

EPITOME OF DIGITAL TECHNOLOGY: INDICATION OF ETHICS, CIVILIZATION AND SOCIAL SECURITY IN BRUNEI DARUSSALAM

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ABSTRACT

As a result of technology, including its ubiquitous connectivity and its powerful artificial intelligence, a new civilization has emerged. This constitutes a new long wave in the socioeconomic development of humanity. As part of its ongoing efforts to be a smart nation, the Government of Brunei Darussalam has introduced a Digital Economy Master Plan 2020-2025 with the aim of following current trends. A number of social issues are raised among the public, including cybersecurity, ethics, values, and human interaction on both a personal and economic level, fostering concern among the public. It is essential that Brunei Darussalam explicitly outline the indications in advance in order to deal with the social and economic challenges associated with the digitalization process. Consequently, this is consistent with Islamic principles and values, which emphasize obedience, respect, cooperation, fairness, diligence, and the fulfillment of human potential. The objective of this paper is to examine how Maqasid Sharia can be integrated with Islamic Development Management, and what other approaches can be combined to utilize digital environments. This paper will also provide a comprehensive assessment of the current ecosystem involving the concerns mentioned, as well as a perspective on how it can be improved. Literature reviews, data analysis, and case study analysis will be used to evaluate digital transformation and ICT innovation in Brunei Darussalam.

Keywords:

Maqasid Sharia; Islamic Development Management; Digital Transformation; Digital Ecosystem

INTRODUCTION

There is no doubt that the Digital Transformation (DT) has provided the country with better socioeconomic solutions in terms of development and future progress. The root cause of DT can be linked to the ubiquitous connectivity and powerful artificial intelligence that are present all around us. In order to enhance DT, strong leadership attributes must be present fusing their knowledge of management with the use of technology in their administration scheme. It was suggested by Muiri (2013) that the majority of contemporary innovation revolves around the concept of 'technology-reliant' to shape the future nation. In this regard, Schwertner (2017) recommends that DT should be supported with an unlimited number of possibilities and have a clear vision.

Digital transformation has become an important tool for leaders and managers in order to achieve greater efficiency while ensuring better business security (Deloitte, 2019). People

would be the ones who would be affected the most by the changes made, even if from a management perspective, many of the changes can be simplified and managed. It is clear that governments, industries, and organizations are embracing new paradigms in order to improve their competitive advantage.

According to Solis et al (2014) Digital Transformation (DT) refers to the realignment of, or new investment in, technology and business models to more effectively engage digital customers at every touch point in the customer experience lifecycle. While Bondar et al (in Kraus, 2021) contend that digital transformation involves the networked integration of all economic sectors and the adaptation of actors to the new conditions of the digital economy. A conceptual definition has been developed by Vial (2019) which identifies the digital transformation process as one that aims to enhance an organization by triggering substantial changes to its properties through the use of information, computing, communication, and connectivity technologies.

According to Unal and Aysan (2022), many organizations and institutions in different sectors have implemented technology as part of their organizational system to force changes and adapt to new environments, including major components such as policies, strategies, human resources, management, and financial. With the advent of the new ecosystem, there will certainly be new strategies and methodologies required to manage these things.

Digital Transformation is a concept that illustrates trends, opportunities, and challenges. There are many unique challenges to the digital economy in the area of regulation, such as privacy, consumer protection, security, and market concentration. These include issues and challenges that may arise in the management of policy. In this regard, the Islamic approach should be used to protect life, mind, wealth, progeny, and religion of an individual in a country.

As stated by Islamic Relief Worldwide (2014) and Rafiki and Abdul Wahab (2014), development is about creating an environment that promotes spiritual, moral, and socioeconomic well-being, and success in this world, and in the hereafter (Falah). A fundamental component of the Islamic holistic viewpoint is Tawhid (the principle of unity) (Islamic Relief Worldwide, 2014 pp 5). The Tawhid paradigm is described by Rafiki and Abdul Wahab (2014) as providing an intellectual understanding of the unity of creation and existence, and it can be used to address the problem of integration within organizations.

Maqasid Sharia is one of the most basic Sharia models that must be considered by any Muslim. It should be noted that the word 'maqsid' (plural) has been derived from the term 'maqсад' (singular), which means purpose, goal, and objective. Maqasid is defined by Al-Zuhayli (2003) as the ultimate goal, purpose, outcome, and meaning upheld and prescribed by Shariah through its laws, thus striving to realize, manifest, and achieve it at all times and places.

Al-Syatibi (2004) believes that the creation of Sharia or a decree is the manifestation of wisdom that strives to bring the Maqasid to all of humanity. In Al-Raysuni's (1992) discussion, Maqasid is described as the objective that Sharia (direct instruction from God) aims to achieve for human interest (maslahah). Maqasid Sharia generally aims at acquiring benefit (jalb al-masalih) and eliminating harm (daf al-haraj) (al-Ghazali, 1993).

