# Transforming Governance with Technology

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#### Introduction

Governments around the world have been consistently working towards building and improving public service delivery systems. An efficient public service delivery serves a pertinent role in bridging the needs of the people and the services being provided by the government<sup>1</sup>. In these modern times, ICT as a tool serves a crucial need in bringing about transformation to make governance efficient, effective, responsive, accountable, and transparent. This is mainly to overcome the problems of the traditional bureaucratic administration system which was expensive, in efficient, and time-consuming. Further, it involved large pools of human resources, tedious approval processes, and numerous supporting documents making simple tasks a cumbersome process. To establish a technologically efficient and effective government by transforming public service delivery and keeping citizens at its core, and creating a safe and thriving digital economy, the GovTech Agency was formed on the 21st of December 2022. Some initiatives being taken up by the GovTech Agency include forming a cohesive governance structure by enhancing data storage facilities for eliminating redundancies across multiple systems, streamlining coordination to eliminate siloed operations, automating tedious verification and authentication processes, creating a consolidated platform for the citizens to avail services from a single system and formulate an easily accessible feedback system.

#### **Data Collection**

In the past, data collection was fragmented, with different agencies using different systems and procedures. The terrain became complex as a result of the variety of methods, which made collaboration difficult<sup>2</sup>. Several

<sup>1</sup> Smith, J. Enhancing public service delivery: Strategies and approaches. Cambridge University Press, 2020.

<sup>2</sup> Gupta, R., Patel, K., & Sharma, S. (2023). Strengthening data governance: Insights from Bhutan's GovTech Agency. Journal of Public Administration Research and Theory, 33(2), 297-314.

agencies collected data using their own systems, resulting in a diverse range of datasets. These datasets were located in a variety of locations, including standalone systems, Google Sheets, and hard disks. As a result of such distributed storage, data became a labyrinth, making sharing difficult and complex.

In various government agencies, departments are further segmented into divisions, each with its own specific mandate but aligned under a shared vision. Historically, many of these agencies operated with distinct systems, and in some cases, even different systems within the same department. Consequently, each system produced its own set of data, resulting in a lack of consolidation and leading to data duplication issues. Despite opportunities for consolidation, data remained fragmented across the organisation. To address these challenges, GovTech is currently undertaking efforts toward data harmonisation.

Recognising the importance of solving these issues and promoting better data-gathering and sharing procedures, GovTech has established a new division. This branch, which focuses on data science and Artificial Intelligence (AI), is tasked with using the country's massive data potential and applications.

This newly formed division's most important task is to create a strong data governance structure. In tandem, the division strives to pioneer the development of intelligent system use cases by carefully applying data and machine learning. This strategic project aims to improve the effectiveness of our data-related activities, foster collaborative synergies among diverse agencies and address the issue of there being lack of coordination between different agencies commonly referred to as "working in silos".

# Working in Silos

The challenge of siloed operations within government agencies has been widely recognised<sup>3</sup>. One of the primary concerns in Bhutan's government structure is the lack of coordination among different agencies. This lack of collaboration often arises due to the presence of "silos," where departments operate independently, failing to communicate and share information

<sup>3</sup> Johnson, J. L., & Patel, H. (2018). Breaking down silos: A guide to interdisciplinary research. Oxford University Press

effectively. The absence of a unified approach hampers decision-making and resource allocation, and ultimately affects service delivery to the citizens.

To address this challenge, GovTech is exploring and implementing various methodologies aimed at promoting collaboration and streamlining processes. First and foremost, GovTech is focusing on the digital transformation of government services. This includes the development of user-friendly online platforms that allow citizens to access multiple services and interact with various agencies through a single portal. By centralising information and simplifying procedures, GovTech aims to break down the barriers of siloed thinking. The Government-to-Citizen portal, known as the Citizen Service Portal (https://www.citizenservices.gov.bt/), was developed to incorporate all citizen-related services into one centralised platform. This consolidation under G2C has notably streamlined and simplified a wide range of services. Together with the agencies, Govtech will further consolidate and work towards a single portal for all possible public services.

Additionally, GovTech is investing in establishing cross-functional teams and inter-agency collaborations. By fostering a culture of cooperation and knowledge-sharing, these teams aim to bridge the gaps between agencies, enhance communication, and promote a holistic approach to problem-solving. Through regular meetings, joint projects, and shared goals, the GovTech seeks to create a more collaborative and cohesive government ecosystem.

With the implementation of GovTech's strategies, Bhutan anticipates a transformative change in its government operations. The digital transformation of services will not only enhance convenience for citizens but also lead to significant cost savings and improved operational efficiency. For instance, the introduction of digital platforms such as online tax filing (RAMIS), and Online Government Procurement(e-GP) applications has already led to remarkable reductions in administrative expenditures and processing durations throughout Bhutan. By breaking down silos and promoting collaboration, Bhutan's government agencies will be able to better align their efforts, share resources, and make data-driven decisions. This holistic approach will enable the government to provide seamless and citizen-centric services, ultimately contributing to the overall happiness and well-being of the Bhutanese people.

