

The Role of Smart Citizens in Building a Smart Bangladesh: Challenges and the Way Forward

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ABSTRACT

Bangladesh's government aims to achieve smart country and sustainable city status by 2041 through the vital topic of smart Bangladesh. This study investigates the crucial role of citizens in the journey towards building a smart Bangladesh, with a focus on analyzing factors influencing citizen participation and addressing challenges to realize the Vision of 2041. Applying a quantitative approach based on positivism philosophy, the research adopts an exploratory research design. A multi-method data collection approach integrates both primary and secondary sources, leveraging close-ended questionnaires executed through various channels, including social media platforms, email, and Google Forms. Additionally, secondary sources such as books, journals, research articles, and reports enhance the extensive data pool. The study covers all eight administrative divisions (Dhaka, Chittagong, Rajshahi, Barishal, Khulna, Rangpur, Sylhet and Mymensingh) of Bangladesh, with a total of 250 respondents randomly chosen from the general population. As no prior research on this particular issue exists, the study fills a critical gap in understanding the role of citizen engagement in shaping a smart Bangladesh. Adhering to social science research conduct and instructions, the research assures integrity and reliability throughout the data collection and analysis process. Findings from this study are expected to shed light on the factors

Keywords: Smart citizen, Smart Bangladesh, vision 2041

1. Introduction

The incredible Smart Bangladesh Dream 2041 map aims to make Bangladesh a smart nation by 2041, moving from a digital Bangladesh (Pal & Sarkar, 2022). At the end of the session, specific projects that could be accomplished in the different level of timeframe (short, medium, and long terms) while taking everything into account have been added. There are four pillars (Smart citizens, smart government, society, and smart economy) of smart Bangladesh, and forty-five megaprojects will be completed for this reason (Sarkar, 2022). A movement plan with a set deadline is prospective for achieving each pillar. Furthermore, in order to transform Bangladesh into a developed nation, each of these projects is necessary for a viable society, a thriving economy, and a sus-tainable ecosystem (Sarkar, 2022). SMART Bangladesh is a well-established smart economy, smart society, smart government, and smart citizens that encompass all Bangladeshis (A2i, 2022). Through the creation and imple-mentation of acceptable digital solutions, it seeks to bridge the digital divide for all people and organizations, irrespective of their level of socioeconomic status (a2i, 2022). Further, expanding on the foundation created by Digital Bangladesh, SMART Bangladesh is the next big step towards realizing Bangabandhu’s vision of “Shonar Bangladesh” or Glorious Bangladesh (A2i, 2022). Financial decisions will be made in this environment by using technology; the government will be technologically savvy; everyone in society will be able to use technology; and society will be intelligent (UNB, 2022). It is essential to possess visionary understanding for accurate imple-mentation of this knowledge (Udo-Akang, 2012; Yu et al., 2015). Consequently, the realization of smart Bang-ladesh View 2041 depends on the notion of a smart Bangladesh. Finally, this study assesses the various activities aimed at achieving smart Bangladesh, its intellectual spheres, and a few related challenges that are necessary for it sustainable growth.

2. Materials and Methods

The study has been conducted a quantitative approach on the basis of the positivism philosophy, where an ex-ploratory research approach has been applied. It employed multi – method data collection methods and tech-niques. Primary and source was used to collect required data and information for serving the study purpose. Primary data has been collected from the field through close-ended questionnaire were used to collect survey data. The data collection survey was conducted using multiple tools and techniques such as social media plat-forms, e-mail and google form. Therefore, to attain the principal objective of the study, the quantitative method has been applied in an exploratory manner. However, survey data has been collected from the 8 divisions (Dhaka, Mymensingh, Rangpur, Khulna, Barisal, Sylhet, Rajshahi and Chittagong) in

Bangladesh. A total of 250 respondents from 8 divisions of Bangladesh took part in survey. Similarly, it is worth mentioning that the respondents were general people who belonged to the selected study area and researchers selected them randomly. Microsoft Excel tools was used for data analysis due to its accessibility, user-friendly interface, and powerful features. Finally, the study complied the social science research ethics and guideline from data collection to complication.

