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Conceptualizing Sustainable Smart Country: Understanding Its Dependency on Smart Security Structure.

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Abstract--- This paper explores the concept of a sustainable smart country and its dependence on smart security structures. It aims to understand the relationship between sustainable development and smart security and how the latter can contribute to the former. The paper defines a sustainable smart country and its key features, examines the role of smart security in achieving sustainable development goals, and analyzes the challenges and opportunities associated with implementing a smart security structure in a sustainable smart country. The research methodology involves a comprehensive literature review of relevant academic and policy sources. The findings will contribute to the ongoing debate on the role of smart security in sustainable development and provide insights for policymakers, researchers, and practitioners. It summarizes the study's purpose, basic design, major findings, interpretations, and conclusions. The research methodology is also highlighted, and the study's potential contribution to the ongoing debate on smart security in sustainable development is highlighted.

Keywords: Smart Country, Smart Citizen, Smart Government, Smart City, Smart Security

INTRODUCTION

1.1 BACKGROUND

The concept of a smart city is gaining popularity worldwide as it uses advanced technologies and data analytics to enhance the quality of life for its citizens, improve sustainability, and streamline urban services (De Waal & Dignum, 2017). Sustainability is crucial in balancing economic, social, and environmental factors to ensure a livable city for current and future generations (Grenčíková et al., 2021). Smart security is an essential component of a smart city, ensuring the safety and security of citizens and their property. The dependency of a sustainable smart country on a smart security structure is crucial, as it includes surveillance systems, emergency response systems, and cybersecurity measures (Robisson et al., 2017). The security structure should be designed to be resilient and adaptable to changing threats and risks.

Understanding the dependency of a sustainable smart country on a smart security structure is important for policymakers, urban planners, and researchers (Badshah et al., 2019). Key factors to consider when conceptualizing a sustainable smart country dependent on smart security include integrating smart security with other components like transportation, energy, and waste management, protecting privacy and data through encryption, secure data storage, and access controls, fostering collaboration and partnerships between government agencies, private sector organizations, and citizens, incorporating risk assessment and management into the smart security structure, and developing education and awareness programs to educate citizens about the importance of smart security and how they can contribute to it (Ravi et al., 2022).

1.2 FORMULATION OF THE PROBLEM

The concept of a smart city has gained popularity in recent years, with cities worldwide striving to become more sustainable by developing innovative technologies and infrastructure. However, the implementation of smart cities raises concerns about security and privacy (Cledou, 2014). This study aims to conceptualize a sustainable smart country and understand its dependency on a smart security structure. The study will conduct a comprehensive literature review and synthesis of existing research on sustainable smart cities, their security and privacy concerns, and the challenges and opportunities in implementing them. It will use three organizational approaches: thematic, inverted pyramid, and benchmark studies. The literature review will cover general and particular research strands, deficiencies, and potentials regarding sustainability, as well as smarter cities in terms of characteristic features, social shaping dimensions, and current issues and future potentials for sustainability (Denuwara et al., 2021). The study will also review the security and privacy concerns of smart cities, including main security challenges such as data sharing and mining, mashup data, cloud security, secondary use of collected data, and threats of artificial intelligence.

A sustainable smart country should have a robust and efficient infrastructure powered by innovative technologies like the Internet of Things (IoT), artificial intelligence (AI), and blockchain. It should also have a reliable and sustainable energy supply powered by renewable sources like solar, wind, and hydro power. A smart and sustainable transportation system powered by electric and autonomous vehicles is also essential (Kim & Kim, 2021). The study will identify the challenges and opportunities in implementing a sustainable smart country, such as privacy and security concerns, infrastructure and resource constraints, and social and cultural factors that may affect citizens' willingness to adopt innovative technologies. In conclusion, the study aims to conceptualize a sustainable smart country and understand its dependency on a smart security structure. It will conduct a comprehensive literature review and synthesis of existing research on sustainable smart cities, identify key features of a sustainable smart country, and provide recommendations for addressing these challenges and opportunities.