While the digitalisation of services serves to significantly benefit the public in availing information faster and monitoring progress remotely, eventual requirement for human intervention in the process for authentication and verification makes the process lengthy. Therefore, the need for certain tasks to be automated has emerged.

### **Automatic Verification**

When considering the landscape of public services, it is clear that the digital age has caused a major paradigm change, with the bulk of services now available online. However, underneath the seamless facade of digital convenience is a complicated network of human actions that have a substantial impact on the efficiency of these services.

For most services, accessing information requires a Cirizen Identity (CID) number and date of birth. However, with the introduction of the National Digital Identity (NDI), the necessity for CID numbers will be eliminated. Instead, individuals can simply scan to verify their identity. Bhutan is swiftly transitioning to a more accessible digital realm, making essential services just a click away. According to a report from Kuensel<sup>4</sup>, a total of 19,724 users have requested for Foundational ID on the Bhutan National Digital Identity (NDI) since its launch three months ago, showing a good reception and adoption of the digital wallet.

Recognising this constraint, the Government Technology Agency (GovTech) is aggressively investigating automated technologies to transform service delivery. GovTech seeks to remove needless bureaucratic roadblocks with the use of technology, opening the door for a public service framework that is more effective.

Automation is the ideal solution as it has the potential to speed and transform public service procedures. At this crossroads of innovation and tradition, GovTech's exploration of automated systems will bring in a new age of efficiency and responsiveness in the public services sector. Simplifying procedures is not just a technology goal; it is also a necessary step in delivering quicker and more efficient public services making the government take a lead role in meeting the needs of our changing society.

<sup>4</sup> Kuensel. (2024, February 6). Bhutan signs strategic partnership with ICIMOD. Retrieved from https://kuenselonline.com/bhutan-signs-strategic-partnership-with-icimod/

## Consolidation of Government Websites and Systems

Government websites and systems in Bhutan serve as primary channels for citizens to interact with the government and access various services. Before this consolidation, the government had numerous separate platforms catering to various services, leading to fragmented user experiences and higher operational costs. Recognising the need for a more streamlined approach, the government identified criteria focused on functionality and user relevance to determine which websites and systems would be consolidated.

Currently, the government has streamlined and unified its services for citizens by incorporating them within the G2C system. This centralised platform serves as a one-stop destination for citizens to access various government services conveniently and efficiently. Obtaining important documents, applying for permits, accessing information about government programmes, or availing themselves of other essential services, Bhutanese citizens can rely on the G2C system as their primary interface with the government. The government is currently undertaking efforts to consolidate other similar systems. Despite the challenges and reliability issues commonly faced by digital initiatives, GovTech is actively enhancing and dedicated to addressing these issues, which will lead to significant improvements in the systems. Consequently, Bhutanese citizens can expect easier, more reliable, and efficient access to essential government services in the future.

The consolidation effort will also strengthen data security and privacy measures. The National Digital Identity (NDI) initiative in Bhutan represents a significant advancement in addressing data security and privacy concerns. NDI serves as a comprehensive solution for securely managing digital identities, leveraging biometric authentication to verify individuals' identities accurately. This approach enhances the overall security of online transactions and interactions, providing citizens with peace of mind regarding the protection of their personal information<sup>5</sup>

Furthermore, by consolidating NDI with the Government to Citizen (G2C) system, Bhutan streamlines access to essential government services

<sup>5</sup> Bhutan Broadcasting Service. (2022, January 20). People urged to be cautious while using digital wallet. Retrieved from https://www.bbs.bt/news/?p=193266

while maintaining stringent security standards. With a centralised system, the government can more effectively implement and monitor robust security protocols, ensuring the protection of sensitive information. By continuously evaluating user feedback and usage metrics, Bhutan ensures that its consolidated government websites and systems remain responsive to evolving citizen needs and preferences.

GovTech's efforts to accommodate Dzongkha on websites and provide content in both English and Dzongkha languages is pivotal for fostering inclusivity and ensuring equitable access to information and services for all citizens. By offering content in Dzongkha, GovTech eliminates language barriers, enabling Dzongkha speakers to navigate online resources effortlessly. This approach not only promotes equal access to opportunities but also supports educational endeavors, particularly among younger demographics, by providing learning materials for languages. Moreover, bilingual websites facilitate the enhancement of citizens' digital literacy skills in both English and Dzongkha, empowering them to navigate the digital landscape proficiently for personal and professional development. Through these initiatives, GovTech contributes significantly to the enrichment of Bhutanese society and the advancement of its citizens in the digital age. To improve effectiveness and accessibility for citizens, the establishment of call centers for one-on-one communication will be initiated.

