

**E-Governing Sports: An Actor-Network Analysis of Digital Governance in
Sports Authority of India**

THESIS

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CERTIFICATE

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Abstract

This study focuses on digital initiatives taken by the Sports Authority of India (SAI) and how these digitalization efforts are changing the traditional analogue governance structure to electronic governance. The goal of the study is to comprehend how multiple actors—administrators, coaches, players, different SAI centres, and digital technology—create e-governance networks and achieve stabilization. It also looks into the difficulties associated with integrating digital technologies into SAI. Actor Network Theory (ANT) is used in this study as an analytical framework to look at how various actors interact with one another in e-governance networks. The negotiation process among various actors is constantly observed to comprehend the power dynamics and user participation within the organization. The concerns that come up throughout negotiations are carefully considered within the larger framework of sports governance. This dissertation is based on qualitative research methodology, where the field data was collected through in-depth interviews, focus group discussions, and participant observation. The negotiations observed among various actors gave rise to practices of governmentality, leading to instances of subjugation of the interests of one actor over others. The introduction of digital practices further raises concerns regarding digital alienation and algorithm governance, especially in the aftermath of the pandemic. The study is important because it advances our knowledge of e-governance practices in the context of sports governance and illuminates the possible advantages and difficulties of SAI's adoption of digital technologies.

Keywords: *Sports Governance, E-Governance, Digital Practices, Actor-Network Theory (ANT), Constructing Identities, Enrolment, Governmentality, Digital Alienation*

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Abbreviations

SAI	Sports Authority of India
ANT	Actor Network Theory
NSDC	National Sports Development Code
ICT	Information and Communication Technology
eOffice	Electronic Office
NSRS	National Sports Repository System
AMS	Athlete Monitoring System
NIC	National Informatics Centre
STCs	SAI Training Centre
NCOEs	National Centre of Excellence

Chapter 1

Introduction

1.1 Overview

Sports Authority of India (SAI) is an apex body for sports infrastructure in India. It collaborates with various sports federations like the All India Football Federation (AIFF) to provide them with the required infrastructure, funds, and any other technical assistance. It also coordinates with Indian Olympic Association (IOA) and State Olympic Association (SOA) to organize sports events¹. In 2011, National Sports Development Code (NSDC) was established for promoting good governance practices in the management of sports (NSDC, 2011). The good governance code varies for every country according to its own context. Many international sports organizations (International Olympic Committee, European Olympic Committee, etc.), inter-governmental organizations (Council of Europe, European Union, etc.), non-governmental organizations (Play the Game, etc.), and scholars (Maennig, 2015) have defined it in different ways. The Council of Europe (2005) states, “Good governance in sport is a complex network of policy measures and private regulations used to promote integrity in the management of the core values of sport such as democratic, ethical, efficient and accountable sports activities; and that these measures apply equally to the public administration sector of sport and to the non-governmental sports sector.” To achieve the goal of good governance, digital practices were introduced in SAI in 2014². Information and

¹Sports Authority of India, Introduction(website), <http://www.sportsauthorityofindia.nic.in/sai/about-us>, (accessed on 24 July 2021).

² Information regarding e-governance practices in SAI was received from RTI filed against SAI (RTI No. SAOIN/R/E/21/00158 filed on 22-06-2021).

Communication Technologies (ICT)³ based solutions have been used by governments all over the world for facilitating good governance (Suri & Sushil, 2017). These initiatives also inspired the Indian government to use digital technologies such as eOffice and National Sports Repository System (NSRS) in sports governance. Therefore, this study aims to explore the digital governance of sports within SAI.

The Planning Commission, which is now known as NITI Aayog, and the Administrative Reform Commission (ARC) view e-governance as a means to attain good governance, that is to achieve efficiency, transparency, and accountability in sports governance process (Commission, 2013 ; ARC, 2008 ; Commission., 2007b).The defines e-Governance as “the use by government agencies of Information Technologies (such as Wide Area Networks, the Internet and mobile computing) that have the ability to transform relations with citizens, businesses, and various arms of government resulting in better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management” (ARC, 2008). The description given above represents the Indian government’s take on e-governance and what are the expected outcomes of implementing it. This definition will shed light on the e-governance practices within SAI.

The rationale behind the adoption of e-governance in SAI is understood by the officials, as “the promotion of transparent work practices and enhancement of the obligation of the organization towards the citizens.”⁴ SAI intended to

³ In this research, the term ‘ICT’ is used interchangeably with ‘digital technologies’.

⁴ Information regarding e-governance practices in SAI was received from RTI filed against SAI (RTI No. SAOIN/R/E/21/00158 filed on 22-06-2021).

disseminate information in a better way with these digital technologies that would help in quick decision-making. E-governance would further help in increasing engagement with stakeholders, such as Government to Government (G2G) interactions, Government to Citizens (G2C) interactions, and Government to Businesses (G2B) interactions. It was believed that the digital practices would result in effective engagement of employees and their skills which could result in an overall increased productivity of the organization.⁵

The focus of this research is to study how various actors, such as administrators, coaches, players, and digital technology, constitute the networks of e-governance and achieve its stabilization. The identification of actors and how they understand the issue of digital governance within the organizational context will be identified. The study also investigates the challenges involved in the process of implementation of digital technologies in SAI. The challenges are studied with respect to the process of governmentality and how these practices are influencing the power dynamics within the organization. This change in the governance system is also analyzed with bigger issues in digitalization literature like algorithm governance and digital alienation. These objectives are chosen as so far, I have not been able to find any study with respect to e-governance in SAI. Challenges may consist of dilemmas, paradoxes, tensions, or the state of unrest that may arise during e-governance implementation (Anttiroiko & Malkia, 2007; Savoldelli, Codagnone, & Misuraca, 2014 ; Ritala, E, Almpantopoulou, & Wijnbenga, 2017). Dilemmas refer to competing choices with specific pros and cons, and paradoxes refer to contradictory but interrelated elements that simultaneously persist over

⁵Information received through RTI filed against SAI (RTI No. SAOIN/R/E/21/00158 filed on 22-06-2021).

time (Birkinshaw, Crilly, Bouquet, & Lee, 2016; Ritala, E, Almpantopoulou, & Wijnbenga, 2017). Tensions usually occur when new practices are introduced in old systems (ibid.). ICT in SAI is a new set of digital practices that may bring change in the traditional practices of governance in SAI. Tensions can be observed when there is a contest of meanings or failure in comprehending current practices. Therefore, it becomes important to study the challenges involved in various networks of governance while implementing digital technologies. It is not easy to see the composition of various networks and how they work but it may become apparent when tensions arise in the network. Thus, Actor Network Theory (ANT) can help explore how actors are constituting the networks of e-governance and what challenges occur when one actor translates the interests, identities, and roles of other actors, and how these networks are stabilized or destabilized (Law, 1992; Cresswell et al., 2010).

ANT is an appropriate analytical framework to study an e-governance project as a phenomenon in action that both emerges from and affects the interaction of various actors (digital technologies, users, administrators, politicians, businesses, etc.) participating in open sociotechnical networks of relationships (Cordella & Hesse, 2015). These networks consist of many actors who interact with each other. ANT defines an actor as a source of action, an entity that can have agency. (Callon, 1986 ; Latour 2005). Thus, an actor can be a technical or a social entity. The concept of agency used here can be understood as, “anything that modifies a state of affairs by making a difference” (Latour, 2005). ANT focuses on investigating how networks come into existence, how actors are translated during the process, and how these networks stabilize (Callon, 1986). Therefore, studying

digital practices as a result of sociotechnical networks gives a more detailed analysis and helps point out any possible tension-laden areas.

1.2 Research Objectives

This research has following objectives:

- To trace the building of networks of e-governance in SAI from 2014 to 2021 and how they achieve stabilization
- To observe the process of translation during implementation of e-governance practices. It is important to observe how social and technical actors are translating the interests, identities, and roles of other actors to achieve agreement among various actors within the network.
- To identify and explore any challenges while executing e-governance initiatives.
- To explore user participation in the context of e-governance in SAI.

Certain concepts are used in this research to better understand the actor-networks involved in implementing digital technologies within the Sports Authority of India (SAI). These theories lay the basis for the interpretation and analysis of our data. Let us delve deeper into these ideas.

1.2 Understanding E-Governance

The phenomenon of e-governance varies as per the context of individual countries, which is why various scholars define it differently. Dawes (2008) defines e-governance as “the use of ICTs to support public services, government administration, democratic processes, and relationships among citizens, civil society, the private sector, and the state.” Further, Bannister & Connolly (2012) defines e-governance as “ the use of ICT in government in ways that either: (1) alter governance structures or processes in ways that are not feasible without ICT and /or (2) create new governance structures or processes that were heretofore not

possible without ICT and/or (3) reify heretofore theoretical ideas or issues in normative governance.” E-governance, however, is a broader term than e-government. E-government refers to the formal and institutional procedures that take place at federal, state, and district levels, whereas, e-governance is a more encompassing phenomenon, i.e., in addition to state authorities it also includes informal and non-governmental mechanisms, such as civil society, NGOs. Bekkers (2012) defines e-governance as “the use of ICT, especially network technologies, to facilitate or redesign the interactions between government and stakeholders (citizens, companies, other governments) in both its internal and external environments in order to achieve added value.” The added value of e-governance can be increased access to government, user-friendly interface of government websites, upholding political and public accountability, or increased participation of citizens. The definition used in this research aligns with Bannister & Connolly (2012) since it argues that the introduction of ICT alters or creates new governance structures or processes, with a special focus on a change introduced within an organization. This change may bring challenges in the implementation of e-governance.

Implementation of e-governance can be observed in the Department of Sports under the Ministry of Youth Affairs and Sports (MYAS) which uses ICT for developmental activities and programs in the field of sports⁶. The users can find detailed information related to various schemes, national policies, government observers, awards, awardees, etc. on the website of MYAS, and Sports Authority of India (SAI).

⁶ Youth & Sports, National Portal of India, <https://www.india.gov.in/topics/youth-sports> (accessed on 11 October 2021).

E-governance can be understood from different perspectives. One of the popular approaches used by scholars is the evolutionary perspective (Anttiroiko & Malkia, 2007); Janowski, 2015). This approach sees e-governance as an evolving phenomenon that goes from one developmental stage to another. An example of this can be found in different phases of the evolution of e-governance devised by the United Nations (UN). The UN model consists of five stages (UN 2004). The first stage of this model is called ‘emerging presence’ which means availability of information to start public service online. The second stage is ‘enhanced presence’ which refers to one-way interaction, for example- the presence of a website for giving information or providing forms to download. The third stage is ‘interactive presence,’ which enables two-way interaction. At this stage information travels both ways, i.e., both administrator and user can interact online. The fourth stage is ‘transactional presence’ which occurs when the full process can be carried out electronically and no other formal procedure is necessary. The fifth stage of this model is ‘networked presence’, which takes place when integration of G2G, G2C, and Citizen to Government (C2G) interactions happen (Anttiroiko et al., 2007). This model proposes that a more advanced ICT development scheme leads to better and more efficient organizational performance (Cordella & Hesse, 2015).

Another widespread approach for evaluating e-governance is taken from the managerial perspective (Madsen et al., 2014; Suri & Sushil, 2017). In this approach, the focus is on the integration of ICT in the delivery of public services. In this approach, scholars monitor and analyze the problems occurring during the integration of digital technologies in organizations. Their aim is to prevent or address any technical or organizational problems in the implementation process (Chadwick & May, 2003 ; Madsen et al., 2014 ; Gustafsson, 2017).

Although these approaches help organizational managers to overcome practical problems, they have been criticized for focusing on a unilinear cause-and-effect relationship in e-governance, which is actually a more complex process (Bannister F. , 2010; Bekkers, & Homburg, 2007;Meijer & Bekkers, 2015). The evolutionary approach seems to take a macro perspective on e-governance, thus leaving out minute details like individual actors' role in an organization and how it impacts the whole network. The managerial perspective provides a solution for implementation problems within the e-governance network but does not consider the interpretations of various actors coming from different backgrounds in multiple networks (Gustafsson, 2017). A more inclusive approach needs to be taken in which multiple variables must be considered (Bannister F. , 2010).

1.3.1 Evolution of e-governance in the Indian Context

Since the LPG reforms, the practice of governance has changed in India. The way the state caters to the people has changed since then. The use of Information and Communication Technologies (ICT) in the practice of governance is a major difference. Public administration was greatly transformed by the coming up of digital technologies like Internet, mobile and laptops. This has resulted in empowerment of (UN System Task Team, 2012). NICNET which is a national satellite based computer network was launched in 1987 that formed the base for application of e-governance in India. After implementation of NICNET, District Information System of the National Informatics Centre (DISNIC) program was launched. The aim of DISNIC was nationwide computerization of all district offices. To successfully implement the program free hardware and software were offered to the State Governments. All district offices were covered under NICNET by 1990. This led to increase in e-governance initiatives taken by the Centre and

the State governments. This formed a network of information among different levels of government. However, practically the government departments continued their efforts to computerize the backend office work rather than focusing their efforts to improve their service delivery to citizens (ARC, 2008). Main thrust for e-governance was paid with the establishment of the National Task Force on IT in 1998 (Suri & Sushil, 2017). Based on the recommendations of the Task Force, all the government departments were asked to spend a certain amount, i.e., 2-3% of their assigned budget on IT adoption. Department of Administrative Reforms and Public Grievances (DARPG) came up with 12 point 'Minimum Agenda for e-Governance' which was to be implemented by all the government departments. This action ultimately resulted in building the required infrastructure for the implementation of e-governance. For coordinated actions at the national level, a 'National e-Governance Plan' (NeGP) was brought up in 2006. Actions that supplement ICT initiatives in the country are IT Act, 2008, RTI Act, 2005, National Policy on Information Technology, 2012. Various ICT initiatives taken by GoI are e-Aadhar, e-KYC, Mobile Seva, MyGov, etaal, e-office, e-Sanjeevani, Passport Seva, etc. ⁷

The Government of India (GoI) views e-governance as the means to attain the attributes of good governance, viz. transparency, efficacy, responsiveness, cost-effectiveness, accountability, and responsibility through the application of technology (Suri & Sushil, 2017) E-Governance helped minimize the complexities of procedures by possible business process reengineering (Prabhu, 2012). It gave a boost to public participation and reduced the transaction costs in government

⁷ Ministry of Electronics and Information Technology, Centre for e-governance (website), <https://www.meity.gov.in/content/centre-e-governance>, (accessed 16 April 2021).

processes. But, however, mere computerization of back-office work is not the target of e-governance. It means a drastic change in the working of government and a change in interaction taking place among different stakeholders. Government departments generally prefer to just digitalize the paper-based data without making the necessary changes to the process due to various operational constraints. For example, even though the National e-Governance Plan (NeGP) and the Second Administrative Reforms Commission (ARC) of India recommended bringing change in the service delivery process to citizens but only few such projects were implemented and rest laid more emphasizes on the computerization of the records (Suri & Sushil, 2017).

e-governance as discussed before was implemented in India in every ministry and department, therefore, the Ministry of Youth Affairs and Sports (MYAS) is no exception. But it was only in 2014 that e-governance initiatives were taken up in the Sports Authority of India (SAI), an autonomous organization under MYAS.

1.4 Approaching ANT

The Actor Network Theory (ANT) provides an alternative perspective. This approach was propounded by (Latour, 1986a ; Callon, 1986 ; Law, 1992). The focus of ANT is not only on establishing cause and effect relationships, but it also analyses the existing relationships in emerging socio-technical networks. Since e-governance can be regarded as an association of heterogeneous elements, ANT becomes an appropriate approach to study it. This approach allows us to study e-governance as a phenomenon by establishing a link between technical and human resources. Thus, ANT as an analytical framework helps to study this interrelatedness between the technical and the social spheres.

Essentially, ANT views technology as embedded in complex associations between human and non-human entities (Latour, 1991). The theory does not draw a distinction between the social and the technological entities, as both are called actors or actants. Latour argues that this approach allows a researcher to investigate the building of the actor networks by following the actors. (Latour & Woolgar, 1986) describe, “a network as a set of positions within which an object... has meaning, it is clear that the facticity of an object is relative only to a particular network or networks.” This approach helps to analyze building of networks at micro level. It is crucial to understand these complex shifts between micro and macro levels because it is here that we can trace the change occurring in the organization or the society. By following the occurrences in the network, it reveals the negotiation processes, power relations, areas of tension, and construction of new agency as effects of changes due to the introduction of digital technologies (Gustafsson, 2017).

The concept of translation given by ANT helps to unveil the microanalysis of everyday operations in an organization. Actors while interacting within the networks negotiate their interests in the process of translation. Translation can be understood as negotiation or action, which an actor takes on behalf of another actor. When actors translate each other, they try to enroll the other to support or believe in them (Latour, 1986). Callon outlines four stages of translation, which will help in highlighting how actors engaged in e-governance practices (Callon, 1986). These four stages are problematization, interessement, enrolment, and mobilization. Problematization occurs when actors start interacting with each other by negotiating their identities, roles, and interests. Some of the actors create themselves as essential components of a network, hence they are called Obligatory

Passage Points (OPP) (Callon, 1999). Interessement is understood as ‘the group of actions by which an actor attempts to impose and stabilize the identity of other actors it defines through problematization’ (Callon, 1999). If interessement occurs successfully, then enrolment of actors into the network takes place. In this process, different roles of actors are defined in relation to each other. Actors accept their designated roles through negotiations and trials. When enrolment is done successfully, mobilization takes place. At this stage, spokespersons are selected from the population of an organization (in this study population would consist of actors involved with SAI). The spokespersons are made responsible to talk on behalf of that population. There are many intermediaries working along with spokespersons to represent the whole population. These stages of translation have been imbibed within this study while analyzing how various actors are responding to e-governance practices in SAI. Actors who contribute to the translation process are not solely and essentially physical and individual agents, rather, they are nodes in a network characterized by alliances in a complex and evolving relational environment.

In a similar fashion, (Hughes, 1983) studies technology as a system. These systems consist of interacting and interconnected components, they can be technical, social, or political. The study of these components cannot be done in isolation, they need to be understood in the context of their influence on each other, thus forming a network of sociotechnical systems. These sociotechnical systems help in identifying the tensions in the field under observation or in terms of identifying the ‘reverse salient’.

The process of translation in network building by the actors has a political dimension. Here, the political dimension means power struggle, alliance building,

negotiation process, and representation of interests of various actors involved in the construction of networks of e-governance. Actors involved in this research are hybrid sociotechnical entities like websites, and individual actors like administrators, players, coaches, and technicians, as well as the Ministry of Youth Affairs and Sports (MYAS), Department of Sports, headquarters of SAI and the regional SAI centres. Actors also include the technological hardware and software used by SAI. These actors interact with each other and initiate the process of translation by redefining their identities and roles.

1.5 Sports & its Challenges

India with its 1.3 billion population is set to become the world's most populous country but lags behind medals in the Olympic games or any other International sports events.⁸ Sen (2015) points to several reasons for the lack of international success: poor governance practices, poor levels of health and education, power shortages, poor air quality, water shortages/pollution, and a lack of physical connectedness (information about and access to sport – including facilities, infrastructure, and legacy) (Dart, 2017). These problems are accompanied by the rude and arrogant attitude of Indian sports administrators toward Indian players (Chelladurai, Shanmuganathan, & Nageswaran, 2002) .These organizations are filled with nepotism and corruption which prevent new talents from finding a place in competitions. These problems were highlighted by the former Chief Justice of India, R.M. Lodha, who said, “Indian sports suffers from corruption and nepotism,

⁸ For instance, at the 2021 Tokyo Olympics, India was able to secure only seven medals. This was less than the performance of much smaller countries such as Kenya, Jamaica, Turkey, Georgia, Kazakhstan, and Ukraine.

hence needs an overarching regulating body.”⁹ Similarly, Jim Ferguson, (2007) has suggested that “nothing will kill sport quicker than too much bureaucracy”. To overcome these challenges in sports governance emphasis has been laid on the introduction of good governance practices. As a result, the National Sports Development Code of India (NSDC) was established in 2011, which aimed at promoting good governance practices in the management of sports at the federal level in pursuance of successive national sports policies(Department of Sports, 2011). Scholars like Prabhu (2012) have argued that e-governance can act as an enabler of good governance. And Indian policymakers followed such prescriptions in the field of sports governance.

Sports have a significant place in Indian life, but the study of sports as a serious intellectual undertaking remains underdeveloped in India (Ferguson, 2002). The research in the area of sports in the Indian context on how it is impacting society, culture, economics, sustainable development goals, or how it impacts policies is lacking. Although there is little existing research on these areas still there is a dearth of sports literature in the Indian context. There are a few accounts by journalists and sportsmen themselves, but these works, although important in their own way, neglect the analytical lens of seeing the challenges in the field of sports, for example, Jaydeep Basu, *Stories from Indian (Football 2003; Bandyopadhyay, 2014)*. The main thrust of literature in sports has been on cricket. Scholars like(Guha,R,2006 ;Bose Mihir, 2006 ; Ashis Nandy, 2001 ; Rodrigues,M

⁹ Mohammad Ali, Qaiser. 2020. “Indian Sports Suffers from Corruption And Nepotism, Needs Overarching Regulatory Body: RM Lodha.” Outlook India, January 4. Retrieved May 16, 2021. (<https://www.outlookindia.com/website/story/sports-news-indian-sports-suffers-from-corruption-and-nepotism-needs-overarching-regulatory-body-rm-lodha/345138>)

2003), have focused their attention mainly on cricket while giving little attention to the study of other sports. These studies have tried to situate sports like cricket within the historical context of India and how it reflected the society at that time. There is a need for more literature on situating sports governance in the context of digitalization. This study will focus on the governance of sports through digital technologies in the premier institution of sports in India that is the Sports Authority of India (SAI). The study will contribute to the existing literature by examining various actors involved in SAI and how they form and stabilize networks of e-governance.

1.6 Sports Policies

In India, there is no sports policy that is uniformly followed throughout the country. Sports is a state subject under the seventh schedule of the Constitution of India (Department, 2023) which states that

Theatres and dramatic performances; cinemas subject to the provisions of entry 60 of List 1; sports, entertainment, and amusements.

But sports also come under international affairs as the games are played at different levels, for example, Asian games, Commonwealth games, and Olympics, making it a centre subject under list 1 of the seventh schedule of the Constitution of India. Exercising its power in this regard, the Government of India (GoI) created the All India Council of Sports in 1954. It was an advisory council to inform GoI regarding national sports policies, government funding to sports organizations, regulation of sports governing bodies, construction of sports infrastructure, coaching of elite athletes, and selection of players for sports awards (Khasnis, Urvi, Chapman, Toering, & Collins, 2021).

The next significant step taken by GoI was the creation of a fully dedicated Ministry of Sports under the Ministry of Human Resource Development in 1982. Following this came the National Sports Policy, 1984. In the education field, emphasis was laid on the principles of the National Sports Policy to be implemented in the curriculum of schools and colleges. In 1986, two bodies to impart physical education and raise the standard of sports were established, namely, Netaji Subhash National Institute of Sport (NSNIS), Patiala, and Lakshmi Bai National College of Physical Education (LNCPE), Thiruvananthapuram. This also led to the creation of the Sports Authority of India, which will be discussed in detail below. But this sports policy was not implemented properly, and no major results were procured.

At present, the jurisdiction of sports comes under the Ministry of Youth Affairs and Sports. A new sports policy came in the year 2001, i.e., National Sports Policy, 2001. The major goals of the new policy were to promote mass sports and the achievement of excellence at national and international levels (excellence-level sports)¹⁰. An effort was made to shift sports from the state list to the concurrent list, so that centre can form policies and fund the sports organizations for the promotion of sports. The policy also proposed to frame by-laws and models to be followed by the Indian sports federation, while respecting the Olympic Charter (PIB, 2015). A National Sports Development Fund had been created with initial funding from the Union government.

In 2007, Draft Comprehensive Sports Policy was put forward with the aim to achieve mass participation, excellence at international games, and ensuring the

¹⁰ See National Sports Policy (2001) to understand its objective. Available at <https://yas.nic.in/sports/national-sports-policy-2001>

presence of constitutional, legal, and institutional measures to achieve these twin objectives (PIB, 2007). Thus, a more holistic approach was adopted. The demand for putting sports in the concurrent list was again made in this draft. But not much was achieved through this draft as it was opposed by many people including the people from within the congress party. Though time and again various executive orders, circulars, and notifications have been released by GoI to govern the sports such as the anti-doping code. These circulars, and executive orders were all then merged under one document known as the National Sports Development Code of India (NSDC), 2011. This code has three main objectives that include defining responsibilities for various agencies to promote and develop sports; defining the guidelines to be followed by National Sports Federations (NSFs) and stating the eligibility to get grants from the GoI (Jain, 2020).

In pursuance of NSDC, 2011 the draft National Sports Development Bill was introduced in 2013. It put forward the agenda of achieving good governance in sports from NSDC by establishing an independent sports tribunal, an ethics committee for each sport, and a sports election commission (Department of Sports, 2013). However, the bill was not accepted at the cabinet meeting and was dropped (Mishra, 2015). To bring in the ethical practices within the sport's governance, another bill came up, i.e., National Sports Ethics Commission Bill, 2016. This bill defined sports fraud and in line with the 2013 bill recommended the establishment of an ethics committee for each federation. Apart from the ethics bill, in 2015, a committee was also formed under Justice Mahajan but the report of the committee was never put to discussion. To conquer all the failures, an effort was again made to propose a uniform sports policy through Draft Sports Code, 2017. This draft was made by a committee headed by sports secretary Injeti Srinivas along with a nine-

member committee including players like Abhinav Bindra, and Prakash Padukone. This draft was also opposed by Indian Olympic Association. Time and again efforts are made to bring a uniform policy throughout India and bring sports under the concurrent list but these efforts have not been realized (Kruthika & Sood, 2021)

We have entered 2023 but no new sports policy has come up and no amendments are made to the previous policy to keep up with the changing times. Sport is not receiving the attention it needs to be given. Due to its intrinsically contentious nature, sports have been marginalized. This is demonstrated by the constant discussions within sports federations about the autonomy of these organizations as well as the distribution of power between the state and central authorities. The federations' dependence on government funding, however, prevents them from achieving the same level of autonomy as the Board of Control for Cricket in India (BCCI). Though many things are changing in the sports with coming up of new technologies, we are still hung up in the early era. There are sports quotas in almost all places, like schools, colleges, public sector undertakings, and even in the army. Many people prepare for these positions and excel in sports, but our government is trailing behind the time. Though NSDC 2011, aims at promoting good governance practices in the management of sports at the national level in pursuance of successive national sports policies (NSDC, 2011), still more is needed to be done.

1.7 Introducing SAI

The Ministry of Youth Affairs and Sports (MYAS) is the concerned ministry for sports in India. And sports activities in India are governed and regulated by the Sports Authority of India (SAI), which is linked to sports federations, national sports policy, sports law and welfare association of India, and the sports

broadcasting law in India (Thakur & Kaur, 2018). SAI was created by the Government of India on 25 January 1984 as a registered society primarily to look after the sports infrastructure created for the IX Asian Games.¹¹ This organization was set up with the objective of implementing the existing schemes, promotion, and development of sports activities. It is also responsible for sponsoring and encouraging various kinds of research to bring development in sports. This institution provides essential assistance required to organize championships or tournaments at district, state, and federal levels. It also arranges funds for the organization of tournaments. The official administrative structure of SAI can be understood from the figure given in Appendix 1.

The scope of this organization is vast, so it is difficult to look at all the aspects within the period of this study. The focus of this research is on the change in the governance system. The digital initiatives introduced in the SAI have changed the traditional analogue governance structure to e-governance. The e-governance network building that will be traced in this research will be limited to the time period of 2014 to 2021. The reason for choosing this period is because e-governance practices were first introduced in 2014 and the latest intervention was in July 2021¹². The restriction of the time frame will make this research feasible otherwise it may appear never-ending. The entry point for this research would be two e-governance initiatives taken by SAI, which are eOffice and National Sports Repository System (NSRS). The eOffice is chosen as SAI regards it as a product

¹¹Sports Authority of India, Introduction (website), <http://www.sportsauthorityofindia.nic.in/sai/about-us>, (accessed on 24 July 2021).

¹² Information received through RTI filed against SAI (RTI No. SAOIN/R/E/21/00158 filed on 22-06-2021).

to enhance governance initiatives.¹³ It would be interesting to see its implementation in SAI and how it transforms the traditional governance structure. And NSRS is chosen as it forms a platform for most of the major actors involved with SAI. These initiatives may become nodes within the e-governance networks that will be traced during this research. This will help in exploring why and how these nodes were constructed, which actors constructed them, by what mechanisms were these stabilized, and to what effects. The exploration of these nodes will then lead us to other nodes and linkages constituted by actors within the emergent networks of e-governance. For example, the eOffice is a point in a network, i.e., a node, which is connected to various other actors or entities such as other digital initiatives, various social actors, or business entities to construct a network of e-governance. The research will, however not be limited to just these two e-governance initiatives, they are just the starting point for exploring further initiatives taken by SAI.

1.8 Current Digital Initiatives in SAI

Sports Authority of India (SAI) is a crucial institution in the field of sports. It has the responsibility to inculcate sports culture and prepare the sportsperson to achieve medals at the international level. To achieve this goal, it has to improve its governance practices and change as per the requirements of the time. In this information age, SAI started its journey towards digitalization in the governance practice in the year 2014. With the implementation of the National Sports Development Code, 2011, the Department of Sports tried to give impetus to good

¹³ eOffice, Government of India, https://eoffice.gov.in/about_us.php accessed on 28 July 2021.

governance following the practice of the International Olympic Association. To achieve good governance, e-governance has been introduced in SAI.

The website is seen as the initial step towards achieving e-governance. In 2014, SAI made its website in pursuance of the Electronic Delivery of Services Bill. It is a primary gateway for providing information regarding schemes, stadia, tenders, job opportunities, etc., to athletes, coaches, and the public. It can be accessed 24 hours a day wherever the internet is available. The revamped version of the website was launched on July 23, 2021. (Cantoni & Tardini, 2006) view websites as technological and communication tools that help in creating an organization's online identity. The website of SAI can be seen as a network of social and technological actors (Mitev, 2009). It includes actors like administrators, users, the internet, software, etc. whose agenda is to provide online sports-related services to interested stakeholders. During my fieldwork, I observed the interaction of players and coaches with the website of SAI is minimal. A wrestler in the North Regional Centre of SAI, Sonipat said that the main source of receiving any information was their coaches. Another player from boxing, SAI Training Centre, Hisar, claimed that 'on the website, the information regarding a camp is uploaded late or sometimes it is not uploaded at all'. So, it is a futile practice to indulge in retaining information from the website.

Another digital initiative taken by SAI was the launch of the **Personnel Information Management System** in the year 2016. This system contains information about SAI staff members. Along with this Management Information System (MIS) system, an **online stadia booking facility** was also introduced. This facility can be availed from the website of SAI. Stadia can be booked for both sports and non-sports events. Earlier this facility was available in offline mode,

which resulted in the citing of corruption but shifting this process to digital mode increased the transparency and accountability of the officers. The clerk working at the Stadia division of SAI Headquarters said that ‘the office has many visitors from different backgrounds and it is rumoured in our circle that ‘babu’ earn enough money through these events.’ Digitalization of such services will in turn help in achieving the goal of good governance that imbibes the value of transparency, accountability, and responsiveness (Pielke, et al., 2020)

In 2019, many e-governance initiatives were taken by SAI. It introduced **Khelo India mobile application, the Khelo India fitness application, and the FIT India website**. These initiatives were taken to promote fitness among the population of India. These initiatives have been launched to reemphasize the sports culture in the country and to identify sports talent at a young age. These mobile applications help to develop reports in different sections such as fitness reports, age-wise reports, school-wise reports, and top performance reports. With help of these reports, players are selected to participate in Khelo India games, and from there, they are selected further in different centres of SAI.

National Sports Repository System (NSRS) was yet another digital initiative introduced by SAI in 2020. It is a digital MIS that provides digital solutions to all the prominent actors, such as athletes, coaches, academies, federations, and administrators. It is an open platform for a sports ecosystem where athletes, coaches, and academies can register themselves¹⁴. It also provides an online facility for SAI Sports Promotional Schemes such as the National Centre of Excellence (NCOE), SAI Training Centres (STC), Extension Centres, and Boys

¹⁴ National Sports Repository System, Sports Authority of India, <https://nsrs.kheloindia.gov.in/Home/NSRS> accessed on 28 July 2021

Sports Companies (BSC), etc. It provides an online facility for updating the performance assessments and performance records of athletes. The reports of different kinds are produced as per the requirement of the various divisions in SAI. These reports are available through the portal. The information about talent scouting and entrance to numerous sports schools is being updated online through NSRS (SAI, 2020). It has been made mandatory for every coach and player training under SAI to enroll herself or himself on this portal. Players are asked to upload their achievements on this portal. An acclaimed archery player at North Regional Centre SAI, Sonapat, was satisfied with NSRS services as he claimed that it helps to consolidate the data in one place and can ease the hassle to give information to the authorities. Similarly, coaches also appreciated the effort but not all were in the favor of this change. For some, it was a technical nightmare.

A recent digital initiative taken by SAI is implementing a tool developed by the National Information Centre (NIC), i.e., **e-office**. eOffice is a digital filing system. It consists of modules like eFile, Leave Management System, Tour Management System, etc. It aims to develop more efficient, effective, and transparent inter- and intra-government transactions and processes¹⁵. eOffice as reported by the Deputy Director of the IT division, SAI Headquarters (HQ) has been implemented across all the SAI centres in India. This research focused on Haryana in particular, so I could verify the above statement in Haryana. To facilitate the better performance of eOffice and to transform SAI's internal functioning LAN facility was also implemented in SAI HQ. The project of implementing eOffice started in July 2020. It took six to eight months to go live with this application since

¹⁵ eOffice, Government of India, https://eoffice.gov.in/about_us.php accessed on 28 July 2021.

the administration faced issues like the availability of server space on NIC. To resolve the issue, server space was attained with the help of the National Data Centre (NDC), Bhubaneswar. To better understand the impact of eOffice on the internal functioning of SAI, they were asked to describe their experiences. Most of them claimed that it has eased the movement of files in the organization.

One of the important digital practices adopted by SAI in the field of data analytics is **Athlete Monitoring System (AMS)**. AMS is designed by a company in the UK. SAI bought the application for their players as it presents the crucial solution to foster potential and lower the risk of injury in young athletes since it combines a wide range of capabilities to securely manage testing, progress tracking, medical, wellness, training load, performance, and administrative data into an intuitive platform. AMS thus helps generate various kinds of datasets to help the athlete perform better. The reports generated can be seen by coaches, nutritionists, psychologists, and administrators of that particular SAI centre. Through analysis of received data, changes can be made in the training regimes of the player and team as a whole. This application is adopted only in the National Centres of Excellence (NCOEs), yet and not in every SAI Training Centre (STC). It has further helped in the consolidation of data. This application has helped in the digitalization of governance practices for players.

Another digital initiative taken by SAI is **Geo Tagging**. It is still in the developing stages. The playfields' geo-tagged locations are mapped on the Khelo India Mobile App. More than 3,000 playfields were mapped (SAI, 2020). Private companies are given tenders to identify these fields. Coaches also help identify the fields by cooperating with private companies. The benefit of this project once completed would be that we will get a complete list of the playing fields in India. This

application would give us data on what kind of facilities are available, how many washrooms are there, what is the seating capacity, what is the current condition of the ground, what needs to be revamped, etc. It would help in organizing the matches according to the needs, for example, organizing Khelo India games need different types of playgrounds like football ground, badminton court, wrestling arena, etc. This project can help us identify these fields and smooth out the process of organizing games in the future.

JAM is another digital practice adopted by SAI in its administration. It is purchasing and auditing software. SAI has made it compulsory to use JAM for procuring any material required. This practice has been adopted to bring transparency to the purchasing process and prevent the misallocation of funds. As reported by administrators and coaches, earlier the funds were misused by providing false receipts but now even small things like mops or brooms are ordered through this platform only. The vendors have to bid to sell their products through JAM then only you can take orders from SAI's different centres.

Apart from these major initiatives, small steps were taken towards digitalization in SAI, including developing and implementing a **Games Management System (GMS) for Khelo India Games; cloud server management**, and support, which is necessary for SAI's numerous divisions. The enhancement of the ability to hold online meetings via video conference and training the staff to hold and participate in such online interactions. National Information Centre (NIC) email creation for coaches and administrators to operate eOffice and Digital Signature Certificate (DSC) acquisition.

1.9 Gap in Existing Literature

The existing literature on e-governance is mostly conducted from an evolutionary or managerial perspective (Chadwick & May, 2003; Anttiroiko & Malkia, 2007; Madsen, Berger, & Phythian, 2014; Janowski, 2015). These perspectives generally limit themselves to exploring cause-and-effect relationships in e-governance implementation. They skip particular details such as individual actors' roles in the organization and how they impact the whole network. They tend to overlook the interaction between the social and technical actors and how they form the networks of e-governance and achieve their stability. This research is aimed at addressing these gaps in the literature.