1.3 RESEARCH PURPOSES AND BENEFITS

This research aims to define a sustainable smart country and understand its dependency on a smart security structure (Wortman & Chandy, 2020). It will define the concept of a sustainable smart country, identify key features, and analyze the role of smart security structure in a sustainable smart country. The research will also analyze the challenges and opportunities of implementing a sustainable smart country, identifying barriers and exploring opportunities. The research will propose a framework for a sustainable smart country, providing a roadmap for policymakers and stakeholders to implement a smart country and identifying key components of a smart security structure (Prasad et al., 2020). It will also contribute to the literature on sustainable smart cities and countries, providing insights into the concept of a sustainable smart country and the role of smart security structure in achieving sustainability. The benefits of this research include providing policymakers and stakeholders with a better understanding of the concept of a sustainable smart country, identifying the challenges and opportunities of implementing a sustainable smart country, and contributing to the literature on sustainable smart cities and countries.

LITERATURE REVIEW

The concept of smart cities (Pontiki et al., 2017) has been gaining popularity in recent years, with many cities around the world adopting smart technologies to improve their efficiency, sustainability, and livability. However, as cities become more connected and data-driven, concerns about security and privacy have also increased. This literature review aims to explore the relationship between smart security structures and sustainable smart cities (Saxena & Varshney, 2021).

Smart cities are defined as urban areas that use advanced technologies and data analytics to improve the quality of life for their citizens. These technologies can be used to optimize transportation, energy consumption, waste management, and other city services (Karl et al., 2020). However, the concept of smart cities is still evolving, and there is no consensus on what constitutes a smart city.

Sustainability is a key aspect of smart cities (Errichiello & Micera, 2018), as they aim to reduce their environmental impact and promote social and economic development. Sustainable smart cities are those that use smart technologies to achieve sustainability goals, such as reducing greenhouse gas emissions, improving air quality, and promoting renewable energy. However, the relationship between smart technologies and sustainability is complex, and there are trade-offs between efficiency and sustainability (Grenčíková et al., 2021).

Smart security structures are an essential component of smart cities, as they help to protect citizens and their data (Muhajjar et al., 2023). These structures include cybersecurity measures, surveillance systems, and emergency response systems. However, there are concerns about the potential misuse of these technologies, such as the violation of privacy and civil liberties. (Li, 2012) focuses on the security system of the urban management platform based on the smart city concept, emphasizing the need for a land information resource system. (Lim, 2016) proposes a security architecture for data protection in smart grid systems, aiming to prevent data corruption and ensure reliable service. (Hosseinzadeh, 2016) introduces a semantic security system and a role-based and elegant access control system to secure smart spaces, with an emphasis on information security and privacy protection. (Sengan, 2020) explores the improvement of physical systems of cyber and smart cities through hybrid smart city cybersecurity architecture, addressing cybersecurity concerns and proposing different approaches for data protection and service delivery. In summary, these cumulative reports highlight the importance of establishing strong security architectures and smart civil systems to protect information resources, ensure data integrity, protect privacy, and address cybersecurity challenges away.

The concept of a sustainable smart country is an extension of the smart city concept (Laufs et al., 2020), where the focus is on using smart technologies to improve the sustainability of an entire country. This requires a holistic approach that considers the social, economic, and environmental aspects of sustainability. Smart security structures are an essential component of a sustainable smart country, as they help to protect citizens and their data. However, it is important to ensure that these structures are designed and implemented in a way that respects privacy and civil liberties.

In conclusion, the concept of a sustainable smart country requires a holistic approach that considers the social, economic, and environmental aspects of sustainability. Smart security structures are an essential component of a sustainable smart country, but it is important to ensure that they are designed and implemented in a way that respects privacy and civil liberties. As the concept of smart cities continues to evolve, it is important to consider the potential trade-offs between efficiency and sustainability, and to ensure that smart technologies are used in a way that benefits all citizens.