3. Review of Literature

3.1 The impact of smart citizen in building Smart Bangladesh.

Smart leadership is required. Each member of parliament (MP) will play a crucial part in reaching the milestones of Smart Bangladesh, including the creation of pertinent infrastructure and digital technology that can be utilized to boost revenue, given their legislative and oversight responsibilities (Shahabuddin, 2023). Encouraging people to put “digital first” in their thinking through campaigns and the implementation of extensive digital literacy programs is the smart citizen goal for the people of Bangladesh. Digital tools like smartphones and the internet will be used by these people to get information (Kabir, 2023). Individuals who use innovation and technology to improve their own lives and the lives of people around them are known as smart citizens. They use digital technology, such the internet and mobile devices, proactively to get information, interact with their communities, and enhance their quality of life. As active participants in the digital economy, smart citizens use technology to connect with businesses, access services, and make well-informed decisions. They shop, handle their money, and take part in the sharing economy through smartphone apps and online platforms (Rony, n.d.). Through the implementation of extensive digital literacy initiatives and campaigns, the Smart Citizen Pillar seeks to empower Bangladeshi Individuals with a digital-first mentality. The digitally adept citizens of 2041 will not only be fully integrated into their daily lives, but they will also work in concert with business and government to co-create policies and services. Four major initiatives—the Smart Bangladesh Campaign, digital collaboration platforms, citizen upskilling, and universal digital ID—make up this pillar (Rahman, 2023). Smart Bangladesh’s primary priority is to develop skilled human resources. Bangladesh is going along the path of development with the goal of providing its youth with technical education in addition to certificate-based education, therefore training them in human resources (Kabir, 2023).

3.2 Factors & Initiatives of Smart Citizens

Smart citizens are those who engage with the ecosystem of a smart city through technology, solve local issues, and participate in decision-making (IGI Global, 2022). On the other hand, Smart Citizenship provides communities with the information and tools necessary to support citizen participation in gathering, locating, and acting upon data (Smart Citizen, 2022). Lim et al. (2018) narrated in their studies that they have

selected five behaviors and roles to define, such as active, independent, educated, and creating public values; for the roles, smart citizens could become aware entrepreneurs, human sensors, experts, skilled, etc. But there has been no discussion about the Internet of Things (IoT), critical problem solvers, etc. A smart citizen must be knowledge-based and cooperative. Bayar (2017) stated that being a smart citizen is making use of all the services that have been enhanced by social, cultural, and technical factors. This paper focused only smart citizen's improvement area but first of all we need to build smart citizens. Hennig et al. (2014) narrated in their studies that Smart Cities Need Smart Citizens. This paper focuses on the experience and results gained from the various projects under development. The project is still under way, but the work done until now already provides a vast range of information on smart citizens, which is also interesting for smart town initiatives. Maxwell (2022) explained that people who actively and voluntarily participate in the process of creating a better world are considered smart citizens. Through the resolution of specific urban, societal, or municipal issues, he or she advances the development of smarter cities as an individual expert or by initiating new legal entities like associations or loose project consortiums. Shankar (2016b) stated in his thesis that an ethically responsible citizen is one who upholds the law. When individuals are aware of clever solutions, they become really smart citizens. The local governments of our smart cities will invest heavily in smart solutions, but they are unable to cut corners when it comes to trying to inform the people about how to use these services and solutions effectively.

3.3 Challenges and prospects for smart citizens in achieving the vision of 2041

Bangladesh's economic development has been on track with the rest of the globe, but the sudden arrival of the global pandemic has made the recession much worse. Our economic progress has also been severely damaged by the persistent drought, flooding, and severe poverty challenges (Akter, 2022). This could have a significant effect on achieving smart Bangladesh. This unit covers both digital literacy deficiencies and illiteracy. Furthermore, illiterate people in rural areas are less likely to receive guidance or support on how to use digital services for their economic growth (Kos-Labedowicz, 2017), which could present significant obstacles to realizing Bangladesh's smart city vision. The report (2023) stated that we must produce smart citizens for a smart Bangladesh. The goal of this statement is to create smart citizens who will tackle any obstacle and be proactive. The limitation is the lack of proper statement to implement this announcement. So, must be follow the specific statement to implement. While there is a growing body of research on smart cities and the adoption of innovative technology in urban areas, there is a notable lack of research addressing the specific challenges and opportunities associated with the concept of a smart citizen and building a "Smart Bangladesh" to advance the socioeconomic development of the country. Although there is growing global interest in smart city initiatives, there needs to be more research on the role of smart citizens in designing and contributing to the

development of smart Bangladesh. This study aims to bridge the divide by highlighting the challenges and potential benefits of encouraging citizen participation in creating a smart Bangladesh. This research contributes to our comprehension of the role of the smart citizen in creating a smart Bangladesh by shedding light on the challenges and opportunities they present.