The Muslim digital transformation process and ethics should be rooted in Shariah principles to help one grow closer to God. One of the most significant objectives in life for a Muslim is to serve Allah (God). Consequently, in order to adhere to Islamic principles and values in the use of social media, the behavior should be dictated by Maqasid Sharia. Generally, Islamic principles and values must be in accordance with the basic divine source of Islam, which is divided into four categories; Al-Quran, Sunnah (Al-Hadith), Ijma (consensus) of Muslim scholars, and Qiyas (analogy). Auda (2017) noted that the sources of Islamic sources evolve. This includes contemporary works from Maliki, Hanafi, Syafie, and Hambali as well as work from other schools of thought in the field of fiqh and usul.

Yaacob, Yaacob, Basir, and Ali (2021) suggested that any organization or authority should adopt a careful approach based on international standards and have lawmakers take steps to ensure Sharia principles are not violated and that all provisions must be within the framework of Islamic approaches based on Quran, Sunnah, and Ijtima' and Qiyas. In the same vein, Ascarya and Sakti (2021) argued that an Islamic approach would alleviate economic empowerment, cooperation, and solidarity.

Dusuki and Abdullah (2007) demonstrate that Maqasid Sharia could provide significant ethical guidance, especially through the concept of corporate social responsibility in banking institutions, whereby Islamic banks must not focus solely on the attainment of profit. Instead, they must promote social welfare and protect the needs of society as a whole. Many scholars have agreed that the ultimate objective of Maqasid Sharia is to serve the interests of all human beings and to save them from harm.

The fundamental rights of *Maqasid Sharia* model carried out actin and decision into preliminary and broad manner but at the same time precisely adhering to the principles of Islam by classifying *Maqasid* (as Purpose) into four different dimensions namely;

- (i) Level of Necessity (from traditional classifications)
- (ii) Scope of rulings aims to achieve purposes
- (iii) Scope of People on the purpose of action
- (iv) Level of universality of the purpose

A number of studies have listed the main elements of Maqasid Sharia, including Al Raysuni (1992), Dusuki and Abdullah (2007), Raquib (2016), Auda (2017) and Saladin, Azmil and Mariam (2020): (i) preserving and protecting the individual, (ii) preserving and protecting the intellect, (iii) preserving and protecting the mind, (iv) protecting and maintaining property and wealth, and (v) protecting and preserving society. From a macroeconomic viewpoint, Maqasid Sharia would be defined as the application of Syariah to all aspects of economic activity, such as monetary policy, investment, and trading.

Raquib (2016) discussed about *Maqasid Sharia for ensuring design and development of Modern Technology for Humanity's benefit*. "Islamic jurisprudence (*fiqh*) is the mechanism of comprehending and interpreting a given situation for the application of the *Shariah*" (Raquib, 2016 pp151). Hassan (2021) suggested that the principles and objectives of *Maqasid Sharia* might change to meet with the transformation's demands.

Understanding *Maqasid Shariah* as a model requires Institutions to comply with the standards of virtue and moral consciousness that have been advocated by the *Shariah*, which expects a balance, upheld by firms, about the rights and responsibilities of the individual and of society. Laldin and Furqani (2013) revealed five dimensions of *Maqasid Shariah*-based Performance Evaluation Model (MPEM) that is composed of:

- a) Freedom of faith
- b) Protection of human right
- c) Propagation of scientific thinking
- d) Well-being of society
- e) Care of stakeholder

Based on the literature on the *Maqasid Sharia* components, all of the elements are actually connected to one another. The platforms of security, laws, regulations and rules should be established before moving towards the vision of Smart Nation as digitalization creates complex issues and challenges in the future. Anticipating the issues are most likely to involve financial aid and ownership, the government should by then have some sort of planning to tackle these issues as these are the basic elements to build Smart Nation through digitalization.

The development aspect of the Islamic approach has always aligned well with the mission of global development and coordinated planning. Bakar (2016) compared the Islamic world and modern Western civilizations which have a balance of distinct identities, characters, and

intellectual histories. Islam is divinely ordained to be a more balanced civilization (Bakar, 2016 pp19). All models, tools and approaches in Islamic Development Management for Digital Economy Master Plan demonstrate how the planning can be implemented into real situation framework in order to meet the goals and objectives.

In terms of management and development in Islam, Mahayuddin Hj Yahya (2017) identifies three philosophies that are practiced by Malay countries including civilization, culturalization, and Islamic prosperity. A theory of civilization is related to the achievement of progress in cities. While culturalization is associated with Islamic civilization and lastly, Islamic prosperity was created by Ibn Khaldun to replace Civilization, the creation of the West (Mahayuddin Hj Yahya, 2017). The culturalization theory holds that traditional practices include hereditary religious beliefs, languages, and customs. Culture is followed by civilization. Civilization is the progress achieved by humans in physical form.