Table 1. Taxonomy of Research Literature

Paper	Summary
	A security system of information resources is required for city management platform.
Security Structure Study of City Management Platform Based on Cloud Computing under the Conception of Smart City	
Wang Li +2	
2012 Fourth International Conference on Multimedia Information Networking and Security	
2012	
23 citations	
	A security system architecture to provide the secure and reliable smart grid service detects a false data injection attack and further prevents a denial of service attack efficiently with less overhead for the individual devices comprising the smart grid system.
Security system architecture for data integrity based on a virtual smart meter overlay in a smart grid system	
Jiyoung Lim +2	
Soft Comput.	
2016	
7 citations	
	The proposed access control scheme produces low overhead and is therefore an efficient approach for smart spaces.
A semantic security framework and context-aware role-based access control ontology for smart spaces	
Shohreh Hosseinzadeh +3	
SBD '16	

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2016	
33 citations	
	A context-specific safety setup for conventional cyber-physical systems is recommended.
Enhancing cyber-physical systems with hybrid smart city cyber security architecture for secure public data-smart network	
Sudhakar Sengan +5	
Future Gener. Comput. Syst.	
2020	
26 citations	
	A smart security system based on HTML5 gateway and UDP has fingerprint recognition, password control, voice, remote control, user interface, HTML5 monitoring page multi-device login, touch buttons and other functions.
Design of Smart Security System Based on Hyper Text Markup Language 5 Gateway	
Wenwen Dou +4	
2020 5th International Conference on Mechanical, Control and Computer Engineering (ICMCCE)	
2020	
0 citations	
	A password is set for the access of all sensors.
Smart Security for an Organization based on IoT	
M. Saifuzzaman +3	
2017	
28 citations	
	A password-based digital lock and vibration sensor for theft detection and the RF wireless communication technology to send signals for the indication of theft.
Smart Security System using Arduino and Wireless Communication	
L. B. Annapurna +3	
2015	
11 citations	
	Automatic crime detection will ensure a complete security for smart homes.
Security management in smart home environment	

Mary Gladence +3	
Soft Computing - A Fusion of Foundations, Methodologies and Applications	
2021	
7 citations	
	The proposed home security system has security concerning gas leakage, fire detection, detection of room temperature-humidity and avoiding overflow of water from the overhead tank.
Internet of Things Based Smart Secure Home System	
Prema T. Akkasaligar +2	
Intelligent Data Communication Technologies and Internet of Things	
2019	
1 citation	
	The automated system for assessing the security risks in the smart infrastructure and choosing the protective measures has been implemented.
Automatic security management of smart infrastructures using attack graph and risk analysis	
Denis Ivanov +3	
2020 Fourth World Conference on Smart Trends in Systems, Security and Sustainability (WorldS4)	
2020	
13 citations	
	A double-processor architecture is a solution for a security management system.
Smart security management in secure devices	
Bruno Robisson +6	
Journal of Cryptographic Engineering	
2016	
3 citations	
	A wireless sensor-based security system is an effective alternative of cctv cameras and other available security systems.
Design, control & performance analysis of secure you IoT based smart security system	
F. H. Chowdhury +6	

International Conference on Computing Communication and Networking Technologies	
2017	
4 citations	
	Smart city security platform is analyzed smart city architecture and security risk.
Research on Security Construction of Smart City	
Yang-qing Zhu +1	
2015	
8 citations	
	Existing cheap and widespread security systems are no more sufficient.
Smart Security System Based on Android Platform	
Pavel Zubr +3	
MobiWIS	
2017	
1 citation	
	A wireless intrusion detection smart security system is the need of the hour.
Smart Security System Using IoT and Mobile Assistance	
J. Indumathi +2	
2020	
2 citations	
	Pervasive and wearable computing, Internet of Things, cloud and fog computing can safeguard individuals and preclude any mishap.
Smart Human Security Framework Using Internet of Things, Cloud and Fog Computing	
Vivek Kumar Sehgal +3	
ISI	
2014	
48 citations	