We have sufficient literature that reviews e-governance and its practices (Prabhu, 2012 ; Suri & Sushil, 2017) but so far none of them addresses e-governance practices in sports. E-governance initiatives in SAI have picked up the pace in recent years¹⁶ which makes it a latent area of research that needs to be addressed. This research aims to examine a few other concerns that did not receive much attention in the existing literature such as user participation and challenges in e-governance implementation within SAI.

Through this research, I want to address the issues of how social and technical actors are interacting with each other to create the network of e-governance in SAI. It is important to observe these interactions as they allow us to paint a comprehensive picture of all the perspectives of diverse stakeholders (Latour, 2005) . It highlights all the possible conflicts and controversies that may not be observed by just taking into consideration social actors. The process of

¹⁶ Information received through RTI filed against SAI (RTI No. SAOIN/R/E/21/00158 filed on 22-06-2021).

negotiation within SAI is closely monitored to understand the power dynamics and user participation within the organization. The issues arising through this negotiation process are carefully examined in the broader context of sports governance.

1.10 Chapter Summary

The chapter that follows this introduction provides a literature review followed by research methodology. In Chapter 4, I answer the question of what challenges were faced by sports governance that led to the rise of e-governance. This chapter covers the technological changes made to sports, such as incorporating administrative duties into integrated ICT systems. One advantage of digitization is the automation of routine tasks and the enhancement of communication within sports organizations. The institutional and discursive space of e-governance is explored in the chapter, defining the issue of e-governance from different perspectives. In Chapter 5, I have explored how different actors were enrolled in the network of e-governance. This chapter answers the question of enrolment by following the actors in their negotiation process and how they are influencing each other's interests and identities while aligning their interests. The idea of identity is discussed as a constantly changing, discourse-constituted shape. In Chapter 6, I trace the power dynamics existent in the e-governance networks. How e-governance is understood as a neoliberal agenda and how e-governance initiatives become techniques of governmentality. This chapter offers a nuanced perspective on the complicated power relations within SAI by highlighting the significance of including immaterial practices and considering the interplay between actors and technologies. The chapter also emphasizes the difficulties experienced while putting e-governance projects into practice such as the issue of excessive surveillance through digital

means, i.e., 'dataveillance' or the issue of maintaining discipline through digital technology. In Chapter 7, I focus on the idea of algorithm governance and how these technologies affect the balance of power in governmental institutions. The interrelation between algorithm governance and digital alienation is explored, which challenges the stabilization of the e-governance network, making it a continuous process. The conclusion puts together the process of translation that led to the emergence of e-governance in SAI.

Chapter 2

Literature Review

Sports have not been a part of any traditional academic discipline, but few anthropologists started to show interest in sports and their role in society. Edward Burnett Taylor was one of the pioneers in this field and published an article ‘The History of Games’ in 1879. With this started a new trend in sports research, as many scholars, like James Mooney, Stewart Culin, and Raymond Firth, came forward to study this field. Sports became a legitimate field in the latter half of the 20th century (Sen, 2015). (Blanchard & Cheska, 1985) define sports as “a physical exertive activity that is aggressively competitive within constraints imposed by definition and rules. A component of culture, it is ritually patterned, game-like and of varying amounts of play, work and leisure”. Sports became a link to understanding society.

The United Nations (2003) has argued that sports programs are ‘a cost-effective way to contribute significantly to health, education, development and peace and a powerful medium through which to mobilize societies.’ Similarly, (Groeneveld, et al., 2011) identify a growing number of national governments that seek to use sport ‘in the pursuit of a range of pro-social policy objectives such as social inclusion, health improvement, and community integration and safety’. Earlier sports were based on promoting cooperation and a collaborative spirit among different nations. But with the coming up of commercialization in sports, a fully-fledged sports industry has emerged. Usually, the governance work in the sports field is associated with corporate governance as there are many privately owned leagues or associations. For example- in India, we have Indian Premier League (IPL). The governing bodies of sports and national sports organizations, in many countries, are part and parcel of systems that engage a plurality of actors and

share knowledge and expertise (Van Kersbergen & Van Waarden, 2004). Therefore, broadly speaking sports governance can be defined as the system of regulations and procedures that direct a sports organization's decision-making and actions. The more refined definitions of sports governance are explored by different scholars as discussed in the following paragraph.

(Dowling, Leopkey, & Smith, 2018) did a scoping review of the literature on sports governance from 1980 to 2016. They did a study of 243 research papers that were selected based on the governance definition by (Henry & Lee, 2004). Henry and Lee defined three types of governance, i.e., organizational, systematic and political. Organizational (corporate) governance is “concerned with normative, ethically-informed standards of managerial behavior” (Henry & Lee, 2004). Systematic governance is “concerned with the competition, cooperation and mutual adjustment between organizations in business and/or policy systems” (Henry & Lee, 2004). Political governance is “concerned with how governments or governing bodies in sports ‘steer’, rather than directly control, the behavior of organizations” (Henry & Lee, 2004). Selected studies were conducted in various countries but none of them were in India. Even a large number of studies were non-empirical. This may be because of the ambiguous nature of defining sports governance as there is no uniform way of defining sports governance. Every scholar in this field has a different opinion and experience of the way this term is used. Perhaps another explanation for many non-empirical studies is to do with how scholars have adopted the concept of governance as an analytical tool or device rather than as a theoretical framework (Dowling, Leopkey, & Smith, 2018). Research on sports governance deals with themes like sports policy, Corporate Social Responsibility (CSR), law, partnerships, and sports for

development or organizational change. These themes are not exhaustive but are among the broader area of research. Governance in sports is usually studied from three perspectives (King, 2017). First, governance is understood as a system in which an organization is steered. It concerns with board and its members and how they influence the organization and its working. Secondly, governance is understood as a network of action. The network approach focuses on relations between organizations, thereby implying that sports bodies arrive at decisions and actions as a result of bargaining between organizations, although not necessarily on a 'level playing field' (King, 2017). Rhodes (1997) defines this network approach of governance as a structure with a large number of stakeholders 'that interact continuously because they need to exchange resources and negotiate shared purposes.' Thirdly, governance is understood as good governance, i.e., one dealing with ethical issues and legal practices.

Sports governance in the present context has changed its nature due to the introduction of digital technologies that have enhanced connectivity among the organization and enabled them to bring innovation in their day-to-day work (Xaio et al., 2017). So, it becomes important to understand the backdrop of digitalization in governance of sports.

2.1 Digitalization in Sports Governance

In the information age, digital technologies like cloud computing, IoT, and electronic platforms have led to innovation in the governance of profit and non-profit sports organizations (Gruettner, 2019 ; Ratten 2017 ; Xaio et al., 2017). For example- the use of data analytics to improve the players' performance. The prerequisites for the success of digitalization have been created by globalization. Globalization's enhanced connectedness and accessibility have facilitated the quick

spread and uptake of digital technology everywhere. By making it simpler to communicate, collaborate, and carry out business across international borders, digitalization has, in turn, aided and accelerated the processes of globalization. Globalization and digitalization have both been impacted by neo-liberalization. Neoliberal policies in India, like trade liberalization, privatization, and deregulation, have made it easier for sports organizations to integrate and grow globally. By encouraging innovation, competition, and entrepreneurship, these policies have additionally helped to establish an environment that is favorable to digitalization (Wilson & Hayhurst, 2009; Hayhurst, Wilson, & Frisby, 2010). In this background, it becomes interesting to study digital practices adopted within sports organizations, which provides a new perspective in the academic field. The thing that makes observing this change important is the unique aspect of sports organizations such as organizational operations' inherent complexity, the diversity of stakeholder groups, the type of the consumed product, the particular consumers, and the significant economic, political, and social impact (Gruettner, 2019).

Digital technologies have been understood from different perspectives in literature. It is understood as digital tools, platforms, or applications (Nambisan et al., 2017 ; Von Briel et al., 2018). Some of the applications of these digital technologies in the sports industry are digital interactions with fans, the use of data analytics to improve players' performance, or the live streaming of matches (Gruettner, 2019 ; Pitts & Stotlar, 2002). Teams and players are applying these cutting-edge technologies to gain a competitive edge over other teams and improve the medal tally (Cortsen & Rascher, 2018; Verner et al., 2017 ; Rein & Memmert, 2016). Technology is transforming every area of sports, including consumer consumption, managerial regulation, and athlete participation. This

revolutionization is bringing a new class of participants (machines, robots, or AI in board games, automobile racing), resulting in the emergence of new sports (Schmidt, 2020).

Athlete Performance

Today's technologies, such as sensors and sports wearables, help athletes perform better overall by employing data analytics to provide feedback and training recommendations (Duking et al., 2018). The Paralympics is where one may see the most technology utilization. Players no longer have to be physically fit to participate in top-tier contests because of technology.

Sports Consumption

The usage of technology has improved the visual experience for sports fans. Using drones that record 360° views, the most popular sport in India, cricket, is now being broadcast to every home with higher optical quality. Through social media, individual and group interactions, personalized and non-personalized communications, and real-time information exchange, digital technologies have accelerated the process of sports consumption (Pedersen, 2013). Sports consumption has become simpler, more adaptable, and more inclusive for audiences throughout the world thanks to the availability of sports material in a variety of forms and formats. Sports organizations may now provide fans with unique and personalized experiences thanks to digitalization. Sports organizations may engage fans with personalized information, interactive experiences, and improved connectivity by utilizing digital platforms (Mastromartino & Naraine, 2021 ; Phua et al., 2018). It has allowed the sports business access to new sources of income. For instance, in-game branding and advertising opportunities have grown increasingly inventive and tailored, enabling advertisers to connect with and

have an impact on sizable global audiences gathered on leading gaming platforms. Finally, social media sites like WhatsApp, Facebook, Twitter, and Instagram unite fan bases with comparable sporting passions.

Sports Governance

Sports federations, clubs, and other athletic organizations can increase operational effectiveness by implementing digital technology (Harrison & Bukstein, 2016). For instance, personalized apps can assist with event planning and stadium issues.

Though digitalization offers various benefits (Aversa, Cabantous, & Haeffliger, 2018 ; Yang et al., 2012), it also poses major challenges to the actors involved in sports organizations (Gruettner, 2019 ; Xaio et al., 2017). Few scholars have studied the challenges created by the use of digitalization in sports, like misogyny toward female sports fans (Radmann and Hedenborg, 2019), cyberbullying and virtual abuse of athletes (Kavanagh, Jones, & Sheppard-Marks, 2019), and social inequality of access to online technologies (Tjønndal, 2021). Despite the profound influence of digital technology on sports, there is still little and scattered study on the usage of digital equipment in organized sports. This dispersed literature on digitalization in sports is majorly focusing on the analysis of the adoption and usage of digital technology in professional sports clubs. Examples include sports fans' use of mobile apps and online platforms (Kang, 2015 ; McGillivray and McLaughlin, 2019 ; Qian et al., 2019) elite athletes' use of social media platforms (Geurin-Eagleman & Burch, 2016; Chawansky, 2016) resistance to digitalization in elite sport (Trabal, 2008 ; Tjønndal, 2020). The study by Ehnold, Fab, Steinbach, & Schlesinger, (2021) on the use of digital technologies by volunteer sports clubs is a striking exception to the literature on digitalization in professional sports. To identify and describe the digital use behaviours of voluntary sports groups in

Austria and Germany (n = 787), (Ehnold, Fab, Steinbach, & Schlesinger, 2021), performed an online survey. According to their statistical analysis, 93.7% of the polled sports clubs said they used digital tools for both internal and external communication. Reporting membership data to federations was the second most mentioned use of digital technologies (82.1%). Thus, their findings suggest that at the moment, internal and external communication as well as traditional administrative activities are the two main uses of digital instruments in voluntary sports groups. Goals of success in competitive sports and collaboration with other institutions were also mentioned by (Ehnold, Fab, Steinbach, & Schlesinger, 2021), as two promoting variables for how voluntary sports groups employ digital tools. Additionally, the utilization of digital tools was higher in sports organizations with a large percentage of volunteers performing administrative duties. However, according to (Ehnold, Fab, Steinbach, & Schlesinger, 2021), volunteer sports clubs that claim that "digital processes do not match with club culture" and when the organization "does not have a clear strategy for the digitalization of our club" exhibit the biggest restrictions on the use of digital instruments.

The above studies don't show how specific digital tools like apps, wearable devices, etc. impact sports organizations. Few studies are working on this gap in the sports technology literature. For example, according to Rigamonti et al. (2020), the variety of apps that are available offer helpful information for both health-conscious individuals and committed professional athletes (Peart et al., 2019) because the ever-increasing number of apps used in sport and fitness contexts are marketed to a diverse audience. Rigamonti et al. (2020) provide specific examples of how app-based diagnostics tools could enhance concussion screening in professional sports. Similarly, (Van Tuyckom.2021) analyses how the

establishment of an app might encourage sustained sports engagement among socially vulnerable youth in Bruges, Belgium by co-creation of the app by participants, public sector stakeholders, and volunteer sports groups. Peart et al., (2019) warn athletes and practitioners to use these apps cautiously because not all apps are based on proper research. Some researchers have shown the impact of demographic variables on the use of wearable devices. For example, Pan et al. (2019) claim that men were more likely than women to employ wearable technology, whereas another study by North et al. (2008) found that there is a strong correlation between the use of technology and social class (Tjønndal, 2020).

The implementation of these digital initiatives will be successful only if the organization is prepared for such a change. (Hess, Matt, Benlian, & Wiesboeck, 2016) emphasize that organizations must adopt such strategies that promote digital transformation and drive effective performance. To fully utilize their potential to develop new avenues for value creation, they must take into account their strategy as well as any potential modifications to their organization's structure, process, and culture (Vial, 2019). An organization's management and internal and external operations are all impacted by rising digitalization. Digital technology has made it possible for organizations to collaborate in new ways, resulting in new product and service offerings and new interactions between the actors involved—the consumers, administrators, and business partners. Organizations must build a wide range of competencies depending on their demands to successfully navigate digital transformation. To remain competitive, an organization must integrate digital technologies into all aspects of its operations, which may require rethinking or even completely reinventing its current organizational model (Carcary, Doherty, & Conway, 2016).

These digital technologies may present themselves as a structure free of any political alignment and paving the way for the transparent working of an organization but there lies an underlining of neoliberalism behind the introduction of ICTs in the organization.

2.2 E-Governance: A neoliberal project

The efforts to implement e-governance in India took place in the late 1990s after the economic reforms of 1991, i.e., Liberalization, Privatization, and Globalization (LPG) (Suri & Sushil, 2017). These reforms introduced a new era of neoliberalism which emphasized the free market (Ives, 2015) and the re-constitution of hierarchical power (Munster & Strumpell, 2014). It has been realized that neoliberalism reconstitutes governance from above serving the interests of the elites (Wacquant, 2010). Neoliberalism can not only be seen as an economic reform but also as a discourse in the Foucaultian sense (Munster & Strumpell, 2014).

E-governance is understood as the use of ICTs in governance, but these ICTs have been criticized by (Armitage, 1999) as 'pan-capitalist'. He believes that these new media technologies act as an instrument to legitimize control over individuals or groups. Sreekumar ,(2007) furthers this argument by observing that e-governance in the Indian setting is entwined with 'cyberlibertarian developmentalism' where he combines the neoliberal discourse of technology with economic development to portray how e-governance practices are transforming the rural settings. Even the cyber-feminist approach discussed by (Haraway, 1991) emphasizes that there is a possibility to see e-governance practices as decolonizing force enforcing the advancement of 'cyborg skills' to survive in this socio-technical society. E-governance is generally regarded to achieve SMART (Simple, Moral, Accountable, Responsive, and Transparent) governance once implemented (Anttiroiko &

Malkia, 2007) but there are various discourses underneath it that need to be challenged.

Neoliberalism can be better understood as a result of power-knowledge relations. The use of digital platforms in recent times has become an indispensable part of society (Plantin et al., 2018). They are introduced with the goal of making the process more efficient, smart, and social (Törnberg & Uitermark, 2020). They are marketed as spaces for personal liberation that allows everyone to give their opinions and express themselves (Zuckerberg, 2019). They allow the users to participate in the process and express their opinions. These ideas give rise to self-organization. Digital initiatives offer opportunities for self-regulation which brings in a new vision of a society where the power is organized without the presence of a central authority (Uitermark, 2015).

Cybernetics scholars also contributed to the development of the self-organization concept (Wiener, 1948 ; Ashby, 1991). Within this discourse, self-organization is defined as systems where components have some independence when they interact with each other, directly or indirectly (Heylighen, Cilliers, & Gershenson, 2006). According to (Andersson & Törnberg, 2018) self-organization differentiates between complex and complicated systems. The latter is assembled whereas the former is self-organized (Bar-Yam, 1997). Complex systems have more flexibility, adaptability, and resilience than complicated systems. Today there is a shift towards complex systems such as network governance. A complex system shifts the focus from formal bureaucratic relations to social, informal relations. This shift can be seen as a result of neoliberalism in governance processes (Joseph, 2013 ; Chandler, 2014 ; Blanco, 2015). Therefore, digital interfaces as self-organizers can be seen as a set of complex and decentralized governance. This governmentality lands us in a

dichotomous situation where the participants see decentralization as a natural choice. The use of digital technology offers ‘individual liberation and freedom’ (Törnberg & Uitermark, 2020) in the decentralized structure where everyone can self-organize and self-regulate their conduct. This points us to the question of the individual we are emphasizing. What are the subjectivities associated with the user of these digital platforms?

(Bauman, 2013) analyses the dissolution of the Panopticon power in disciplinary societies. The dissolution was observed as institutional structures or any watch towers were abandoned while promising freedom and liberation. Bauman remarked that this liberalization did not lead to the empowerment of the individuals; rather, it resulted in disempowerment. Just because something is decentralized and individualized doesn't mean that its results reflect the interests or preferences of those who make up the system. Neoliberalization and the associated movement to individualized forms of politics and power did not enhance liberties because market choice cannot replace political action. So, Bauman, in his examination of post-disciplinary societies, notes that the freedom promised in the neoliberal world is illusory.

2.2.1 Self-organization: A new form of Laissez-Faire

The lectures on biopolitics by (Foucault, 2008) provide a critical analysis of laissez-faire policy and deconstructed it. The concept of laissez-faire implies that the free market is a natural condition, whereas government should be in limited power. (Harvey, 2007) questions this hegemonic discourse and understands neoliberalism as a method to restore class domination through political and economic practices. Foucault also saw this as a naïve interpretation because the market doesn't develop by itself; rather, it is also constructed and becomes subject to government control

and restriction. Therefore, the disciplinary techniques of government are tied up with the imagery of free market. This idea of *laissez-faire* which is associated with the neoliberal government, should be identified with regular and rigorous intervention. This means the state changes its form to market instead of taking a step back in the governance process. For example, public institutions like SAI, through its indicators like rankings or audits, ensure that all the actors are competitive and observe self-discipline through observation of their own actions. This type of disciplinary measure ensures that control is embedded in the technical designs of the digital platforms rather than direct top-down control.

Similarly, self-organized systems are also constructed and maintained through control. These self-organized systems are not natural as believed in neoliberalism; rather, they hide the actual forms of control which are present in the digital platforms. As (Foucault, 2008 ; Foucault, 1988) notes, self-organization “should not be identified with *laissez-faire*, but rather with permanent vigilance, activity, and intervention.” Digital platforms are far from being decentralized; instead, they are made up of a complex web of policies and practices for sifting data, prodding users, and monitoring users with the ultimate aim of enhancing the interests of the platforms' owners (Weinmann et al., 2016 ; Marres, 2017). The user is constantly monitored and subjected to behavioural trials to discover how to guide and prod them in lucrative areas. Platforms are advertised as "making technology social," but their true impact is typically to make the social technically controlled by converting interactional modes into quantifiable and datafied forms that allow for intervention and modification to exert control (Van Dijck & Poell, 2013). Thus, social technology represents a concentration of social interaction modalities,

providing institutions the authority to influence and change our own forms of communication.

Digital platforms represent "choice architectures" that influence the circumstances in which users make decisions and influence user behaviour. Although choice architectures are inevitable since we always make decisions in certain situations with limited knowledge, nudging is the methodical process of constructing the designs to change behaviour in predetermined ways. This shaping may be accomplished by altering the information provided, the options offered, and the default choices or generating various implicit or explicit awards, scores, or ratings. In order to "gamify" and influence users' behaviour, ratings and scoring are particularly prominent examples that are commonly employed (Vanolo, 2019). The way "quantified self" (Lupton, 2016) devices like Fitness Band push us to measure our productivity, health, and well-being with the implicit imperative to self-regulate and optimize our health care and workplace productivity are examples of how ratings and scoring shape social life (Vanolo, 2019). As it integrates into people's regular social life, it becomes a potent weapon for influencing individual behaviour while continuing to appear to be a decentralized form of self-governance (ibid.).

These perspectives intertwine to create the governmentality of the digital platforms, which (Törnberg and Uitermark, 2020) refer to as complex control. These creative digital efforts have changed the organization's power dynamics by introducing new forms of governance and control. Using Deleuze's theory of power shifts, the enormous influence of digital platforms in the field of sports administration and shifting forms of governmentality is analyzed. Deleuze's viewpoint on the shift from disciplinary to post-disciplinary societies offers important new perspectives on how the power relations inside SAI are evolving.

Disciplined societies gave way to new, adaptable power structures in the middle of the 20th century that were characterized by "ultrarapid forms of apparently free-floating control" (Deleuze, 1992). According to Deleuze, these control societies functioned through mobility and speed as opposed to the fixity and confinement found in disciplinary societies. Although the analysis clarified the broad societal changes, his expectations about the impact of digital platforms in the modern environment of the SAI have been outperformed. As digital technology has developed, more complex and evasive methods of influencing behaviour have become possible. Digital platforms may constantly change and adapt, giving users extraordinary precision and control over their behaviour. Platform owners can strategically alter user behaviour to serve their own interests by utilizing complexity science techniques like data analysis, A/B testing, and real-time review. Technology owners now have detailed knowledge of how their goods fit into the larger sociotechnical context thanks to the increased symbiotic feedback loop between appraisal and technological adaptation (Lane, 2016). As a result, the control has become more scientific. In the age of digital platforms, control takes the shape of subtle nudges and behaviour shaping rather than top-down directives. The very laws of interaction contain this type of control, which we can refer to as complicated control. Desired outcomes emerge via micro-interactions similar to a complex system but with a major difference: system designers slowly and iteratively construct features that coincide with the platform owner's objectives. Control seeps further into lower strata as digitization speeds up the creation of mediated platforms. These phenomena highlight the strength of intended self-organization, where control is conveyed through fine-tuning of technical code and performance indicators, which causes cascading changes among interacting actors.

The revolutionary impact of digital platforms mirrors (Elias, 1969) insights about the power relations at the court of Louis XIV. Elias emphasized the transition from a crude game of power to a more deft and diplomatic one. Digital platforms create the game's rules in a similar way, but they are more flexible and adaptable. These technological breakthroughs make the development of fluid and carefully managed social games possible. The naturalization of emergence and self-organization frequently comes with a normative dimension, in which these events are viewed as fundamentally beneficial. However, the negotiated and manufactured nature of social games highlights the fact that self-organization is not inherently good or natural; rather, it reflects the objectives of those who create the rules.

We face a conundrum since governance models informed by complexity theory now use the ideas of bottom-up dynamics and complexity as control tools (Krivy, 2018). While centralized, top-down command-and-control systems have long been linked to oppression, it is important to understand that decentralization and self-organization can lead to the emergence of new power relations and forms of control. Modern society in the 20th century ran on the tenets of linearity, stability, and negative feedback. On the other hand, complexity, chaos, positive feedback, and non-linearity come to the fore in the digital era, which is characterized by digital platforms. These platforms alter the limits of personal freedom by hiding the complex processes of pushing, nudging, and pulling that determine the context in which users engage. Instead of serving as tools for disintermediation, digital platforms inject new layers of technical control and mediation into various spheres of social life. By authorizing some forms of action while restricting others, they serve as collections of rules that organize interactions and direct behaviour. With their "choice architecture," these platforms influence

human behaviour and define what is practical and even conceivable in their intended settings. The way we approach political claims and analyze the data they produce depends greatly on our ability to understand the true nature of digital platforms. Due to its frequent roots in complexity science, computational social science may unintentionally embrace a simplistic naturalist epistemology that ignores the political implications of self-organization. Similarly, it is possible to ignore the political economy in which digital data were formed by considering them to be "raw" or "natural" evidence of social processes (Marres, 2017). Researchers' attention may be drawn away from the contextual factors underlying data production by focusing on data and methodology. This necessitates a critical examination of social complexity and computational science that questions the notion that "bottom-up" implies spontaneity, naturalness, or an absence of politics. As a result of the fact that structure and power are always at play in determining the context and conditions of social interactions, such a critical approach must place conflicts and power struggles front and centre. Therefore, these platforms have reinterpreted the rules through the use of science and the development of social games, reshaping the basic foundation of modern sports administration.

2.2.2 Employer-Employee relations in purview of digital practices

Growing competitiveness in every sector calls for effective and efficient workplace productivity. To achieve this efficiency in organizations, digital technologies are used that empower management to monitor the actions and behaviours of their employees. One of the pioneering research to examine individual employees' concerns regarding organizational practices was conducted by Smith et al. (1996). He identified four key aspects of their concerns regarding organizational information practices, i.e., privacy issues, improper and unauthorized access.

Similarly, another study was conducted to analyze digital monitoring from both employer and employee perspectives (Stanton & Weiss, 2000). In this study, three aspects were cross-verified across various organizations, i.e., attitudes, perceptions, and beliefs. The result observed was a mixed response, where only a small percentage of respondents displayed a negative attitude toward digital surveillance. The majority of respondents felt safety and security due to the presence of monitoring technologies. The reason for their secure feeling was that they did not believe that information collected by the employers was used for any punitive or vicious purposes, so it was not disturbing for them.

To pinpoint various elements that would enhance an employee's perception, attitude, and behavioural response to workplace electronic monitoring, (Alder, Noel, & Ambrose, 2006) developed a framework. The study was conducted in two phases. In the first phase, an online form was sent to the respondents before an unwitting Internet monitoring and blocking system was installed in their workplace. In the second phase, respondents were informed that this monitoring had taken place; as a result, only 63% of the original sample replied to the second survey suggesting that the sample base may have been concerned. Furthermore, the findings showed that regular Internet users were more concerned about the use of Internet monitoring tools than those who used the Internet less frequently.

Synder (2010) used communication boundary theory to investigate how workers reacted to email surveillance in a workplace that was computer-mediated. Employees' views of email surveillance in the workplace were acquired through an online survey. The perceived email privacy scale (PEP) was then used to test those perceptions. According to the study, PEP is a two-dimensional construct that assesses a person's capacity to safeguard their privacy as well as their justifiable

worries about an organization violating their email privacy. The study added that employees' assessments of their working connections, particularly with management, were directly associated with their perceptions of PEP. For instance, the study found that if an employee believed that management was monitoring their email, there would be a negative impact on the relationship between employer and employee.

These dynamics of employer-employee relations lead to the question if these digital practices are not only affecting our work but governing the individuals through their algorithms.

2.3 Understanding Algorithm Governance

The literature on the topic consists of multi-disciplinary subjects that show how through the functioning of algorithms results in the automation of the project. Since the inception of technology, it has reorganized and remodified the society (Bijker & Law, 1992 ; Latour, 2005). This change has been noted from as early as Socrates (Ong, 1982) to Weiner's interdisciplinary relation among technology, biology, and social structures (Weiner, 1948). The next breakthrough in literature was (Langdon Winner's ,1980) article 'Politics of artefacts,' where he showed that technology is not neutral and it has a role in shaping social interaction and achieving its political aim through its design or use. Scholars have also emphasized the role of coding as one of the factors affecting social behaviour, other factors include legal structures, economic conditions, and societal norms (Katzenbach, 2017; Napoli, 2013; Orwat et al., 2010). The first to contemplate the term 'algorithm governance' were Müller-Birn et al., 2013, where they highlighted that it is different from social governance and represents a coordination mechanism based upon specific rules. The works in critical software studies on this topic present that the algorithms and social

interactions are mutually dependent on each other (Fuller, 2008 ; MacKenzie,2006 ; Kitchin & Dodge, 2011; Berry, 2011).

These scholarly works have stressed the relevance of algorithms in relation to socio-economic and political contexts. Empirical studies showed the effects of algorithms on different environments (Kitchin, 2017 ; Seaver, 2017 ; Ziewitz, 2016). The pertinent studies have had the impact of coordinating and inspiring research about algorithmic governance with a common conception of regulation to control risk or change behaviour in a desired manner to achieve a certain agenda (Yeung,2018). Scholars from STS and media studies have long researched and shown how social media platforms can re-organize our information and affect our subjectivities (Couldry & Langer, 2005). These platforms prioritize a certain kind of information over other content, introducing new modes of domination in a digital society, such as filtering and blocking certain photos or videos to be uploaded on social media platforms (Gillespie, 2018)(Gorwa, 2019).In the educational field, an example of selective decision-making platforms are plagiarism software that restricts certain kind of content from being accepted by journals (Introna L. D., 2016).

Thus, algorithms can be understood as tools to exercise power, control, modify behaviour and reconstruct social reality (Lessig, 2009 ; Bucher, 2012 ; Pasquale 2015 ; Just & Latzer, 2017 ; Latour's 2005) idea can further be implemented here as power is produced as a result of networked assemblages of social and technical actors, which helps understand how the algorithms gain power and slowly exercise their control (Neyland & Möllers, 2017). Especially in the public sector, this assemblage further leads to mass surveillance, also explained as dataveillance in the coming chapters. Algorithms bring rationalities into the

bureaucracy by filtering information and making the best choice out of the available options (OECD, 2019). But these advantages are critiqued by their negative consequences. It has resulted in non-planned and non-revealed consequences in public organizations (Veale & Brass, 2019; Dencik, Hintz, Redden, & Warne, 2018). In the process of exercising power through algorithms, actors are alienated from their output of the work. To comprehend it better, we need to understand how digital alienation works.

2.4 Digital Alienation

To understand the concept of alienation, we need to first explore the notion of subject-object dualism. Rousseau through his concept of Social contract, portrayed the dilemma of the person who is limited by their need for social interaction while also having this as their only means of achieving peace with themselves. This Social Contract would allow each individual to become "as free as before" and be subject to "one's own law" (Jaeggi, 2014). Hegel works on a similar line with Rousseau but departs from his idea of the individual's attaining peace through the Social Contract in favor of a universally accepted commitment to a shared "type of social integration that does justice to the 'individual's' right to particularity." Following Hegel further two schools of thought emerges, i.e., Karl Marx and Kierkegaard. They both presented different views on alienation. Marx saw alienation from the proletariat's perspective, how their own labour becomes alienated from themselves. Kierkegaard and Heidegger saw the self as alienated from the external world and yearning for authenticity.

The studies on alienation are mainly influenced by Seaman and Marx's perspective, which form the two main traditions that inform the study on alienation; most researchers favor the latter (Healy, 2020a). These two traditions diverge

greatly, especially in how they view the root causes and effects of alienation. Marx views alienation as a typical reaction to the difficulties imposed by problematic technologies and sees it as a direct product of capitalism's conflictual and contradictory nature. Marx's approach places special emphasis on the social and economic dynamics that underlie alienation. Even Marx's concept of commodity fetishism can be used to understand digital interventions in the present world. We can recognize a variety of digital commodities, including software applications, online platforms, data, and digital services, which are the result of the work of software developers, graphic designers, and other digital workers. The social relationships and labor involved in their manufacture, however, are frequently concealed, which leads to a fetishization of the digital products themselves. The fetishization of digital goods is frequently reinforced by the idea of technological determinism, which portrays them as neutral and unavoidable byproducts of technical advancement. The social relations and power structures that are involved in their creation and administration are hidden by this ideology. Additionally, it maintains the fallacy that digital interventions and governance are unbiased and apolitical when, in reality, these issues are determined by economic factors and established power structures. This objectification of commodification leads to the alienation of labour, in which employees are cut off from the products they produce.

The Seeman approach, on the other hand, views alienation as a pathological reaction to life's challenges that is divorced from the big picture and centred on the individual. Powerlessness, meaninglessness, normlessness, isolation, self-estrangement and cultural alienation are Seeman's six categories of alienation.

The idea of powerlessness is the conviction that one's own efforts have no power to change desired results or reinforcements (Seeman,1959).

Meaninglessness refers to the inability to anticipate outcomes and consequences and a lack of comprehension or clarity of one's beliefs. Normlessness is a term used to describe how societal norms fail to control behaviour and how people lose touch with their social conscience. When people place a low value on objectives or convictions widely held in society, they become isolated, resulting in feelings of alienation and a desire for change. Loss of intrinsic significance and fulfillment in one's work is reflected in self-estrangement. The rejection or sensation of separation from prevailing social values is a component of cultural estrangement (ibid.).

Seeman's framework offers a toolkit for examining a variety of behaviours related to alienation, with the goal of making the idea more understandable. His plan, meanwhile, has several drawbacks. First of all, none of the six characteristics of alienation must be present or have a clear theoretical structure. Seeman contradicts himself by treating these dimensions as independent realms while simultaneously suggesting that they might be applied together in the analysis of certain situations. Second, his emphasis on the unique feeling of alienation prevents generalization from particular situations, which impedes the quest for more comprehensive answers. Seeman's viewpoint implicitly favors management over labour while also tending to reinforce current social interactions and hierarchical systems (Healy, 2020a). Despite its flaws, Seeman's framework recognizes the existence of fundamental problems with our way of life. This observation is consistent with Marx's attempts to address the problematic elements of society in his *Economic and Philosophic Manuscripts* from 1844.

According to Marx (1981), alienation has its historical roots in the antagonistic and dialectical relationship between labour and capital and the ensuing

loss of authority over one's own labour force. Marx emphasised that this relationship existed in everyday life and titled the section of the Economic and Philosophic Manuscripts that dealt with alienation directly with the term "Estranged Labour" to underscore this point. Marx has a unique perspective on the nature of our species and contends that labour expresses people's fundamental humanity. People undergo personal and social transformations during the course of their work. In order to realise the results of their labours, people form a variety of partnerships, which fosters this creative, innovative desire. In his argument that society "does not consist of individuals, but expresses the sum of interrelations, the relations within which these individuals stand," he highlights the need for a collective effort to gain those goods necessary for us to live, survive, and thrive (Marx,1973). The main tenets of Marx's conception of humankind are as follows: we alter the world as it is, we do so in a social setting, and in the course of doing so, we alter both our perception of the world and our beliefs about it. By doing this, we transform ourselves and, subsequently, the social environment in which labour takes place. It is a dynamic, interactive, creative, and transforming process that contributes to and is based on social relations. It is a dialectical process subject to continual change that generates new practical problems demanding new solutions. This dialectical and contradictory aspect of the capitalist system, notably the loss of control over one's labour force, is central to Marx's theory of alienation.

2.5 Summary

This chapter delved into key thematic areas to discuss the evolution of e-governance in SAI. It comprehends how digital technologies are imbibed within the administrative working of the organization and how the neoliberalism ideology is reflected in the use of such digital practices. The use of ICTs also promotes the

chances for algorithm governance and how it may lead to digital alienation. This chapter provided the basis for understanding power dynamics and the decision-making process in sports organizations.

Chapter 3

Research Methodology

In this research, e-governance is constituted as a heterogeneous entity consisting of both human and non-human actors. It adopts Actor Network Theory (ANT) both as an explanatory framework and as a research method to study e-governance in the context of SAI. As a theoretical framework, it will guide the research design, interview questions as well as the understanding of the acquired data. As a method, it gives three basic assumptions for going into the field. First, losing all the former assumptions about the nature of networks or actors. Second, is the principle of generalized symmetry, which is using a single framework or terminology to explain human and non-human elements. Third, is the principle of free association that is abandoning any distinction between natural and social phenomenon. It is so because the distinction between natural and social phenomena is an effect generated by networked activity. So, they cannot be used to provide an explanation and one should consider symmetrically the efforts to enroll both human and non-human elements.

The concept of e-governance is multifaceted, encompassing various actors, procedures, technology, and regulations. A thorough grasp of these intricacies and their interrelationships can be obtained through qualitative research. Investigating the thoughts, feelings, and driving forces behind particular choices or actions in digital governance is beneficial. This is especially helpful for this research as the aim of the study is to comprehend the phenomenon of e-governance and how it is translating the roles of various actors. Qualitative research methodology is also useful in the present context as it allows flexibility during data collection and reshapes the course of actions as per the requirement. It allowed to have a deeper

understanding of how different actors interact with each other, policies, and digital technologies. This study was focused on analyzing how actors are deciphering these new changes in their practice. ANT adopts the notion of ‘following the actors in action’ (Latour, 2003). By following actors and understanding how they interpreted digital technologies in their daily life helped in contemplating the phenomenon of e-governance. Thus, an interpretative stance was used to make sense of the actor’s understanding of e-governance practices. It allows to answer the theoretical question of how non-human entities gain agency within sociotechnical networks (Atkinson et al., 2001). A simple example can be a biometric attendance system that constitutes a sociotechnical network of employees, organizational rules, biometric machines, etc. This way, the biometric system has been delegated an agency that shapes human action.