4. Data Analysis

Data analysis is a significant step in research that implies sequentially using statistical, computational, and mathematical methods to evaluate, clean, convert, and model data (BABBIE, 2011). It frequently combines both qualitative and quantitative techniques to ensure an extensive understanding of the obtained data and its implications (Haining & Haining, 1993).

Table 1: Profile of the Respondents

Particular	Frequency	Percentages
	Gender	
Male	150	60%
Female	100	40%
Age Category		
15-24	155	62%
25-34	75	30%
More than 35 years	20	8%
Educational Qualifications		
HSC	40	16%
Undergraduate	135	54%
Graduate	75	30%
Total	250	100%

Note. From Field Survey, June 2024'

In the survey with 250 respondents, 60% ($n = 150$) were male and 40% ($n = 100$) were female. The majority, 62%, fell in the 15–24 age group, adhered to by 30% in the 25–34 range, and 8% were over 35. Furthermore, 54% of respondents ($n = 135$) were undergraduates, 30% of respondents ($n = 75$) were graduates, and 16% of respondents ($n = 40$) had an HSC-level education. The data was composed across eight divisions through a random choice process, helping to ensure a smooth data collection experience and basically contributing to the concept of transforming Bangladesh into a smart Bangladesh.

Table 2: Location of the study

Divisions	Frequency	Percentages
Dhaka	50	20%
Mymensingh	50	20%
Rangpur	30	12%
Khulna	25	10%
Barishal	30	12%
Sylhet	20	8%
Rajshahi	20	8%
Chittagong	25	10%
Total	250	100%

Note. From Field Survey, June 2024’

The above-mentioned table shows that there are 250 respondents for this questionnaire. Among them, 20% frequency (n = 50) collected from Dhaka and Mymensingh. Second equal majority frequency (n = 30) collected from Rangpur and Barishal at 12%. Again, equal frequency (n = 25) collected from Khulna and Chittagong at 10%. Furthermore, equal frequency (n = 20) was collected from Rajshahi and Sylhet at 8%, respectively.

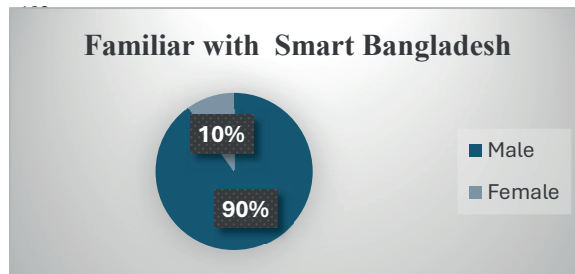


Figure 1: People familiar with Smart Bangladesh

Note. From Field Survey, June 2024’

Out of 250 respondents, 90% respondents (n=225) are familiar with Smart Bangladesh, whereas 10% respondents (n=25) are not. This shows a critical awareness and recognition of Smart Bangladesh among the surveyed people, displaying a positive impact and engagement with the initiative. The information recommends that most of the sample population is well-versed or informed about the concept.

Table 3: The first priority-based pillar of Smart Bangladesh

Particular	Frequency	Percentages
Smart Citizens	175	70%
Smart Government	35	14%
Smart Economy	25	10%
Smart Society	15	6%
Total	250	100%

‘Note. From Field Survey, June 2024’