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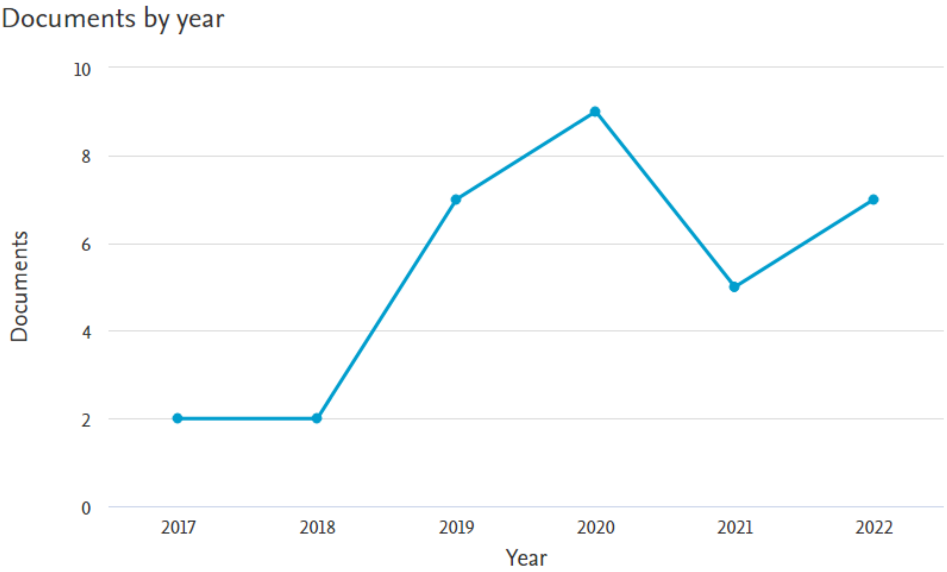
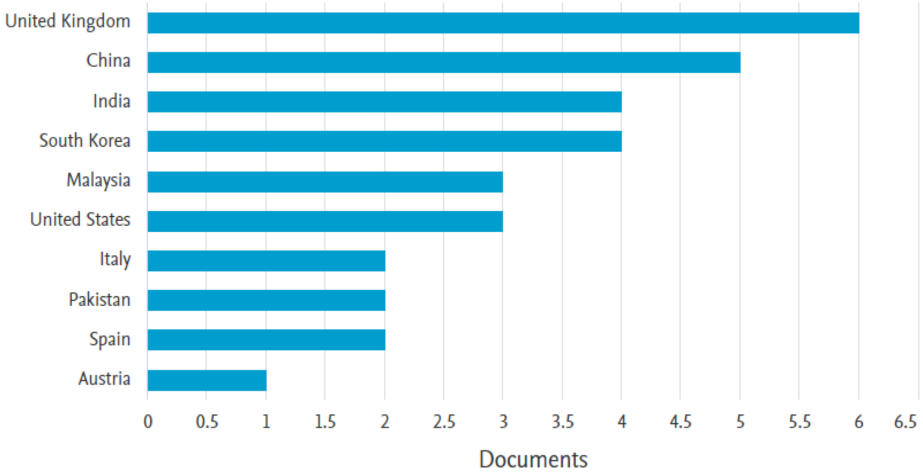


(Figure 1. Number of Publication done Per Year – Source Scopus Database)



(Figure 2. Number of Publication done in Each Country – Source Scopus Database)

The keyword used and filters applied for searching data is as follows:

TITLE-ABS-KEY ("smart country" OR "sustainable smart country" OR "smart security") AND (LIMIT-TO (OA , "all")) AND (LIMIT-TO (DOCTYPE , "cp") OR LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SUBJAREA , "COMP") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "DECI")) AND (LIMIT-TO (PUBYEAR , 2023) OR LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR , 2015) OR LIMIT-TO (PUBYEAR , 2014) OR LIMIT-TO (PUBYEAR , 2013) OR LIMIT-TO (PUBYEAR , 2012) OR LIMIT-TO (PUBYEAR , 2011) OR LIMIT-TO (PUBYEAR , 2010) OR LIMIT-TO (PUBYEAR , 2009) OR LIMIT-TO (PUBYEAR , 2008) OR LIMIT-TO (PUBYEAR , 2007) OR LIMIT-TO (PUBYEAR , 2006) OR LIMIT-TO (PUBYEAR , 2005) OR LIMIT-TO (PUBYEAR , 2004)).