3.1 Research Design

A case study research design has been employed to get an in-depth understanding of SAI. The goal of this research is not to generalize the results but to focus on completely understanding and analyzing the implementation of e-governance in SAI. Several sources of evidence can be used in a case study approach, leading to a deeper comprehension of the research problem. These involved document analysis of e-governance policies and strategies, participant observations of e-governance practices within the organization, and interviews and focus group discussions with important actors. Because of its adaptability, the case study approach allows for adjustments to the research plan in response to findings from the investigation. This is especially helpful in light of this research, considering how quickly digital technologies are developing and how sports governance uses them.

3.2 Participants

The research used purposive sampling along with snowball sampling because this study aims to explore a particular phenomenon, i.e., e-governance within SAI. It helped to provide great insight into the phenomenon. The access to the field was gained through a friend who was a shooting player in SAI. He introduced me to his coach, who further introduced me to SAI administrative staff. Once I entered the field it was comparatively easy to develop further connections but there were some who were not interested in cooperating with the research. All attempts have been made to reduce the biases associated with the sample and make it generalized to the entire population that has been considered in the study.

Stakeholders	Criteria for participation	Type of interview	Average Duration of Interview	Number
Administrators	Officials who had experience in implementing and using e-governance initiatives	In-depth semi-structured interview	50-60 minutes	17
Coaches (from the following games) Wrestling Archery Boxing Athletics Hockey Kabaddi Badminton Swimming Shooting	Users of e-governance initiatives. Both permanent and contractual coaches were interviewed.	In-depth semi-structured interview	50-60 minutes	25
Players (from the following games) Wrestling Archery Boxing	Enrolled under SAI schemes, be it Khelo India or Target for Olympic Podium (TOPS)	In-depth semi-structured interviews & focus group discussions	20-30 minutes	20 (in-depth interview) + 6 (focus group)

Athletics Hockey Kabaddi Badminton Swimming Shooting				
National Informatics Centre (NIC) Haryana Chandigarh New Delhi	They are the technical support for implementing eOffice and provided server space for e-governance initiatives launched by SAI	In-depth semi-structured interviews	30-40 minutes	10

(Table 1: List of respondents from the field)

3.3 Data Collection

The empirical material is based on semi-structured interviews, focus groups, meeting observations, and policy and document analysis. Formal (interviews) and informal conversations are treated as primary data. At the initial stage, the format of interviews was open, so that participants can freely tell what is important to them. The material was collected through dialogue with informants about their knowledge of digital technologies used in their everyday work (with a special focus on the National Sports Repository System (NSRS) and eOffice), their role in policy formulation and implementation, and their experience of using technological platforms. Initially, the focus was on two digital initiatives, i.e., NSRS and eOffice. It was so because eOffice was responsible for bringing change in the internal office working environment and dealt with interactions among different levels of administrators at various stages. On the other hand, NSRS is responsible for dealing with various stakeholders like players, coaches, sports scientists, sport centres, and administrators. The information about working of this digital application can provide insight into complicated governance network. However, the study was not

restricted to these two e-governance initiatives rather they formed the starting points for starting the conversations.

This study utilized textual and content analysis that helped in analyzing policy and institutional documents. It also assisted in interpreting interviews and day-to-day observation of conversations among employees of SAI. As an ethnographer, I observed different kinds of interactions in the form of stories, events, interviews, routine practices, etc. which helped me in making sense of the participant's world. As (Giddens, 1984) argued, 'social systems, no matter how grand or far-flung, both express and are expressed in routines of daily social life.' These routines, events, and interactions, constitute the discourse of organizations which further contribute to organizations' reproduction (Ruth & Krzyzanowski, 2008). Moreover, following Latour (1986), individual interaction is simply one aspect of social activity, it is also embedded in geographical, semiotic, and material contexts, all of which influence how people interact.

The fieldwork was started with the conduction of interviews at headquarters of SAI situated in New Delhi. By following the actors, the study consisted of multiple sites. The study began by observing administrators belonging to the IT division as they are responsible for the implementation of e-governance initiatives and they formed the entry point for this research. In the SAI organization, there are many tiers such as sub-regional, regional, and headquarters. The top-to-bottom approach was taken so that the idea behind implementing e-governance initiatives could be understood and the questionnaire could be modified accordingly. Interviewees were started from SAI Headquarters in Jawaharlal Nehru Stadium, New Delhi, then went to Ch. Devi Lal SAI Northern Regional Centre, Sonapat, Haryana. After this, the SAI Training Centre (STC), Hissar, was covered along with

the National Centre of Excellence (NCOE), Rohtak, STC Bhiwani, and STC Kurukshetra. A thorough qualitative study was done to explore the dynamic process of network building in the context of e-governance and the issues related to it. The instrument has been self-developed and has been validated through content validity by academic experts in the domain.

Interviews

The in-depth semi-structured interviews were conducted with the actors mentioned in Table 1 to explore and generate deeper insights from the interviewee's experiences. These interviews helped to identify core matters related to various actors and improvise the questions for subsequent interviews. The interviews were informative and valuable in understanding various nuances of e-governance in SAI, like the benefits of digitalization and its limitation.

The interviews explored the following issues: a) Issues related to policy and practice, i.e., the policies being followed by SAI to implement these e-governance initiatives, the impact of Digital India policy, what is their motivation to launch these initiatives, administrators' conceptions, and implementation of e-governance projects; b) issues related to the impact of e-governance on SAI, i.e., how do administrators, coaches, and players react towards e-governance, is it making a change from traditional governance structure to e-governance and how they enroll actors into the network of e-governance; c) implementation related issues, i.e., what are the challenges associated with the implementation of e-governance practices from each stakeholder perspective, how do these stakeholders operationalize these initiatives; d) the issues related to power were also explored, i.e., whose interests were favored over whose.

Focus Group Discussions

Only a few focus groups—that too with the players—were held since most participants felt uneasy with the concept of group discussions. Every focus group had one thing in common: the sports they played. My comprehension of how players interact with technology has improved as a result of the in-depth interviews, but focus groups have given me a more varied perspective on the same issues, which has enabled me to paint a more nuanced picture of e-governance. Everyone was reluctant to talk about the organization's digital practices at first, but after engaging in conversation about their passions and accomplishments, they began to share their thoughts on the organization's current digital initiatives as well as their own experiences with them. Focus group discussions gave various actors a forum for interaction and discussion, which allowed the study to record opinions and experiences from a group of participants.

Participant Observations

Along with in-depth face-to-face interviews and focus group discussions, participant observation was also extensively used. It allowed me to investigate the interaction of actors with each other. I used to visit the SAI center (headquarters, regional center, and sub-regional centers) from 9 AM to 5 PM, which allowed me to observe the workings of the organization and how various actors are using digital technology to get through the day. I was allowed to sit with the employees, players, and coaches, which gave me the access to nitty gritty of their interaction with digital initiatives that were not mapped out thoroughly during interviews and focus group discussions.

Why Haryana?

This research has been conducted in the state of Haryana. The reason for this can be better understood by providing the sports background of the state. Haryana has been producing successful players, especially in boxing and wrestling (Duggal, 2018 ; Ghoshal, 2016). Haryana has excelled in the area of producing medals in international games like the Olympics and Commonwealth Games. In the Commonwealth Games of 2022, Haryana athletes won 28 medals out of 120 Indian medals, which was the highest for any state (Benu & Murthy, 2022). Haryana has a rich sporting culture where it is a common rural practice of holding wrestling matches monthly. This background made Haryana an ideal state to conduct my research on e-governance in the Sports Authority of India (SAI). In Haryana, there is one Regional Centre for SAI in Sonapat and a total of four sub-regional centres, i.e., STCs and NCOEs, in Kurukshetra, Hisar, Bhiwani, and Rohtak. The scope of this research has been deliberately circumscribed to the Haryana region in order to provide a comprehensive analysis of the e-governance initiatives employed by the SAI within the constraints of the project timeline.

3.4 Ethical Considerations

An introduction informed each participant about the goals and designs of the investigation. The results have been handled confidentially. Without the express consent, no source was associated with any particular findings or comments, nor will it be. The study was conducted with informed consent of the participants. Initially, the consent was taken on an organizational level. Later, the interviews and focused group discussion happened taking into consideration their personal willingness to participate in the interviews and share their invaluable knowledge. Participants were informed that they might choose not to answer any questions.

Participants were respected to the fullest extent possible, and it was acknowledged that they had the option to decline participation or not respond to any questions. Anonymity was given to all the interviewees, and their names were withheld wherever interviews were cited.

No data was created; instead, primary data was gathered with the goal of maintaining objectivity. All secondary data sources are fully acknowledged for their contributions to this study in terms of secondary data sources. To the best of the researcher's expertise and skill, the data collection is truthfully described, and the analysis is performed.

3.5 Data Analysis

The results acquired through qualitative interview instruments such as interviews and focus groups have been analyzed through thematic analysis, in which proper themes have been developed based on the data, and such data is used for analysis in accordance with the objectives of the study. Thematic Analysis (TA) is a method of 'identifying, analyzing, and reporting patterns (themes) within data' (Braun & Clarke, 2013). It helped to grasp the data in depth. It facilitated the emergence of themes from in-depth face-to-face interviews and focus group discussions. It helped to closely scrutinize the emerging themes from the dataset. Braun and Clarke's six stages of thematic analysis were used to fully grasp the results from the dataset. These six stages include familiarization with the data, generating coding categories, searching for themes, reviewing themes, defining them, and expressing the findings through a coherent write-up (Barun & Clarke, 2013).

The in-depth interviews, focus group discussions, and participant observation provided an understanding of how the translation process is being carried out within SAI to stabilize the e-governance networks. During data

analysis, I could visualize how actors were being enrolled, and some resistive actors existed, making e-governance a continuous process.

This study also utilized textual and content analysis that helped analyze policy and institutional documents. It also assisted in interpreting day to day observation of conversation among various actors.

3.6 Summary

To sum up, the research approach used in this thesis used a case study design in conjunction with a variety of qualitative data-gathering techniques to offer a thorough grasp of how e-governance initiatives affect SAI. The study was able to document and analyze the intricate realities of e-governance within the unique framework of SAI through the use of numerous data-gathering techniques and thematic analysis.

Chapter 4

Problematization: The Rise of E-governance in Sports

India has been experiencing significant digital growth due to factors including the decreasing cost of smartphones, the accessibility of high-speed connectivity, and government programmes for financial inclusion. India has one of the highest percentages of internet customers worldwide thanks to its sizable and quickly expanding population of digital users. The rising use of digital services, app downloads, and social media engagement in India are clear signs of this digital leap. The Sports Authority of India (SAI) may have embraced digital projects as part of its digital transformation to boost productivity, streamline operations, and improve communication inside the company. This chapter focuses on the adoption of digital technologies in sports from the perspective of different actors. Through this agenda, it is analyzed that digital technologies are a part of the larger competitive neoliberal environment. Digital technologies promotes the interests of those positioned at higher hierarchies and pulling the strings. This idea is dealt with in greater detail in the next chapter where the linkages are provided between governmentality and neoliberalism. The present chapter mainly focuses on how digital technologies are being consumed by different actors in the sports sector and why.

In 2014, SAI started with its digital presence by launching its website. This marked a shift from a traditional governance structure towards e-governance, which led to the creation of various actor networks such as technology vendors, sports scientists, and technocrats. E-governance was adopted with big goals in mind such as making the organization efficient, getting rid of red-tapism, and better serving the needs of the coaches and players through more participative platforms.

In most of the e-governance literature, it is believed that e-governance would bring positive major changes in the organization on adoption but such rationale often only focuses on what is happening on a macro level and ignores the micro picture (Sreekumar, 2007). The e-governance initiatives launched with a particular goal may be used in an entirely different manner or may not be used at all. So, it becomes important to observe these micro-nuances of how various actors interact with each other. In an attempt to discuss the rise of e-governance in sports, it becomes important to contextualize the discourse of e-governance. Contextualizing the discourse would help us comprehend how various digital initiatives function within the broader networks. However, the chapter also discusses how other theories are relevant to understand e-governance.

This chapter explores the way various actors understand e-governance. It is explored why the need was felt for these changes. The introduction of new technologies often requires a cultural change (Harding, Mackintosh, Martin, Hahn, & Ames, 2009). One of the leading figures in the sports industry, Luis Vicente, said that

we need to embrace the new ecosystem and participate actively in the design, definition, construction, and execution of a new model of sport, in a more constructive way and in a true consortium spirit
(GISC, 2021)

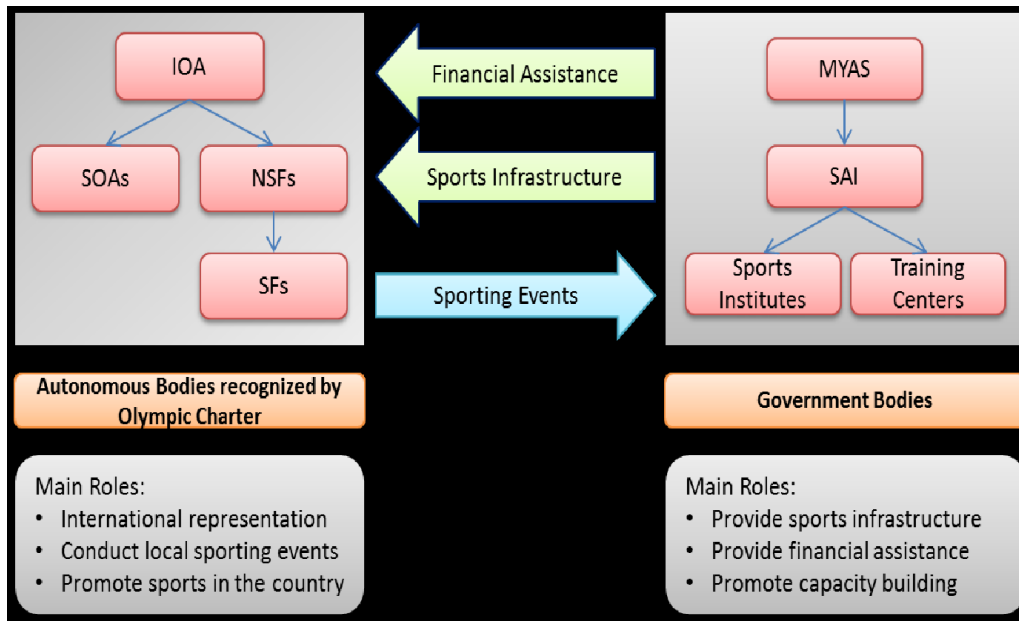
All the actors are working towards creating, innovating, and achieving this change. Efforts are made to study how the use of digital technology is changing the current scenario of sports governance. With India gaining Independence in 1947, sports was not seen as an important topic to be taken care of at that moment. But later, the Nehru government realized the potential of sports in portraying countries'

image. Therefore, Asian Games were hosted in 1951 in India, which was a major milestone for post-colonial India. It was in 1982 that a special department (presently known as the Ministry of Youth Affairs and Sports) was set up to look after sports (MYAS, 2023) and as its first action, it created the Sports Authority of India (SAI), which is the case of examination for our research. The mechanisms by which various actors understand 'sports governance' have been explored along with changes digitalization makes in the governance processes that result in good governance in a sports organization, especially the Sports Authority of India (SAI).

The first section will examine the concept of sports governance, how different actors are associated with it and what are the challenges faced by them. As discussed in the previous chapters, an actor can be any entity be it social or technical that carries the agency to make a change. Then digitalization of sports governance is taken up which has helped to mitigate some of the governance issues like corruption charges or holding two official positions at the same time which hinders the functioning of sports organizations. The focus is also laid on how the use of digitalization is changing the sports governance scenario. In the second section, the role of these e-governance practices has been considered in the pandemic phase that brought the entire world to a standstill position. Covid-19 brought a huge financial loss to events that were supposed to take place physically and the Olympics was one of them. Every country was preparing their athletes for the same and the sudden outbreak of the pandemic halted everything. The situation was dealt with by SAI with the aid of digital initiatives and some of them are still in continuation. In the third section, a stage is set for the next phase of translation, i.e., enrolment by clearly identifying the interests of various actors. This is followed by an overall conclusion for the chapter.

4.1 Sports Governance

Indian sports governance structure can be understood from the figure given below:



(Fig. 1. The governance structure of sports in India, taken from (Choudhary & Ghosh, 2013))

Indian sports governance structure is an autonomous one with federal features as seen in Fig.1. Every sport is governed by a body that is autonomous in nature and is governed under different regulations, for example, the Athletics Federation of India governs Athletics whereas, Hockey India governs Hockey. These bodies are representative of their sports at the national level and if they are recognized by the international federation of their respective sports, they represent India at the international platform of those sports (Department of Sports & National Policies, 2020) .So, the federations follow the rules of international bodies and are free from the supervision of the Indian government. But in India, almost all the federations are dependent on the funding from Government of India (GoI), therefore, they have to follow the policies rolled out by GoI. However, in these federations, there is a division of power among state federations and district offices. At this level, federations are further governed by a particular state's sports policy because initially, sports is a state subject in the constitutional list. If a federation is not taking

any financial support from the government, they are not bound to follow its guidelines, for example, the Board of Control for Cricket in India (BCCI) (Schoenberg, 2019). This number of organizations in sports is a major concern and challenge for the governance of sports. These organizations are intertwined with each other which leads to unclear roles and responsibilities. Though government tries to distinguish between their roles, few organizations are so overlapping that practically it is not possible to segregate them. This leads to poor accountability and transparency. This complex structure of sports governance in the country gives rise to various aspects that need to be researched but due to lack of time, the focus of this dissertation would be on the Sports Authority of India (SAI).

The SAI comes under the purview of the Ministry of Youth Affairs and Sports (MYAS) but it is an autonomous body that has its own charter and constitutions. SAI was created by the Government of India on 25 January 1984 as a registered society primarily to look after the sports infrastructure created for the IX Asian Games. This organization was set up to implement the existing schemes, promotion, and development of sports activities.

The complexity of the structure of SAI as discussed above gives rise to various challenges. The focus of the administrative staff is more on performing routine activities that they fail to complete their governance responsibilities (Hoye & Cuskelly, 2007). The reason behind this can be a lack of staff in the offices, or poor fund allocation (Inglis & Weaver, 2000). During the field study, it was found that there was a lack of permanent staff in the department of SAI at headquarters in New Delhi, for example, there was hardly 4-5 permanent staff working in the IT division, and the rest were the contractual staff. Further, there was a lack of transparency and accountability in decisions taken by SAI. These contractual staff

members were hired for about two years. Administrators complained that by the time they train the new employees, they are ready to leave the organization and they have to repeat the cycle once more. One of the administrators claimed that

every 1-2 years we need to change our office staff and hire new ones and train them again. Since, they are aware they have to go sooner or later, they are not willing to learn this software.

So, a lack of satisfaction with the contractual work was seen which keeps concerned authorities from fully utilizing the benefit of a fully dedicated workforce allocated to them.

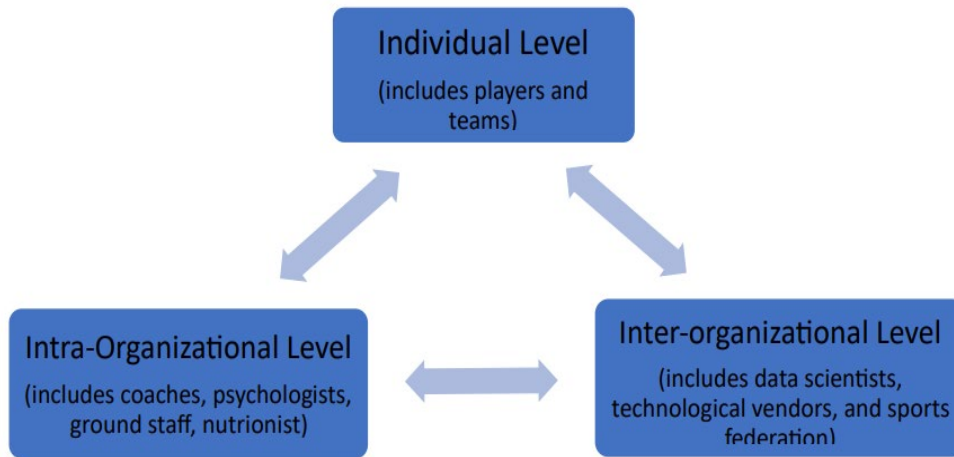
Another issue with sports governance is corruption. A prominent example of corruption in sports in India is Commonwealth Game Scam, in 2010. In 2003, India bid 500 million dollars to host the commonwealth games but when the games were over, the amount spent was 4.6 billion dollars which was way more than expected (Astill, 2013) .With this incident, GoI came up with National Sports Development Code, 2011 (as discussed in the previous chapter) whose main aim was to exercise proper control over the sports in the country. The negligence of administrators toward players has been another issue in sports governance. In my interaction with the hockey female team, from Hisar, Haryana, (it is to be noted that these players were not from SAI) they claimed that

it is a tough job to get cash rewards from authorities because we have to get 2-3 sets of photocopies for each form which almost accounts for 15-16 photocopies. After this, we have to go back and forth for getting the forms signed and finally submit them. It would be better if this process can be automated.

Along with this sports bodies today face several challenges like doping, betting, and gambling, safeguarding children and vulnerable adults, ensuring inclusion and diversity in the provision and a declining volunteer base; ethical leadership, operating as a business and negotiating a complex legal and sometimes litigious environment and other non-sports issues like economic recession, political change, et. (King, 2017). Conflict of interest is another prominent issue in sports governing bodies. It can be understood as a situation where a person is performing duties at two or more places at the same time (Segal, 2022). The infamous Olympic medallist Abhinav Bindra has also been charged with this issue. He was in conflict because he was both a National Observer of Shooting as well as Chairman of the Target Olympic Podium Scheme (TOPS) Athlete Identification Committee. Due to these allegations, Bindra decided to step down to look after his private projects in 2017 (Scroll, 2017). To correct these problems, reforms were introduced in this sector. The reform or ‘modernization’ of sport has been defined as ‘the process of the continuing development of a governing body towards greater effectiveness, efficiency, and independence (UK Sport, 2003). The practice of Good Governance was suggested to make the required changes. The need for good governance was felt across the globe due to failure in the functioning of administrative functions that were affecting the integrity and ethical concerns of sports organizations. The Council of Europe (2005) states, “Good governance in sports is a complex network of policy measures and private regulations used to promote integrity in the management of the core values of sport such as democratic, ethical, efficient and accountable sports activities; and that these measures apply equally to the public administration sector of sport and the non-governmental sports sector.” International Olympic Committee (IOC) worked towards good governance by

introducing 'Basic Universal Principles of Good Governance of the Olympic and Sports Movement'. These principals were included under the Olympic Charter and Code of Ethics. In India, National Sports Development Code, 2011 was introduced. It focused on inculcating good governance practices in various sports organizations. However, achieving these reforms was not an easy task as few actors would be resistant, indifferent, or reactive towards these changes. Sports organizations face pressures from various aspects (like concerned actors, professionalization of the sector, corporate governance standards, statutory legislative requirements, and government sports policies) which ultimately shape the structure and behavior of an organization. SAI is also a sports organization that is affected by the above mentioned issues. To address these issues in general and aligning with the interest of International Olympic Association, efforts were made to introduce good governance. To achieve good governance, digitalization was introduced in the sports governance process. The use of digital technologies in the governance process is known as e-governance.

The benefit of digital technologies can be observed from various levels of analysis (Davern & Kauffman, 2000 ; Xiao et al., 2017 ; Gruettner, 2019). In this dissertation, the analysis is done from three different levels, i.e., an individual level, an intra-organizational level, and an inter-organizational level. These three levels were visualized by following the interactions among different actors. The individual level includes players and teams. At the intra-organizational level, digitalization helps coaching staff, management teams, and support staff (Gruettner, 2019). At the inter-organizational level, actors include technological vendors and sports federations.



(Fig. 2: Inter-relation between different levels of e-governance structure in Sports Authority of India (SAI))

This framework studied digital practices within SAI from an organizational and technical standpoint. The organizational perspective deals with aspects like the administration of sports and improvement in sports outcomes. The technical sphere includes skills, knowledge, and technical know-how. The distinction between organization levels and institutional activity spheres is not rigid rather there is an overlap between them indicating the complexity of digital networks in SAI. The interlinkage of a technical sphere with an organizational sphere improves knowledge processing, enabling knowledge creation (Gruettner, 2019). For example, the Assistant Director, of SAI Headquarters mentions that

with help of the National Sports Repository System (NSRS), we can get real-time updates and produce reports that can help personalize the requirements for athletes.

To put it another way, sports digitization combines a variety of administrative tasks, including player registration, ranking lists, tournament management, recording of results, and more, into an integrated ICT system or service with various features, like webpages and mobile applications (Xiao et al., 2017). The ecosystem of a sports organization is extended as new actors like data providers, IT professionals

enter the organization. (Davenport, 2014a) noted that due to the size and resource constraints, sports organizations will need to rely on a wider ecosystem to successfully imbibe the digitization trend. The expansion and growing complexity of sports ecosystems, as well as the increasing significance of IT players, are therefore likely to be observed because of the entry of new participants. It is also observed that growing digitalization can aid sport governance by using digital technology and doing away with manual procedures and enabling real-time access to game results as well as historical data (Xiao et al., 2017). Digital technologies have led to the automation of regular activities resulting in the replacement of traditional administrative and workflow processes (Morgan & Ravindran, 2017; Mignerat & Audebrand, 2010). This process of automation has been observed from the field data. Most of the administrative staff and coaches accepted that it took them less time to perform routine tasks due to the inception of digital technologies. One of the athletics coaches claimed that

the online process is more convenient for filling out APAR (Performance Appraisal Report). Earlier, there were issues like misplacement of hard copies but now we have our record maintained in our ID.

Digitalization has also helped in dissemination of the information, for example, the website is used as a tool to communicate information within the organization as well as outside the organization. One of the contract-based administrators commented that

The information like tenders, jobs, or upcoming trials are put on the website, and this information is consumed by stakeholders associated with SAI both inside and outside of the organization.

Digitalization in sports also provides new means to interact with its team members and other actors in the organization. One of the examples of this can be eOffice, eOffice has a Collaboration and Messaging Service (CAMS), which includes eScheduler for appointments, Instant Messaging Service (IMS), eTalk (an instant chat application), and eAlerts. This makes inter and intra-department communications in SAI effective and efficient. The use of business intelligence and data analytics can improve how sports organizations function. For example, coaches are awarded in SAI as per their achievements but earlier it was difficult to keep track of the trainees under each coach because coaches are transferred every 2-3 years to different centres of SAI. Therefore, NSRS helps to maintain real-time updates about who are the players trained under a particular coach. This makes administrators' job easy to identify the beneficiaries.

To adopt digitalization in a holistic manner, organizational readiness plays a crucial role. The organizational model of SAI is a traditional bureaucratic structure. For incorporating digital initiatives, SAI has introduced the inception of hardware, software, and knowledge creation among its users, in all its centres. Higher authorities from IT Division, SAI Headquarters, when asked about the competency of SAI in launching these digital practices told that

we purchased servers as per NIC recommendations. Our governing body decided to give laptops to every coach, which was further taken up in regional centres. In RCs laptops, and desktops were given to both the administration wing as well as the coaches, making them meet the hardware requirement. Manpower (technical staff) was also arranged accordingly as per NIC recommendations.

However, there was a contradiction in the answers received on the readiness of SAI in adopting these changes. One of the Assistant Directors, in the regional centre SAI, claimed that

we don't have good wifi (BSNL and MTNL are used and they have poor bandwidth). For more than one year I was not provided with a laptop or PC, so how was I supposed to implement eOffice? I still don't have a webcam, scanner, or printer in my office. Even if things are ordered in my name, someone else uses it. This is the bitter reality of SAI.

It was observed that there was a difference in the readiness level in the headquarters and regional and sub-regional centres of SAI. The headquarters was much more equipped to deal with the change in comparison to the other centres.

4.2 Did Covid-19 give a boost to e-governance?

Sports is important from sociological, political, and economical perspectives (Rodrigues, 2020 ; Smith et al., 2021). But with the coming up of Covid 19, sports activities came to a halt. This has impacted the sports industry badly, especially the postponement of the Tokyo Olympics till 2021 (IOC, 2020). More than 90,000 people were significantly impacted by the postponement of the Tokyo Olympics. The International Olympic Committee allocated more than \$25 million to pay the additional expenses for athletes and teams due to the one-year delay (Rodrigues, 2020). There were many difficulties faced by sports organizations all over the world, like loss of revenue, and unemployment of coaches, and athletes. The pandemic revealed previously underutilized digital opportunities for sports organizations, precisely because they were compelled to make up for the absence of their core products (Ströbel et al., 2021). Sports organizations drastically

reduced their operations in response to strict and easing public health restrictions, halted contests, abandoned strategic plans, reset objectives and priorities, and managed cash flow as a top priority in revenue-constrained circumstances (Karg, Robertson, & Dinsdale, 2021). Sports organizations expanded their digital footprints quickly at the same time, delved deeper into social media platforms, and worked more closely together with a newfound vigor spurred by a necessity to maintain relevance and presence. The responses to the epidemic differed in terms of commitment to digital channels (Smith & Skinner, 2021). The usage of Internet resources by non-profit organizations offering organized sports has expanded, primarily for communication (Ehnold, Fab, Steinbach, & Schlesinger, 2021). On the other hand, (Horbel, Buck, Diel, Reith, & Walter, 2021) discovered that fans' co-creation of value when they returned to live action was facilitated by digitizing stadium experiences through mobile phones. Smith & Skinner (2021) proposed that the pandemic has given a new business model that has intrigued sports organizations to come into partnership with technology firms to 'monetize data, produce consumable analytics for fans' and give interactive experiences to the users. For example, SAI collaborated with UK based company and adopted Athlete Monitoring System (AMS) to improve the performance of players using data analytics.

The pandemic has forced participants in sports, especially athletes, to alter, pause, or even stop their regular routines and activities. This has necessitated a major reorganization of how coaches interact with players. Due to the distance between coach and athlete, instructors will likely need to address several important issues, such as how to track athletic performance, injuries, and other training-related input (Evans, et al., 2020). This may limit the effectiveness of many

coaching techniques in sports, where technique and physical prowess are crucial. Though the webcams can help coaches to monitor the progress of players it is not that effective since they cannot provide a 360-degree view of the space. The use of digital tools in sports has also changed coaching practices, for example, earlier the focus was on technique-based coaching but due to the non-availability of equipment and lack of proper monitoring, the focus of coaches has shifted to strength and conditioning exercises that can maintain the player's stamina during the lockdown. The field interviews showcased that coaches in SAI were majorly concerned with keeping the players in shape despite the barriers of physical proximity. The use of digital tools in interaction with external and internal actors, like social media sites was used to increase communication (Tjønndal, 2020a). One of the hockey coaches at STC, Hisar said

We had a WhatsApp group during Covid 19 to maintain the interaction with the players and were in touch with every student and gave them workout plans. They had to send us the photos and videos. If anyone was suffering from an injury or did not have the equipment or space to practice, we used to motivate them by providing alternative ways like asking the player to exercise with bricks instead of dumbbells (basically we made 'jugad' to get through the situation). We had directions from headquarters about how to carry out the training online and every centre was following those commands. We were in touch with students and to enhance sports education, classes were taken through zoom meetings regarding rules & regulations, diet, psychology, physiotherapy, yoga, and meditation classes, improving performance, etc. We also

had renowned speakers to motivate the players. So, the time was utilized very well during the pandemic. Many students had inquiries during these sessions, so it was an interactive practice.

So, the pandemic gave impetus to the use of digital tools. The meetings were conducted online using Zoom, and the interactive sessions were taken with students on Zoom and google meet. One example of such a meeting was Online training Programme for PE teachers and community coaches held during the lockdown in June 2020. This meeting was attended by the Minister of Youth Affairs and Sports and other dignitaries like the Secretary of Sports, and Deputy Director, SAI. SAI released its Statement of Purpose (SOP) for the functioning of its centres during the pandemic. The SAI has started a series of live online workshops with professionals in sports science and sports management to engage athletes and help them advance their knowledge at a time when athletes are confined to their homes due to the Covid-19 outbreak (Gopichand, 2020). Along with this online coach education program was also launched, encompassing lessons related to injury prevention, video analysis, coaching age-group teams' guiding concepts, and much more (Scroll, 2020). This practice of digital interaction has been continued by SAI even after the continuation of normal training sessions. When players were interviewed to know their opinion about the handling of the pandemic by the SAI administration, they were satisfied with the arrangements made. One of the archery players said

*the situation in Covid was under control here (SAI, Sonapat).
Everything like food used to come into the room. We were quarantined separately, and everything was arranged on a phone*

call. Any meetings or get-togethers used to happen on zoom meetings.

The administrators of SAI were asked for their opinion if they considered Covid-19 gave a boost to their digital efforts. Almost everyone gave a positive response to it. Efforts were going on before the pandemic hit, but they were not able to materialize due to some constraints. The advancement of the pandemic and countrywide lockdown brought the sports organization to a halt. To overcome this challenge SAI paced itself with digitalization efforts. Especially, going live with eOffice kept the functioning of SAI operational. The central-in-charge of one of the STCs said

Covid-19 was a push factor in implementing digital tools in SAI since the administration had to run anyhow and contact was necessary to maintain with the players & coaches, so, we used platforms like WhatsApp, zoom meetings.

Apart from these affirmations, it was also confirmed that the use of e-governance practices within the organization is leading to time efficient results. Less time is consumed in gathering all the actors or transferring a piece of information from one person to another. This made digital tools a part and parcel of SAI's organizational life, especially after being hit by the pandemic.

4.3 Defining Problem

Achieving good governance has been a motto of the International Olympic Association which is also applied by various national Olympic committees. In the Indian context, we have a complex sports governance structure as discussed above. All the sports bodies try to implement good governance within their practice. Sports Authority of India (SAI) being an autonomous body under MYAS with an aim to

promote sports in the country, tries to implement good governance practices. They tried to do so with help of e-governance because it has been found in many cases that implementing ICTs in governance practices can give better results (Anttiroiko & Malkia, 2007 ; Kalsi & Aidya, 2009). By implementing e-governance, the organization is also abiding by the ‘Digital India’ mission. Digital India is the Indian government’s flagship program launched in 2015 to transform India into a digitally empowered society and a knowledge economy. It is focused on three main areas: governance and services on demand, digital citizen empowerment, and digital infrastructure as a basic utility for every citizen. It provides thrusts to specifically designed nine pillars for the program, including Information for all, e-Kranti: electronic delivery of services, e-governance: reforming government through technology, and many more (ibid.).

The journey of implementing e-governance initiatives so far in SAI has not been easy. There are numerous e-governance initiatives taken by SAI as discussed in the previous chapter. To successfully execute these initiatives, a process of translation needs to be observed among all the actors. Every actor defines and understands the rationale behind the adoption of these initiatives differently before aligning their interests with others. The main actors that go through the process of translation to achieve stabilization of the e-governance network within the organization are administrators, coaches, players, technical vendors (NIC), sports scientists, and e-governance initiatives. The main force behind the implementation of these e-governance practices is the IT division of SAI headquarters along with the Personnel division which coordinates these initiatives throughout all the centres of SAI across India. The IT administrators held a crucial position within the network

of e-governance. Their goal was to achieve the following benefits from e-governance¹⁷

- Better dissemination of information
- Quick decision making
- Increase transparency
- Enhance accountability
- Increases engagement with stakeholders
- Assures data security and integrity
- Effective usage of staff energy and skills, thus resulting in increased productivity

The IT administrators in achieving these goals defined other actors in the way that they themselves became an obligatory passage point in the e-governance network they were trying to build. The objectives set by IT personnel bring other actors into the network.

Administrators other than IT personnel become one group of actors who are directly involved with the implementation of e-governance and gets affected the most. They are the executives of SAI who run the organization on daily basis. These include both permanent and contractual staff members. It was noted that most of the staff is on a contract basis, which give rise to various kind of challenges that will be discussed in the next chapter where the efforts made to enroll them in the e-governance network is analyzed. They need good governance practices so that they can ease their workload. They have complained of duplication of work and problems in the connectivity of information between various centres which can be resolved with e-governance. E-governance initiatives like eOffice, National Sports

¹⁷ Information received through RTI filed against SAI

Repository System (NSRS) can resolve these issues, which makes them interested parties.

Coaches are another important actor as they play a crucial role in the development and training of players. They are responsible for selecting athletes for competitions and training them to perform at their best. However, coaches often face problems such as limited resources, lack of access to athlete data, and difficulty in monitoring athletes' progress. They are interested as they believe e-governance initiatives can help address these problems by providing with real-time data on athletes' performance, health, and wellness.

Players are yet another key actor in this context. They want to spend less time on administrative tasks and focus more on their training. They believe it can be achieved through e-governance initiatives. They are the end-users of digital solutions such as NSRS and AMS, which can help them access information and services related to sports governance. However, athletes may face challenges such as limited access to technology or a lack of awareness about these solutions.

E-governance initiatives launched by SAI are also critical actors in this context. They are responsible for providing digital solutions that address the problems faced by administrators, coaches, and athletes. However, e-governance initiatives like eOffice, and NSRS, themselves need to negotiate their identity and roles in these networks. They need to balance the interests of different actors and ensure that digital solutions are designed to meet the needs of all the actors.