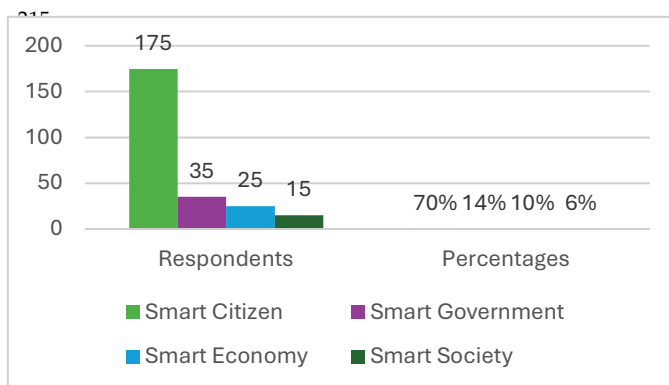


Figure 2: Priority based pillar of Smart Bangladesh

‘Note. From Field Survey, June 2024’

In the Smart Bangladesh ambition’s first pillar, Smart Citizens, takes the focus of interest with a significant frequency of (n = 175), forming 70% of the total. This focal point places a strong emphasis on enabling and including citizens in the smart development process. Following closely, smart government is identified as a priority, accompanying 35 instances and making up 14%, showcasing the importance of effective public administration. The Smart Economy area holds a 10% (n = 25) share, indicating a strategic focus on economic aspects. Lastly, Smart Society, contributing 6% (n = 15), reflects efforts towards building a united and interconnected community. This allocation illustrates the deliberate prioritization within the first pillar, emphasizing the important role of engaged citizens and active governance in forming a smarter Bangladesh.

Table 4: The influential key factors of Smart Citizen

Particular	Frequency	Percentages
Sustainable practice	25	10%
Promoting digital literacy	115	46%
Creating platform for engagement	15	6%
Civic education	45	18%
Lifelong learning	10	4%
Responsible digital citizenship	15	6%
Active participation	25	10%
Total	250	100%

‘Note. From Field Survey, June 2024’

Outlines the key factors contributing to Smart Citizen initiatives. Among these, advancing digital literacy takes the lead with 46%, showcasing a broad acknowledgment of the significance of tech-savvy communities. Sustainable practices take after at 10%, emphasizing environmental consciousness. Creating platforms for engagement (6%) implies the desire for interactive spaces, whereas civic education (18%) underlines the commitment to educated citizenship. Lifelong learning (4%) and responsible digital citizenship (6%) exhibit a balanced approach. Active participation (10%) is significant, demonstrating the community's enthusiasm to be included. Overall, these factors, totaling 250 instances, reflect a comprehensive strategy for fostering a dynamic and informed Smart Citizen.

Table 5: Attachment of Smart Bangladesh with four pillars

Particular	Respondents	Percentages
Strongly agree	30	12%
Agree	185	74%
Strongly disagree	15	6%
Disagree	20	8%
Total	250	100%

‘Note. From Field Survey, June 2024’

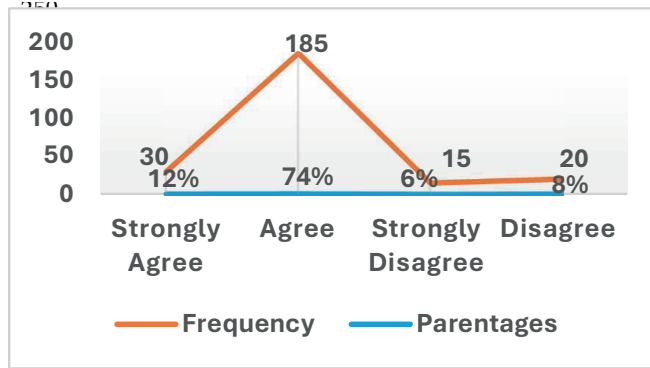


Figure 3: Attachment of Smart Bangladesh with four pillars

‘Note. From Field Survey, June 2024’

Demonstrate the connection of smart citizens with the three pillars. The data uncovers a positive engagement, with 74% of respondents (n = 185) expressing agreement and 12% of respondents (n = 30) strongly agreeing. Alter-nately, as it were, 8% of respondents (n = 20) disagreed and 6% of respondents (n = 15) strongly disagreed, reflecting, for the most part, a favorable attitude. The table underscores the alignment of smart citizens with the pillars, emphasizing a strong agreement among the surveyed 250 respondents.