# Single National Call Centre

Call centres are vital for maintaining effective communication between service providers and service seekers. They contribute to user satisfaction, issue resolution, and overall service efficiency. In Bhutan, the current setup involves having distinct call centers dedicated to specific services offered by various agencies or offices. Bhutan has separate emergency helpline numbers for different types of emergencies. For fire, the number is 110, for health emergencies, it is 112, for police, it is 113, and for national disaster, it is 2196. If a person needs help availing the service related to revenue and custom, their helpline number is 3999. Each call centre is specialised in assisting exclusively for a particular service. The agents within these call centres are trained specifically for one service and are not equipped to address inquiries related to other services. This approach allows for focused

<sup>6</sup> Emergency contact numbers | Ministry of Health. (2020). Moh.gov.bt. https://www.moh.gov.bt/here-are-a-list-of-emergency-contact-numbers/

expertise, ensuring that users receive accurate and specialised support for a particular service. However, it also means that users may need to contact different call centres for assistance with different services, as the service providers are not cross-trained for broader support and the call centre agents may not be optimally engaged. Sometimes they may have to handle too many calls due to demand for a service and other times there may not be any calls at all.

The public faces challenges in availing services from these call centres. These challenges include fragmented support, inconsistencies in information, potential delays in response times, difficulties in navigation, restricted operating hours, lack of a unified platform, limitations in communication channels and different call centres offering similar or redundant services, leading to confusion and inefficiency. A more integrated and user-friendly approach, such as centralising contact centres could enhance the overall service delivery experience for the public.

Completely cross-trained agents are available at this one centre, guaranteeing proficiency in all government services. It encourages reliable and timely information transmission, effective service coordination for overlapping needs, and round-the-clock accessibility. Agencies may work together more effectively with a single, unified communication platform, and different channels and linguistic assistance can meet the demands of different users<sup>7</sup>. Efficiency is further increased by utilising technology and keeping a user-friendly navigation system. By putting in place a feedback process, government service delivery may be made more integrated, approachable, and user-centric.

## Service Delivery Rating

A user-centric strategy is essential to improving the delivery of online services. A more customised citizen experience is achieved through platform optimisation for mobile accessibility and simplified interfaces for easy navigation. Online services are perceived as more trustworthy and satisfactory when they offer effective search functions, real-time communication channels, and clear information dissemination. A comprehensive and user-friendly online service ecosystem is ensured

<sup>7</sup> Bertesteanu, L. (2022, March 30). How to build a Customer-Centric Call Center. NobelBiz. https:// nobelbiz.com/blog/how-to-build-a-customer-centric-call-center/

by giving priority to data security, multichannel accessibility, and public input. The focus on educating citizens, accessibility compliance and strong support further demonstrates the government's dedication to providing outstanding services that both meet and go beyond citizens' expectations while promoting openness and involvement<sup>8</sup>.

Simple rating systems and anonymous feedback options encourage honest opinions. Developing a feedback form which is short and easy to fill out enables users to easily provide feedback right after availing the service without having to navigate to other pages. Regular reminders enhance user engagement and sharing insights into how feedback has driven improvements fosters transparency. By combining these strategies, government services can establish an accessible, inclusive, and responsive feedback system, empowering the public to contribute to ongoing service enhancements.

## **Design Thinking**

The GovTech agency, standing at the forefront of bringing technological transformation, draws inspiration from the process of design thinking. Design thinking is a design philosophy that emphasises solving problems from a human-centered perspective, to thoroughly understand the needs and perspectives of the end-users to devise innovative and effective solutions. For instance, empathising with the public made it known that people had to go through a cumbersome process of authentication and verification at every point to avail a service. Furthermore, the inconvenience of carrying the same documentation only exacerbated this issue.

Through this, it was known that the root cause of this problem was the unavailability of a single consolidated portal through which the process of authentication could be made less tedious. There was a need for an innovative solution to address this issue.

Hence, the NDI project was launched. It underwent various testing phases until the digital wallet was completed. This wallet now enables individuals to verify their identity digitally, removing the need for physical presence or

<sup>8</sup> BrandEquity, E. (2020, October 7). Opinion: Building a customer-centric ecosystem through memorable experiences. ETBrandEquity.com.



paper documentation. The GovTech Agency's adoption of design thinking principles in its projects ensures a user-friendly, iterative, and innovative approach to problem-solving leading to an efficient, effective, responsive, accountable, and transparent governance structure.

## Conclusion

GovTech's mission to establish a technologically effective and efficient government, transform public services with citizens at the core, and create a safe and thriving digital economy is driving significant changes in Bhutan's governance landscape. Through initiatives such as data governance enhancement, digital service transformation, and automation of processes, GovTech is revolutionising service delivery. By consolidating government platforms and leveraging technology, GovTech is ensuring that services are more accessible, reliable, efficient, and citizen-centric. This approach, rooted in design thinking principles, fosters transparency, accountability, and responsiveness to citizens' needs. As a result, GovTech is leading Bhutan towards a future where government operations are streamlined, innovative, and inclusive, ultimately fulfilling its vision of a technologically advanced nation with empowered citizens and a thriving digital economy. Through continuous innovation and collaboration, GovTech is reshaping the government's role, making it more responsive and effective in meeting the evolving demands of society while contributing to the well-being and happiness of the Bhutanese people in the digital age.

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