Technical vendors like National Information Centre (NIC) form a key actors to achieve e-governance. They provide the backing to SAI to implement these initiatives. Along NIC, there are other actors providing technical support to IT personnel such as National Data Centre, Bhubaneswar provides hosting space

to SAI. IT personnel has also taken help from private companies (the name of the company was not disclosed during the interview) to establish NSRS. Together, all these actors become part of technical vendor groups which also impacts the implementation of e-governance and achieving good governance.

Sports scientists include personnel who help players in their training on the sidelines such as psychiatrists, physiologists, and nutritionists. They need players' data to analyze their performances and better help them. They are interested in e-governance initiatives as they can help them better perform their duties.

Whereas the IT personnel represents themselves as the administrators who just want to achieve good governance and make the governance process more effective and efficient. The IT personnel not only identifies other actors but also picturizes their interests which can only be attained by admitting the proposed e-governance initiatives.

This leads us to the first stage of the translation process, i.e., problematization. It emphasizes various movements that an actor takes to align their interests. These actors cannot achieve good governance alone because there are different problems blocking their way. For example players cannot attain good governance as they lack the agency to do so. Coaches have to follow the regulations of both their sports federation as well as SAI, they are bound by rules and regulations twice. E-governance initiatives if implemented without considering their users in mind while designing may not result in the effective functioning of these platforms, leading to their failure.

4.4 Perception of e-governance by different actors

The use of ICTs in the sports governance process brings more actors into the play including the technologies. Despite ICTs being a crucial aspect of e-governance,

many actors failed to define the concept in their own terms. Only a few of the administrators, especially the ones involved with the implementation of these e-governance initiatives could explain the concept. For example, the chief executive for implementing these initiatives in Regional Centre, Sonipat claimed that

e-governance in SAI is a current initiative and it aims to improve the working of the organization with help of digital technology. It aims at reducing time and bringing efficiency to the work. eOffice is a core application in achieving this aim.

Apart from these key actors, there were rare incidents of awareness of e-governance in specific and governance in general. Most of them claimed that

I don't know much about it.

To gain a better insight into their understanding regarding these new interventions, I had to rephrase the concept of e-governance as digitalization or simplify and sometimes re-simplify to jog their memories and get them to speak. After oversimplification of the concept, one of the athletics players said that

I think digitalization is a good initiative but I don't have much contact with the administration so I might not be the right person to say anything about it.

The concept of e-governance seems to be alien from a player's point of view. Players are the end users of these technologies because the ultimate goal is to enhance the governance level which will promote better performance in international games. But they don't find themselves associated with these technological interventions in the governance system. Only a few could speak about e-governance or digitalization in terms of its benefit. Among them, one claimed

India is getting digitalized. Earlier governments used to give rewards either through cash in hand or cheque but due to that players have got less money or sometimes no money at all. But due to digitalization, the administration has the account numbers of the players, and they actually receive the money that they deserve for their performance. But every state has its own policy regarding which competition they recognize.

The player emphasized the interlinking of information has helped them to gain the benefit from these digital initiatives. Even the coaches understood e-governance from the benefits it delivered. One of the boxing coaches in the sub-regional centre, Hisar, understood e-governance as a digitalization process that saved time as,

earlier it took time to bring all the coaches for a discussion but now it happens through Zoom meeting. These meetings help to address any grievance or provide any suggestions.

These excerpts show how the actors are trying to make sense of these new digital efforts. Actors along with these ICTs are forming a network of their own where they are influencing each other's interests and translating themselves as well as the other actors. Administrators from departments other than IT or contractual staff members form part of the users. They are also trying to make sense of these new changes. Therefore, the IT division can be considered as the 'OPP' who is enrolling other actors into aligning their interests with the interests of the other actors, such as the ICTs or digital initiatives like NSRS, eOffice, and AMS, coaches, administrators, or the players. If these e-governance initiatives need to sustain in the organization and make a change, they must align with the interests of other actors.

4.5 Conclusion

The discussion in this chapter pointed out the rationale behind the adoption of e-governance practices in the Sports Authority of India (SAI). A discursive space was opened up discussing sports governance in general and particularly from the Indian perspective. The need arose for achieving good governance in sports bodies due to challenges like corruption, nepotism, etc. This demand for good governance was resolved by introducing digitalization in the sports governance process, or what we call e-governance. Then the discourse of digitalization in sports governance was explored emphasizing its benefit and experience of various actors in the SAI. Since the effects of the pandemic still linger, the impact of COVID-19 was analyzed over SAI. It was discussed if the pandemic acted as a catalyst to implement e-governance initiatives. Later, the process of translation for negotiating the identities and interests of various actors to forge alliances among each other was taken up. In this chapter, the focus was laid on defining the problem and understanding the interests of various actors. In the following chapter, it will be understood how these interests are aligned and what are the shortcomings in the process to achieve stabilization of the e-governance network.

Chapter 5

Enrolment

Enrolment can be understood as a process of negotiations, manipulations, and tricks that allow interessement to be successful (Callon, 1986). Now the question arises what is interessement. It can be understood as a cluster of actions that allows to stabilize the identity and roles of actors defined while identifying the problem, which we did in the previous chapter. If these actions become successful then only an actor is enrolled within the network. Enrolment allows to identify and define the identity and role of actors, which is tested during negotiations and calculations to stabilize the network (Stanforth, 2007 ; Ruikar & Chang, 2012).

This process of enrolment has become even more difficult to trace in today's digitalized world. Digital interaction has become so natural and familiar that it has become an undisputable background for our everyday communication impacting the way we construct, articulate, and perform our identities. We talked about identities being online, but this very idea has changed. Earlier there was supposed to be a distinction between real self and virtual self. The virtual self or online identity was supposed to be a fake or unreal that differentiated it from actual embodied selves. However, today we are constantly online, even though we are not operating our devices because we leave our traces in digital spaces, which continue to construct our identities. Identity is comprised of identifiers that may include common denotations like gender, religion, education, job, etc. These identifiers together construct the self. As (Foucault, 1988) notes that the identity or the self is a form constituted through discourses that are formed around selfhood. People don't have real identity embodied within them rather it is a way that one communicates to others. But identity is not fixed rather it is continuously in the

process of change. This approach has opened the possibility to construct identity through power-knowledge discourse.

To identify the user identities in these complex and intricate networks of digital interactions, we need to carefully consider the microanalysis of actor networks forming this e-governance network within SAI. The use of a digital interface alters the interaction between the organization and its users, minimizing bureaucratic interventions through the use of self-mediated technologies, which revolutionizes the governance structure of SAI. These practices provide an opportunity for more inclusive service delivery to the users. Inclusivity entails making sure that any user, regardless of their skills or personal traits, may efficiently and unhindered access digital services (Becker, Niehaves, Bergener, & Räckers, 2008). Delivering services in an inclusive manner seeks to encourage fairness, participation, and engagement for all users (Holland, Ruedin, Villiers, & Sheppard, 2012). The nature of these digital spaces is explored within this chapter showing the implications on digital embodiments. The use of these interfaces calls into question the changing dynamics of identities within the public organization.

This chapter is divided into four sections exploring how the actors are enrolled within these networks and translate their identities and interests. In the first section, the focus is on user participation in digital practices introduced to improve sports governance. Here, the main users are identified and how they deal with these digital initiatives has been emphasized. In the second section, the process of negotiation is carefully observed understanding how the actors are interacting with each other to enroll them within the network while aligning the interests of all actors. In the third section, it is analyzed how actors have domesticated these digital practices in their routine lives. In the fourth section,

emphasis has been placed on the construction of identities, explaining how the meanings are produced, and how SAI as a public organization is impacting the identities of the actors involved. This gives way to the conclusion of the chapter.

5.1 Participation in digital initiatives in sports governance

Technologies can be seen as a result of the interplay among different people and materials to produce artifacts that serve a particular purpose (Sismondo, 2010). Many scholars from STS (Burningham, 1998 ; Irwin, 1995) believe that citizen participation in technical decision-making can help to improve the quality of science and technology (Sismondo, 2010). Democratic decision-making in technical issues provides legitimacy to decisions, increases citizens' trust, and better reflects public interests (Kleinman & Daniel, 2000 ; Oudshoorn & Pinch, 2003 ; Sismondo, 2010 ; Volti, 2017). There are many approaches to study user interaction with technology and how they form a democratic interaction process. Some of these approaches are Social Construction of Technology (SCOT) propounded by Bijker and Pinch (1984), Steve Woolgar's semiotic approaches (1991), the concept of script by Bruno Latour and Madeleine (Akrich, 1997), Actor-Network Theory (ANT), and domestication approach by Roger Silverstone along with other scholars (1993). With the help of ANT, users along with non-users are studied to understand the multiplicity of users (Wyatt, 2003). The users are not passive receivers of technology instead they are active players in negotiating the meanings of technology (Oudshoorn & Pinch, 2003). The focus being only on users and the use of technology brings forth another set of problems that is we implicitly accept that technology will lead to progress (Wyatt, 2003). Therefore, users should be seen in relation to another set of groups called, non-users. The existence of non-users will help identify certain prominent methodological problems that would not

be possible by just focusing on users. In the case study of Sports Authority of India, there are certain administrators, coaches, and players who don't prefer to use the digital interfaces launched to ease the governance process. Especially in wrestling it was seen that players only used digital interfaces for marking their attendance, and remaining tasks like uploading their achievements or other such activities were taken care of by the coach. In the action of not using digital applications, they have become non-users, and it becomes important to understand what is stopping them from using these applications. Therefore, the use and non-use of digital technologies will help in understanding how users' identities are negotiated and shaped during the course of time (Laegran, 2003).

The user's role in the sports sector is prominent as it helped make this industry a 512.14 billion business.¹⁸ To maintain the sports clubs there are governing boards addressing the needs of players and the fans. These boards are responsible for sports governance within a country for that particular sport, for example, BCCI is responsible for cricket in India. There are numerous studies showing that sports governance can be improved to great lengths by the participation of users (Uhrich, 2020 ; Garcia & Welford, 2015 ; Uhrich 2020) focuses on fans' participation in his paper. He emphasized the role of fan associations and how they must be allowed representation in management to bring transparency in decision-making. This allows more openness and accountability in management decisions. In a similar sense, Gracia & Welford (2015) studies how supporters can act as a legitimate stakeholder in sports governance. They contend

¹⁸ There are various reports indicating the rising trend in sports industry despite being hit by the pandemic. This statistics have been taken from <https://www.thebusinessresearchcompany.com/report/sports-global-market-report> on 31st May 2023.

that because supporters are frequently viewed as fans or customers, they are not given the same weight as other stakeholders in the management of a sports organisation. Making wise policy decisions will be more impacted by accepting them as valid stakeholders. Any sports organization that wishes to remain competitive in the market must now focus on stakeholders (Parent et al., 2018). A sports organization's main stakeholders are its coaches, athletes, and administrators. These stakeholders when interacting with each other influence the governance (Ferkins & Hilbury, 2015a). The expertise of stakeholders can help sports organizations co-create and manage their governance (Ferkins & Hilbury, 2015a). These studies highlight the value of diverse actors' involvement in the system of sports governance. It is generally acknowledged that sports organizations function better when they have a good governance structure (Rassouli et al., 2020). However, the technical or non-human actors, who play a significant role in affecting the governance structure of sports, are not taken into account in these studies. This research gap has been fulfilled through this research and the focus of this chapter is laid on how these actors interact with each other and create relationships and form nodes, ultimately leading to an e-governance network.

Any organization must consider interactions as a key component. They aid in negotiating the objectives and identities of actors. Many research papers in organizational studies focus on employee relationships, both formal and informal, and how these relate to the performance of the organization (Tejay & Mohammed, 2023 ; Koch & Denner, 2022). However, analyzing these interactions in a way that favors social or human players prevents the actualization of realistic scenarios. There was no differentiation made between social and technical actors while observing interactions at the Sports Authority of India (SAI). The study examined

the users' adoption of these technological solutions into daily life as well as their interaction with one another to forge the socio-technical networks of e-governance.

Few users who took part in these e-governance efforts discovered that little had changed. When asked what digital efforts are made in the governance process, an archery player responded,

main thing that happened is online attendance, now we don't have to go to the office and can be performed through our phone only.

When asked further to clarify what she meant by the "main thing," she stated that, to the best of her knowledge, no additional digitization attempts had been taken to facilitate the governance process for the players. She gave a negative response and stated that although there are other programmes like AMS, she has not yet reaped any benefits from them. Therefore, it is noted that it is challenging to include these actors in the e-governance network. Actors' interests must coincide with those of every other actor in the network. Others held that the reduction in the amount of time required to complete administrative tasks was the most significant change that could be observed following the deployment of e-governance. The governance process has improved in effectiveness and efficiency using ICTs. One of the coaches said,

Digital technologies have their own benefits such as it saves time, paper can be lost but online we can access it anytime, anywhere and it is safer.

Additionally, it enhanced the data's connectivity throughout all SAI centres. The coaches routinely switch between centres, so they had to start the players' training

from scratch. However, thanks to these technical advancements, they were able to produce greater results right away.

Another interesting observation made was that the players only interacted with the administration on a limited basis. The coach served as the relationship's facilitator, negating the role played by students by viewing them as minor connectors while they only interacted for bills or the issuance of equipment from the administrators as suggested by the following excerpts

1. *our most of the work is done by our coach*
2. *administrators are contacted for issues like TA/DA bills or for issuing of some equipment.*

However, other players expressed the need for more physical assistance, pointing out problems with the current network system that prevent them from efficiently accessing digital assistance. One of the participants, for instance, remarked that

staff members give us random calls to ensure if there are any grievances, but it would be better to ask about our problems in face-to-face meetings rather than on the phone because not all problems can be resolved there. If they visit and see themselves, it can be addressed better.

This shows that in order to increase player engagement, both physical and digital support must be offered. When questioned about the need for physical support in spite of the existence of online mechanisms, administrators responded that these digital solutions are not intended to take the place of the current governance mechanism, but rather to enhance it and make it even more capable of meeting the needs of its users.

The implementation of digital solutions like NSRS, e-Office, and Athlete Monitoring System (AMS) in the context of user engagement in e-governance activities includes the selection and negotiation of various players and their roles in the networks of e-governance. We may better comprehend how these players are included in these networks and how the adoption of digital solutions affects their relationships.

Administrators, coaches, athletes, and e-governance efforts are examples of actors in this situation. These e-governance efforts were introduced by administrators, particularly SAI's IT division. All other administrators, besides the IT division, are among the users who are having trouble with these projects. Since they are so vital in the growth and training of athletes, coaches are yet another significant player and user. They are in charge of choosing contestants and preparing them for their greatest performances. However, coaches frequently struggle with issues including scarce resources, restricted access to athlete data, and challenges observing athletes' development. By giving coaches access to real-time data on athletes' performance, health, and wellness, digital solutions like AMS can assist in solving these issues.

Another important actor in this scenario are the players. They are the target audience for technological products like NSRS and AMS, which can give them access to data and services around sports governance. However, athletes could experience difficulties including restricted access to technology or a lack of knowledge about these remedies. For athletes to sign up for these networks, digital solutions must be created in a way that is both accessible and user-friendly.

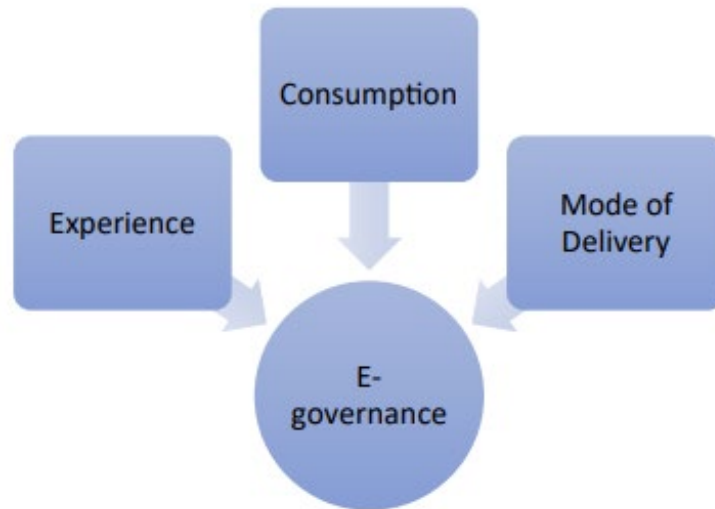
SAI's e-governance projects are crucial actors in this situation. They are in charge of offering digital fixes for the issues experienced by administrators,

coaches, and athletes. Initiatives in e-governance like eOffice and NSRS must, however, negotiate their own roles and identities in these networks. In order to ensure that digital solutions are created to suit the demands of all players, they must strike a balance between the interests of various parties.

All the parties involved are negotiating their responsibilities and interests in the networks of e-governance through the adoption of digital solutions. Coaches might need to modify their training strategies, for instance, to account for AMS data. The ability to access information and services connected to sports governance may need athletes to learn how to use digital solutions. Initiatives for electronic governance could also need to change to accommodate coaches and athletes.

5.2 Negotiations creating e-governance networks

E-governance as understood through ANT is a heterogeneous network where knowledge, power, and action are effects that are generated through networking activity. This network of e-governance in SAI is influenced (see Fig. 3) by what is being offered in terms of services that can be consumed by the actors at different levels of an organization (Weil and Woerner, 2013). Secondly, how the consumption of digital practices is changing the nature of interactions among different actors, thereby inducing a new experience. To shape the experience of actors, it is imperative to take into consideration the mode of delivery. Since almost everyone has a smartphone today, SAI has tried to deliver its digital services using mobile phones.



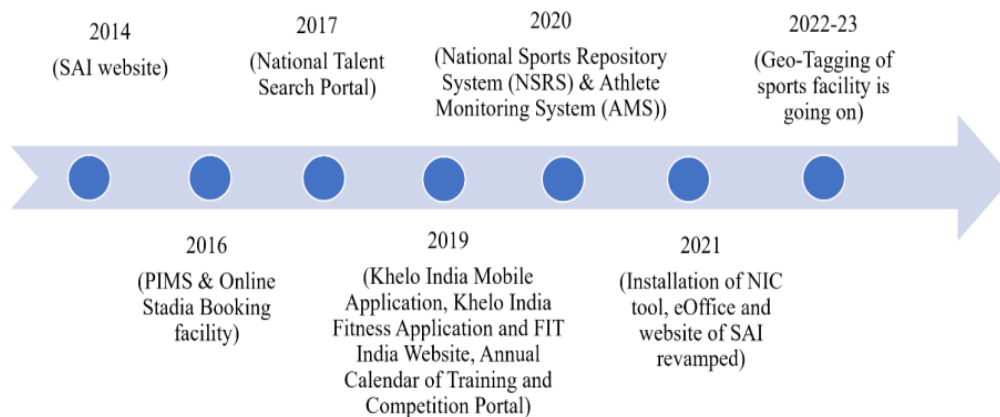
(Fig. 3. Factors influencing e-governance)

These e-governance initiatives are encountered by the actors on a daily basis, which affects each other. Sometimes, coaches, administrators, or players have to learn a new skill set, and sometimes technological modifications are made to accommodate the interests of the other actors in e-governance practices. There is always a continuity to achieve the stabilization of e-governance networks by enrolling all the actors and keeping them in the loop. This process involves the negotiation of the identities or interests of various actors so that they can do the bidding on behalf of implementers. To highlight e-governance's dynamic nature, the focus of discussions would be on the interactions and negotiations between different actors. The following actors impacting e-governance in SAI would be studied in this section.

5.2.1 Government policies

Government policies form the framework for the implementation of e-governance. As mentioned in Chapter 1, the current national sports policy was developed in 2001 and is centred on achieving excellence at the elite level and broad involvement of players (MYAS, 2023). For healthy sports development, the

National Sports Federations (NSFs), Indian Olympic Association (IOA), and SAI must implement good governance practices (NSDC, 2011). The Government of India (GoI) has released detailed guidelines to ensure best practices in the administration of sports. To achieve good governance, e-governance initiatives were adopted within SAI.



(Fig. 5: E-governance timeline was taken from Supriya & Das, 2023)

The National e-Governance Plan (NeGP) and Digital India serve as a foundation for the implementation of these e-governance practices by SAI, which does not adhere to a set policy in this regard. These regulations offer a chance to incorporate knowledge into decision-making. For example, users of eOffice can access files at any time and anywhere thanks to its workflow management system. It seeks to increase efficiency and openness in all aspects of internal and external government operations. Additionally, it seeks to innovate government workplace practices and encourage better teamwork (NIC,2020). When the justification for the implementation of eOffice in SAI was investigated, it was discovered that it had been put into place in conjunction with other e-governance projects for better information dissemination, quick decision-making, and increased transparency. Ensuring data security and integrity, as well as utilizing worker talent and energy,

were additional objectives. Therefore, the eOffice project was clearly in line with SAI's goals to improve organization-wide internal process efficiency. A fundamental concern of international organizations like the International Olympic Association is the introduction of good governance practices in sports organizations, which the project also supports in its larger policy objectives. Even if eOffice aligned its interests with SAI's, the actual execution is the result of negotiations among various parties. This project involves several actors, all of whom need to be evaluated. As the application had to satisfy its requirements, higher authorities' policies became the first actor in this bargaining process. To set the deadlines and gradually achieve the requirements, it directly confronts policymakers, technical teams, and SAI administrators. The rules established during the initial phase are updated to reflect the changes that occur during the implementation of e-governance initiatives. For example, earlier Stadium booking facility was done in paper format and only the specifications were provided on the website but now the whole process of booking the stadium for sports or non-sports purposes is conducted online. This modification occurred because of the need felt by a set of actors such as players, coaches, and other vendors to bring in this change. As a result of these negotiations, the process of Stadium booking was updated.

5.2.2 Administrators

The relational network that served as the e-governance's original springboard was reshaped as a result of the administrators dealing with a number of actors that caused specific interests to coincide. In the implementation of these e-governance initiatives, the administrators took on the role of mediator. They assisted in enlisting the initiatives to have a say in how it was carried out, making sure that their objectives aligned with those of the project. In addition to making sure that

their benefits are clearly seen with the project's implementation, they had to make sure that the policies of MYAS and SAI's own requirements are taken into consideration. Through multiple meetings with NIC (technical vendors), administrators were able to negotiate with them and harmonize the interests of both parties. Administrators asked a variety of questions during this collaborative effort to pique their curiosity. The organization's administrators were concerned about data protection and were afraid that a paperless governance model could actually be implemented. However, it was made clear through the negotiations among various actors that these e-governance initiatives are secure as there are multiple security measures taken such as there is a firewall and an encrypted password in place to ensure two-way security.

In the case of AMS, SAI bought the software from the Athlete Monitoring company, which offers simple and innovative data management solutions to coaches, teams, and sports organizations as a whole. NSRS was indigenously developed by SAI with the help of a private technological firm. In all these e-governance initiatives, administrators negotiated with various parties to align the interest of all the actors indulged. This demonstrates the constant nature of discussions that occur inside SAI to translate the interests of other actors over time. The translation influences the interests and identities of the actors as well as the project's results. The new e-governance initiatives are offered in accordance with the necessity for coordination and negotiation among various actors. Earlier only a website was launched but with time new e-governance projects were launched as per the needs of different actors. Within a particular e-governance project also negotiations taking place bring new changes, for example, in eOffice initially, only PIMS was obtained, then eFile, and SPARROW were implemented and now the

eLeave system is on a pilot basis. One of the higher authorities from SAI headquarters commented on the benefit of using eOffice that

file movement has become easy reducing the time. It is in this sense that eOffice impacts the interactions in inter and intra-department, as time is of the essence for everyone and eOffice reduces it. Especially higher authorities can monitor the process more thoroughly, making other officers handle their assigned tasks quickly which leads to increased work efficiency.

Another administrator, however, noted that although eOffice increases organizational efficiency and responsibility, this accountability is more focused at lower levels of the hierarchical chain. He claimed that while there is seldom any accountability for higher authority, he would be reprimanded if a file seemed to be outstanding on his account,

They (superior authorities) have the luxury of postponing the work, but we don't.

Even while every administrator recognizes the benefits of eOffice, discussions are still taking place among the actors to determine where these e-governance projects would have an influence along a hierarchical chain of command and how they should be mitigated. These initiatives and the way they are carried out may change further as a result of continuous conversations between higher authorities and lower staff members.

5.2.3 Coaches

The SAI administrators are in charge of the e-governance projects, but the coaches' expressed views have a big impact on it. Coaches are the major impact on players

who are seen as end product of SAI. Any policy or new administrative change in governance system in SAI is introduced to players through coaches. So, coaches play the important role in implementation of e-governance initiatives. The coordination between the many SAI centres and the interaction between administrators and coaches, according to one of the coaches who also holds an administrative position, is based on informal chats and meetings. The SAI headquarters' IT and personnel section pushed these initiatives, and it was made clear from the outset that both administrators and coaches had to be involved for the intended results to be achieved. Coaches felt that the main benefit of using e-governance initiatives is data management. For example, through eOffice they can file their APARs reducing the time taken and making the process hassle-free. With NSRS and AMS, they can access the player's record. Since there is a continuous transfer of coaches from one centre to another, the time taken to collect each player's detail about their performance becomes difficult but with the help of AMS and NSRS, this task could be achieved easily. The Khelo India ID (KID) was introduced to identify all the players and coaches participating in Khelo India games which helped to identify the upcoming talent in the country. Earlier it was not compulsory to have a KID but now it is mandatory for anyone participating in these games. Through KID coaches and players can access the NSRS platform which is a database of athletes, coaches, sports scientists, and sports training centres. Coaches had different opinions regarding these digital interfaces. Some found that players should be more focused on their training rather than using these digital technologies. One of the archery coaches said that

It is the job of the administrators to focus on these tasks (office duties like filling the forms, etc.) and players should only concentrate on their goals.

Whereas many other coaches found that the use of digital technologies in the governance of sports organizations is helpful in many ways. This will become more clear with a reading of the conversation with an athletic coach.

Interviewer: Tell me about other e-governance initiatives taken by SAI that helped you in performing your job.

Athletic Coach: We have NSRS through which a record is maintained of how many students are training under me. For example- in athletics, we have 9 coaches in Sonipat, so athletes are distributed among us and this record is maintained in NSRS. We also have a testing process, which is uploaded quarterly. Then there is also AMS (Athlete Management System). In AMS we have to upload the training program that we are conducting, weekly and yearly.

Interviewer: Do you think it is beneficial?

Athletic Coach: Yes, the main benefit is we have our record maintained. Earlier also we used to maintain data in written format but when we write, we forget to take into account some points or the page gets misplaced on which we recorded the data. But now we have this easy access to data. One more thing, earlier any record or data regarding our training or any such matter, was with the coach only and no one could check but now, anyone can see how the training is being conducted. We also have a presentation before

uploading the training program with the administration as well as the athletes, so that if they want some changes we can take that into consideration.

As a result of negotiations between coaches, e-governance initiatives, players, and administrators, there was a shared interest in achieving a paperless and effective governance system in which all actors have a keen interest.

An observation was made that only a few coaches knew about all of the e-governance projects. Most of them were not aware that eOffice was used to send their appraisal reports. According to them,

eOffice is used by office people.

They saw no purpose for eOffice and thought it was a tool primarily for administrators. The majority of them were not aware that sending their appraisal reports via eOffice was an option. They replied that they fill out the form and provide it to the office employees when asked how they send their assessment reports. The security guard-designated individual was in charge of all office duties in one of the STCs. He said that

I had some computer knowledge, and therefore, I helped them manage office work.

He claimed he took care of the coaches' APAR filing on their behalf because they were unsure how to do so using eOffice. As a result, instructors varied in their level of technological sophistication. Coaches were given training regarding the use of digital initiatives through online means initially due to the pandemic. Later on, they were also provided with hands-on training from their respected SAI centre staff. Coaches were then made responsible for helping players, along with

administrators, to use these digital platforms. Despite providing training to the coaches, they continue to struggle with basic problems like login issues or filing their own APARs on eOffice. In these cases, a lack of training was obviously present. Manpower training is one of the crucial components for the successful implementation of e-governance (Burlacu, Alpopi, Mitrită, & Popescu, 2019 ; Sachdeva, 2002). Literature pertaining to organizational change indicates that change is difficult to achieve as employees often fear how this will affect their own social and political dynamics within the organization (Wright et al., 2013). In our case, the introduction of digital platforms brings forth new changes that lead to the fear of the unknown in the minds of coaches, players, and even administrators. Training can prove crucial to get rid of this fear among its members. Employees who receive training and support are more likely to adapt to change and work more productively (Sachdeva, 2002). Organizations can enable employees to adopt new procedures or technologies by providing training programs that give them the abilities and information needed to adapt to the change.

One of the digital initiatives that every coach knew was the facial attendance system. Earlier attendance was marked the traditional way, i.e., shouting aloud the name of the players and they replying to it 'Yes, coach'. But now a player could mark their attendance online by themselves with the help of their smartphones. But some of the coaches believed that it was a hassle as it was more time-consuming as sometimes mobile networks don't support it. They have the time deadline to submit the attendance before the end of their morning schedule. The network connectivity is a big problem while practicing this initiative but otherwise coaches found that this system helps in maintaining a check on the players as it only allows a player to mark the attendance if he or she is within the premises of SAI centre.

These e-governance initiatives though implemented by the SAI headquarters, especially IT division but these projects change or are adopted by different actors in different ways, which changes the course of action of a project. For instance, in eOffice, only a small number of coaches were aware of the eLeave system and admitted that it had not been deployed, despite ongoing discussions to implement the entire suite of eOffice products, including eTour. Coaches asserted that everyone involved—administrators, coaches, and players—will find eTour to be very helpful. They have to travel for other competitions, and filing the paperwork later is difficult. It would be advantageous if this service were to become automated. These examples demonstrate how the coaches' actions were influenced by intricate interactions that altered how the project was carried out. The interests of other actors are once more in line with these changes. Although PIMS is a comprehensive product, the need for an integrated eOffice suite, particularly the eFile and SPARROW system, was felt at the beginning of the eOffice project. Coaches later felt the necessity for eLeave and eTour, which would genuinely make a difference from their perspective. Government regulations, administrators' intended use, and now the alignment of coaches' interests have all contributed to the transformation of the eOffice. This modification is the outcome of protracted negotiations that took place whilst the project was being carried out. The various actors alter the project while simultaneously altering themselves to fit the project.

5.2.4 Players

Players are the end beneficiary of these e-governance initiatives in SAI as the focus of these projects is to benefit the sports culture of the country and encourage more medals in the international games by ensuring good governance in the sports ecosystem. In some of the initiatives, players are the indirect beneficiary as they

are not directly involved, for example, eOffice, Geo Tagging, or JAM. But if the administration is running smoothly, it can help the players resolve their issues better. However, a well-functioning administration can aid the players in resolving their problems more effectively. The players were questioned about how they believed e-governance would help them. One of them answered that it would be wonderful if our problems, like our funds, were received promptly. Another sportsperson chimed in that the digitization of administrative work would be beneficial. Every player has a file, and thanks to eOffice, these files are kept in a digital format. The management of records is also done through programs like NSRS and AMS. Administrators noted that because of these digitalization initiatives, it is now simple for them to follow a player's statistics without having to repeat themselves. Their records are kept in a system of central repositories. The work of computerization of these records is still in the ongoing phase.

In the case of Geo Tagging, it will benefit the players by providing them the data pertaining to stadiums near them. If these stadiums have the facility for the sport, the player is interested. This initiative is still in its development phase, but players' opinions are not taken into consideration so far. The actors presently involved in shaping this project are administrators, coaches, and the stadiums. Noting the player's thoughts about what kind of information, they generally seek when they look for training in a particular playfield can further enhance the quality of this database. It would become more inclusive. The absence of players from the initial phase of digital project planning shows signs of hierarchy in place. In this context, administrators can be considered as the dominant class ruling over the coaches and players. Administrators can exercise this power due to their control over resources used by players. Sports as a domain has always been considered a part of global

capitalism, and therefore, it is driven by the same principles (Chen, 2022). The idea that sports are run by organizations be it private or public, ignores the fact that contemporary sports is a product of capitalism. None of the modern sports have been practiced by people just for fun; they were all produced for the development of capitalist economies along with nationalist ideologies (Collins, 2013). In the present world, players and sports events have become commodities exploited by the dominant class for their own benefit (Chen, 2022) . This can especially be observed when players in SAI are treated as instruments for achieving success in international competitions.

Players are an important part of the sports governance network; they are the representative of the nation on international platforms, so hierarchical control over them should be wavered. This does not mean they should have complete autonomy because, in sports, players need to be disciplined. A more detailed discussion on discipline and punishment of players is discussed in the next chapter. They should be accounted for when making a decision regarding their welfare. Therefore, even when the players indirectly influence the project, they can impact the administrators' decision to consider their interests while implementing the project. Their interests also shape the trajectory of the e-governance projects.

The players are also direct participants in some of the e-governance initiatives like AMS, NSRS, Khelo India Fitness Application, Fit India Application, the website of SAI, the Stadia booking facility, and the facial attendance system. In this case, they directly impact how the project is being implemented and, in the process, a change is introduced within their own conduct as well as the e-governance applications themselves. In this way, the players are also enrolled within the network of e-governance.

5.2.5 Technical vendors

The technical support team is an important actor to implement these e-governance initiatives. Generally, the technical support is provided by the IT division of SAI which hires contractual staff members who can help with these new changes being introduced. An important actor other than the IT division, which provides support for these digital efforts is NIC (National Informatics Centre) which makes it a technical vendor to SAI. NIC created eOffice in collaboration with the Department of Administrative Reforms & Public Grievances (DARPG), and it was made available to other federal, state, and local government agencies. To adopt eOffice, SAI must meet a number of prerequisites. The SAI IT section is in charge of working with NIC and carrying out the project. Meeting with SAI and learning about its requirements led to NIC's agreement to assist with project implementation. Along with providing a list of servers that must be installed, NIC also suggested expanding their technical personnel. The IT department fulfilled these requirements. Even though the project began in 2020, it took some time to get it going. Due to a shortage of server space at NIC, the IT department requested assistance from the National Data Centre (NDC), Bhubaneswar, to host their programme. The server space SAI acquired is on a cloud storage system; these spaces alone make up the network's nodes and communicate with additional actors like administrators, NICs, and satellites. They come together to produce a rhizome-like structure that has no focal point, beginning, or ending points but is the same at all points (Latour, 1999). This makes SAI's server space an important actor in this e-governance network that influences the action of other actors. The server space is used for all the e-governance initiatives taken by SAI which is hosted by NIC,

acknowledging NIC as an important actor within the network of sports electronic governance system.

Following the acquisition of the server space, NIC worked in conjunction with SAI's IT division to train a few admins. The idea of "training the trainers" was formed early on since these administrators were charged with providing training to other organization members. NIC dispatches its technical team to address any technical issues, such as coding difficulties or login issues. NIC officers have asserted that despite training, there is still a lack of awareness on how to utilize the programme as per the significant reports they receive.

The NIC claims that various actors have responded to eOffice in different ways. For instance, one of the District Information Officers (DIO) in Haryana told that

lower level such as clerks, have resistance to it because it will increase their accountability and they had to give a reason for their delay, if any. But for higher authorities, the response is positive as they are in a better position to monitor and supervise the functioning.

NIC from its end provided in-depth information regarding eOffice and how it might increase the openness, responsibility, and efficiency of the SAI governance structure. SAI was able to improve how eOffice communicated with other actors thanks to their partnership with NIC. The modifications NIC made to the eOffice suite also had an impact on how the project developed because every time a new feature or update is added, the IT division evaluates its viability and, if it is, moves forward with its implementation.

5.2.6 Regional/Sub-regional Centres

IT division along with other departments of SAI headquarters in New Delhi is responsible for implementing these new changes in the whole organization. This implementation would not be completed if the regional centres or the SAI Training Centre (STCs) or the National Centres of Excellence (NCOEs) are not enrolled within this network. Therefore, efforts are made by the headquarters to employ or assign at least one person responsible for carrying out these digital changes. These regional and sub-regional centres act as a node within the whole network, which further connects administrators, players, coaches, and sports scientists of these centres to the whole network. In this study, only one regional centre was covered, i.e., North Regional Centre, Sonipat. In Sonipat, there is an Assistant Director deployed to look after the implementation of digitalization efforts in the governance process. Though he is under the supervision of the Director of the regional centre as well as the headquarters. These regional and sub-regional centres interact with headquarters by means of meeting and conveying their needs to each other from time to time. During the phase of pandemic, these meetings started to happen online but this practice is still continued as it is more convenient and time-saving for the actors indulged. With the help of eOffice, the transactions between different levels of the SAI structure have become very easy. The bureaucratic structure of SAI is shown in Annexure 1 of this dissertation. Earlier, files were used to transfer from the lowest level, i.e., the STCs and NCOEs, to regional centres and from there to the headquarters. Within this vertical flow also, there were horizontal levels that had to be cleared. For example, in a STC, supposedly a player had an issue, which was addressed to the coach, then he raised the concern to the office staff, and then the administrators of the concerned department in the regional centre

were connected. This cycle was iterative in nature, making it a time-consuming process, and no one was accountable for keeping the files on their desks without attending to them. This has changed with the coming up of eOffice. Now, files can be traced as to where the time is being consumed, and a reminder can be sent. Transparency and accountability are introduced in the backend work of the SAI due to this digital interface.