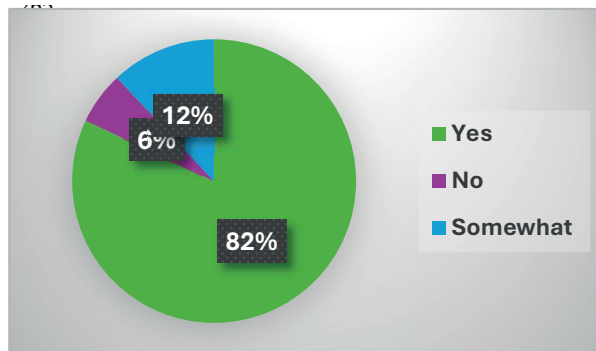


Figure 4: The government capacity that ensure to Smart Bangladesh

‘Note. From Field Survey, June 2024’

Illustrates that there are 250 respondents to this questionnaire. Among them, 82% (n = 205) believe that the government empowerment rate can ensure smart Bangladesh. After 12% frequency (n = 30), some people believe that governments can ensure smart Bangladesh, and the rest, out of 6% frequency (n = 15), do not believe that government empowerment can ensure smart Bangladesh.

Table 6: Implementation challenges of Smart Bangladesh

Challenges	Frequency	Percentages
Population growth	105	42%
Cybersecurity and data Privacy	15	6%
Insufficient funding and resource	45	18%
Economic Inequality	15	6%
Lack of data security and privacy	20	8%
Rapid Urbanization	5	2%
Lack of skill workforce	10	4%
Limited access to internet	35	14%
Total	250	100%

‘Note. From Field Survey, June 2024’

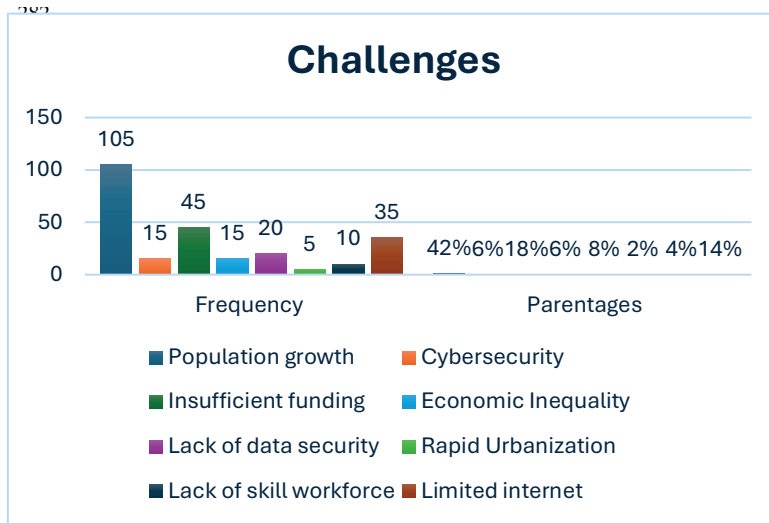


Figure 5: Challenges of Smart Bangladesh

‘Note. From Field Survey, June 2024’

Smart Bangladesh is dealing with multiple obstacles. 42% of respondents identified the rapid population rise as their most pressing issue. Infrastructure and resources are under tremendous strain as a result. Cybersecurity and data privacy (6%), which require strong measures to protect sensitive data, are critical challenges. The lack of funds and resources (18%), which hinders progress attempts, is another urgent issue. Further obstacles include economic inequality (6%) and the associated lack of

data security and privacy (8%). Urban areas are under duress from the 2 percent rate of rapid urbanization and the 4 percent rate of skilled worker shortages. The nation's limited growth in technology is further hampered by the 14% lack of affordable internet service availability. It is essential to address these issues if Bangladesh is to become genuinely smart.

Table 7: Priority areas that can build a smart Bangladesh

Particular	Frequency	Percentages
To ensure proper education	105	42%
To promote digital literacy	45	18%
Ensure funding and resources	65	26%
Sustainable Development	15	6%
Lifelong learning	20	8%
Total	250	100%

‘Note. From Field Survey, June 2024’