2.1 OPERATIONAL FRAMEWORK

The operational framework of this article is as follows.

Table 2. Operational Framework

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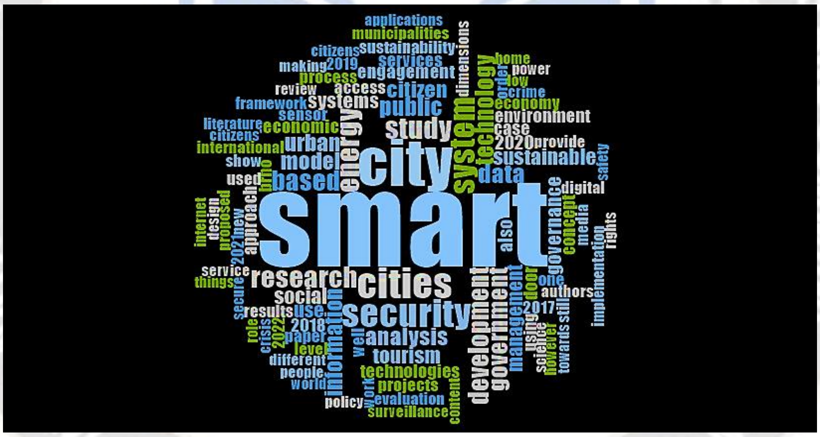
Variables	Indicator	References
Smart Security Structure	- Cyber Security Policy - Cyber Defense Strategy - Cyber Insurance - One-Time Only Information - Citizen Data Tracking - Blockchain Data Security - Smart Digital Nervous System	(Potter, B., 2007), (Pelton, J.N., & Singh, I.B., 2015), (Ji, Q., & Jiao, Q., 2019), (Arora, D., Gautham, S.K., Gupta, H., & Bhushan, B., 2019)

RESEARCH METHODS

3.1 Types of Research

This article explores the concept of creating a Sustainable Smart Country and the critical factors that make it possible. It uses qualitative research methods, including literature review, thematic analysis, and document analysis, to gain a deep understanding of the complex social phenomenon. The inductive approach is used to identify key themes and patterns in the data, while 'Nudge Theory' is applied to shape the concept. Case studies of countries and cities that have implemented Smart Cities plans are used. The research sources include academic journals, government reports, think tanks, news articles, and online blogs. Academic journals offer in-depth analysis, government reports offer global insights, and news articles and blogs provide current perspectives, but they may not always be accurate and reliable.



(Figure 3. Main Themes Regarding Smart Country – Source Created by Author)

3.2 Research Data Analysis Techniques

After we have carefully collected all the data related to our research, we let's move on to the next step, which is our data analysis process performed the research work by analyzing all the collected data available from different analysis tools, software, etc., so a lot of data analysis Our study methods are as follows:

3.2.1 CiteSpace Analysis Techniques

CiteSpace is a desktop-based software that is designed in a way to help researchers to visualize and analyze large sets of data. In order to use it, we have downloaded the Software and installed it on our laptop. Also, we have used the Free Basic version of the CiteSpace Software for the analysis of our article data. After successfully installing the Software, we have imported the research data in WOS format, and to make it possible, we have converted our RIS and CSV format source files to WOS format with the help of the CiteSpace software feature. Then we have filtered the options by adjusting date ranges and setting the cluster criteria, Like through Title, Abstract, References, Keywords, etc., for inclusion or exclusion. Once we have filtered the criteria, then we can analyze the research data using its visualization tools to see a cluster of data based on co-citation, co-occurrence, etc. So, by examining the relationship between different clusters, we are able to find a more profound understanding of the literature written related to our article topic. Using CiteSpace, we have made sure that our findings are comprehensive and up-to-date based on the current state of research. The Insights got, with the help of CiteSpace, we were able to identify the area of the gap in the study, but