5.3 Domestication of e-governance initiatives

E-governance efforts were just recently implemented at SAI, but they have already assimilated into the administration. Documents are now regularly filed by administrators in an electronic office. The work of employees can simply be monitored by higher authorities. Through eOffice, the coaches could keep track of and submit their appraisals. Coaches and administrators can view player performance updates using NSRS and AMS. Players can also use these applications to compare their weekly progress and keep track of their performances. JAM enables administrators to manage the budget openly, reducing the extent of corruption in public organizations. Actors are trying to adjust to these new technologies and in this process, these digital technologies get domesticated within the governance structure of SAI. Roger Silverstone used the term "domestication," which first applied to the taming of wild animals, to describe the process of "domesticating ICTs" as they are introduced into the home (Haddon, 2007). Domestication refers to the diffusion and integration of technology into routine activities (Berker, Hartmann, Punie, & Ward, 2006). Similar to Roger Silverstone, ANT discusses the domestication of technology, although the perspective is distinct. While supporters of ANT focus on the networks connecting social and technological players, Silverstone emphasizes its social and cultural components.

In his writings, Silverstone has discussed how media technologies like TV and radio have become domesticated or normalized into the daily routines of a household and have even become an integral part of their social lives (Silverstone, 2006). He contends that domestication occurs as a result of negotiations between the technology and its users, which have an impact on their interaction. They both have an impact on one another. For instance, a TV impacts how the family imagines their leisure time while TV technology has developed over time with the comfort of its users in mind.

In contrast, ANT emphasizes actors' contributions to the development of socio-technical networks without making a distinction between social and technological actors. The "enrolment" process by which technology artifacts are incorporated into networks of human and non-human actors and become a component of a wide range of social and technological practices is highlighted by ANT's approach to domestication (Callon, 1986 ; Latour, 2005). Thus, domestication becomes a joint effort between humans and machines; Latour emphasizes how technology plays a crucial role in defining social practices and cultural meanings. The bargaining process that goes on when stabilizing or domesticating a technology is the main emphasis of both strategies. These methods acknowledge that domestication is an ongoing process. As the environment changes, re- or de-domestication may take place (Callon, 1986 ; Berker, Hartmann, Punie, & Ward, 2006 ; Latour, 2005). All of the SAI centres in India have adopted these e-governance initiatives. The negotiating process is still going on between the various parties, but it's crucial to keep social and technological players in mind. Actors are a source of action and an entity capable of having agency, as correctly noted in ANT (Callon, 1986 ; Callon M. , 1987 ; Latour 2005). As a result, an actor

could be a social or technical entity. An agency can be understood as “anything that modifies a state of affairs by making a difference” (Latour, 2005). E-governance was explained using the case study of various digital projects, which collectively make up an actor-network. It is a network that engages in negotiations with diverse actors including administrators, players, the NIC, coaches, and technical artifacts. It is an actor in itself as it has an agency that impacts the working of the SAI, whereas it is also a network as it negotiates with heterogeneous actors highlighting the continuity of the e-governance process (Supriya & Das, 2023).

5.4 Construction of identities

The issue of digital identities is the most contested topic of present times. It is difficult to identify a person who is indulged in digital communication, especially for public organizations. But this also provides an opportunity for individuals who are able to relate through digital means to themselves and others. As a result, the term "digital identity" can have two complementary meanings, which together form the core of the domain's problem: identifying the user in the digital space and understanding how identity construction is affected by digital technology. There is an increase in a multitude of identities. To construct their online identity, organizations reinvent their identities online. As it is fluid and subject to quick change, their online identity may be different from their offline identity or print media persona (Schafer, 2010). However, this only indicates that the online and offline identities are developed in different spaces, not that there is a clear boundary between them. Since digital projects handle interactive communication with other stakeholders, online identity is mostly influenced by interconnectivity and interactivity, as well as information content, feedback, security, and ease of contact

with administrators (Fritz, 2007; Kotler, Armstrong, Wong, & Saunders, 2008 ; Nandan, 2005; Ranganathan & Ganapathy, 2002 ; Rossmann, 2010 ; Sassen, 2004).

There is various research focusing on the issue of identity (Adam, et al., 2006). Rissanen (2010) studies the diffusion of the Finnish Electronic Identity Card (eIDs) and how it is different from older ID cards. Similarly, the role of these eIDs is to create a new identity for the person. eID becomes an artifact with multiple roles attached to it (Hedström, Wihlborg, Gustafsson, & Söderström, 2015). These eIDs act as enablers of achieving e-governance and attaining efficiency in back-office work (European Commission, 2010). In our research project, we have KID (Khelo India ID). This KID creates a presence of an actor on the cloud server space. It solves the issue of personal identification as well as provides authentication to any claims made by an actor to attain any personal benefit. For example, a boxing coach from STC claimed that

If a coach is registered under KID, SAI can figure out whom to send on training sessions, or whom to pick for promotions or rewards as per their experience and qualifications.

Another instance where coaches praised the generation of the KID was that it brought transparency into the system along with the availability of the information.

One of the coaches said that

Earlier, it was difficult to track who trained the player during which time period, and if that player achieves an international medal this led to false claims made by the coaches to get promotions & rewards. But now these kinds of records are maintained online

bringing much-needed transparency into the sports governance system.

These KIDs are provided by SAI to maintain a secure and efficient information system. In this sense, these eIDs can be considered a tool to attain organizational goals and maintain hierarchical control over the whole organization. The introduction of KID has changed the administrative structure (Fountain, 2001). But the use of electronic IDs is often seen as a technical mediation to achieve e-governance objectives, often forgetting the social, political, and organizational factors impacting the eID. So, KID can be seen as a socio-technical arrangement rather than an isolated artifact. Users (coaches, players, and administrators) develop their online identities when they engage with an online interface (Schau & Muniz, 2002). For instance, when a player tries to access NSRS through their KID, it requests their identification information. Once the information is provided, it establishes an online identity that the program may use to identify the player. The information that is asked from a player during the registration for KID includes

1. Name
2. Gender
3. Date of Birth
4. Photograph
5. Communication Address
6. Mobile no.
7. Email id
8. Sports discipline
9. Password

10. Photo ID proof
11. Educational details
12. Achievement details

If you are a coach or sports scientist, the following further information is required

1. Country
2. Contract type
3. Employee ID
4. Sports Training Centre KID (if, a coach is mapped under Training Centre)
5. Training Centre name
6. State
7. District

This information creates an online presence of an actor. Therefore, these interfaces have an impact on identity. It is not a one-way process rather these digital interfaces are also impacted by the users. As new changes are introduced within these applications to suit the needs of the involved actors. In this sense, KID acts as an obligatory passage point without which information cannot be accessed. The implementation of these digital practices is ongoing, so currently SAI is in a state of flux where both online and offline practices are being carried out. Though information is provided through eOffice, NSRS, or AMS it is also transferred through paper files, or word of mouth, especially when a coach is transferred to another SAI centre & another coach takes over. So, the process of enrolment is still in process and efforts are being made to get everyone on board to attain good governance.

Another problem with eIDs in SAI is that there is not one unique ID for everything. KID is only used for accessing NSRS and marking facial attendance. To access AMS, there is a different login and password, similarly, eOffice has different credentials. This creates confusion and chaos in the use of these digital initiatives. Administrators are trying to tie more functions to the KID so that it can be used more readily, for example, kit distribution during Khelo India Games is done through KID.

5.4.1 Website creating an online identity of SAI

Players favor reputable government websites over private websites when looking for sports-related information online (Sillence et al., 2007). Websites are seen by (Cantoni & Tardini, 2006) as both technology tools and communication artifacts. Consequently, the SAI website has been viewed as a hybrid entity made up of both social and technical players in order to examine various elements of it. In this hybrid entity, the failure of one player could result in the failure of the whole network. One of the actors, for instance, is the availability of the internet; without it, one cannot visit the website, and the entire network of websites comes to a halt. On the website, there are various symbols that are used to build SAI's online identity, including logos, colors, and layouts. It is tough to have a clear distinction between an individual's offline and online identities, as was previously mentioned. Similarly, ANT rejects the idea of rigid distinctions between the natural, social, and technological worlds (Murdoch, 2005). As a result, it is possible to think of the SAI website in this situation as a network made up of many social and technological actors (Mitev, 2009). The SAI website is the result of the collaboration of many different players, including administrators, users, the internet, software developers,

etc., with the goal of offering online sports-related services to interested stakeholders.

A website can also be referred to as a system or perfectly an information system due to its networked structure because it involves numerous actors cooperating to gather, process, and present information (Tatnall et al., 2002). Instead of focusing on a specific actor or network, the emphasis had been on how the identity is being generated by highlighting processes and flows. To conform to network requirements, identities are constantly translated (Barry A. , 2001 ; Singleton, 1995 ; Thompson, 2003). The translation is the displacement, transformation, and speaking on behalf of another person (Latour, 2005 ; Lindqvist, 2010). As a result, the SAI website's identity must be modified to meet the interests of the parties involved, including corporations and athletes. As a result, an actor gets enrolled within a network and speaks in the desired way through a process of translation. A website develops relationships and trusts with its users in order to represent and speak for them.

During the fieldwork, it was observed that the interaction of players and coaches with the website of SAI was minimal. A wrestling player from the SAI Regional Centre, Sonipat said that the main source of receiving any information was their coaches. Another boxer, from STC, claimed that

on the website, the information regarding a camp is uploaded late or sometimes it is not uploaded at all.

Therefore, attempting to retain knowledge from a website is a fruitless endeavor. A website should have evolved into a hub that all actors must pass through in order to effectively communicate information to diverse actors. It did not succeed,

though. As is evident from the players' comments up top. They rely on the coaches rather than the website to acquire the information.

In this instance, there are two main categories of actors that we may separate into: users and developers or coordinators. Users in this situation include coaches, players, and administrators of regional and sub-regional centres. The administrators from the headquarters, particularly from the IT division, are part of the coordinators and are in charge of maintaining the website. For the coordinators, the website's purpose is quite apparent; it should prominently display organizational data, recent accomplishments, annual reports, and current notices. Khelo India Games were taking place when the fieldwork was being conducted, therefore the IT department was busy posting the tournament's schedule and players' accomplishments on the website. When enquired why you do so, one of the administrators replied that

it is their job to do so.

One of the high rank officials in headquarters when asked about the same replied that

it is important to showcase our achievements so that public trust remains with us.

Apart from the coordinators, users when asked about their experience of using the website, one of the coaches replied that

I hardly use the website except for one reason, i.e., to access any job opportunities, because I have many players around me who keeps on asking if there are any job opportunities.

Administrators from the regional and subregional centres claimed they don't utilize the website but do access other SAI e-governance projects instead, such as eOffice and the National Sports Repository System (NSRS). Website administrators have thus tried to integrate a variety of other elements into the website in an effort to attract more visitors, such as the possibility of renting Stadia through the website. Even firms can now use the website to access the tender and bid for projects. This opens up new channels for enlisting non-users and bringing their interests into line with the organizers'. Since actors like players are farther away from the website, attempts are made to enroll them up by posting links to the Right To Information (RTI) website, the Khelo India Dashboard, and timely updates of the selection lists for various games on the main website.

If successful, these efforts will mobilize the website and alter the way that different actors interact, which will ultimately translate the identities of the users and the organization. The SAI established its online presence through its website by coordinating other actors' desires to use the resources inside by positioning itself as the key location that each actor uses to access various services and pursue their interests. The process of building identities is still in progress, and it will take on the characteristics of the web coordinators who, in turn, are impacted by the users, as changes are made by them.

5.4.2 Philosophical Understanding of Identity

Identity can be understood from Paul Ricoeur's hermeneutical reflections (1990), i.e., differentiation between idem and ipse identity. Idem identity refers to the perspective of an individual from the outside whereas Ipse identity refers to how an individual relates to oneself. Even Edmund Husserl supported this kind of distinction as he emphasized the differentiation between the body as a thing and

lived body. Body as a thing can be described as a set of characteristics that an external viewer identifies you with whereas lived body includes the experience that an individual experiences oneself. Therefore, idem allows an individual to become a part of society by identifying them with certain attributes and subjugating them. Ipse allows an individual to define new meanings for themselves.

This understanding of ipse and idem identity can now help us to better understand digital identity. Digital identity from idem mode can be understood as a set of stable characteristics, for example, while registering for NSRS certain parameters need to be filled (as explained in the previous sections) to be used for transactional or electronic communication. A typical example can be KID. While ipse mode defines digital identity in terms of how an individual project himself or herself in front of society through their own actions, for example, social media sites. In this research, an example of ipse mode can be AMS, where an athlete himself feeds his daily details like sleep pattern, and fatigue levels to be shown to coaches and other sports analysts. This ipse mode, in terms of (Goffman, 1959) can be described as a representation of self where identity is constructed, one in which socialization produces personal identity and in which identity is never an independent thing existing before its interactions. This makes it a dynamic process, which is never stabilized as it is always in the process of negotiations. (Bauman, 2019) in this respect says that in modern times an individual does not want to be chained down and aspires to have multiple choices and experiences. It is this plurality and exploration of new meanings that Bauman calls that today we live in 'liquid societies'. In these hypermodern times, there is a constant struggle between a need to be stabilized and anchored and aspirations to have a plurality of choices. According to Bauman, "Identity is the simultaneous struggle against dissolution

and fragmentation, a voracious drive coupled with a stubborn refusal to let oneself be devoured” (Bauman, 2019)

The introduction of digital technologies affects how we as users construct our identities. This effect is understood with the Foucauldian concept of ‘technologies of the self’ which is endowed with materiality. ‘Technologies of the self’ allow one to perform various functions on one’s body, soul, and thoughts with the help of others or by oneself. These technologies help to construct one’s identity. These technologies of the self are never direct, it always involves an intermediary (Khatchatourov, 2019) . For example, the spatial organization of SAI centres shapes social and administrative exchange in different ways. Thus, in any exchange between one person to another or within oneself, it always involves an obligatory passage, i.e., an intermediary or mediator. This intermediary with the coming of digitalization in SAI has become digital. At this point, a distinction must be made between an intermediary and a mediator. Initially, an actor (social or technological) is just an intermediary, i.e., a black box of inputs and outputs (Latour, 2005). While the mediators translate and modify the meanings of the messages they are supposed to deliver, intermediaries do not influence or distort the meaning of the message carried (ibid.). In relation to the process, an actor may switch between the roles of mediator and intermediate. This study discovers that e-governance technologies serve as mediators, bringing about a new set of behaviors and fostering new connections among various organizational actors. Additionally, it has made it feasible to assign tasks more methodically, which was before impossible. The National Sports Repository System (NSRS), for instance, serves as a social and scientific tool. Up until recently, it was challenging to keep track of every player's accomplishment in one location.

It was noted that work overlap was the main difficulty, and that organising these files at headquarters was a major undertaking and added to the effort. It had a scientific edge thanks to systematic data handling. It transformed into a social tool in that it met the demands of various players and coaches to cooperate and view the outcomes of their peers at their convenience. One of the administrators talked about the rationale behind the NSRS's implementation as

In PM Modi's interaction about the Tokyo Olympics, he talked about guru-shishya interactions and devising a digital platform for maintaining these developments in their relationship. So, SAI came up with NSRS, a repository containing the achievements of both athletes and coaches. This software uses an agile methodology and is evolutionary in nature.

According to this school of thinking, which concurs with Foucault, technological actors have power over both other people and our own selves in addition to being merely neutral entities (Gerrie, 2003). As a result, while NSRS was created to address specific relationship restrictions between coaches and players, it also led to the formalization of this connection, the organization of SAI's governance structure, and the rationalization and standardization of record-keeping procedures.

It was also discovered that some of the coaches don't actively take part in these e-governance projects. There is an intermediary between them. To assist the administrators with their increased workload brought on by e-governance initiatives, SAI engages Youth Professionals (YPs). These YPs are typically used by coaches to fill out data for the NSRS. Although there was no YP at one of the sub-regional centres, the centre's whole computer-related work was overseen by a person with the job title of a security guard. He said this

Employees who are near retirement don't have much computer knowledge, so I handle these things for them. We have eOffice, NSRS portal, and then coaches APAR, all these services are handled by me.

Due to the coaches' lack of technological know-how, these YPs or the security guard fill in the information as needed in a predetermined manner. But they also sometimes act as mediators. The fact that they have a lot of work to do and prioritize it according to their own preferences gives them control over coaches even though they don't change or distort the material. In this context of digitalization, these intermediaries or mediators reconfigure the relationship with oneself and one's identities.

5.4.3 Production of meanings

We have seen how the writing of the self is articulated and now the focus is on how the production of meaning is affected by these digital initiatives taken by SAI. With the coming of hypertext in place of traditional files, things have become more complicated. There is a larger scope of a multitude of meanings as the interpretative process can be comprehended in an unlimited manner. Most of the users lack awareness about technical modalities, and how they process and rebuild the meaning. Though the technical modalities change the meaning it is not directly visible to the users, leading the user to act on half knowledge. This also entails that there is a risk of uncertainty and disorientation as humans are not able to fully understand the interpretative process of digital machines (Khatchatourov, 2019).

These digital projects were introduced to bring e-governance within the organization changing the process of how an actor interpret their own traces and build their identity. As discussed earlier, identity can be defined from both inside

and outside. From inside, an actor faces difficulty in producing meaning from all the traces left by them (bit by bit). It should be highlighted that all "identity struggles" start when we become aware of our identity from the outside (Khatchatourov, 2019) and Foucault's state ensures that external restrictions are internalized so that they do not lead to an outward display of opposition (Foucault 1977). From the outside, an actor can be defined in terms of data, for example, SAI as an organization identifies its staff members or players with the help of specific attributes like KID, sex, region, etc. as discussed in detail in previous sections.

5.4.4 Identity in relationship with SAI as a public organization

As a public organization, SAI defines its subjects on the basis of identity traits which not only include basic background information but also details like social background (for example, caste, community, and religion). This kind of information makes it possible to develop a better understanding between a public organization and its people. This is so because it helps the organization to give concessions and reservations according to the socio-political background. This is also one of the goals of good governance "to improve the relationship with state".

Thus, SAI identifies its subject in terms of a targeted address or eIDs. Rouvroy and Berns (2013) call this dissolution of its subject in terms of categories to targeted addresses as 'algorithmic governmentality'. This idea suggests that the government is based on algorithmic procession of data sets rather than traditional methods of law and social norms (ibid.). Now, there are no separate files maintained for an actor who has multiple roles, for example, in one of the STCs, the person was a coach also but he also handled the responsibilities of central-in-charge. This duality of roles can now be found as a single profile on the cloud server space, combining the two planes of existence.

This instance raises the question of surveillance and control. Digital identities are sometimes constructed without the knowledge of the user. Since every website and mobile application uses cookies, the users themselves are not aware of what information is obtained from their personal data. The surveillance is not always covert but most of the time public organizations make an effort to make the users aware of what details are required or stored by the system. Data protection is ensured by following the Information Technology Act, 2000. A bill (Digital Personal Data Protection Bill, 2022) has recently been introduced to protect personal data.

Therefore, the organization can easily track the fragmented digital traces, which form the identity of an actor, and converge these fragmented tracks into a single identity through which the organization exercises its control over the individual. So, the control by organizations no longer progresses by direct confrontation but rather by a posteriori rebuilding of behavior and by a priori regulation of rights of access. The digital identity developed for e-governance projects often tends to be 'imposing' in nature, pointing to an idem mode of identity as it doesn't allow space for the individual production of meaning.

5.5 Conclusion

We are dealing with the advancement of digital technology in governance structure of public sports organization which is accompanied by techno-discourses that most often act on the identities of the involved actors. This chapter pointed out the intricacies of the negotiation process that takes place in SAI where IT administrators have tried to enroll other actors and align their interests with the common interest to attain good governance. In this process, the identities of actors get translated. They are constructed and re-constructed in a dynamic manner. This

chapter analyzed how different realities are enacted by different actors which further helps to conceptualize how the dynamic relationship among actors are formed within a network (Cresswell, Worth, & Sheikh, 2010). Through a number of digital initiatives various overlapping sociotechnical practices were observed providing crucial insight into the shift from a paper-based governance structure to e-governance. There are many conflicts within the enrolment process bringing ineffectiveness to the e-governance network, such as a lack of defined government policy or involvement of intermediaries resulting in passive involvement of actors.

Chapter 6

Governmentality of e-Governance in SAI

Foucault, (1977) understands governmentality as ‘conduct of conduct’ that involves the use of human abilities as members of the population as the resources to be used effectively. The term governmentality can be understood in general terms as a way of governing with different rationalities (Rose & Miller, 1992 ;Dean, 1995).Rationality can be understood as a way of thinking that is based on a certain set of knowledge. The analysis of government entails four main aspects, i.e., what will be governed, and secondly, how will it be governed. Thirdly, it involves the ‘mode of subjectification’ (Dean, 1995) and lastly, what is the motive of being governed or to govern. Michel Foucault's idea of governmentality is crucial in understanding power relationships and how governance is carried out throughout organizations. It entails analyzing the systems, tools, and tactics institutions and people employ to rule over one another and themselves (Foucault, 1977). Governmentality becomes important in the Actor-Network Theory (ANT) setting because it clarifies the power dynamics and behaviours among actors within a network. Through the concept of *dispositif*¹⁹, which includes both material and immaterial practices like the state, sexuality, and discipline (Foucault, 1977), Foucault's work is in accord with ANT. The ANT's concept of "black boxes," which describes the non-discursive components and social contexts that influence the interactions between actants, is analogous to this idea of *dispositif* (Latour, 2005). By emphasizing the significance of including immaterial things in the analysis,

¹⁹ *Dispositif*, as defined by Michael Foucault (1980), refers to an ensemble of various institutions, discourses, and knowledge system that helps in the exercise of maintaining power.

Foucault solves one of ANT's doubts by taking into account these non-discursive practices.

This chapter is concerned with how rationality is operationalized in the working of a sports public organization, i.e., SAI. A public organization has many facets apart from power and authority; it also focuses on the issues of identity creation (Adam, et al., 2006 ; Kubicek, 2010 ; Rissanen, 2010), which was addressed in the previous chapter. So, the SAI analysis helped us identify particular contexts in which the question of governance was raised. As Latour (1986a) also pointed that problematization can be examined based on analytics of the practices, how different techniques, knowledge, and language interact with each other to govern an organization. Governmentality allows us to draw a picture of how governance is taking place, who is governing and who is being governed, how the relations of power and authority are constituted within an institutional space, how different actors are connected to each other, and which nodes take a central place in the governance network. Such a picture allows us to ‘think with eyes and hands’ (Latour, 1986b)

E-governance was introduced in SAI with the aim to bring transparency, accountability, and effectiveness in the organization.²⁰ E-governance constitutes various technical processes that are embedded in the social structure of the organization which reinforces the power structures which it aims to eliminate. The actor gets exposed to these social networks and becomes primarily vulnerable as soon as they join the organization (Butler, 1997). So, all actors including

²⁰ Information regarding e-governance practices in SAI was received from RTI filed against SAI (RTI No. SAOIN/R/E/21/00158 filed on 22-06-2021).

administrators, coaches, players, and digital initiatives are already exposed to these social networks in SAI. These actors encounter e-governance initiatives daily and in the process accept or revise these technologies to make them satisfactory. Through these digital discourses, SAI tries to introduce governmentality Foucault, (1991), defines this governmentality as a complex form of power that works through these networks to subjugate the users. This subjugation is not rapid instead it happens at a slow pace eroding other forms of power like sovereignty . So, the e-governance initiatives like eOffice, NSRS, or AMS introduced to increase participation and transparency instead become the technologies of governmentality at the hand of upper authorities of the organization.

These technologies of governmentality allowed the higher authorities to have access to all of the data pertaining to its members. The unlimited access and lack of accountability raise the questions of ‘datapulation’ and ‘dataveillance.’ Dataveillance can be understood as the automatic, ongoing, generalized, and unfocused gathering, storage, and examination of digital traces by state and commercial actors (Buchi et al., 2022). There have been incidences where the player's data are sold to private companies that use this data to make their organizations profitable (Rana & Chopra, 2021). Data manipulation or ‘datapulation’ has caused a detrimental shift in user behaviour on digital platforms, which has resulted in the misuse of user information. These practices also lead to changes in user subjectivities as their views of the world and how they interact with it may alter as they become increasingly dependent on these digital applications.

The chapter is divided into a few sections to better understand the dynamics of power at play within the organization. The first section deals with the issue of risk and security in the digital governance of the SAI. Here the issues pertaining to

risks such as misuse of data and how this data can be used for manipulation are explored. It has also been explored how the idea of surveillance has merged with the idea of dataveillance. This dataveillance has also affected the relationship among various actors in the organization. The second section deals with techniques of discipline and punish in SAI. The techniques of control are discussed here and how various actors exercise the power to maintain the desired decorum within the organization. In third part, the idea of neo-liberalization within the sports digital governance structure has been discussed. In fourth section, technologies of self have been emphasized, how they convert actors into subjects through self-organization of their own actions. In the last section, the idea of good governance has been related to the digitalization process within SAI.

6.1 Risk & Security in e-Governing Sports

Risk can be understood as one of governmental rationality as it is embedded within the good governance aspect of a public organization. As (Ewald, 1991) emphasizes, risk can be understood as representing reality in the calculable form. Everyone has different perspectives according to the knowledge and expertise they are embedded in, which makes them arrange occurring events in a particular way that can be governed through some techniques to attain a particular goal (Dean, 1999), Risks can be understood as calculations made to govern our course of action. It can be viewed as an amalgam of governing methods, practices, knowledge, and rationalities.

To examine risk management while introducing digital technologies in the SAI, various practices and rationalities were observed. Surveillance is monitored in the organization to prevent any risk from escalating to chaos. (Castel, 1991) points out that this surveillance changes the relationship between the ‘watcher and

watched'. Sometimes, they are not aware that they are being monitored. Now, the interactions are not just limited to face-to-face but they are a result of abstract factors which may be risky. Earlier the operator working in the field to meet the requirements of players and coaches to make the game possible has now been reduced to a mere executive who just has to obey the orders given by managerial staff after taking into consideration the current scenario from the comfort of their seats in their offices through surveillance.

Digital technologies play a crucial role in the dispositif of risk management in SAI. Earlier, the administration of sports was carried out through a paper-based system. Files used to transfer from one desk to another which sometimes took a longer period of time, delaying the task at hand. Things started to change recently when the decision was made to digitalize the internal working of the organization. eOffice was introduced to improve the backend processes. This digital intervention allows transferring of files online and in a timely manner. The files could be tracked, which makes monitoring easy for the higher authorities. This allows the surveillance of administrative work. Similarly, NSRS and AMS allow to monitor the movement and action plan of coaches and players. NSRS has a facial attendance system that monitors the presence of the players in the confinement of the stadium facility. This service will soon start for the coaches as well, which will ensure constant monitoring of their movements. Administrators have biometric attendance to mark their attendance. So, these digital efforts were established to promote good governance but they should also be considered as a security tool. The use of facial attendance or a biometric identification system demonstrates how the actors are being redefined in terms of information. Negroponte (1995), in his work on 'Being Digital,' explains that the industrial age was the time of atoms, i.e., the age of mass

production bringing uniformity and repetition in a particular time and space but with the coming up of information age times have changed from atoms to bit. Now, everything is present in the form of bits that travel at the speed of light and can easily blend with any form of media. It is not even restricted by space and time. Following the concept of bit, Van der Ploeg (2005) further explains how a person's traits are analyzed and classified once their data is stored in bit format. For example, as discussed above, these digital interfaces identify the actors based on their profiles. The software identifies a person according to different categories against which facial and biometric attendance is marked. This identification is further clubbed with another set of data such as the number of attendance marked by a player affects the fellowship he/she receives. (Castells, 2010) argues that this kind of surveillance is now diffused in the whole society blurring the boundaries between personal/private and professional/public roles. Although these digital technologies are used by public organizations to control and monitor actors indulged with the organization but these can also be used by the actors like players, coaches, contractual staff, or the lower rank administrators to enhance their control over the organization and access information. These instances of surveillance shows sign of 'centralizing and decentralizing' trends (Spaij, 2013).

The collection of different kinds of information creates metadata which gives the higher authorities more control over the other actors. The extensive use of surveillance going beyond the control of a single organization is indicated through the work of Lyon (2001), in which he states that

surveillance activities have long since spilled over the edges of governmental bureaucracies to flood every conceivable

social conduit. While the state still accounts for much monitoring of everyday life, such government activities are just one of many areas within which surveillance data now flows.

The e-governance initiatives taken by SAI create new associations, new cultures, and new practices. As in the case of eOffice, the structure is such that the users are under constant surveillance and modify their behavior accordingly. The athletes are also under constant surveillance or supervision in two forms, first, when they are in the field, they are constantly observed and directed by the coaches, and secondly, through AMS that measures each and every activity of the athletes, and this data gives coaches, sports scientists, and administrators more power over athletes. So, control is embedded within the design of these e-governance initiatives giving them the agency to exercise power over other actors, which only becomes visible when one closely observes the real practices and follows the actor.

6.1.1 Dataveillance

The Sports Authority of India (SAI) has started several digital projects to improve the organization's governance system. The deployment of eOffice, the Athlete Monitoring System, and the National Sports Repository System are just a few of the projects that have unquestionably improved efficiency, data management, and decision-making. But along with these developments, privacy and surveillance issues have surfaced, necessitating a review of the idea of "dataveillance" in relation to sports governance. The systematic observation and gathering of personal data about persons using digital technology is known as dataveillance. The observation of surveillance structure started from Bentham's Panopticon (Foucault, 1977), and it was later developed as 'dataveillance' by (Clarke, 1988). In order to collect, analyze, and understand enormous amounts of data for governance reasons,

which includes the employment of numerous surveillance technologies, can be understood as dataveillance. The persistent nature of digital technologies, such as wearable devices, cloud computing, or the Internet of Things, allows management to observe and collect data on their stakeholders constantly. The SAI's use of digital initiatives has increased the gathering and analysis of athlete data, raising concerns about the possible privacy and surveillance ramifications.

Real-time tracking of athletes' physical activities is made possible by digital efforts like the Athlete Monitoring System, which enables coaches and management to monitor players' performance and advancement carefully. Despite the fact that this monitoring might be helpful for training, it also fosters a power dynamic where athletes' actions are constantly being watched. These devices' considerable surveillance capabilities raise concerns about the possibility of disciplining and controlling athletes, potentially infringing upon their autonomy and independence. Comprehensive data gathering and analysis of sporting facilities and infrastructure are made possible through the National Sports Repository System and Geo Tagging. While these systems provide useful information for planning and allocating resources, they also spark worries about potential profiling and movement tracking of people. Digital profiling takes place by analysis of application usage data, suggested systems, targeted advertising services, and resource optimization programs (Eke, Norman, Shuib, & Nweke, 2019 ; Mahbub et al., 2019). Digital profiling helps personalize user experience (Kwon, Lee, & Jeong, 2021) but also threatens users' privacy and increases the risk of data manipulation (Olzak, 2009). To ensure the responsible use of digital projects, it is essential to strike the correct balance between effective governance and protecting privacy rights.

Given the development of digital activities inside SAI, a careful analysis of the ethical ramifications is required. To reduce the risks related to data surveillance, transparency, informed consent, and data protection measures must be given top priority. To preserve ethical practices within the sports governance structure, it is crucial to establish clear regulations and procedures surrounding data access, sharing, and retention. It is also important to inform athletes and other actors about their rights and the potential consequences of data collecting.

Dataveillance also impacts the employer-employee relations. Collecting and storing private and sensitive data becomes inevitable as SAI deploys digital systems like eOffice. These systems strive to make administrative procedures more efficient, but they also require gathering sensitive data, such as athletes' performance measures, training logs, and medical records. Concerns are raised concerning the possibility of unauthorized access, data breaches, or improper use of this information as a result. A loss of control over their personal data was felt by administrators and other actors, which could jeopardize their right to privacy. One of the administrators claimed that

Digitalization and all is good, but the issue of privacy remains. I am not confident in the online system; it can break down or get hacked anytime. So, I believe that safety measures must be taken before making the online system compulsory.

Therefore, the constant digital surveillance must be balanced to take advantage of digital innovation while protecting players' fundamental rights and autonomy within the framework of sports governance.

6.1.2 Datapulation

As discussed above, dataveillance has become omnipresent (Clarke, 1988). But the use of digital technologies is not limited to surveilling people, but it also influences the behaviour and opinions of people. Psychologists and platform designers refer to them as 'persuasive technologies' (Fogg, 2003). These technologies have positive and negative aspects associated with them. In a positive sense, they can help to motivate players to eat healthy or exercise more rigorously to get medals. In a negative sense, these technologies can be used to generate fake news or manipulate information and become a targeted informational weapon to mislead the action of its users (Castelluccia, 2020 ; Waltzman, 2017). It is crucial to take into account the potential risks connected to data tampering, or "datapulation," within the framework of sports governance. Datapulation or data manipulation includes mediation of personalized strategy based on the information received through these digital platforms to alter the behaviour of users, which may not be in their best interest (Castelluccia, 2020). Data gathering and analysis are now essential for performance assessment, talent spotting, and tactical decision-making in the world of sports. Digital platforms enable storing and handling enormous volumes of data, including scouting reports, competition outcomes, and athletes' biometrics and training plans. These technological advancements offer insightful information and chances for growth but also foster a climate where data manipulation is possible. In the sports scenario today, a case study called 'Project Red Card' has been gathering the limelight, where former footballers have raised the case against companies who are commercializing their performance data for their own profit (Rana & Chopra, 2021). The data is being sold to the betting or gaming industry,

which then further manipulates the data to turn the bets in their own favor. Therefore, it becomes necessary to keep the data collection in check.

One thing to be worried about is the possibility of data breaches or unauthorized access to athlete data, which could jeopardize athlete security and privacy. Additionally, when data analysis is vulnerable to manipulation, there is a possibility of biased judgement or favouritism in athlete selection, financial allocation, or resource distribution. Unequal treatment or the unequal allocation of opportunities to particular people or groups may result from compromised integrity of the data or the algorithms used for analysis. This compromises the ethical values and transparency in sports governance. In addition, employing persuading technologies and profiling strategies can raise questions about the digital technologies used for sending specific messages or providing individualized feedback to athletes to influence their actions, motives, or mental states. This presents ethical questions regarding the autonomy and welfare of athletes within the sports ecosystem.

The SAI should prioritize a number of procedures to reduce the dangers of data manipulation. To protect athletes' personal information, stringent data protection protocols and cybersecurity safeguards must first be put in place. In order to protect data privacy and integrity, regular security audits, encryption methods, and access controls are used. Second, the procedures for data analysis should be transparent and accountable. In order to guarantee that judgements and actions based on data are fair, impartial, and objective, it is important to develop clear norms and protocols. Identifying and correcting any potential biases or manipulation by routine audits of the algorithms and models used for decision-making is possible. Finally, it is critical to educate and raise awareness among athletes, coaches, and administrators about the usage of digital platforms and data privacy. They should

be informed on how their data is gathered, utilized, and safeguarded so they may make educated decisions and take an active role in the governance of their own data.

6.2 Discipline & Punish through Digitalization in the Governance Process

There is a current trend where disciplining of docile bodies is moving beyond the era of Fordist and Taylorist production to a more complicated and innovative knowledge worker. Foucault's work extends the concept of a knowledge worker which is shaped by power-knowledge relations existing in the organization. He emphasizes, "there is no power relation without the relative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations' (Foucault, 1977)."

These power-knowledge relations are found embedded within the regimes of truth. Every society has its own regimes of truth, i.e., a type of discourse that helps to distinguish between right and wrong through particular techniques and procedures. Governance practices have always been inculcated within the regimes of truth. To analyze the SAI e-governance structure, the organization must be analyzed as a site where disciplinary practices and power-knowledge relations emerge from the regimes of truth.

Within the context of digital technologies, some of the employees are more competent in using these applications in comparison to others. But the aim of the organization is to include this 'unskilled' or 'incompetent' workforce within the mainstream to mobilize the interests of the higher authorities. However, these unskilled or incompetent actors remain active subjects. To bring these actors within the networks of e-governance various disciplinary techniques are implied. Discipline doesn't turn humans into objects, they still have their own free will. It is

only when these actors are mobilized within regimes of truth that they are able to act in certain ways. These actors carry agency which ensures them a specific exercise of power. The disciplinary process which may include observation, surveillance, examination or any other method allows certain types of capacities to be produced by the actors. As digital technologies are still in the implementation stage, it changes knowledge structures which also impacts disciplinary practices. Similarly, these changed practices impact the knowledge structure. So, the main function that these disciplinary practices are performing is training the actors to perform their functions in a particular manner. This relationship between discipline, subjectivity, and actors is dynamic. For example, shifts within the governance framework provide the possibility for disturbing the working environment for the formation and maintenance of other regimes of truth and subjectivity of the actors. This shift aims to modify the active actors according to the norms and regulations associated with consumption of the digital practices. The subjectivities get remodified portraying the administrators, coaches, or players as digital resources.