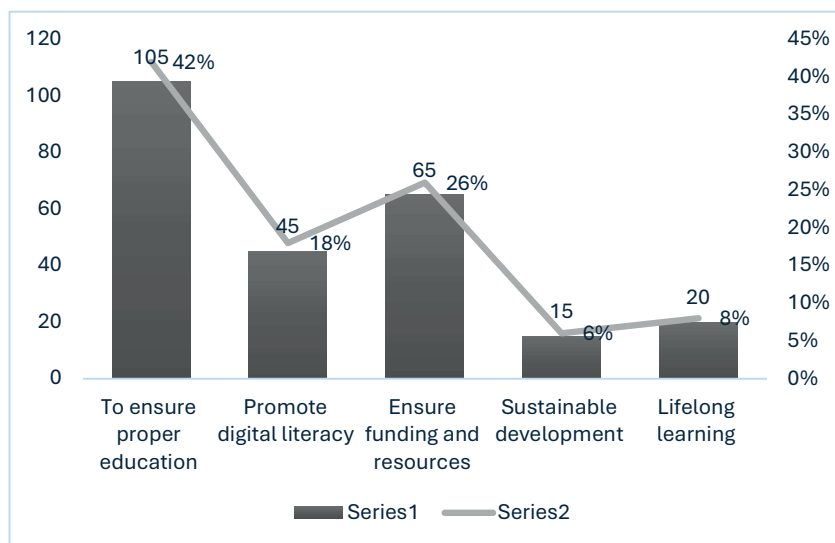


Figure 5: The government capacity that ensure to Smart Bangladesh

‘Note. From Field Survey, June 2024’

The above-mentioned table shows that there are 250 respondents for this questionnaire. Among them, 42% (n = 105) believe that to ensure proper education, it is the major improvement area needed to build a smart Bangladesh. Furthermore, 26% (n = 65), 18% (n = 45), 8% (n = 20), and 6% (n = 15) vote for ensuring funding and resources, promoting digital literacy, lifelong learning, and sustainable development, respectively.

5. Result and Discussion:

After examining the results of the questionnaire and other analyses, a significant correlation has been found between smart citizens and smart Bangladesh. The dependent variable, smart Bangladesh, will have much more dependency on smart citizens for the purpose of making smart Bangladesh. The main findings are that smart citizens are positively associated with smart Bangladesh. Out of the 250 respondents, 90% are familiar with Smart Bangladesh, and 86% are concerned with the pillars of Smart Bangladesh, respectively. 70% respondents believed that smart citizens were the priority-based first pillar. Genuine citizen participation in the provision of information and feedback gives access to the expertise and abilities of all actors and stakeholders, enhancing processes and giving the process more validity. The article also finds there are many challenges faced by Bangladesh in forming Smart Bangladesh, like lack of skill and knowledge, data privacy, and cyber security. Limited access to the internet, insufficient funding and resources, and economic inequality and finally, this study recommends some miscellaneous initiatives encouraging the use of ICT in miscellaneous areas such as digital literacy, quality of public services, continuing to invest in technology, investing in infrastructure, investing in education, creating a favorable business environment, and creating programs to overcome those problems.

6. Challenges of the study:

6.1 Education and skills development: In modern countries, it is also a big challenge because every person must have a proper education and skill development study so that they can handle any critical situation. A skilled workforce is the main wealth of any nation. Promoting education and training in technology-related fields and encouraging innovation will be crucial for the successful implementation of smart Bangladesh.

6.2 Regulatory framework: The absence of or outdated regulations is a very effective and important barrier to Smart Bangladesh because every public or private program depends on its specific regulatory framework so that it can easily lead to a successful program.

6.3 Lack of digital divide: Urban areas may have access to advanced technologies, whereas rural areas lack infrastructure and digital literacy, leading to a digital divide. It must promote equitable access to technology, and bridging this gap is crucial for the success of a smart Bangladesh. There is a large digital divide between urban and rural areas, with rural areas lagging behind in access to ICT infrastructure and services (Sun, 2023). The calculation of this study showed that 55% of respondents voted for this challenge. Shortage of qualified workers: The lack of skilled professionals in fields such as IT, engineering, and data analysis is a major obstacle to the development and implementation of smart technologies (Ahmed, 2023).