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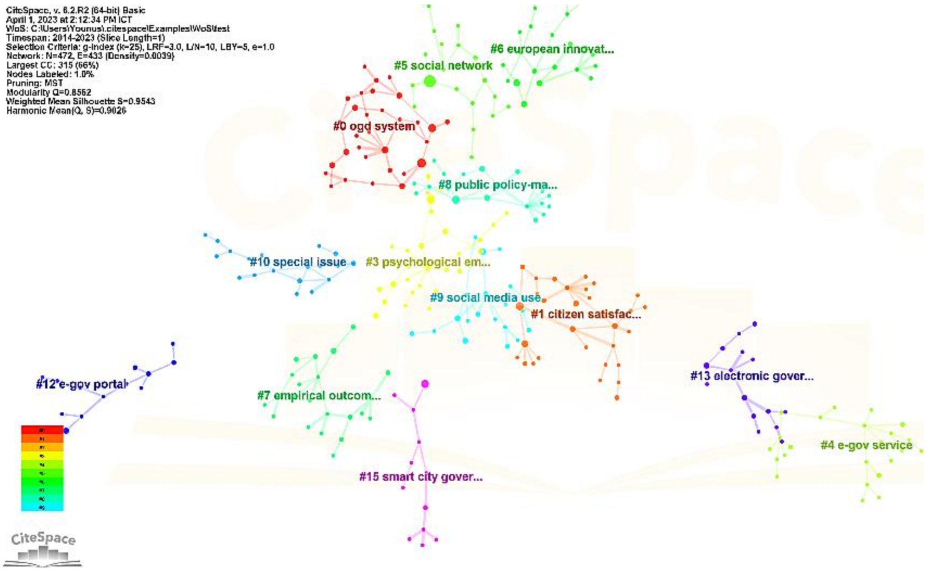
also, we got ideas to suggest areas for future research.