The self is to be a subjective being, it is to aspire to autonomy, it is to strive for personal fulfillment in its earthly life, it is to interpret its reality and destiny as a matter of individual responsibility, it is to find meaning in existence by shaping its life through acts of choice.

(Rose, 1998)

Through self-fashioning, the ethos of digital practices contributes to the reshaping of subjectivity. This digitalization, which is frequently incorporated into discourses about innovation and flexibility, is evident in many policies as well as in the practices of the SAI. But for Foucault ethics is constructed through practices by which one acts on oneself or others, i.e., technologies of the self (Foucault,

1988). With the help of digital practices, actors are situated as innovative and flexible. These digital technologies, however, cannot determine but only shape the actors as subjects who have the power to interpret and act. Digital technologies have the potential to be viewed as a form of actor-shaping power. But power does not have an unidirectional flow, so it does not dictate how actors act. Therefore, actors can manipulate, alter, or reject the power that digital technologies exert through this network of relationships. Actors can act in accordance with their own realities and identities by interpreting the information offered by digital technologies.

Discipline and regulation can be understood as methods to exercise power, they cover every aspect be it your own personal self or the organization as a whole. (Dean, 1999) highlights that governmentality mainly deals with individuals disciplining their own behaviour rather than concentrating only on external forces controlling the behaviour of individuals. In this perspective, governmentality can be understood as merely the historical replacement of one form of power with another, with a shift away from people having power exerted over them to a situation in which they increasingly have actively control their own behaviour. However, the situation is getting more complex. The regulation of actors associated with the organization enables more spaces for action in comparison to when individuals were disciplined alone. But it is not a regular trend. These tendencies allowed us to accentuate the governance process of the organization by focusing on the power that allowed it to intersect and become patterned within the network. But if we emphasize solely on governmentality or disciplinary measures we are susceptible to falling into the trap of realizing the exercise of power from the centre. So, precaution was taken by analyzing power's microscopic mechanisms such as

its techniques and tactics, and how these mechanisms have been used, translated, and displaced . Rather than using these broad concepts as self-explanatory to understand governance, actors were followed in action. In the organization, power is exercised as a result of connection, interaction, and translation among different actors (both social and technical). The governance and subjectivity are distributed through various networks that are interconnected. These networks constantly shift over time and are performed constantly to exist. The power exercised in the SAI can be seen as an actor-network.

As Latour (2005) observes, analysis of the very thinnest of the fabric of power, which was present in Foucault, was forgotten in the present world, but ANT scholars still hold on to this form of analysis. “The only way to understand how power is locally exerted is thus to take into account everything that has been put to one side, that is, essentially, techniques” (Latour 1986a). Power can be said as a result of its effect (Latour, 1986a ; Foucault, 1977) . . The two scholars have similar interests in analyzing power but differ in their emphasis. ANT is more interested in how techniques socialize non-human things, whereas Foucault was interested in how techniques resocialize human subjects (Matthewman, 2013). Foucault also addresses the materiality of power as power can only be exercised through concrete arrangements (Foucault, 1977). Power is realized as a combination of humans, discourses, rules, and regulations working at different levels of an organization. ANT theorists also agree with Foucault’s conception of the materiality of power, as Latour (2004) notes, “left to its own devices, a social tie made only of social ties would be limited to very short-lived, local, face-to-face, unequipped interactions... When power is exerted, it is because it is not made of social ties... It is when power is exercised through things that don’t sleep and associations that

don't break down that it can last longer and expand further—and for this, of course, links made of another stuff than social contracts are required” (Matthewman, 2013).

Foucault's work on *Discipline and Punish* (1977) explained the exercise of power to produce subjectivities and individual identities. Knowledge along with power influenced and created the thought process of the actors. Through his example of the penal system, he showed the changed nature of punishment from open execution to a closed controlled system, i.e., Panopticon. Torture was replaced by training. Instead, there is a system of rules and regulations that govern every aspect of existence, the creation of thorough records, personal files, new classification schemes, and schedules that specify the tasks that must be completed. Constant supervision was to support all actions. (Foucault, 1977) emphasized that the panopticon was universal in its application. Such is the “architecture that would operate to transform individuals: to act on those it shelters, to provide a hold on their conduct, to carry the effects of power right to them, to make it possible to know them, to alter them” (ibid.). This kind of technological structure is very much prevalent in today's world disciplining its subjects.

Sports was shaped by various social developments leading to the development of themes such as order, discipline, health, efficiency, and rationality (Gearity & Mills, 2012). Within a sports organization emphasis is laid on disciplining the players in a standard order to achieve excellence at the international games. To achieve this aim discipline is not only experienced by the players but also by the coaches, administrators, and the technologies used to attain this goal. All the actors undergo the practice of discipline. (Foucault, 1977) understands discipline as ‘a political anatomy of detail’, which challenges the taken-for-granted

things. He remarks that ‘we are entering the age of infinite examination and of compulsory objectification’ (ibid.). This statement especially holds true in contemporary times, the use of digital technology to enhance the governance process leads to regular examination and objectification of the actors. Coaches must give in daily facial attendance before the end of their morning training session, making them work according to the task at hand. This mechanization of function leads to the objectification of the actors.

SAI instilled discipline by reorganizing its governance practices, shifting its physical presence to a digital presence. This shift enabled efficiency in governing process by reducing inconveniences. Digital technologies allowed us to have different spaces for different issues. For example, eOffice was implemented to improve internal office work, NSRS & AMS for monitoring the activities of players and coaches, and JAM for improving financial issues. In this digital space, there is a new type of punishment to ensure the subjects are disciplined. The nature of the punishment was corrective to make the subjects perform in a particular manner (Foucault, 1977) ,The flowchart of giving instructions and maintaining discipline is from top to bottom as illustrated by the following figure,



(Fig. 6: Flowchart of command at SAI)

Through these hierarchical levels discipline is maintained throughout the organization. Administrators are the dominant exerciser of discipline. They exercise this control through these digital technologies, for example, coaches have to report their training agendas to the administrators and players by uploading them to NSRS. To validate their position they also give regular tests uploaded by the sports scientists from time to time. In the case of players, coaches are the dominant exerciser as they are responsible for their training. Punishment is a part of disciplining the athletes. There always exist physical punishments to make sure players learn what happens if protocols are not followed but with the coming up of digital solutions like NSRS or AMS. Athletes' every moment is monitored through these applications keeping them under constant surveillance, so if an athlete fails to appear for his training, the coach gets notified by these applications of their

absence, and they are punished physically as well as their allowances get affected automatically, even if a coach doesn't report the player.

These disciplinary practices also help maintain age-old hierarchies. For example, eOffice was launched with the aim to reform the internal functioning of the public organization and bringing more accountability to the position holders. It was observed that eOffice brought more control over the actions of the users and partially impacted the higher hierarchies. One of the Assistant Directors at the Regional Centre, SAI, said that

eOffice is good, one can work anytime and anywhere. It saves time and brings accountability, but this accountability is more on the lower levels, higher authorities don't feel this pressure of doing the work in the stipulated time. For example- my director has more than 10 files pending but when I ask there is no response. So, they have the luxury of postponing the work, but we don't.

This case illustrates the reinforcement of age-old hierarchies again with help of these digital technologies. But it is not easy to attain this status quo, as it is a gradual process. The actors need to enroll in these networks to maintain this power structure. Enrolment of actors is done through training and manipulation. The training and manipulation of users are done through the mediation of digital technologies as discussed earlier.

Furthermore, discipline is maintained by organizing time. In sports, timing is everything, even for the sports governance process effective utilization of time can reduce the time taken for administrative work and using that time for effective planning and training of the players. According to (Foucault, 1977) ,the

establishment of rhythms, the imposition of specific vocations, and the control of cycles of repetition are the three ways by which time can be organized. In eOffice, a file can remain at a table for a set period of time and if it exceeds that time period, an explanation has to be given. The constant imposition of time limits on the actors coded all the activities, which according to (Foucault, 1977) molds them into a desired subject by taking the activity as natural. This made the administrators, coaches, and players blindly follow the orders, which in turn enforced the desired behavior. These digital interfaces were developed to better organize and ensure effective governance often compromising the individual demands.

Hierarchical and intersecting observations shape the behavior of every actor. Physical presence was no longer mandatory to exercise power. The digital interfaces introduced within the governance process acted as a watchdog, making actors adhere to the norms even in the absence of a physical check. In this manner, the administrators, coaches, and players were disciplined through self-surveillance. Digital technologies are also disciplined as they are tweaked to perform the same repetitive functions by a set of concerned actors. This ensures that discipline lasts longer without the need to be overseen (Gearity & Mills, 2012).

6.3 Neoliberalization of sports digital governance

E-governance aims to achieve good governance (Anttiroiko & Malkia, 2007; Suri & Sushil, 2017) but it also has neoliberal interests which raise questions about the actions of digital technology in mediating the work relationships between other actors. Further, each e-governance initiative uses the data differently for different purposes which raise concerns regarding security and surveillance and give further rise to the question of power. This research has analyzed social, technical, and political issues which were embedded within the networks of e-governance

practice. ANT made it clear how digital platforms, data, and humans have inextricably meshed within the organizational context. Through these interwoven networks, the ideology of neoliberalism is visible.

One of the features of neoliberalism is the idea of responsibility (Foster, 2016; Luxton, 2010). The actor's intention to accept personal responsibility reveals the centrality of neoliberal ideology in their actions. The actor becomes a neoliberal subject through an act of 'responsibilization' (Watts, 2021) but it may not always be the case. For example, a facial attendance system has been launched in SAI centres. Every player has to mark their attendance through their phones using their Khelo India ID (KID). The motive behind this initiative was to discipline the players and make them accountable for their availability for training. Some players are still adapting to this change, and they find it nuance. When enquired about digital initiatives taken to improve the sports governance process from female boxing players, they replied

Interviewee 2 & Interviewee 3: We have an online attendance system.

Interviewee 1: But that does not provide us any benefit. Plus there are time and again network issues with it.

Whereas, another player from archery claimed that

If we mark our own attendance, we will become responsible for ourselves... We only have to mark our attendance if we are in the SAI centre. Yet another player asserted that we have to mark facial attendance and we can do it only if we are on the SAI campus

otherwise absent is marked. Coaches get to know if we are disciplined and are going to practice or not.

The sense of responsibility endowed within the minds of players hints at the neoliberal ideology. Players are made self-responsible for their own trainings that results in promotion of neoliberal ideology that promotes the idea of non-interference and self regulation. But just an instance can't justify the claim. So, other than responsabilization there is a sense of autonomy and individualism that makes an actor neoliberal. There are different instances observed during the fieldwork that showed the willingness of the actor to act autonomously. E-governance initiatives were launched to ease the governance process and create autonomous spaces for coaches and players to practice without worrying about administrative interference. Most of the players and coaches appreciated the efforts as they could dedicate more time to their training. In one of the STCs, a coach said that

no one disturbs the coach here. The coach is mainly concerned with his training. We don't have to go anywhere as nowadays most of the happenings take place online only. Administratively we are well supported to concentrate on players.

I argue that though responsabilization and autonomy are expressions of a neoliberal subject they cannot make a neoliberal discourse rather it is a knowledge power structure that constitutes it.

Digital technologies allow flexibility in the construction of subjectivities of its users, which was not possible earlier. Digital applications shape an epistemology based on how users navigate the world and what is included and omitted while

operating these applications (Halpern,2015; Kitchin, 2017).These reasons construct agencies and subjectivities of users as the digital platforms define how one perceives and connects to their surrounding. Thus '*digital platform interface embodies a kind of ontology: it defines what the world is and is not*' (Törnberg & Uitermark, 2020). The reaction of the user becomes dependent on what the platform constructs as reality. Though the user may have a choice while opting for options from a drop-down menu (in this sense, they may feel they have freedom of choice) but the users are limited by the design of these interfaces. The algorithm behind these digital technologies shapes the subjectivities of the user (Isin & Ruppert, 2015). For example, in AMS or NSRS, only certain kinds of reports can be generated. This makes the users think that only those particular information is necessary to be observed. Even if one wants to interrogate the workings of these systems, they are closed by non-disclosure agreements, trade secrets, and any other such legal document. These platforms direct their users on how to conceive and perceive information. These interfaces claim to help in better decision-making by utilizing the information obtained in the best possible way (Hallinan & Striphas, 2016) . These digital technologies claim to know us better than ourselves (Gomez-Uribe & Hunt, 2016).However, the discrepancy between what we say we want and how we really behave is not a result of not knowing ourselves but rather a manifestation of an internal conflict that constantly goes between whom we aspire to be and what we really think. For example, in NSRS, athletes' achievements are recorded, telling them their exact stature, but it does not disclose the aspirations of the athlete or how marginally he/she failed to achieve their goal. These digital platforms take advantage of the relational & porous self (Conradson, 2016 ; Kingsbury & Pile, 2016) which is always in a state of flux, and through this

flexibility of self, digital platforms intervene and shape their users to their own advantage. This intervention even has a bigger impact in the sense that it interferes with the sports culture in the country, pinpointing only the best-desired athlete (the definition of ‘best’ is based on the interpretation of the authorities) as successful.

Bauman’s theory of individualization (2013) indicated that the metaphor of the Panopticon can no longer justify the disciplinary measures taken today. He introduced the concept of ‘Synopticon,’ as today’s society is filled with many watching eyes with the use of digital technology. The Synopticon helps neoliberalism by shaping individuals into set parameters through self-control. With this, the spectacle replaces surveillance while retaining its ability to discipline; obedience is now obtained by attraction and seduction rather than compulsion. Control subsequently manifests as an exercise of free will, as we like and imitate the examples we see without someone commanding us to do so. For example, during the field survey, it was noted that coaches are promoted as per their achievements, and one of the coaches claimed that now the process has become more transparent as their achievements are mentioned in the portal (NSRS). The promoted coaches are set as examples for other coaches. Thus, the rankings can act as a way to promote a particular organizational motive, making the reality of these digital platforms far from as objective and technical as appealed. Therefore, the promotion or ranking system encodes different political, social, or economic perspectives to promote certain policies and agendas (Zumbrun and Talley, 2018). The whole process of promotion is still not transparent as the coaches believed it to be. Questions can still be raised, such as how they are shortlisted, if two coaches in the same sport or others are at the same level, what will be the promotion basis. So, not everything is clear. But the use of digital platforms has changed the thinking

of coaches to believe that things have taken a more democratic turn. Putting things in the public eye doesn't guarantee transparency but gives decision-makers legitimacy.

According to Sundén (2002), these digital platforms serve as a mirror through which one sees oneself as perceived by others. Then this picture is used to write oneself into being, connecting one's narrative with the social structures one observes around themselves. This Synoptican is carried in the designs of the digital platform.

6.5 Technologies of Self

Foucault in his work on 'Technologies of Self' (1988) mentions four types of technology with different functions. The first three, according to him, were identified by Habermas as technologies of production (related to developing and controlling things), technologies of sign (related to symbolization), and technologies of power (related to forms of domination & objectification). He added a fourth form of technology, i.e., technologies of the self, to this categorization. This form allows individuals to act on their own bodies, behaviour, and actions by means of their own efforts or with the help of others to achieve happiness or perfection (ibid.). Technologies of self are used in the organizational context to promote empowerment and success (Edwards & Nicoll, 2004). Employees are urged to view lifelong projects like self-improvement, training, and constant learning. People are encouraged to take responsibility for their actions and invest in their own human capital by framing exposure to risks and expenses as chances for personal growth and development. The idea of governmentality, which describes how people are persuaded to regulate themselves according to societal norms and political power structures, is consistent with this self-governing strategy.

The application of ANT to the study of SAI allowed to view the organization as an intricate web of actors and their interactions. The mobilization of multiple actors, such as digital India policy, competitiveness, and flexibility, can be understood as a part of organizational learning (Edwards & Nicoll, 2004). These actors influence subjectivities and aid in the development of their own self, along with the management, appraisal, and development practices. The idea of actor-networks highlights these interactions' fluid and dynamic nature, bringing attention to the network's instability and contingency. The mobilization of actors as learners reflects an effort to modify power relations and current actor networks (ibid.). Discipline practices are still in place but are now supplemented by fresh observation and assessment methods, like online appraisal reports and 360-degree evaluations. The emphasis on the use of self-directed technologies supports individual self-regulation in the organization and is consistent with the larger governmentality rhetoric. One of the coaches commented that

Digitalization has allowed us to reflect on our methods of training the players as it has aided in the prompt acquisition of outcomes, allowing us to improve our strategic approach.

In this sense, digital technologies are helping the actors to improve their own actions by becoming technologies of self.

Apart from digital applications, the physical layout of workplaces and their exterior relationships might also influence instructional opportunities and mobilized subjectivities. The subjectivities in the organization harness various perceptions and individualities to create an inclusive environment. In harnessing this potential infrastructure of an organization can be a crucial factor. The physical

structure and architecture of the organization can either encourage or inhibit actors' collaboration and communication. Open and flexible offices, relaxing meeting spaces, and common areas can promote conversations and the sharing of various viewpoints. However, a strict and divided design may make collaboration difficult and restrict the expression of subjectivities. For example, SAI promotes open working spaces for coaches, players, and administrators, allowing them to be more creative and open about their viewpoints. This collaborative space becomes more accessible with the help of these digital initiatives. eOffice allows administrators to share their work with other employees in the organization easily and speedily. These digital initiatives also allow having an inclusive learning environment that promotes feedback mechanism from various actors that influences their perception about different agendas carried out by SAI.

6.5 Digitization in the administrative process of SAI: A Good Governance Agenda

Corruption was found in sports from as long as the Olympic Games of 388 B.C. (Khan, 2017). As per the Transparency International Corruption Perception Index 2022, India ranks 85 out of 188 countries. This level of corruption affects all fields of society and sports is no exception. The first major sports scandal in India happened in the 1990s, where Indian cricketers were charged with match-fixing. The magnitude of corruption raised during the Commonwealth Games 2010 brought the world's spotlight on the country. This raised concerns to resolve the issue of corruption to implement the agenda of good governance, which was in line with the neo-liberal idea of development (Madon, 2009). This resulted in a restructuring of public organizations, primarily separating governance from politics (Joseph, 2013). In this context, the policies and programs implemented within SAI were influenced by political factors and technological interventions.

This framed SAI as a technological organization. Technological expertise is often perceived as neutral and unbiased while politics is seen as serving the interests of elite groups (Abraham & Rajadhyaksha, 2004). As a result, the development of a technological organization in India centralized the expert knowledge associated with scientific authority, discounting politics and using techno-science to handle political difficulties (Nandy's, 1988). This strategy fits with the neoliberal good governance agenda's anti-political mindset. In these settings, digital initiatives like eOffice, NSRS, AMS, Geo Tagging, and JAM were introduced, claiming to bring transparency and effectiveness in the governance process of the organization. SAI is trying to establish a discourse for success around these digital initiatives. However, so far, no study has portrayed the effects of e-governance in SAI in a clear-cut cost-benefit analysis. These digital initiatives act as technologies of governmentality, where the stakeholders are treated as subjects rather than citizens, segregating governance practices from politics (Chatterjee, 2004).

According to (Abraham & Rajadhyaksha, 2004), there is a liberal presumption that technology is a neutral through which "subjects respond passively to technological change." But Winner (1980) asserts that technology is political. It embraces some concerns while rejecting others (Introna & Murakami Wood, 2002). According (Amoore, 2009), the algorithmic logics of computation included into digital technologies seem to transmute the uncertainties of human existence into an apparent scientific conclusion. What becomes evident in the case of SAI is the division of actors based on algorithms. Some actors, such as prominent coaches who have trained or are still training world-class athletes, are excluded from the database.

The interactions with these digital technologies come to be seen as interactions with the state (Corbridge, Williams, Srivastava, & Veron, 2005) As encountered in many of the interviewees with the coaches, the government does not take into consideration their home backgrounds while transferring them to various positions across India. One of the coaches said

Administrators have a tendency to make everything very complicated. I have faced such problems in other SAI centres. Plus, you have to butter these officers to remain in their favorites, and if they don't like you that much, you are transferred. The transfer is the main issue because we also have families, and it disrupts our entire life. In SAI or maybe in any government office, there is a culture of controlling their juniors. It is very difficult to get a permanent position in SAI; most of the staff here in this centre (centre name hidden for anonymity) is on contract.

The digital interfaces act as a mediator to facilitate the relationship between administrators and other stakeholders. The transfer of the coaches and administrators and the allocation of players to various camps are done through digital applications. So, these digital interfaces are promoted as tools for good governance. Participation forms a crucial part of good governance agenda (Dattani, 2019). But as (Kothari & Cooke, 2001) point out, participation may also be exploitative, leading to exclusion and serving the interests of the most powerful classes. They refer to this as "the tyranny of participation." For instance, the act of face identification itself places the body under constant surveillance (Finn, 2005). According to (Corbridge, Williams, Srivastava, & Veron, 2005), participation can encompass a wide range of behaviours, including being more

passive or active. Rather than participation through which citizens can confront oppressive structures, SAI only provides passive participation for some actors to be seen through its digital initiatives. The process of digitalization in governing SAI rather than liberating the actors solidifies them into subjects as they are confronted with passive participation with the organization. In the context of Aadhar, (Cohen, 2017) calls that ‘duplication from below’ has been replaced by ‘duplication from above’; similarly, the digitalization of governance process, rather than supporting the participation from below, establishes the basis for legitimizing the hierarchical control.

6.6 Conclusion

The Sports Authority of India (SAI) has experienced a change in governmentality as a result of the implementation of digital platforms, changing how authority and control are exerted inside the organization. A more streamlined and effective governance structure has been made possible by the digitization of administrative procedures, enabling improved resource allocation and decision-making. Earlier, analogue governance took more time and resources to accomplish a task. It was also less transparent as it is difficult to keep track of all the records. The former system was notorious for its red-tapism, which resulted in files going ignored for long stretches of time without any additional push, such as pressure from superiors or favouritism for those who were close to people in authority. Research papers show that organizations' effectiveness is negatively impacted by red tape in information technology and human resource management (Pandey et al., 2007). Analogous governance mechanisms shouldn't be immediately dismantled as we move towards digital government. Instead, analogue governance frameworks

should be supported and enhanced by digital governance, guaranteeing seamless connectivity between the two systems.

However, worries about data surveillance have also been raised by the introduction of these digital platforms. Large-scale data gathering and analysis have the potential to violate people's privacy and autonomy. In addition, the availability of digital platforms has increased the potential for data manipulation, which could corrupt the governance process. It has also affected how people are disciplined and punished at work. A sense of constant surveillance heightens monitoring and responsibility among actors, which can have both beneficial and negative effects. This calls for a counterbalance between control and freedom to achieve efficiency in the workplace.

Chapter 7

Does algorithm governance in sports means alienation from the self?

Algorithms are part and parcel of today's life. They are expected to ease the process of doing a task, be self-sufficient in handling monotonous tasks, and bring more efficiency to the functioning of an organization (Dauvergne, 2020). Apart from the positive usage of algorithms, it also possesses the risks of control through which the public or private sector can penetrate every nook and corner of the world including the minds of people (Zuboff, 2019). They can lead to discrimination and isolation of marginalized and unmatched forms of exploitation (Black, 2021 ; Yeung, 2018). Algorithms, as understood by Gillespie, (2014), are mere commands that are given to obtain a certain result. However, it is not the case today where we have big data, AI, and machine learning that are not always dependent on humans to operationalize them. Therefore, they have a huge impact on actors governed by its calculations. Katzenbach & Ulbricht, (2019) defines algorithm governance as “a form of social ordering that relies on coordination between actors, is based on rules, and incorporates particularly complex computer-based epistemic procedures.” Many scholars share the opinion that algorithms affect the decision-making of those employed in the public sector, which has severe implications for power relations (Crawford, 2021; Eubanks, 2018 ; Beer, 2017). The scholars have warned that algorithms will play a more inclusive role in disciplining societies (Kitchin, 2017) as well as controlling and manipulating the behaviour of citizens in their own favor (Danaher, et al., 2017). Algorithms are considered to be free of human error and more cost-efficient for public organizations (Kuziemski & Misuraca, 2020), however, they also lead to inequalities in power and self-replicating errors. For

example, O’Neil (2016) has shown that algorithms have barred groups by not allowing them to raise challenges. In understanding the impact of algorithms, it is necessary to identify the context in which it has implications. In order to understand the implications of algorithms on sports, the context needs to be explored.

Sports administrators are using data analytics to enhance their governance functions and promote the competitive level of their players. Overall, the appeal is to implement good governance in SAI. Given the increasing number of digital interfaces, smartphones, and laptops in the organization, it is believed that these technological developments can enhance the efficiency of the organization. The rationale for adopting such digital initiatives, as discussed in previous chapters, is to use the data generated from such applications to address the issues within the organization and promote timely delivery of services to its stakeholders. This allowed a certain degree of automation in the governance mechanism. However, the automation based on algorithms in SAI is still used as a recommendation system, especially in the case of AMS and NSRS, whereas eOffice, has fully automated the internal office work. As a recommendation-based system, it generates information that is used by humans to make a final decision, but administrators and coaches sometimes don’t have the capacity to override the recommendation made by an algorithm and result in implementing the same without any further discussions (Brayne, 2017). The heavy impact of algorithms in determining the governance mechanism of organizations, be it private or public, is known as algorithm governance.

Scholars like Fuchs have named such developments as ‘informational capitalism’ where he argues that big data companies, which are dependent on the data, generate this by exploiting its user in the form of unpaid labour (Fuchs &

evignani, 2013 ; Fumagalli, Lucarelli, Musolino, & Rocchi, 2018). When we browse social media platforms, we produce data for the companies, which is again consumed by ourselves. Due to the rise of big data companies, the relationship between the bourgeoisie and proletariat, as addressed by Marx's theory has changed as data has emerged as a 'new factor of production' (Walton & Nayak, 2021) and access to this data has become 'new source of power' (ibid.) through this data has become a 'new form of capital' (ibid.) This new form of capitalism keeps workers under the illusion that they have freedom of choice. Thus manipulating the users so that they become unaware of their unfreedom. These thoughts have been articulated in the work of De Kosnik, (2012) ; Trebore Sholz ,(2012) ; Shoshana Zuboff ,(2019) ; Attoh, Wells, & Cullen, (2019)

In public organizations, data produced by the users becomes a commodity of the government. This commodification allows the public officials to exercise more power over its user resulting in unequal power relations (Thatcher et al., 2016). The data that was originally generated by the users becomes alienated from them through data license agreements. Such a process is called 'data colonialism' (ibid.). Thatcher et al. (2016) and David Harvey refer to this process as "capitalist accumulation by dispossession." Personal facets of our lives are now gathered thanks to the incorporation of smartphones and other such technologies. The majority of the time, the data creators are deprived of their ownership and control over their resources. End-User-License agreements, which permit the privatization of user data, are one way that this dispossession may occur (Thatcher et al., 2016). Marx's alienation theory perfectly captures today's digital culture critique. This states that man becomes alienated from his own rationality and creativity. One can't

be completely independent in a digital society, as the applications are designed to maximize user engagement (Zinda, 2019).

7.1 Algorithm governance

7.1.1 Background

Algorithms can be defined as a structure of defined steps that allows to process an activity to generate output (Kitchin, 2017). Today algorithm-based digital applications are found everywhere, be it in the health industry, education, finance, or the sports industry. For example, google assistant on Android mobile phones and ‘Siri’ on Apple phones are some of the most used AI tools. Apart from these, we have examples of data-mining programs, trading systems, or robots used in different industries. These AI tools are also used in public organizations where repetitive and time-consuming tasks have been automated, resulting in the generation of more acute information or predictions (Engstrom, 2020). This allows to personalize services even in the public sector. Algorithms are advertised as a tool to increase efficiency and effectiveness in public organizations by introducing new modes of delivering public services (O’Reilly 2011 ; Margetts & Dunleavy 2013 ; Williamson 2014). Scholars have pointed out that these technologies have delivered some concrete benefits, for example, improvement in decision-making speed that also improves the socio-economic interaction within the organization (Athey, 2017).

These algorithm-based technologies not only have a positive side but also show negative aspects of using them, such as numerous ethical and legal challenges. Some of the ethical challenges include interpretation ability, transparency, accountability, reliability, safety, and security of personal data (Ebers M. , 2020 ; Perrault et al., 2019). Some studies have also found that these applications encroach on fundamental rights like the right to privacy, the right to

freely express oneself, or freedom from non-discrimination, which are the building blocks of Western societies (Raso, 2018 ; Council of Europe, 2017)One of the concerns regarding algorithm-based applications is their decision-making ability. Earlier, in public or private organizations, the decisions were made by humans, but now decisions are automated, or at least the initial process of sorting information is done by machines (AlgorithmWatch, 2019). Now the actors of an organization are subject to these algorithm-based technologies. These technologies enhance the capacity to oversee and track any changes within the organization or its users, for example, eOffice or NSRS in SAI. As a result, there is always a danger lurking to violate data privacy issues. As discussed in the previous chapter, this also allows the organization to conduct mass surveillance. Some scholars have even shown that these technologies can also lead to discrimination as the decision-making done by them is not neutral and can show instances of biasedness. Noble (2018) highlights that search engines are not neutral actors; they can result in discriminatory practices. Digital platforms or applications are produced in a socio-economic, political, and racial context. These platforms can legitimize and support abusive social interactions, reflecting societal biases and inequities (ibid.). It is not that humans were not biased in their decisions, but since these applications deal with thousands of cases, the chances increase manyfold (Ebers & Gamito, 2021).As already discussed in the previous chapter, these digital interfaces can also be used to manipulate data (Pariser, 2011; Sunstein, 2017 ; Epstein, 2014)

Public organizations are rapidly employing these technologies in their governance mechanisms to make predictions regarding citizens behaviour. For example, in the taxation department, algorithm-based technologies are used to analyze the taxpayer's behaviour and accordingly suggest some cases for human

review (DeBarr & Harwood, 2004). Another example is the prediction-based mechanism used by US courts to envisage if the accused will commit another crime or not (Barry-Jester, 2015). The specific traits of many of these technologies, such as opacity (black box effect), intricacy, impulsiveness, and partially self-directed behaviour, all of which may make it difficult to verify compliance with the existing legal requirements, further intensify and amplify the risks associated with these technologies (Burrell, 2016 ; Leese, 2014 ; Mittelstadt et al., 2016 ; Pasquale, 2015). Due to these attributes, it may be difficult for both enforcement agencies and the concerned people to confirm how a particular algorithmic decision were made and if all the rules were followed.

As algorithm-based technologies are used in different spheres of society, it has gained the interest of scholars from various disciplines, leading to an advent of interdisciplinary literature on the subject (Danaher, et al., 2017). There is no universally acceptable definition of Algorithm Governance, but it can be studied at the intersection of digitalization, data management, and technological governance (Wilsdon, 2001; Danaher, et al., 2017)

7.1.2 Existing legal structure to regulate algorithms or AI in India

In the race to automate most of the functioning of government operations to create less financial strain on existing resources, public organizations have failed to comprehend the undaunting challenges associated with the use of algorithms. For example, algorithm-based technologies used in SAI present predictive models such as NSRS or AMS. These digital application helps to make a prediction about the performances of various players and coaches. But questions like who has access to these databases and how does it affect the users. In a recent inquiry on Facebook done by European Commission, surfaced the allegations against the digital giant as manipulation of their user data to gain a competitive edge (Schechner, 2021). This

raises the question of user safety because algorithm-based technologies track the activities of users without their awareness, which may be later used to manipulate their choices. These circumstances call for some legislative actions.

In the Indian scenario, AI is broadly targeted through three main initiatives, i.e., the Digital India mission (to empower India as digital knowledge economy), secondly, Make in India, which promotes AI technology developed in India; and lastly, Smart city mission (Marda, 2018). To successfully achieve these missions, an AI Task Force was set up in 2017 by the Ministry of Commerce and Industry, which identified ten sectors for deploying AI. Along similar lines, NITI Aayog published a report entitled 'National Strategy for Artificial Intelligence' that further saw the deployment of AI (Aayog, 2018). In these documents, there is a superficial level of engagement with issues of inclusivity, fairness, and restrictions on algorithm-based decision-making (Daly, et al., 2019).

Another important step in this regard is the Draft National e-Commerce policy issued in 2019 by the (Department for Promotion of Industry and Internal Trade, 2019) and Internal Trade. This draft provided rules and regulations for the e-commerce industry in India, where it dealt with various issues like data, consumer protection, and intellectual property rights. The objective behind this draft was to create a governance structure that would harvest the potential of digitalization and create opportunities for data safety and promotion of national industries. It also aimed at regulating rules regarding personal information and building a safety net for its consumer. This draft identified data as a building block for the e-commerce sector, but the issue of data privacy was not broadly talked about here. A different bill, named Draft Data Protection Bill, was issued to address the challenges related to data privacy. Whereas the e-Commerce policy draft

identifies different types of exploitation of consumer data, for example, users' present GPS location, their browsing history, or their chats. The draft stated that a user is an owner of his or her data, and companies cannot use their data without their consent. But there is a self-contradiction in the draft when it states that the data of a nation should be considered a collective resource that is guarded by the government. In this sense, the draft is trying to make a niche in the field of legal and technological governance framework around AI. It states the following rules regarding the circulation of data, firstly, sharing of community data with private companies will only be done for research. Secondly, private companies that possess sensitive data of their citizens cannot share it with foreign companies located outside India. Thirdly, if a foreign government asks for such data, the permission of Indian authorities is mandatory. This draft presents many challenges, such as there is no mention of rules regarding sharing of data with third parties. There is no definition of what is considered as national data, community data, or personal data. Another question that arises is what about the power of the intermediary platforms to define if the content is fake or not. Finally, if the government has access to all the data under the name of 'law and order,' then the chances increase for a state to become a panoptic state, encroaching on the rights of privacy of its citizens.

A recent bill introduced by the Ministry of Electronics and Information Technology (MeitY) in respect of data protection is the Digital Personal Data Protection Bill, 2022. This is the fourth attempt to pass a bill in this direction (Dev, 2023). The first step was taken by the Justice Sri Krishna Committee, which framed the first draft for the protection of personal data in 2018. This draft was presented as a bill in the 2019 Lok Sabha. This bill was then further revised by the Joint

Committee of both houses and renamed as Data Protection Bill, 2021. This bill was withdrawn in August 2022 as the scope of the bill was increased, which was not acceptable to the government. In 2021, Information Technology rules were passed. This included intermediary guidelines and digital media ethics code to regulate social media platforms. After a lot of struggle, finally, this new draft came in, which focuses on issues like the use of personal data by organizations in a fair & transparent manner. Topics like data accuracy and storage of this data are also discussed. The formation of Data Protection Board has also been discussed, which can levy penalties up to Rs 500 crores. This draft has raised new concerns like the independence of the said body to regulate data protection rules. The time period of storage of personal data for private firms has been defined, but no upper cap is given for government organizations (Dev, 2023). This gives government organizations a monopoly over the data after a certain period of time. It also dilates the Right to Information (RTI) Act as, through one of its sections, it protects the personal information of public figures. It is also in conflict with the Right to Privacy, as it empowers the executive to frame rules regarding various issues, resulting in absolute control by the central government (Singh & Panjari, 2022). For example, it can exempt any organization, be it public or private, from the draft just by issuing a notification. Further, Clauses 8, 13, and 18 of the Digital Personal Data Protection Bill 2022 provide a hindrance to protect the Right to Privacy.

Apart from these regulations, IT Minister Ashwini Vaishnaw, in a press conference, said that there would be no AI regulation to promote AI culture in the subcontinent (Nucleus_AI, 2023). He admitted that there are various ethical issues related to the use of AI, such as biases, privacy issues, discrimination, and lack of transparency. He emphasized that strict regulations may hinder the growth of AI,

and efforts are made to standardize the use of AI through National Strategy for AI or through NITI Aayog's dedicated papers like 'Responsible AI for All' (Aayog, 2018).

These legislative actions affect the present scenario of implementing algorithm-based technologies in public or private organizations. In public organizations like SAI, they provide a macro picture of digitalization. SAI is creating its database by using digital applications like NSRS, AMS, or GeoTagging, but questions arise about the use of this data. Where is this data stored, for what purposes is it used, and how long it remains on the cloud storage? When asked IT officials about these particular questions, they responded

*The data is stored on National Data Centre (NDC),
Bhubaneswar server space in collaboration with NIC.*

*The purpose for the collection of different kinds of data is
mentioned in the applications.*

For example, NSRS mobile or web applications clearly states their purpose and the type of data required. It becomes clear from the following image 1.