- 6.4 Limited foundation improvement:** Bangladesh faces framework challenges within the areas of transportation, communications, and vitality supply. Creating and maintaining the framework required for clever innovation can be exorbitant and time-consuming. For example, the moderate infiltration of high-speed web within the nation may prevent the sending of savvy city arrangements and computerized administrations in country regions.
- 6.5 Lack of protection and security:** Security and security have gotten to be major concerns with the utilization of advanced administrations. These two terms are very important to any public or private program or organization. It is also a big threat to Smart Bangladesh because most of the analysis or work depends on her data privacy. So we need to clear rules and regulations to ensure all data privacy (Ahmed, 2023).
- 6.6 Underdeveloped infrastructure development:** To build a smart nation, it requires a robust and digital infrastructure, including electricity, high-speed internet services, and a modern transportation system. Finally, it is a significant challenge, especially in rural areas (Ahmed, 2023).
- 6.7 Cybersecurity:** As digital technologies become more connected, the risk of cyber threats and cyberattacks is increasing day by day. It is a big threat to smart Bangladesh. Cybersecurity measures urgently need to be implemented to protect critical infrastructure, data, and citizens' privacy from potential breaches and attacks. Bangladesh is becoming increasingly connected and faces increasing cyber security threats, such as cyberattacks and data breaches.
- 6.8 Inefficient funding and investment:** To build a smart nation, we need to make long-term financial investments. Every program or project depends on its financial investment, which plays a significant role in ensuring sustainability (Ahmed, 2023).

7. Conclusion & Recommendations of the study:

7.1 Conclusion: Smart Bangladesh is a bright dream for the future of Bangladesh. The government of Bangladesh commit critical progress in current age, but skilled is still much work expected accomplished. If Bangladesh can overcome allure challenges and impose upon glamour event, Before Smart Bangladesh can come into being. The future of Smart Bangladesh is outstanding. The government of Bangladesh has a clear aspect for the future, and it is making important progress in accomplishing allure aims. Accompanying advanced contribution in science, instruction, and framework, Bangladesh is well on the way to becoming a Smart Bangladesh. An all-inclusive strategy called Smart Bangladesh Vision 2041 seeks to transform Bangladesh into a prosperous and developed nation by the year 2041. The vision is created on six mainstays financial growth, human capital incident, government, energy and surroundings, connectedness and urbanization, and domestic security. The management has recognized various priority districts for operation to achieve

these aims that contain investment in foundation, instruction, healthcare, and social guardianship programs; publicity of enterprise and innovation; change of continual beginnings of energy; bettering of transport infrastructure; and encouraging of police officer’s powers. The Smart Bangladesh initiative is a modern program that has the potential to transform the country’s overall evolution. It is imperative that people understand the significance of this initiative and how technology will shape Bangladesh’s future. Smart Bangladesh shows a broad and complete approach to automated revolution. It identifies the interrelation of different views of people and the saving and inquires to influence technology and change to drive progress thoroughly areas. By attracting on foundation growth, government and public duties, human capital incident, mathematical enterprise, evidence-compelled administrative, sustainability, and cyber security. Smart Bangladesh has the potential to transform the country into a colorful and successful digital saving that can equate highest in rank in the experience.

7.2 Recommendations of the Study

7.3 Prospective Implementation Projects of Smart Bangladesh

Implementation ⇨ Perpetuation ⇨ Standardization ⇨ Transition

2023 to 2025	2023-2024 to 2031	2023-2024 to 2041
Digital Job Platform, National Procurement E-Market, ICT Policy (Information Privacy and Cyber Security, Bangla Digital Skills Development, Trade Facilitation), Smart Public Service and Paperless Administration, Government Cloud	Smart Device Access, Digital Collaboration Platform Universal Digital ID, Smart Bangla Campaign, Digital Curriculum, Smart Healthcare, Smart Tax, Blended Learning, Digital Leadership Academy.	Smart Land Management, Smart Postal Service, Smart Judiciary, Smart Borders, Smart Social Safety Net, Police Modernization, Inclusive Financial Ecosystem, FinTech Accelerator, Center of Excellence (COE) for Emerging Technologies.