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CiteSpace, v. 6.2.R2 (64-bit) Basic
April 1, 2023 at 2:12:34 PM ICT
WoS: C:\Users\Younus\.citespace\Examples\WoS\test
Timespan: 2014-2023 (Slice Length=1)
Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=472, E=433 (Density=0.0039)
Largest CC: 315 (66%)
Nodes Labeled: 1.0%
Pruning: MST
Modularity Q=0.8562
Weighted Mean Silhouette S=0.9543
Harmonic Mean(Q, S)=0.9026
```

(Figure 4. Main Theme regarding Smart Country with CiteSpace – Source Created by Author)

4 RESULTS AND DISCUSSION

4.1 Your Findings According to the Indicators

Based on the study and research done by the data collection and data mentioned above in the process of analysis, we can identify certain points or characteristics which will play a very important role in the national revolution from e-government to smart governance and from e-city to smart citizen. We will say here from the full; please know that we have distributed different important factors or characteristics for Smart Country based on them part means that we have to consider any object or feature and its associated part of the guard. In this way, we will be able to better cover all aspects of A Smart City that will not leave any space empty. So let's start talking the diagnosis is the same according to the part;

4.2 Security Structure of Smart Country

In this Section, we will be discussing in detail about the Security Structure of a Smart Country. We will be starting with a discussion on the key security features which will be the foundation of the Security Structure of a Smart Country. Then we will mention the innovative initiative which the Smart Government of Smart Country will take for making robust the Security of Smart Country. So, in below, we will discuss the points;

4.2.1 Cyber Security Policy of Smart Country

In recent years, there has been a considerable global expansion in information and communication technologies (ICTs), particularly the Internet. As a result, people, groups, and society have profited enormously. However, this heightened reliance on ICTs has also given rise to new risks and challenges, particularly cybersecurity. Cybersecurity refers to safeguarding ICTs and the data they process, store, and transmit. The digital revolution has brought new opportunities and challenges to nations worldwide. Due to widespread technology use, systems and devices are becoming more interconnected, opening up new avenues for creation, communication, and trade. New dangers to international security and stability include cyberattacks, data breaches, and other hostile actions that put at risk critical infrastructure, intellectual property, and individual privacy.

Numerous nations have formed or are in the process of adopting national cybersecurity policies as a result of the widespread understanding of the necessity to address these concerns. In response to the present and future hazards of the expanding use of ICTs, smart governments will create national cybersecurity laws to protect their citizens, organizations, and critical infrastructure. These rules will provide a framework for dealing with the potential risks posed by technology while protecting the interests of people and organizations and fostering a stable and prosperous Smart Country. Because of the surge in cyberattacks and the potential for significant repercussions from these attacks, governments, organizations, and individuals are now gravely concerned about cybersecurity. Several high-profile cyberattacks have badly impacted governments, businesses, and individuals.

These attacks were regular features of private data theft, disruption of essential services, and the spread of malware and other destructive code. These incidents have highlighted the need for a solid national cybersecurity strategy to effectively address the current and future issues brought on by cyber attacks. In light of these issues, Smart Country believes national cybersecurity legislation is crucial for ensuring the security of individuals, organizations, and critical infrastructure security. A well-designed Smart country cybersecurity policy will have the following characteristics: it will be thorough, flexible, and able to respond to the dynamic nature of cyber threats.

4.2.2 Cyber Defense Strategy of Smart Country

A significant topic that demands serious inquiry and analysis is the future of the Smart country's cyber security plan in the case of cyberattacks from other nations. The threat that cyberattacks represent to privacy, economic stability, and national security has significantly increased in recent years. Given the growing threat from external cyberattacks as technology advances, the future of Smart country cyber security strategy must be assessed. One of the major challenges in responding to external cyberattacks is the need for international coordination and cooperation. The internet is a worldwide network, therefore cyberattacks can originate from anywhere and cross borders. Smart Country cyber defense strategies must take into account the need for international cooperation in order to effectively combat the danger from external cyber-attacks.

One of the key trends influencing future national cyber security strategy is the increased focus on cyber defense. Smart Governments will make investments in tactics to strengthen their cyber security, such as developing stronger early warning and incident response systems. This will certainly necessitate a stronger emphasis on public-private partnerships because private sector enterprises are essential in guarding against cyber-attacks. Another development that may affect future state cyber security policy is the development of international cyber security rules and agreements.

4.2.3 Cyber Insurance for Smart Citizen

As the number of cyberattacks increases, cyber insurance will become an increasingly important component of the Smart Country cyber security strategy. Cyber insurance will try to protect consumers from monetary losses brought on by cyber-related catastrophes, such as data breaches, network disruptions, and unauthorized access to personal information. The cost of a cyber-attack investigation and resolution, as well as any settlement for losses or liabilities, are often covered by the policy. As the threat of cyberattacks increases, so does the necessity for cyber insurance. For the future of Smart Country cyber security policy, a more comprehensive approach to cyber insurance will be required, including the development of new insurance products and the deployment of cutting-edge technologies.