INTRODUCTION

a) This Portal may collect personal information of the Athletes (Personal Information, Contact Information, and Additional Information & Documents pertaining to the Education and Bank Account, Training, Competition and Ranking Information, Kitting Details, Statement on the Athlete's success story, and action photos and videos of each athlete, etc.), Coaches (Personal Information, Contact Information, and Additional Information & Documents pertaining to Education and Experience, Kitting Details, Coaching Details, etc.), and Academies (Legal Entity and Status, Contact Details, Details of Coaches, Athletes and Statement on Academy's success story, and action photos and videos of the Academy).

b) This Privacy Policy should be read in conjunction with our Terms and Conditions. By accessing the Portal, you are consenting to the collection and use of information described in this Privacy Policy. The terms of this Privacy Policy apply and extend to the Users and the Parents and/or Legal Guardians of minor Athletes and the rights ascribed to such minor

(Image 1: Screenshot of Terms of Usage from NSRS mobile application)

Though the purpose of the data collection is mentioned specifically, it is nowhere mentioned the duration of storage of such data. This type of issue is not addressed in policies like the Digital Personal Data Protection Bill of 2022. So, even if this bill becomes an act in the future, these questions regarding the safety of user data will still pertain. This raises further questions like if a coach or player is not active anymore, will their data be removed or kept in records? Apart from this issue, access to these databases is not open for all. It is limited to higher authorities, and if coaches and lower administrative staff want to use this data, they are only allowed to generate certain kinds of reports to help analyze the performances or verify the records.

The next challenge that comes with the use of digital technologies in public space is security. When asked about the safety and security of user data during field interviews, officials said that they were committed to ensure the security of user's

personal information. Further, every kind of personal information is always present in encrypted form, which can only be accessed through a private key or password. Thus, the information is coded and decoded simultaneously to protect the user data. Despite their best efforts, there is always a risk associated with digital records of data, and therefore, they cannot always guarantee the security of data; it is even mentioned in their applications' user manual.

Public organizations, unlike private firms, do not focus on meeting user expectations in a complete manner. They try to make the best use of the resource for their own purpose, such as the collection of information. One of the higher officials, in regard to eOffice, said that

The user interface of the eOffice is a bit old, which needs to be upgraded for a quality experience.

Even in the NSRS portal or mobile applications, they have clearly mentioned that 'SAI does not guarantee that the portal will meet user's expectations or will be accessible without interruption or in a timely manner' (NSRS, 2023). SAI has even forsaken the responsibility that the results arising from the portal will always be accurate. This needs to be given serious thought as, at one point, all the actors are required to use these applications, but at the same time, the organizations do not take complete responsibility for these AI based results, leading to contradictions in their own functioning.

As noted earlier, algorithms lead to concerns like a lack of transparency and accountability, which is clearly visible in the context of SAI. To address such issues, the laws are still not sufficient, as their main focus remains the private entities rather than government organizations.

7.1.3 Concerns about Algorithm Governance

1. Accumulation of large amounts of data

With a large number of digital devices operational at various facets of life, data accumulation has increased, which has further amplified spaces for constant surveillance (Beer, 2017). Technologies have evolved to analyze a large amount of data within a fraction of a second using Algorithm-based tools (Mejias & Couldry, 2019; Rieder & Simon, 2016). Researchers in their studies about algorithm governance have shown how such technologies establish avenues for mass surveillance and data sorting of individuals, allow these algorithms to create opportunities for discrimination, manipulation, and state oppression of its users (Lyon, 2014 ; Gandy, 2010)

2. Agency of algorithms

As Latour (2005) argues that it is not the actor that enables action; rather, it is through agency that action is achieved. So, the social and technical actors both achieves action through their agency. In a black-boxed society, algorithms decide our action without us knowing (Pasquale, 2015). A society or system is referred to as a "black box" if the public is unaware of its inner workings and decision-making procedures (ibid.). It is a metaphor for a society that lacks openness and where control is exercised by few by keeping their workings in the dark. Algorithms help to keep this exercise of power hidden. Our activities and records are present in the form of data, which algorithms divide into categories without the user's direct involvement and often without their consent. This categorization is often black-boxed from visible debates on data security. They remain hidden, but it is used by the data owners to spread their propaganda through the discourse of their content online (Pasquale, 2015). Elmer, (2004) in his work on 'profiling machines,'

highlighted that one can only define oneself in terms of data interpreted by the algorithms. So, the users of a digital application can be defined as their own self along with all the additional information presented through their algorithmic interpretations. This process of computationally calculating ourselves is called ‘algorithmic governmentality’ by Rouvroy (2013). This type of governmentality ignores “embodied individuals it affects and has as its sole ‘subject’ a ‘statistical body’. . . . In such a governmental context, the subjective singularities of individuals, their personal psychological motivations or intentions do not matter (ibid.)” In this sense, our identities have become ambivalent. For example, the use of players’ data by NSRS and AMS will result in the different identities of the players because they speak about them in terms of their own language. Each becomes ambivalent about defining the player’s identity as per their algorithm logic. This identity generated by the software can change by inserting different inputs. Algorithms understand everything in terms of data. In this representation, we ourselves become data. Algorithms carry their agency to convert our identities from atoms to bits (Cheney-Lippold, 2017).

3. Issue of transparency

The discussion in digital society frequently includes calls for greater transparency, along with the presumption that algorithms and algorithmic governance are opaque (Kitchin, 2017; Pasquale, 2015). Recent arguments, however, stress that having access to computer code shouldn't turn into a fetish. The majority of issues with algorithmic governance—such as fairness and exploitation — cannot be solved by perfect transparency since it is frequently neither desirable nor achievable (Ananny & Crawford, 2017); (Mittelstadt et al., 2016). Additionally, the integration of societal rules into code makes things more unclear as well as reveals previously

concealed norms and procedures. The raised interest of scholars and civil society in algorithm governance has allowed them to make inquiries into the rationalities behind these algorithm-based technologies.

4. Politics behind algorithms

Algorithm-based technologies are usually associated with depoliticizing organizational operations due to their objectivity. These scholars consider algorithms to be neutral and objective systems (Morozov, 2013). However, through this field study, it is found that digital technologies are often seen as sites of political and social struggles, which is not easy to observe. These systems are often imbued with political agendas, but they are hidden behind the technical pretence of digital applications (Bowker & Star, 1999). With the help of algorithm-based technologies like NSRS, AMS, or GeoTagging, the classification of information is done, but this classification process can itself be considered as a process of exercising power by organizing knowledge and determining the outcomes of those who are classified. For example, through AMS, a coach can determine if a player is fit to play or not based on the input given in the system. This assessment is a result of algorithms, which influences the decision of the coach. The technologies exercise their power over the administrative staff and coach's decisions, which raises the question of how algorithms define which player is fit or not. These algorithms are designed in a way that they take up only the usual cases and leave behind the exceptions (Gorwa, 2019). Reigeluth (2014) reminds us that digital technology needs to be analyzed in connection with existing socio-political and economic structures and not just the new changes that it brings with it. So, the algorithms construct their own 'corrupted truths' (Cheney-Lippold, 2017), which are based on their programmed language. Manovich (2001) observes that when political and social

agendas are mixed with algorithms, it changes the technological direction where they follow the customary principles directly feed into the system. In this sense, a public organization can be seen in terms of data where digital technology is changing the analogue culture of the organization (Boyd & Crawford, 2012).

The governmentality of digital initiatives has been discussed in the previous chapter. To add a new dimension to this discussion, Deleuze's (1990) concept of modulation has been used to understand the control exercised by digital platforms. Modulation can be defined as the capacity to exercise control without conventionally overt means of doing so. It maintains a relational intimacy while operating across a permissive distance in an open setting. Continuous training and control are used instead of traditional institutions like schools and prisons in this modulation. These traditional disciplinary institutions openly take action against those who show any deviance from established norms. Modulation, on the other hand, allows to have a degree of flexibility in deviation from established norms and, in the process, continuously adapting to this change. Modulation, as a concept in physics, allows you to see wavelengths' different features when their frequency, amplitude, or phase is changed. Similarly, Deleuze has used this concept to show the change in a continuous process of control where the subject though slightly deviates from the process but is still under control. In this exercise of control, individuals are often converted into 'dividuals' or the masses, which is the focus of biopolitics, are converted into data (Deleuze, 1992). The dividuals represent parts of our own identities. For example, administrators in SAI have their own personalities and identity as individuals, which may or may not be affected by the digitalization of office work, but there certainly are some elements of administrators' identities that are represented online, such as their dividual data,

which gets modulated through algorithms. Another example of this type of control in SAI can be seen through the access granted to different digital identities. As already discussed time and again that NSRS allows to produce different kinds of reports, but not everyone can have access to all kinds of reports. It depends on their levels of identification, such as higher officials having much clearance level than clerks assisting them, which allows them to download all kinds of reports. Such power may not be with coaches. Therefore, algorithms allow conditional access to reports generated by NSRS that are regulated by individual digital identity. This individual digital identity gives one legitimacy within the algorithmic system. But administrators or coaches are not just individuals; rather, they are understood as categories within the database, which then are given a certain level of clearance according to their digital identities. This clearance level for different digital identities is governed by an engineer, who can deny anyone to have access to these reports. So, these systems not only regulate the access of the reports but also determine what it means to be defined as a coach or administrator. (Cheney-Lippold, 2017) calls this form of control soft biopolitics, which can regulate our decisions through algorithmic identities.

7.2 Digital alienation

The politicization of digital technology in the global race for supremacy is evident. It is especially believed that countries with most advanced technology in sports have more medals in international games like the Olympics²¹. As discussed in the

²¹ Please check the following newspaper articles and data reports focusing on economic and technological factors affecting the number of Olympic medals won. <https://towardsdatascience.com/visual-analysis-of-olympics-data-16273f7c6cf2> accessed on 5th July 2023; <http://dx.doi.org/10.1080/02640410903062019> (Haake, 2009);

previous chapter, ICT system implementation or upgrade may endanger employment or provide heightened employee surveillance. This discrepancy may be caused by inadequate technology, bad judgment, ineffective ethical policies, low end-user proficiency, or a combination of these factors. Some think that better technology, better policy initiatives, better ethical frameworks, and greater end-user education are the answers (Healy, 2020). However, these approaches have their limitations and are not able to figure out concrete solutions. To explore these issues, the concept of alienation has been discussed.

Chisnall, (2020) argues that personal data exploitation is a problem because of its potential for alienation and enslavement. By pointing out that the gathering, aggregation, and trafficking of personal data through predatory practices can be seen as a form of chattel enslavement, Chisnall argues against the notion that personal data should be treated as a "free" resource that can be extracted without the informed consent of individuals. According to this viewpoint, people are cut off from parts of themselves when their data is stolen and used by third parties, challenging the idea of ownership and control over personal property.

As noticed during the fieldwork, when digital technologies were used in sports governance processes, the workers—in this case, the players, coaches, and staff—often lose control over the decision-making process. Managers, sports administrators, and the commercial forces that drive the sector now have the power to determine how sports outcomes, training plans, and tactical choices are produced. Though the coaches are free to make their own training regimes but their

<https://www.theguardian.com/sport/2012/jul/04/london-2012-olympic-games-sport-technology> accessed on 5th July 2023.

thinking is controlled by the design of these digital solutions. They can exercise their free will only within a constrained framework.

One significant factor that fits Marx's thesis is the commercialization of labour in the sports industry. The athletes who are the main creators of athletic performances grow distant from the results of their labour. They have little control over how the products are tailored to their own requirements and objectives. Instead, market needs, financial factors, and the priorities established by sports organizations frequently affect these choices. Athletes lack control and ownership over their own performances and careers since their labour is viewed as a thing that can be bought and sold.

The modes of production are changing due to digitalization. One is not aware that they are producing data to be used by third parties (Hassan, 2020). Our laptops and mobile phones are constantly producing data. A newly introduced facial recognition attendance system in SAI is capable of matching players' physical features with GPS coordinates, which is further linked with his database. Such activities are considered a form of production, though one may not consciously participate in this production process. For organizations to benefit from data production, simultaneous consumption needs to be there. The concept of 'prosumption' coined by Alvin Toffler described that in industrial society, there was a gap between production and consumption, but post-industrial society offers a chance to bridge this divide (Ritzer & Jurgenson, 2010). Now the consumers perform certain activities earlier performed by the producer, making him consume what he produces. Apart from the production and consumption relationship, the focus also needs to be on the revaluation of the base and superstructure in the digital organization. This relationship has become hazy as (Baudrillard, 1993) points out

that in the society of the image, everything is a component of the superstructure, and the creation and consumption of electronic pictures creates illusions of reality. Baudrillard criticizes Marx for analyzing the role of technology way too lightly and proposes that production may lead to exclusion. This idea of Baudrillard aligns with Jaeggi's concept of double alienation. According to this concept, digitalization disturbs the process of mutual constitution between humans and technology. Alienation occurs not only from the products of one labour but also from the process of production. Digital rupture causes alienation, but of a different kind, and Jaeggi's idea of a "relation of relationlessness" perfectly describes it (Jaeggi, 2014). The relationship we have with our digital tools and virtual environment is objectively impossible to avoid because they are so incompatible with our nature. However, because we cannot understand or relate to digital in the same way we could with analogue technology, this relationship is essentially meaningless (ibid.). Our historical ties to analogue technology and the natural world are broken by digitality. Because the digital realm is so dissimilar from our analogue nature, our relationship to it and to the digital tools we employ becomes meaningless. As (Jaeggi, 2014) writes, what we are alienated from 'is always *alien and our own*'. She refers that in alienation relations, one is both a victim and an agent of it. For example, if a player becomes alienated from the process of digital filing of records, this role is played by himself, making him an agent, but this also leads him to be alienated from the product of his own labour makes him a victim. This socio-technical nature of digital interfaces relies on their use by humans, but it takes control and exercises its power over humans in the context that it automates functions that earlier required human participation. Therefore, it becomes a relationship of dominance.

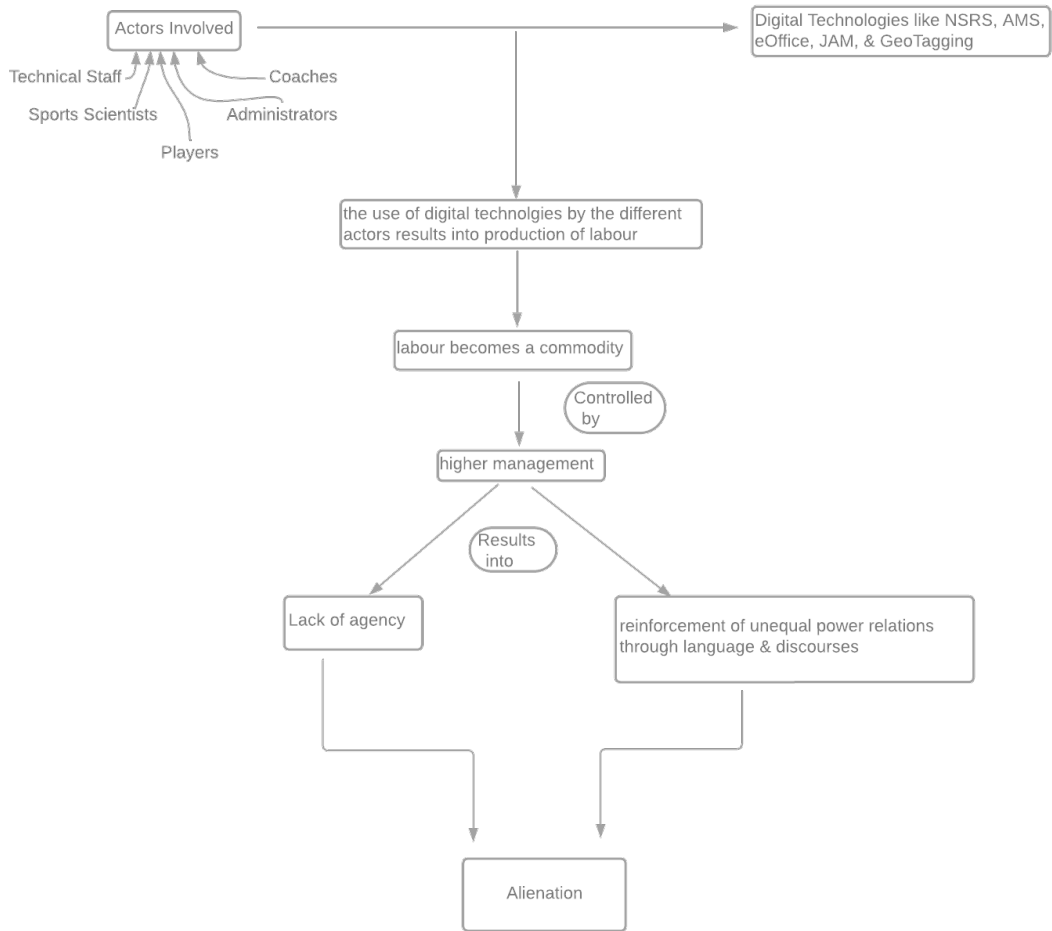
The domination of digital practices creates new spaces of alienation. As Marx (1970a) emphasizes, alienation occurs throughout the actual process of production as much as in the end products of work. This is evident in the way the labour system is changing in the world of sports, where capital is increasingly in charge of who owns what equipment, how to exercise, and how to evaluate performance. This is illustrated by the impact of digital technologies, such as the Athlete Monitoring System. Athletes frequently feel alienated since external organizations frequently manage and prescribe how their performance, health, and adherence to training regimens are monitored and evaluated using data.

Alienation appears only through practical ways by its relationship to other actors. According to Marx (1970b), technology, labour, and social structure are all intertwined with each other. Technology can liberate workers from their manual labour, but as per Marx, this positive effect of technology has been misused as under capitalism, technology is used as an exploitative tool that leads to alienation of workers. Technology instead is used to create a differentiation between the proletariat and the capitalist class. Proletariat uses the technology to create production. In the process of doing so, they become alienated from means of production and their own labour. The routinization and repetition of work make the workers alienated from their own selves by stripping away their sense of rationality, work satisfaction and creativity. So, this sense of alienation not only impacts the economic sector but also enters other phases of life, leading to a fragmented social reality. On the other hand, capitalists use the extra value generated by workers to increase the class divide.

While taking the Marxian view on alienation, it is important to focus on its critique. Marx presents a contradiction in his thoughts as, on the one hand, he

supports the technological intervention in the industrial society as a means of production because it will give humans a chance to liberate themselves from the hardships of the job by shortening the time taken in performing a task and using that time for self-development. His ideas sound similar to a utopian socialist thinker (Wendling, 2011). But on the other hand, he contradicts himself by blaming machines for bringing the worst for the labour. He blames the mode of production for not valuing humans and prioritizing machines over humans. Marx highlighted machines as ‘instruments of torture, death and misery’ (ibid.). Therefore, the technology, which he thought would cast away the fears of alienation from the self, reinstalled and heightened it.

Marx saw alienation only from a class perspective and focused on the role of technology as a neutral tool. To broaden the horizon of this concept and understand the role of technology in bringing this alienation, concepts of ANT have been imbibed. Combining ANT and Marx’s ideas makes it clearer how power relations structure individual experiences. Alienation is not just an emotion; rather, it is a lived reality experienced through one’s interaction with humans, technologies, and discourses. It becomes more clear through the following figure:



(Fig.7: Showing the process of alienation in SAI)

Different actors use these digital interfaces to produce ‘labour’ in Marxian terms. For example, when the administrative staff in Regional Centres, STCs, and NCOEs use these digital platforms like eOffice, they are targeted to perform a particular function in a defined way. It is believed by the officers that these interfaces bring standardization, rationalization, and effectiveness to the work done. One of the administrative heads at SAI headquarters claimed that

eOffice has eased the workload. Now, the software automatically sorts the type of files, reducing the time spent on such activities.

So, technologies, along with humans, produce labour. In this process, labour gets commodified as the skills and expertise of the actors are used for different purposes.

The commodity here means that the division of work is done on the basis of the skill sets of the actors so that maximum output could be derived from them. Digital interfaces make work more monotonous and repeatable, drawing the elements of creativity and variation from them. Costas & Fleming,(2009), describe this condition as self-alienation because the ‘self’ is treated as a commodity. The actors' skills, expertise, and experience are part of their self, and these materialize to create resources for the organization. these resources are then used at the discretion of the higher management. This results in a lack of agency. For example, athletes have the least agency to affect the sports governance process. It was observed that their main focal point for any issue is their coach, and they hardly contact the administration through any digital interface or through face-to-face interaction. But they are asked to use these digital interfaces like NSRS or AMS constantly, but they themselves don't see any benefit of these applications. As one of the athletes admitted that we fill our records as we are told, but we don't see much change due to it; everything remains almost the same. This results in the alienation of athletes from their own actions. This alienation from one's own actions, their production of labour, and from different actors results into a perception that their labour is not a free activity instead, it is undertaken as a service of the organization, similar to forced labour. These activities are done not to satisfy their own needs but to satisfy the needs of the organization (Marx, 1970b). This results in the depersonalization of an actor (Worrell, 2009)

Secondly, the control of labour by higher authorities also results into unequal power relationships. This control is exercised not through coercion rather, it is done by use of different discourses. For example, digital literacy is one of the factors that affect the use of these digital platforms. Before introducing these digital platforms,

it was mapped that training was required for the users. On these lines, the ‘training the trainers’ motto was introduced. Initially, a handful of people were trained then it was passed down. But during this process, training was only provided for a day or so, due to which many coaches and administrators claimed they were not fully aware about these applications. Lack of training didn’t allow users to fully articulate themselves in digital discourses. So, dealing with new interfaces without fully understanding them alienated the users.

Apart from training, the technological design of these digital spaces reflected the existing hierarchical relationships. For example, through eOffice, accountability and transparency were introduced, but it was more at the lower levels than at higher levels, as higher authorities were not answerable to the lower administrative staff. These instances create power imbalances by privileging those at higher hierarchical chains over those at lower levels. Even the access to information is not the same for all the administrative staff even at a similar job designation, giving some more decision-making power compared to others. This allows only a handful of individuals to influence and shape the discourses within the organization. These instances show how an actor becomes alienated from their labour due to unequal power relationships.

Another observation was the use of information without the consent of the users. During the field visits, cases have been observed where personal data, such as performance measurements, health data, and personal information about athletes, is collected and used without their complete knowledge or agreement. Sports leagues, sponsors, and other organizations with a stake in the sports business frequently receive this data. It's possible that the athletes, who are the data's main creators, won't have any influence over or say in the decisions made over how it

will be used. The classic definition of alienation as a separation from one's own property does not apply to this type of alienation from personal data. It focuses on the barriers that stop people from fully appropriating their life and the environment around them instead. Individuals are hampered in their ability to exercise agency and control over their own data and, consequently, their personal and professional lives by the barriers posed by the predatory practices of data aggregation and trafficking. The analysis recognizes the complexity of estrangement, where people can be both perpetrators and victims. By readily disclosing personal information in exchange for access to services, rewards, or perceived benefits, prosumers—those who produce and consume data—may unwittingly contribute to their own data theft. This tendency is demonstrated by loyalty programmes and government efforts that demand considerable personal data from participants.

Throughout the discussion of alienation in SAI, it was observed that the main drivers of alienation were the estrangement from the product of their own labour and the process of producing that labour. In the former way of alienation, the actors don't have any real choice in what type of work they intend to do. They are dictated by the directives issued by higher authorities, which are compiled within the designs of these digital applications. Some of the administrators seem to be aware of this lack of power to determine the outcomes. This lack of power becomes clear from following experience of an administrator

I abide to do whatever task is allotted...as such, I have a choice from the work given to me to prioritize which over which but I can't choose a completely new task...

These experiences confirm that they have little or no control over their work selection. It is the higher management that gets benefitted from the sports administrators, coaches and athletes' work, while these actors might not have complete control over their own labour. This leads to unequal power relations within the organization.

The second form of alienation occurred from the process of labour. Instances of bifurcation of a project were observed where every small detail like which centre will complete the task, who will be the participants, and the timeframe for completion. Through the use of eOffice this was made possible. The higher officials could supervise the functioning of a project by closely monitoring the task. This resulted in the fragmentation of work done by different actors. Especially with Covid-19, the process of work transformed completely. Everything was carried out digitally with more focus on the completion of the task at hand that was commissioned to them. For example, the coaches were responsible for keeping the players motivated and trained, whereas, sports administrators were responsible for running the organization despite the closure of the offices. These responsibilities were divided among the actors, and they were made accountable for performing particular tasks. Though it seemed that coaches had a choice in motivating the players, in reality, they were guided by the administrators, so they had a superficial choice. Administrators were responsible for doing a job in a standard way using defined templates. So, these actors had minimal control over how to do their jobs. In addition to these circumstances, there is the presence of contract workers. SAI hires people for different roles on a contract basis, be it Young Professionals (YPs), technical staff, or coaches. They become the labour reservoir of SAI, often associated with unstable employment. These employment conditions promote

competition, insecurity, disappointments, and conflict within the organization affecting interpersonal relations. Some of these contract workers were least bothered with what kind of work they were given. They had to be taught everything from the start since their joining, but there are certain projects that would not be completed during their service tenure. So, they were not enthusiastic about their work. One of the office staff on contract commented

We are here during the office hours and complete all the tasks that are assigned to us. Digitalization has eased our workload, but it takes some time to get hold of these digital applications.

When further enquired if they think this learning of new software would enhance their skill sets and could be used in getting new jobs, the response was divided. Some gave a clear answer that

Obviously, I can add these learnings to my resume, and this experience can help me get better job opportunities.

Whereas others responded in a negative sense as they thought every job has its own requirements that needs to be met. So, they found this learning a futile exercise and were not satisfied with the work they were doing. They felt that they were not a part of this organization. One of them said

I am here for a short duration of time until I get a good job. So, I do whatever is needed to survive.

The lack of feeling of belongingness alienated these workers from their work.

7.3 The illusion of digitalization

Zuboff (2019) refers today's society as 'Surveillance Capitalism' because internet has become a humongous panopticon as it constantly observes, records and stores vast amount of interactions. In Bentham's prison, prisoners are confined due to punitive restrictions but in present scenario, the prosumers on digital platforms are enslaved by the effectiveness and efficiency of work carried through these applications. In this networked society, digitalization can pose dangerous challenges. Within an organization an individual use their own devices to connect with others by their own choice or as per the requirement. But in reality those devices, be it smartphones or tablets through which we connect with others, are just a node in complex networked organization. This provides us the illusion that we are actually the one who is in control of our decisions but reality is that we have become a hybrid entity who are managed and controlled by algorithms. Though it is believed that digitalization gives more autonomy and transparency to organizational operations but harsh reality is that the concentration of external control increased by many folds (Vines & Marsh , 2018). But the question that needs to be asked is when does this black box of assemblages gets exposed.

This assemblage of actor networks contains a vast amount of aggregated personal data, which is used by organizations to manipulate and control the behaviour pattern and decision-making of its users. The data becomes a lifestream of algorithm governance driving analytics based decision-making or providing with nudging strategies. This form of technological governance operates at the intersection of knowledge and power (Wang, 2018). Public organizations adopt this kind of governance, as Zuboff (2019) says, gives them a new form of instrumentarian power that shapes human behaviour as it "works its will through

the automated medium of an increasingly ubiquitous computational architecture of ‘smart’ networked devices, things, and spaces.” This has the twin effect of raising levels of behavioural conformity while also causing the user to feel more alienated from himself because they are less able to appropriate the environment.

In the case of SAI, personal data is collected from various actors for different purposes to operate algorithms, which ensures compliant behaviour and reduces their agency. The dataset received about various athletes from AMS doesn’t necessarily describe their exact state because some athletes don’t understand what exactly is asked. For example, they have to record their sleep timings, so they are not sure how they can feed the exact timings when they themselves are not aware of it. Additionally, the reports generated by these algorithms have their own logic, which is beyond the understanding of sports administrators or other actors. This may cause unnecessary trouble for the coaches, sports scientists, and administrators. Therefore, the agency of the athletes gets diminished due to the mandatory use of technology and lack of transparency in the workings of the algorithm. Even the feedback of athletes’ well-being is asked through random phone calls in one of the regional centres. One of the players complained that the feedback must be asked face-to-face rather than on phone calls as it will be more comfortable, and they could directly ask for solutions for their issues. There is no feedback mechanism introduced in applications like AMS or NSRS, so the actors can’t express their resistance through these digital platforms, which might be understood, in the context of actor networks, as the designers' intentional creation of an "obligatory point of passage" (Callon, 1986) to thwart "anti-programs" that might challenge the prevailing social logics of the digital system.

This kind of digital interface hinders critical thinking and engagement with the training process, thus showing instances of alienation. The digital interface introduced within SAI fails to deal with ambiguous reality. Therefore, the illusion portrayed by digitalization fades away when one takes a closer look. The designers of these applications work on 'utilitarian' principles as they target the most common cases leaving behind the exceptions (Etheredge, 2018). They feed the algorithms, which can then decide the right or wrong way of doing things as 'Artificial Intelligence (AI)' knows the best. With time these systems are getting more upgraded and more alienating from the complex human nature. The users of these digital applications in public organizations fail to oversee the logic behind the system and believe in the illusion that is portrayed. Such systems, made possible by the aggregation of personal data, are systems that cause alienation from self and, in that sense, can be considered as "enslaving" technology.

Chisnall, (2020) compares the alienation of users from themselves as a form of chattel slavery. In chattel slavery, the pain comes more from the connotations of the slave's legal status as owned than from the status itself. These implications include the slave's lack of autonomy and dependence on "chains," rewards, and punishments. On a similar note, access to personal information & AI & machine learning-based resources reduces the user's ability to take over their lives completely. Therefore, digitalization can act as a destructive force for personal agency.

7.4 Alienation not a necessary accessory of digitalization

In his writings, Marx highlighted that humans become 'cogs in a machine' when separated from their labour and seen as a means to an end. They lose their creativity and become alienated from their own labour. He suggested that revolutionary

measures need to be taken to overcome this alienation where the capitalist society is superseded by the socialist society. In the process of de-alienation, he forgets to take into account the effects of digitalization. Digital technologies will not eliminate the skills and creativity of users completely, but it will provide the conditions for developing new skill sets. Marx failed to take into consideration the complexity of technological changes within an organization.

As pointed out earlier, Marx didn't see technology in a negative light and believed that it can create a conducive working environment for the workers. However, according to Marx, the class relations acted as a barrier to achieve this goal. I agree with Marx but believe that despite hierarchical relations in the organization, there are still instances of flexibility. Digitalization has enabled a participatory approach; though there may be limited instances of participation still, it is better than total obstruction of communication. Digitalization can promote the chances of empowerment. Thus, alienation introduced due to digitalization is not automatic or deterministic outcome, but it definitely has the potential to commence new forms of control.

7.5 Conclusion

Microsoft expressed itself as a form of cyborg, emphasizing that everyone has a code inside them, which represents our potential that can be unlocked by using Microsoft services (Cheney-Lippold, 2017). Microsoft, through this representation, showed how technology and capitalism go together while shaping our future in some neoliberal metaphor of code. This argument is not just true in Microsoft; rather, it holds its essence in public institutions as well. Public organizations like SAI, which are using digital technologies to exploit the full potential of their manpower, are susceptible to fall into the trap of algorithm governance. Algorithm

governance gives rise to asymmetrical power relations that classify individuals into categories without our knowledge. These classifications then determine who has what rights and how they are defined through intricate networks of algorithms. In this sense, the organizations become algorithmically interpreted, where one cannot fully comprehend the meaning of what it means to be a coach, administrator, or player. Everything is interpreted in terms of data, but data only becomes significant when interpreted. These interpretations then affect our daily decision-making ability. Digital alienation occurs when the users feel that their input is not taken into consideration by these algorithms. The users are manipulated by algorithms into thinking that they can exercise free will in contemplating a task. The reality is that power relations imbued within these algorithms allow them to choose within a defined framework. This responsibility of creating data for organizations for various purposes creates a sense of alienation when they are not allowed to own the product of their own labour.

Chapter 8

Conclusion

In the preceding chapters, the focus was on examining how different digital technologies are used in SAI. Another question that was addressed was how the interaction among various actors leads to the formation of various nodes both in physical and digital space, giving rise to the networks of e-governance. Through participant observation, in-depth semi-structured interviews, and group discussions, it was possible to critically examine how users interact with these digital technologies and relate them to larger discourses of power, governmentality, and digital alienation. The findings from the study contribute to the domain of sports governance, e-governance, and in a broader sense, public administration practice in India.

The final chapter of this thesis is divided into five segments. The first section gives the primary conclusion or an overall summary of the thesis, re-captivating the key ideas from each chapter. The second section examines the concept of e-governance as an ongoing phenomenon, highlighting the need for continuous evaluation of actions taken by different actors. The third section offers the practical implications of this project for sports administrators.

8.1 Summary of findings

After careful analysis of digital initiatives launched by SAI to improve its governance, this research has arrived at two major conclusions. Firstly, the use of digital technologies has improved internal or backend work. The use of eOffice has eased the burden of employees in tracking and submitting various administrative

tasks. The software is now carrying out regular or monotonous work. It is in this sense that digital technologies have empowered administrators to carry out their responsibilities by giving them a tool to supervise the functioning of their subordinates. Secondly, not all the digital technologies implemented to smoothen the governance mechanism are showing positive results. For example, technologies like NSRS or AMS are not clearly showing positive responses among the users. Players have noted that though they enter their daily details in the AMS system, they are still asked to repeat themselves during practice sessions by their coaches as well as by nutritionists, physiologists, and psychologists. Due to the repetition of the task, they feel nothing has changed; instead, the work has increased for them. In NSRS, coaches feel that the regular register attendance was good enough instead of the facial attendance system. Coaches are held responsible if players have not marked their attendance by the end of their morning session. Even players feel that it was unnecessary as their coaches always knew if they were available for training or not. From the responses of both coaches and players, it was felt that these digital solutions were not able to deliver what it promised.

In other words, digital technology has, in some cases, empowered its users, and, in some instances, it has failed to show an overall positive response. The results vary within each sport as well. During the field interviews, a total of nine sports were covered, including wrestling, archery, boxing, athletics, hockey, kabaddi, badminton, swimming, and shooting. Among these nine sports, archery, athletics, swimming, and shooting showed a more positive approach to these digital changes compared to other sports. Federations for these sports promoted the incorporation of digital technology to improve the governing conditions in their concerned area.

To give an overall picture of the impact of digitalization on the governance process within SAI, we can divide the results into positive outcomes and negative outcomes. The conventional Indian sports governance structure underwent several changes as a result of the introduction of ICT. Digital technology has simplified the management of sporting events, sporting organizations, and sporting participants. It brought accessibility, accountability, and efficiency in the sports governance structure. Any file can be accessible at any time, from any location, with the help of the eOffice system. It made it possible to work from home, particularly with Covid 19. Accountability was introduced with the help of these digital solutions, for example, players are in charge of recording their attendance via the NSRS (National Sports Repository System) site; failure to do so could result in the loss of their fellowship. Similarly, coaches are held responsible for their training schedules, which must be presented to players and administrators and posted online to maintain the previously lacking transparency. The government can distribute services through a single window thanks to an integrated platform developed using ICT. E-governance solutions, such as eOffice and NSRS, have made it possible to link data that was previously impossible to do manually because of human error. According to researchers, a fully integrated e-government platform with the capacity to automate procedures using artificial intelligence is said to be able to overcome one potential issue with traditional governance systems, which was human error (Fagan & Fagan, 2001). The files used to be rotated traditionally at SAI from one table to another and from one department to another, which used to slow down the operation. However, transferring and tracking files is now simpler thanks to modern digital technology. Every option is just a click away. By providing information and services through platforms like mobile applications (such as

NSRS, eOffice, or AMS), digitalization has made governance easier. The hyperlinking of information was one of eOffice's key accomplishments, according to the Assistant Director at SAI's New Delhi headquarters.

The 'Digital India' agenda sets ambitious targets for developing e-governance, but it must be considered what is planned and implemented as we work towards achieving these objectives since it can thwart efforts to reform the current governance structure. (ARC, 2008) stated that the goal of e-governance practices was not just the computerization of files. As a result, it suggested that the government departments redesign their business processes. However, it was observed during the fieldwork in SAI that computerization had not yet been fully accomplished and that there was still much work to be done before the reengineering process could begin. Despite efforts to reduce manual filing, there are still some, and if not all, the amount of file labor has increased as hard copies are retained as a backup to soft copies in case the system starts acting up.

Another hurdle that administrators faced was the unwillingness of people. Actors over the age of 40 exhibit this reluctance more overtly since they are on the verge of their retirement and do not want to overburden themselves with new learnings. Although the actors in this age group were not a majority, they affected the study as they occupied leadership positions at different levels in SAI. The type of employment also has an impact on how willing they are to learn new things because a person working a permanent job must master that specific software whereas, one who works under contract believes they have to depart after two years, so why bother learning anything new that will not help them later? Apart from their willingness, a lack of technical know-how was also seen in different SAI centres. Many SAI employees lack the skills necessary to run complex software

like eOffice. The personnel continues to voice objections about simple problems like login even after training. In a similar vein, staff have expressed dissatisfaction with their lack of training, which they attribute to their troubles.

The growth of the ICT infrastructure is one of the factors that determines how successful e-governance implementation will be. To ensure that SAI is fully prepared to carry out digital efforts, the digital infrastructure was ordered. Before, there was not much hardware available. However, a specific budget was approved once it was decided to move through with the e-governance activities across all SAI centres in India, and the goal was achieved. A few administrators, however, claimed that their lack of basic equipment, such as printers and cameras, was impeding their ability to do their jobs.