Smart Bangladesh 2041

⇨

Figure 1. Smart Bangladesh: Vision and Reality (Developed by Authors, 2023)

7.4 Initiatives toward Smart Bangladesh

One Student, One Laptop, One Dream	One Student, One Laptop, One Dream that will be achieved by the area of Secondary and Higher Education.
Self-employment based training	Self-employment-based exercise programs under the Digital Inclusion for Vulnerable Exceptions-DIVE initiative to build an all-encompassing digital society
Digital Leadership Academy	Digital Leadership Academy Establishing of Digital Leadership Institute to build a smart and universal government. It will be executed respectively Information Technology Area.
Smart education framework	Will focus on five claims: teaching-knowledge practices, content and estate, formative evaluation, teacher professional progress and integrated research.
Internet access to last-mile citizens	Internet access for last-mile citizens means roads utilizing artificial intelligence (AI) and information management.
Smart service delivery	S-M-A-R-T place, S signifies social to co-generate services, M for mobility, a for analysis of miscellaneous administrative fields, R for radical opens of government assistance, and T for trust in high-tech privilege for guaranteeing protection.
Knowledge based economy and innovative nation	Make Bangladesh a globally innovative and knowledge-based economy. The nation's information technology department will carry it out.
Waste management in Bangladesh	Waste's place will be affected by using representation detection technology and developing connected processes and a legal framework.

'Note. Developed by authors, June 2024'

There are initiatives and projects ongoing in Bangladesh that are aimed at advancing the use of science and change to drive growth. By leveraging the capacity of technology and innovation, it is believed that Bangladesh can develop into a manager in the area and a model for different nations to admire and advance continuous growth and progress through the use of technology. In this guide, we will investigate the miscellaneous initiatives and programs that the administration has achieved or plans to implement to achieve the aims of Smart Bangladesh (DMahbub, 2023).

7.5 To build smart cities and smart villages: It is a very effective element of Smart Bangladesh to grow up smart capitals and villages. This includes achieving smart city answers such as smart conveyance wholes, smart potential systems, and smart waste control wholes, in addition to developing e-government schemes to upgrade the delivery of public aid (DMahbub, 2023).

7.6 Encouraging the use of ICT in miscellaneous areas: The government is further hopeful about the use of ICT in different sectors of frugality, to a degree, healthcare, instruction, farming, and finance. This includes achieving computerized healing records, digitizing educational fabrics, utilizing accuracy in agriculture sciences, and advancing connected to the internet financial aid (DMahbub, 2023).

7.7 Continue to invest in technology and research: Technology is the key to improving the competence and capability of management aids, empowering settlers, and establishing a livable standard of living. In modern countries, technology is a very effective and essential part of any program, project, or organization. Finally, continue to invest in technology in order to build a smart Bangladesh (Ahmed, 2023). Bangladesh needs to invest in research and development to promote change and expand new technologies that can drive financial development and develop the characteristics of the lives of its citizens (Ahmed, 2023).

7.8 Invest in education and infrastructure: A well-informed community is essential for a smart Bangladesh. The administration needs in the second place to invest in instruction, from the early period of being young instruction to university. This platform is very essential for any modern nation. Most modern nations have a sustainable educational platform; that's why they succeed (Ahmed, 2023). A powerful foundation is essential for a smart Bangladesh. In the second place, the administration needs to invest in roads, bridges, airports, and additional foundations. This platform is also important for smart Bangladesh. Most developed countries have a specific budget for infrastructure so that they can improve their destiny (Sun, 2023).

7.9 Young population, economy, location and developing infrastructure: Bangladesh has a lot of young people. The middle age in Bangladesh is 27. This means that Bangladesh has an abundant pool of potential traders (Ahmed, 2023). Bangladesh's savings are increasing at a brisk pace. The GDP tumor rate in Bangladesh has been balancing over 6% for the past few years. Bangladesh is situated in a crucial position. The country is at the intersection of South Asia, Southeast Asia, and East Asia. That's why it is a big opportunity to build smart Bangladesh (Ahmed, 2023). Bangladesh needs to invest in building a healthy automated foundation, including rapid broadband networks, predictable capacity supply, and knowledge centers.

7.10 Developing human capital & PPPs: Bangladesh needs to invest in expanding skilled and trained workers in areas such as IT, manufacturing, and evidence analysis. Developing policy and regulatory framework: Bangladesh needs to establish clear procedures and regulations to advance the incident and maintenance of smart technologies, save dossier solitude, and guarantee cyber security. Bangladesh needs to advance cooperation enclosed by all and the private sectors to expand and implement smart sciences. This platform must be improved to be built for Smart Bangladesh (HigherStudy.org, 2023).

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