4.2.4 Give Information One-Time Only Policy of Smart Country

Since all services are connected through a single platform and will receive citizen information from a single central database, the Smart Government Centralize platform also offers the benefit of a "Give Information One Time Only" policy, which states that any citizen information collected by the government at any time in relation to any service will be permanently stored in the central platform database. Once it is saved, the citizen won't ever again be asked for the same information in relation to any government service, unless it has been modified, in which case the citizen will be notified.

After being collected from the citizen, the information will be updated in the database. With the aid of this policy, citizens will save time and effort by not having to fill out the same information each time they use a smart government service. They will also benefit from increased data security because by providing the same information frequently and in different locations, there is a greater risk of data compromise. Furthermore, data can leak at any time and at any point and be traced. Yet thanks to this policy, data will only be collected once, saved, and accessible from a single database, making data security simple and making it possible to track down leaks.

4.2.5 View Smart Citizen’s Data Tracking by Smart Government

Data security is something that Smart Citizens are good at protecting and ensuring. As a result, a feature will be available on the same Central Platform of Smart Government to provide citizens with insight over their data and to display the logs if it is tracked or used by any smart government department. This means that whenever a smart government department or ministry needs to utilize your data for any reason, the data logs will be displayed to the smart citizens and will include all relevant information, such as the Date and Time of Access, the Department Responsible, the Reason for Access, etc. This function will aid smart citizens in monitoring their data usage and fostering openness and transparency in smart government.

4.2.6 Smart Data Security Through Blockchain Technology

Any service or process that relies on technology must prioritize data protection. Data must therefore be kept in a safe location with the fewest possible individuals having access to it. The security of the system must thwart any attempt at data leak or hacking and ensure that no data reaches the hands of any unauthorized individuals. That is why the Central Platform of Smart

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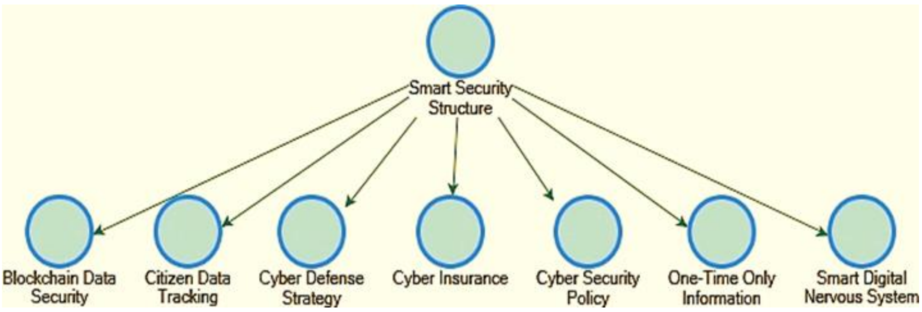
Government, which will house all of the information of Smart Citizens, should be outfitted with everything required to ensure data security, including the booming technology of today that not only ensures that data breaches become impossible to carry out but also ensures that data does not remain in the hands of a select few who can profit from it. Blockchain technology, which creates data in a decentralized manner and secures it so that it cannot be easily hacked or stolen, is that technology.

4.2.7 Smart Digital Nervous System of Smart Country

The infrastructure of the Smart Country will be extremely dependent on the Smart Digital Nervous system. It will be built to keep track of the condition of all crucial system parts, ensuring that everything is operating as it should and that any problems are swiftly identified and fixed. In principle, the Smart Digital Nervous system will function by periodically sending a signal or message to all of the system's components, requesting confirmation that they are still operating properly. The Smart Digital Nervous system warns the system administrators right away if a component stops working so they can look into it and fix it before there is a system outage or failure.

The Smart Digital Nervous system's ability to monitor the system proactively rather than waiting for a problem to arise is one of its main advantages. In a Smart Country, which depends on constant connectivity and access to vital data and information, this can help to prevent downtime and ensure that the system is constantly up and operating. Overall, the Smart Digital Nervous system is essential to maintaining the system's dependability, availability, and performance, supporting the provision of key services to forward-thinking citizens and businesses across the nation. It helps to reduce downtime and the risk of system failures by offering real-time monitoring and proactive alerting, ensuring that the system is always stable and secure.



(Figure 5. Smart Security Structure Indicators)

CONCLUSION

A sustainable smart country relies on a robust security structure to ensure the safety and security of citizens, infrastructure, and data. This structure should be designed to protect against cyber-attacks, data breaches, and other security threats while also protecting citizens' privacy and preventing misuse of their personal data. Research on smart cities and homes has highlighted the importance of sustainability in the concept. The International Telecommunication Union Focus Group on Smart Sustainable Cities (ITU-T FG-SSC) defines a Smart Sustainable City as one that uses Information and Communication Technologies (ICTs) to improve quality of life, urban operation efficiency, and competitiveness while meeting the needs of present and future generations in economic, social, environmental, and cultural aspects. However, there are discrepancies in sustainability-oriented definitions, highlighting the need for a clear definition of a sustainable smart country. A multidisciplinary approach, involving social sciences, environmental science, energy and business management, and accounting, is crucial for achieving a sustainable smart country. The research field of smart cities is multidisciplinary and diffused, and a focus on the conceptual aspect of the subject is essential.

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