One of the most important global challenges is cyber security. Although they are adjusting to this digitalization, the SAI actors do not fully trust it. They, therefore, maintain separate hard copies in case the digital material is lost. However, preventing cyberattacks requires taking precautions. It appears that challenges with cyber-security are impeding the implementation of e-governance. In addition to technological, socioeconomic, and religious limitations, there may also be privacy and security concerns (Agrawal, Khan, & Ansari, 2023)

8.2 Re-captivating key ideas from all chapters

The introductory chapter introduces the case and analytical framework that was used to understand the dynamics between different actors. In chapter-2, the history of sports governance is traced, and the dearth of literature on sports governance in the Indian context is highlighted. In chapter-4, digitalization leading to the growth of sports ecosystems has been discussed, including the involvement of new players

like data suppliers and IT specialists. Organizational readiness and the adoption of strategies that support digital transformation are necessary for the successful implementation of digital projects. In order to stay competitive, organizations must incorporate digital technologies into every part of their operations and modify their structure, procedures, and culture. Additionally, this chapter found a difference in preparation levels at the headquarters, regional, and sub-regional centres. The final section of the chapter defines the problem at hand, which is being carried forward by Chapter-5, which identifies who are the main actors that are involved in the process of e-governance and how they are interacting with each other. This chapter investigates how identity building and performance in daily communication are impacted by digital contact. It highlights how our online presence leaves marks in digital places that continue to mould our identities, challenging the idea that there is a difference between our real and virtual lives. The chapter also explores the microanalysis of actor networks inside the SAI e-governance network with an emphasis on user involvement, negotiation processes, domestication of digital practices, and identity building. The governance structure is revolutionized, and more inclusive service delivery is made possible by SAI's usage of digital interfaces. In chapter-6, the focus is laid on highlighting the power struggle within the organization. SAI's e-governance programs seek to increase openness, accountability, and efficacy, but they unintentionally reinforce preexisting power structures. The advent of digital tools like eOffice, NSRS, or AMS exposes organizational players to social networks and makes them susceptible to governmentality's technology. In an effort to achieve successful government, this slow subordination erodes other types of power, such as sovereignty. The Actor-Network Theory (ANT) and the analysis of governmentality provide a thorough

understanding of the power relationships and behaviours among the participants in the e-governance network. The quest for good governance is significantly hampered by risk management, the blending of surveillance and dataveillance, discipline and punishment methods, the impact of neo-liberalization, and self-organization technology. These results highlight the importance of strategic planning, performance improvement frameworks, cross-government, and public-private partnership to achieve successful e-governance deployment in sports organizations like SAI. Chapter-7 examines how digital initiatives and algorithm-based technologies are implemented in the governance frameworks of public organizations, with a particular emphasis on the SAI. Concerns about interpretational capacity, openness, accountability, dependability, and the safety and security of personal data are raised when algorithms are used to make decisions. Fundamental rights like privacy and freedom of expression run the risk of being infringed upon, and there is also a chance that prejudice will result from partial decision-making. The employment of algorithm-based technology also enables data manipulation and widespread spying. This chapter also examines the idea of alienation in light of how politically charged digital technology has become. The exploitation of personal information and the loss of ownership and control over personal property are just two of the many angles from which alienation is analyzed.

The findings from the research are directly addressing the objectives of the study. The very first objective which was to identify any implementation challenges and this addressed by taking into consideration a number of factors for e-governance initiatives to be implemented successfully. These include the organization's

readiness, the involvement of new players like data suppliers and IT specialists, and the adoption of strategies that support digital transformation.

The second objective was to observe how different actors are translating each other interests and enrolling them within the e-governance network. This is addressed in elaborative manner in chapter 4 and 5. The results demonstrate how digital technologies have changed sports ecosystems, attracting new participants and requiring adjustments to protocols, practices, and cultural norms. This suggests that the application of e-governance practices requires translation.

The third objective was to trace how these networks achieve stabilization. The results indicates that stabilization is only for a small interval of time and it gets disrupted as soon as a new element is introduced. The stabilization of networks is also dependent on the power dynamics within the organization.

The fourth and the last objective was to understand user participation in the e-governance network. Within the context of the e-governance network, the study looks at user interaction, negotiation processes, domesticating digital activities, and identity construction. It also draws attention to the possible drawbacks of using algorithm-based technology, including the potential for incomplete decision-making to lead to discrimination and the violation of fundamental rights.

To sum up, the research offers significant understanding of the difficulties, procedures, and consequences of e-governance application within the framework of SAI. It emphasises how crucial it is to engage users actively, plan carefully, and think strategically. It also draws attention to the risks and difficulties that could arise and need to be properly controlled, such as the possibility for bias and the violation of fundamental rights. Thus, cross-government collaboration, public-

private partnerships, performance improvement frameworks, and strategic planning are essential for the effective implementation of e-governance.

8.3 E-governance as a continuous process

Various e-governance initiatives such as eOffice, NSRS, AMS, Geo Tagging, JAM, and online stadia booking facilities have been shaped by a number of factors and interests of various actors involved in these projects. The relational aspect of e-governance has been highlighted by analyzing these projects using ANT. The interdependencies of actors and the role of intermediaries shaped the ongoing nature of e-governance initiatives. The use of digital technologies in SAI shows that the e-governance project is not fixed rather it is dynamic in nature because what may be initially planned may be changed over the course of time. This dissertation showed the emergence of e-governance due to complex interrelationships, where negotiations occur among different actors and do not necessarily stabilize. For example, the eOffice project changed over time, along with the various actors involved in it, government policies, administrators, coaches, players, and technical vendors. The reason being that actor-networks are always in a state of flux but evolving in terms of relational networks.

This research portrayed the negotiation process that took place to translate the interests of various actors into one common goal, i.e., to achieve good governance in the sports domain. The goals were constantly adjusted to align the interest of all actors. Thus, e-governance structure emerged as a contextual configuration involving all the actors who were affected as well as effected the implementation these digital technologies. Foucault also emphasizes that e-governance practices are not neutral, and they also control and shape the behaviour

of those you use them. ANT offers a new analytical lens to understand the complexity of e-governance projects without differentiating the socio-technical actors. It allows us to observe the translation process that becomes black-boxed once the project is successfully implemented. Managerial and evolutionary studies on e-governance help to understand the macro concepts but ANT allows us to observe the micro nuances of e-governance. In this dissertation, the use of the ANT lens showed us the negotiations taking place at different levels, changing the nature of the project and also providing the future settings in which these negotiations will take place. It is argued that society, organization, agents, and technological artifacts are all effects generated in patterned networks of diverse materials. Therefore, the concept of actor and network is tied in a series of chains where one cannot be defined without the other. “The actor-network is reducible neither to an actor nor to a network. An actor-network is simultaneously an actor whose activity is networking heterogeneous elements and a network that is able to redefine and transform what it is made of. Hence, the relationship between the actor and the network appears cyclical. They remain open-ended and can only be artificially closed and isolated from the broad and natural openness of relationships. In our study, policy, administrators, coaches, players, and technical vendors are present in a complex inter-relational network that shapes their interests and identities. When a change occurs in any one of the actors, for example, coaches’ interest in gaining more from eOffice in terms of dealing with their tournament travel allowances, new aims and goals were introduced, shaping the overall project. Now, these changes were once again negotiated among other actors, depicting the cyclical nature of the e-governance network. In these terms, e-governance appears as a continuous

process that keeps on changing with the change in the interests and identities of any one actor.

8.4 Recommendations

Based on a close examination of the governance mechanism in SAI, this dissertation proposes the following recommendations. First and foremost is bringing a new policy focusing on e-governance in sports organizations. As noted from the primary and secondary material collected during the research, there is no policy addressing the digitalization framework in SAI or any other sports organization in India. The administrators are following a broader framework of Digital India to make changes in the existing governance structure. So, there is an urgent need to address this issue. A well-mapped sports-specific policy will also show a clear political will and commitment to digital transformation within sports organizations.

Secondly, measures to ensure cybersecurity should be taken along with awareness workshops. Strong cybersecurity measures are more important as digital governance systems spread. SAI should place a high priority on the security of its computer systems and hold frequent awareness sessions to inform users about potential dangers and secure procedures. Sports federations should work along with SAI to implement cybersecurity measures so that e-governance initiatives can be implemented successfully.

The specific unique findings for Sports Authority of India (SAIs) could help an organisation work towards better governance and more skillfully handle implementation challenges.

8.4.1 Suggestions for SAI

It was found that various actors complained about lack of training for use of these digital interfaces. Therefore, the SAI should adopt different training programs for different users to converge the interests of all actors in a network. It needs to put in place a variety of user-specific training programs. To ensure that everyone is aware of the new digital systems and can utilize them effectively, these programs should attempt to align the interests of all network participants. Training programs can also lessen resistance to change and boost support for digital projects in general.

Secondly, the SAI must encourage the adoption of both online and offline modes of interaction. The presence of a hybrid working mode can facilitate better coordination and coherence by providing multiple channels for communication, collaboration, and decision-making. This can enhance the overall governance effectiveness and ensure a more integrated approach to sports administration and development. Given the difference in digital literacy and access among stakeholders, SAI can assure proactive engagement from all users by supporting online and offline means of contact. This strategy can also help meet the demands of persons who are not yet capable of fully interacting with digital interfaces or are not at ease with them.

Thirdly, the SAI shall encourage self-participation in these e-governance initiatives rather than involving intermediaries. Encouragement of direct stakeholder engagement with e-governance projects can lessen the need for middlemen, which can result in cost savings and more proactive governance. The ability to interact directly with the systems can also result in improved comprehension and more efficient use of digital tools.

Fourthly, feedback must be collected continuously and regularly to improve the system. User feedback is essential for the system to be improved continuously.

Implementing systems for gathering and analyzing feedback would allow SAI to make the required changes to the e-governance efforts based on the knowledge acquired. Feedback can also help in tackling the negative impacts of algorithm-based governance. They can help in identifying and addressing biases. Biases are often reflected in the form of explicit biases, such as biased training data, and implicit biases, such as biased algorithms that perpetuate already-existing inequities. Algorithm governance is a dynamic process that needs to be observed, assessed, and improved in order to ensure accountability and transparency.

These suggestions are intended to promote a SAI digital governance system that is more functional and inclusive. By paying attention to these crucial areas, SAI can improve its e-governance procedures and implement a radical change in how it runs and serves its users.

Future Scope

This research focused on analyzing e-governance practices within SAI using the theoretical framework of ANT, which was further supplemented by the understanding of Foucault's governmentality and Marx's concept of alienation to bring forth the minute nuances of digital governance discourse. My dissertation challenged the thought that digitalization always leads to increased efficiency, transparency, and accountability in the governance process. It definitely produced some positive results but could not completely change the existing behaviour of the individuals and empower every actor involved with digital practices introduced within SAI. I was able to treat both social and technical actors symmetrically, which helped me avoid biases towards any particular actor. I wanted to trace as many possible links as I could, but it was not humanly possible. I wanted to delve deeper into how gender plays a role in determining the actions and policies within SAI. The correlation between gender and digital practices. How comfortable are women in comparison to men while using these digital applications? Who is getting more benefit from it?

Another avenue that could be explored is sports federations and the use of digital practices within them. The Indian sports governance structure is a complex construct that consists of sports federations for each game at different levels. So, it is fascinating to observe how they connect with SAI and MYAS to get their support for operationalization. During the field study, it was found while interacting with players from archery, athletics, and shooting that their federations have also started to use digital initiatives to ease administrative tasks. Therefore, it would be

interesting to see how these two major stakeholders in the Indian sporting scenario, i.e., sports federations and SAI, interact with each other through their users or directly in the context of changing governance structure. (IOC, 2020)

Apart from sports federations, other stakeholders that can be considered are sellers of digital software or devices being used in the organization. For example, AMS was developed by a private company based in Europe and North America. Due to pandemic conditions and financial constraints, interviews from this section of actors were not included in the study. But another key developer, i.e., NIC, who was responsible for developing eOffice and managing cloud storage, was considered for this study. But still, there are many more private companies indulged in developing such software, which are currently working in collaboration with SAI for upcoming projects. So, it would be great if, in future studies, all of the stakeholders are considered.

Another interesting dimension of e-governance in sports can be explored by analyzing the role of fans in the Indian scenario. It can be observed how they are responding to digital initiatives taken by sports administrators to cater to their needs. For example, today, live streaming of matches at the convenience of their homes at the choice of their device has opened up various avenues for research. The corporatization of sports in association with sports bodies and citizens can expose a completely different network of associations at both local and global levels.

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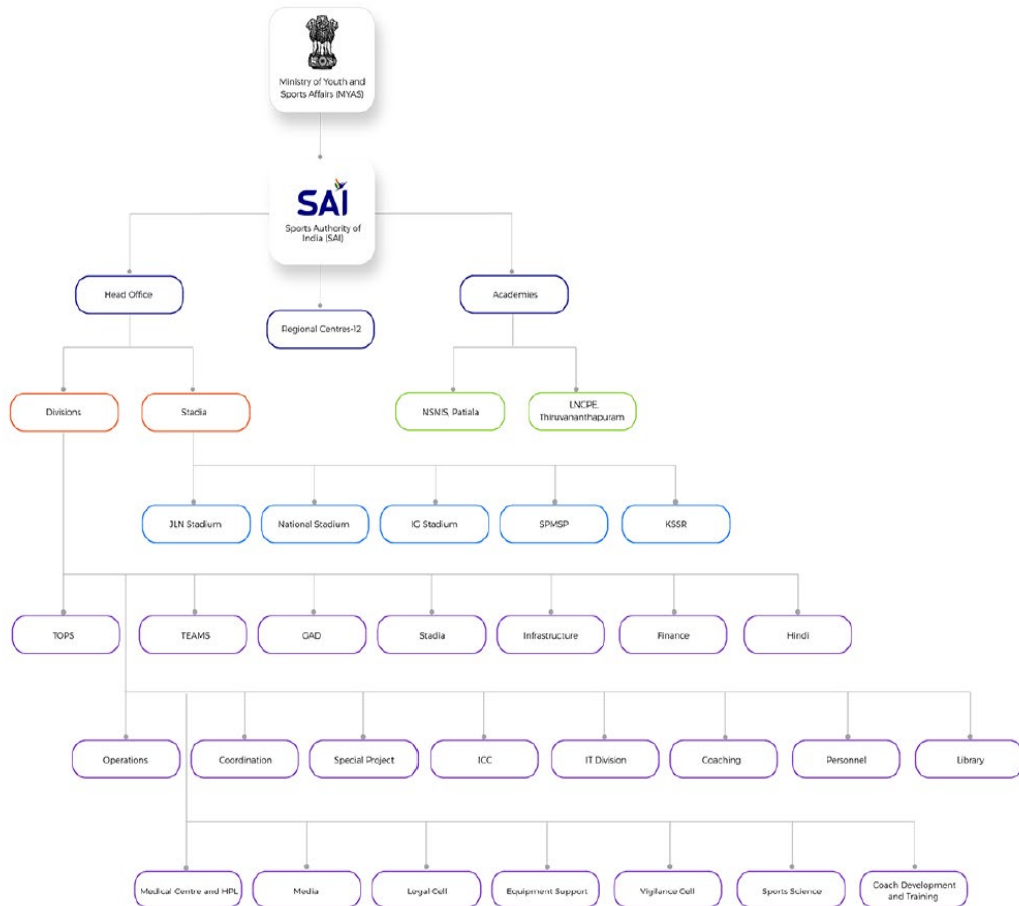
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Appendices

Appendix 1: Administrative structure of SAI



(Figure 1. Administrative structure of SAI²²)

²² Sports Authority of India, Organizational structure (website), <http://www.sportsauthorityofindia.nic.in/sai/organisational-information>, (accessed on 24 July 2021).

Appendix 2: Interview Schedule (Administrators)

Name:

Age:

Designation:

Permanent/Contractual:

Department:

Regional/Sub-regional centre:

Duration of working in SAI:

Briefly describe your role in the organization.

Q1. What are the digital initiatives launched by SAI?

Q2. Can you briefly explain how these digital initiatives like eOffice, NSRS, AMS works and how they impact your work?

Q3. How/why were they started? What is your opinion about it?

Q4. Can you share your understanding of e-governance?

Q5. Do you think COVID-19 was a push factor in the digitalization of SAI administration?

Q6. How were digital practices introduced in SAI Headquarters/Regional Centre/ Sub-regional Centre? Were any workshops organized for the competence development of the staff?

Q7. What other bodies/institutions/arms of government were involved in implementation of these digital applications?

Q8. What are the responsibilities of your department in implementing these digital initiatives? In your opinion did those responsibilities suite your organisational capacity? If not, why?

Q9. How was the data maintained earlier? Who was responsible for maintaining the data earlier? Can these digital platforms be considered a more manageable way of organizing the data of important stakeholders, like athletes, coaches, etc? Why yes or no?

Q10. How often is the data updated? Is there a change in the way the data was collected after the introduction of these digital initiatives? If yes, can you elaborate?

Q11. When was the procedure more convenient for you and why?

Q12. How is SAI (particularly your centre) equipped in terms of computers, competence, budgets for using ICTs in administration?

Q13. How was the competence developed for using these digital applications among all the stakeholders, including SAI personnel?

Q14. In your opinion, have these digital initiatives changed the way interactions happen among athletes, coaches, and administration?

Q15. What do you think are the limitations of these digital applications, if any? How can it be improved?

Q16. Who can have access to the data stored in through these digital applications and where is this data stored?

Q17. Do you think these digital platforms are secure? Why yes or no?

Q18. What are the current policies followed by SAI for implementing e-governance?

Q19. Is there a dedicated policy for e-governance? If yes, what is it, can you briefly explain? If not, what do you think is making the shift from traditional governance to e-governance within SAI?

Q20. Do you think there is support from the Ministry of Youth Affairs and Sports for e-governance initiatives to be taken up in SAI? Any recent example in your mind?

Q21. Do you think SAI officials are adequately skilled in using technology?

Q22. Do you think SAI officials feel satisfied by using technology as and where required in their job?

Q23. Do you think SAI personnel engagement with technology leads to workflow efficiency in their routine tasks?

Q24. Do you think there is technology fear among the SAI personnel when they engage with technology?

Q25. Do you think SAI officials intend to use technology in their daily routine tasks/duties or work going forward?

Q26. What do you think is the future of SAI in the aspect of e-governance initiatives in administration?

Appendix 3: Interview Schedule (Coaches)

Name:

Age:

SAI Centre:

Q1. What is your expertise in sports?

Q2. What are your achievements as a coach?

Q3. How long have you been coaching? When did you start as a coach in SAI?

Q4. Are you here on a permanent or contractual basis?

Q5. Why (for what reasons) do you contact the office staff or administrators?

Q6. How do you contact administrators? (Through phone, email, or in-person)

Q7. Especially in covid times, how was communication maintained with the officials as well as players? Elaborate with example

Q8. What do you understand by e-governance? Explain

Q9. How is e-governance beneficial for you as users, as well as how do you think it will benefit players?

Q10. In your knowledge what are the e-governance/digital initiatives launched by SAI?

Q11. Do these digital initiatives help you in any way? Has it brought any change in the work/relation to the SAI administrators and players? If yes, can you explain?

Q12. Do you feel any difference between the administrative services offered by SAI earlier and now?

Q13. Do you think coaches and players are adequately skilled in using digital technology?

Q14. Do you think coaches and players feel satisfied by using technology as and where required in their job?

Q15. Do you think coaches' and players' engagement with technology leads to workflow efficiency in their routine tasks?

- Q16. Do you think there is technology fear among coaches, players, and administrators when they engage with technology?
- Q17. Do you know about the National Sports Repository System (NSRS)? Are you registered in it?
- Q18. Does this data collection about players and coaches help you in any way? Has it brought some changes which were not existent?
- Q19. Do you think KID generated through NSRS is beneficial for players? Can you explain how?
- Q20. Were any workshops conducted to train you to use these software?
- Q21. How is the support provided if any problem arises while using digital platforms?
- Q22. How often do you use these digital platforms? Why, why not?
- Q23. Do you think there are any limitations to these digital initiatives?
- Q24. What do you think is making the change from a traditional paper-based governance setting to e-governance?
- Q25. How do players receive cash rewards? Do they still have to do it manually, or has it changed to digital platforms?
- Q26. Do you trust these digital applications? Do you experience data security and privacy issues in connection to it? Can you share your thoughts?
- Q27. What other things (with a special focus on digital changes) do you think should be improved to benefit the players?

Appendix 4: Interview Schedule (Players)

Name:

Age:

Gender:

Q1. What do you play? (ex-football, tennis, swimming, etc.)

Q2. What are your achievements as a player?

Q3. Do you receive any assistance from SAI? What type of assistance?

Q4. Do you yourself contact SAI administrators or office staff? If yes, for what reasons?

Q5. If not, who does the administrative work for you?

Q6. Do you use the website of SAI to gain any information?

Q7. Especially in COVID-19 times, how were the messages communicated about games and other benefits to athletes?

Q8. What do you understand by 'e-governance' or digitalization? Can you briefly explain with an example from the sports field itself?

Q9. How is e-governance beneficial for you as user?

Q10. In your knowledge what are the e-governance/ digital initiatives launched by SAI?

Q11. Do you know about the National Sports Repository System (NSRS)? Are you registered for it?

Q12. Are you aware of Athlete Monitoring System (AMS)?

Q13. Do these applications help you in any way? Has it brought any change in the work/relation to the SAI administrators? If yes, can you explain?

Q14. Are there any personnel in SAI who help you with specific IT-related tasks?

Q15. Have they provided you with KID? If yes, for what all other purposes is it used?

Q16. How often do you use NSRS and AMS? Why, why not?

Q17. What does the introduction of these digital initiatives mean for you as a sportsperson?

- Q18. Do you feel any difference between the administrative services offered by SAI earlier and now?
- Q19. Has interacting with the SAI administrators been made easy with the use of digital initiatives in the system?
- Q20. Do you experience it is easier or difficult to keep track of your information in NSRS compared with how you had it done before?
- Q21. What other changes did you experience with the coming up of digital initiatives like NSRS, AMS, and the facial attendance system? Do you find it useful?
- Q22. Did you experience any difficulties with respect to these? If yes, can you name a few? How did you solve these issues?
- Q23. Do you think players are adequately skilled to use technology?
- Q24. Do you think players' engagement with technology leads to efficiency in your administrative work?
- Q25. Do you think there is technology fear among coaches and players when they engage with technology?
- Q26. What do you think is making the shift from traditional governance to e-governance in SAI?
- Q27. How do you receive cash rewards? Do you still have to do it manually, or it has changed to digital platforms?
- Q28. Do you trust these digital applications? Do you experience data security and privacy issues in connection to it? Can you share your thoughts?
- Q29. What other things (with a special focus on digital changes) do you think should be improved to benefit the players?

Appendix 5: Interview Schedule (NIC)

Name:

Age:

Designation:

Duration of working in NIC:

Q1. When and why was eOffice started?

Q2. How do you introduce (training) eOffice in other departments?

Q3. How is the support provided in case of technical problems in eOffice?

Q4. Do you consider the platform secure for the administration of various actor's data? Why, why not?

Q5. What were the reactions of various actors (like sportspersons, administrators, coaches, etc.) to these changes brought by eOffice? Was it positive or negative?

Q6. How did it improve the communication between the administration and other actors?

Q7. What challenges did you experience while introducing the application in SAI?

Q8. What other bodies/institutions/arms of government were involved in this project?

Q9. Were there any political obligations that you had to abide by? If yes, what were these?

Q10. Did these political obligations pose a hindrance in your work? If yes, how?

Q11. Who are the users of eOffice, and how were they identified? What parameters did you use to define the user of your software?

Q12. How did you understand users' requirements?

Q13. Before and after designing the application, have you done a pilot study to understand the user perspective?

Q14. What do you think can be the reason for existing non-users of eOffice? Do you think non-users can also help in the successful implementation of eOffice?

Q15. Who controls the database for eOffice? Who can access this database?

Q16. In your perspective, what are the biggest challenges posed by eOffice? And how can they be mitigated?

Q17. Do you think officials are adequately skilled to use this kind of technology?

Q18. Do you think SAI personnel engagement with technology leads to workflow efficiency in their routine tasks?

Q19. Do you think there is technology fear among the administrators when they engage with technology?

Q20. Do you think administrators from various departments are adequately using and would keep using the technology going forward?

Appendix 6: Places visited during field study



SAI Training Centre, Hisar



SAI Training Centre, Bhiwani



SAI Training Centre, Kurukshetra



SAI North Regional Centre, Sonapat



SAI Headquarters, JLN Stadium, New Delhi



SAI National Centre for Excellence Boxing, Rohtak

Appendix 7: Images from different sports during field work



Hockey



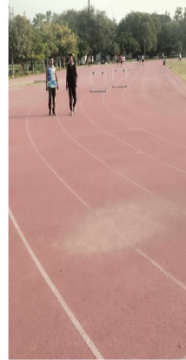
Swimming



Boxing



Archery



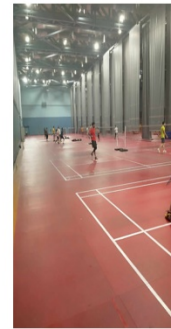
Athletics



Shooting



Kabaddi

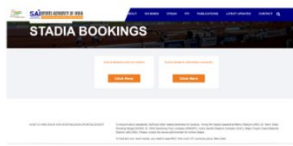


Badminton



Wrestling

Appendix 8: Different e-governance initiatives taken in SAI



Online stadium booking facility on website



Website of SAI



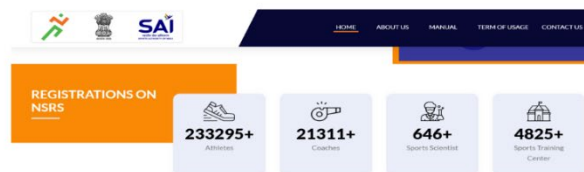
Khelo India mobile application



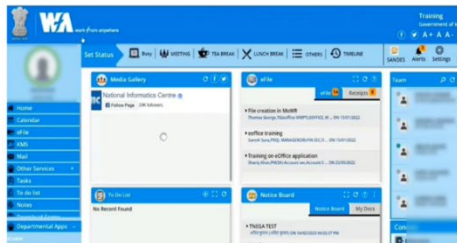
Online Zoom meetings of SAI staff



Athlete report generated through AMS



NSRS portal



eOffice platform



FIT India webpage and application

Appendix 9: RTIs filed during the research

Sports Authority of India		Sports Authority of India																						
S. No.	RTI Query	Response	Sports Authority of India																					
1	<p>1. Date and year of e-Governance adoption</p> <p>2. Year-Wise progress report of e-Governance since adoption?</p>	<p>As part of e-Governance initiative, SAI has adopted a number of initiatives in various years, which (including year-wise progress) is indicated below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>S. No.</th> <th>Year</th> <th>e-Governance Initiative</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2014</td> <td>SAI Website</td> </tr> <tr> <td>2</td> <td>2016</td> <td>Personal Information Management System, Online Booking of SAI Stadia for Sporting and non-Sporting Facilities</td> </tr> <tr> <td>3</td> <td>2017</td> <td>National Talent Search Portal (NTSP)</td> </tr> <tr> <td>4</td> <td>2019</td> <td>KheLo India Mobile Application, KheLo India Fitness Application and FIT India Website, Annual Calendar of Training and Competition Portal</td> </tr> <tr> <td>5</td> <td>2020</td> <td>National Sports Repository System</td> </tr> <tr> <td>6</td> <td>2021</td> <td>implementation of NIK tool namely eOffice and SPARROW, Revamped SAI Website</td> </tr> </tbody> </table>	S. No.	Year	e-Governance Initiative	1	2014	SAI Website	2	2016	Personal Information Management System, Online Booking of SAI Stadia for Sporting and non-Sporting Facilities	3	2017	National Talent Search Portal (NTSP)	4	2019	KheLo India Mobile Application, KheLo India Fitness Application and FIT India Website, Annual Calendar of Training and Competition Portal	5	2020	National Sports Repository System	6	2021	implementation of NIK tool namely eOffice and SPARROW, Revamped SAI Website	<p>allows access to the talented sportspersons from any part of the country to upload their online applications in their desired sports discipline for admission in Sports Centres run by SAI under its various sport's promotional schemes.</p> <p>e. KheLo India Mobile Application: It is a mobile application which helps create awareness about Sports and Fitness, especially among youngsters. The information under the application is categorized under Learn (Tutorials on various sports), Play (List of Sports Infrastructure) and Get Fit (Fitness Assessment).</p> <p>f. KheLo India Fitness Application: It is a mobile application, which has been developed for Schools to assess the fitness levels of their students.</p> <p>g. FIT India Website: It is the primary gateway for providing information related to FIT India Mission, its related campaigns and programs.</p> <p>h. Annual Calendar of Training and Competition (ACTC) Portal: It is an online portal which allows for submission of proposals by Federations, as per approved ACTC minutes of meeting, and their further processing.</p> <p>i. National Sports Repository System: It is a digital MIS, which envisages providing a comprehensive digital solution for all the major stakeholders, such as Athletes, Coaches, Academics, Federations and Administrators. It is an open platform of sports eco-system where Athletes, Coaches and Academics can register themselves.</p> <p>j. eOffice - eOffice is a digital filing system, which consists of following modules namely eFile, Leave Management System, Tour Management System etc. It aims to make more efficient, effective and transparent inter-government and intra-government transactions and processes.</p> <p>k. SPARROW - The electronic Annual Performance Appraisal Report (SPARROW) is an online system based on the comprehensive performance appraisal for officials. The aim of the system is to facilitate electronic filing of PAR by officers, which is user friendly and can be done anywhere anytime as per convenience.</p>
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2	<p>What are the current e-Governance practices conducted in SAI?</p>	<p>As part of e-Governance initiative SAI has adopted the following initiatives:</p> <p>a. SAI Official Website: It is the primary gateway for providing information regarding Scheme, Stadia, Tender, Job Opportunities etc. to Athletes, Coaches and public at large. The revamped Website of SAI has been launched on 23.07.2021.</p> <p>b. Personal Information Management System: It is a digital MIS solution, containing information related to the Administrators, Coaches and other staff at SAI and its regional centres.</p> <p>c. Online Booking of SAI Stadia for Sporting and Non-Sporting facilities: The portal allows for online booking of SAI Stadia for Sports and Non-Sports facilities.</p> <p>d. National Talent Search Portal: The Portal</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">What is the rationale behind e-Governance adoption?</th> <th style="width: 85%;">The rationale behind e-Governance adoption are indicated as below:</th> </tr> </thead> <tbody> <tr> <td></td> <td> <ul style="list-style-type: none"> a. Better dissemination of information b. Quick Decision Making c. Increases transparency d. Enhances accountability e. Increases engagement with Stakeholders f. Assures data security and data integrity g. Effective usage of staff energy and skills, thus resulting in increased productivity </td> </tr> </tbody> </table>	What is the rationale behind e-Governance adoption?	The rationale behind e-Governance adoption are indicated as below:		<ul style="list-style-type: none"> a. Better dissemination of information b. Quick Decision Making c. Increases transparency d. Enhances accountability e. Increases engagement with Stakeholders f. Assures data security and data integrity g. Effective usage of staff energy and skills, thus resulting in increased productivity 																	
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RTI filed against SAI. RTI No. SAOIN/R/E/21/00158 filed on 22-06-2021

Sub: Reply to RTI application with registration no. SAOIN/R/E/22/00245, for seeking information under RTI Act, 2005

Sir/Madam,

Please refer to your RTI vide which the following information was sought:

Serial Number	Information Requested	Information given
1	Is a dashboard available on National Sports Repository System (NSRS) where the administrators can see the statistics for players, coaches, or academies.	Yes
2	Any statistical tool used by the department in NSRS	No
3	Any data cleaning tools used by the department to mature the data in NSRS	No
4	In NSRS, are there any outsourced reporting companies working on getting you the reports needed.	No
5	Any statistical methods used to get the extracted data on the NSRS dashboard.	No
6	what kind of software/tools are used to review the reports generated through NSRS	The reports are generated through SQL Queries, business logic and are displayed to the user.
7	Please provide the mindmap of NSRS working/ communicating with backend and extracted reports.	Information not available

Serial Number	Information Requested	Information given
8	What kinds of reports are generated through NSRS used by different departments?	Detailed and Summary Reports are available to the authorized users. These reports can be filtered on the basis of State, Discipline, Gender etc..
9	Are there any particular reports needed for a particular season for different sports or department based?	Information not available
10	How old much data is kept in the system (NSRS) and when is it sent to the archive?	As per Government Data Archival Policy.

RTI filed against SAI. RTI no. SAOIN/R/E/22/00245 on 12-08-2022

Online RTI Status Form

Note: Fields marked with * are Mandatory.

Enter Registration Number	NICHQ/R/T/22/00126
Name	Supriya
Received Date	28/07/2022
Public Authority	National Informatics Centre
Status	REQUEST DISPOSED OF
Date of action	03/08/2022

Reply :- As per information received from Custodian of Information i.e Deemed PIO the answer of the RTI request is as follows:-

With reference to the RTI Registration No. NICHQ/R/T/22/00126 dated 28.07.2022 following is submitted.
Meeting minutes of the working committee of eOffice.
Department of Administrative Reforms and Public Grievances (DARPG) may be requested to provide the required details. transferred to DARPG

How were users identified for eOffice.
Users are identified by the respective organizations where eOffice has been implemented. Such information is not available on record in NIC

Present statistics about how many departments are actively using eOffice.
The list of organizations where eOffice has been implemented is available at <https://eoffice.gov.in/Dashboard/dashboard.php>.

In case you want to go for an appeal in connection with above, you may appeal to the Appellate Authority indicated below within thirty days from the date of issue of this letter.
Sh. Sunil Kumar, DDG & Appellate Authority,
National Informatics Centre-Hqrs.,
A-Block, CGO Complex, Lodhi Road,

RTI filed against NIC. RTI No. NICHQ/R/T/22/00126 on 28-07-2022.

List of Publications

1. Supriya, Das, M. and Raina, S. (2023). Does digital technology impact user participation? A case study of Sports Authority of India (SAI). *Int. J. Electronic Governance*, Vol. 15, No. 4, ahead of publication.
2. Supriya and Raina, S. (2023). Creation of Online Identity: The Role of Sports Authority of India (SAI) Website. *Seybold Report*, Vol. x, No. x, ahead of publication.
3. Supriya and Das M. (2024). Achieving e-governance in Sports Authority of India (SAI): An Actor Network Analysis. *Kurdish Studies*, Vol. x, No. x, ahead of publication.

Conference Presentations

1. Supriya. (2023, 7-8 June). A study on user participation in Sports Authority of India: a perspective from actor-network theory. *Fourteenth International Conference on Sport & Society*, University of Nevada, Las Vegas.
2. Supriya. (2022, 3-5 March). Identity creation through the sports organization website. *Second International Conference on Sports Engineering*, Sports Engineering Association India, Jodhpur.

Workshop Participation

1. Advanced Academic Writing Workshop conducted by the Department of Humanities and Social Sciences, BITS Pilani, Pilani Campus, India at BITS Pilani Campus from 4th April 2022 to 12th April 2022.
2. Peace Study Tour, 2023, organized by Hiroshima University in collaboration with Sasakawa Peace Foundation and Columbia University at Hiroshima University from 31st July 2023 to 8th August 2023.

A Brief Biodata of Candidate

Ms. Supriya is currently a doctorate candidate in the Department of Humanities and Social Sciences at BITS Pilani, Pilani Campus. Prior to her doctoral studies, she obtained her undergraduate degree in B.A. (English Honors) from MCM DAV College for Women, Chandigarh in 2015. Additionally, she has achieved two master's degrees, one in English from DAV College, Chandigarh in 2017, and another in Public Administration from MDU, Rohtak in 2019. In 2019, she successfully passed the UGC-NET examination in Public Administration, demonstrating her proficiency in the subject.

A Brief Biodata of Supervisor

Dr. Sunita Raina is an Assistant Professor at the Department of Humanities and Social Sciences, BITS Pilani. She worked as a research analyst at the Centre for Science and Environment (CSE), New Delhi. She completed her PhD from Virginia Polytechnic Institute, USA. She was also a fellow at the Indian Institute of Advanced Study, Shimla. Currently, she is involved in interdisciplinary research and teaching in the field of STS and Sociology at BITS Pilani.

A Brief Biodata of Co-Supervisor

Dr. Madhurima Das, joined the Humanities and Social Science Department at BITS Pilani on March 2019. Dr. Das received her Postdoctoral degree from the Department of Philosophy and Cultural Heritage at the Ca' Foscari University of Venice on a European Research Council sponsored project across nine nations called “*DomEQUAL: A Global Approach to Paid Domestic Work and Global Inequalities*”. She completed her PhD from the Department of Sociology at the University of Oregon and also has a Graduate Certificate from the Women’s and Gender Studies Department at the University of Oregon. She has held joint teaching appointments at the Sociology and Women’s and Gender Studies Department at the University of Oregon, where she has taught variety of courses. She came to University of Oregon after completing her Masters in Sociology from Jadavpur University (Kolkata). She also received another Masters in Sociology from University of Oregon and completed her undergraduate degree in Sociology with First Class Honours from Presidency College, Kolkata.