Embracing global trends, the government of Brunei Darussalam implemented a major policy transformation aimed at creating a 'Smart Nation' aligned with the national vision of *Wawasan Brunei 2035*. An initiative called 'Digital Economy Master Plan 2020 - 2025', was developed by the Digital Economic Council¹ to guide and transform Brunei into a Smart Nation. Overby and Audestad (2021) proposed that the Digital Economy Ecosystem is a useful representation for explaining complex interactions among relevant stakeholders and key industry players, including policy, institutions, and the data industry, as part of the Digital Ecosystem, which is comprised of the Digital Economy, Digital Governance, and Digital Society as indicated in Figure A. As a matter of fact, a policy is a creation of human beings through the utilization of clear strategies and priorities. A number of key points were raised by Brunei Darussalam, including the importance of having a Digital ID, Digital Payments and People hub in the digital ecosystem at the earliest opportunity to enhance human interaction, ownership and payment, as well as data availability.

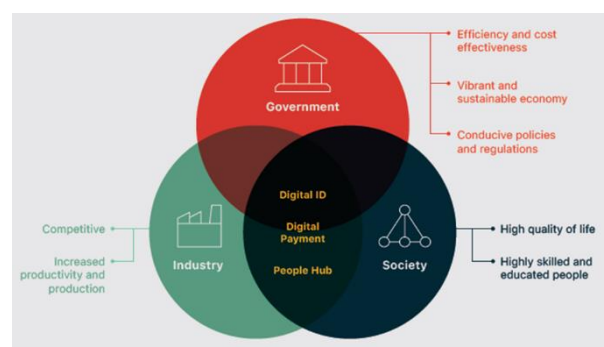


Figure 1. Brunei Darussalam's Digital Ecosystem

The Government of Brunei Darussalam incorporates Islamic values and ways of life into its policy strategies. This is so that Brunei can be recognized as a Smart Nation and adhere to *Sharia* principles in order to achieve its Smart Nation status. It is intended that the inclusion of religion will lead to additional rewards and solutions. The western world tends to separate religious beliefs from policies and management in order to benefit modern arrangements.

A different situation prevails in Brunei Darussalam, which has developed a unique system incorporating racial (Malay) and religious values. Religious and racial elements have been an integral part of Brunei Darussalam's system throughout its history. As can be seen from the declaration philosophy of *Melayu Islam Beraja*, which permeates all aspects of government in their decision-making process.

The Government of Brunei Darussalam intends to use *Maqasid Sharia* as the basis for its Digital Economy Master Plan as shown in Figure B. *Maqasid Sharia* serves to ensure the

¹ A council established by His Majesty the Sultan dan Yang Di-Pertuan of Negara Brunei Darussalam

preservation and protection of the rights of individuals concerning one's faith, life, wealth, progeny and intellect. According to Campra, Brescia, Jafari-Sadeghi, and Calandra (2021), *Maqasid Sharia* involves ethical considerations, impact-based investments, and a variety of management practices. The country has the opportunity in such a situation to transform its strategies for its future development and to establish a revised paradigm based on religious reform in the economics and management.

Considering that policies are created and operated by humans, Mushtaq, Saghir, Kayani, and Bukhari (2014) argue that Islamic Development Management has an important role to play in the regulation of policies. It is the basic goal of development, according to Rafiki and Abdul Wahab (2014), to create an environment that promotes spiritual, moral, and socio-economic well-being and success (Islamic terms refer as *falah*) in this life and in the hereafter.



Figure 2. Maqasid Sharia on Digital Economy Master Plan

METHOD

It is important to note that Brunei Darussalam declares itself to be a state which upholds and strengthens Islamic values while applying Islamic law (Yaacob, Yaacob, Basir and Ali, 2021: p. 192). This paper aims to examine how Islamic Development Management and Maqasid Sharia can be integrated, along with what other approaches can be utilized to utilize digital environments. It is the purpose of this paper to conduct exploratory research by utilizing investigative techniques. It is a fundamental and qualitative study designed to identify the role of Maqasid Sharia and Islamic Development Management in facilitating the process of socioeconomic digital transformation.

The purpose of this paper is to recommend a concept note on development strategies and innovative administration that adapt with *Maqasid Shariah* and Islamic Development Management theory and concepts, and that are to be integrated with the current master plan through the use of digital technology and cyber security. Furthermore, the paper will provide an assessment of the current ecosystem involving the issues and challenges mentioned, as well as a suggestion for how it can be improved. Accordingly, this is in keeping with Islamic principles and values, which emphasize obedience, respect, cooperation, fairness, and diligence.

RESULT AND DISCUSSION

Digitalization, in particular involving data, stimulates the creation of new business models and thus contributes to innovation (Acquisti, Gross, & Stutzman, 2014). The use of

data and digital tools has implications both at the micro and macro levels, and the digitalization of both private and public sectors contributes significantly to the use of data and digital tools at both levels. The use of data and digital tools has also changed and shaped the behavior of individuals on a micro level. On a macro level, digitalization has implications for equality, the environment, and society more broadly. Prior to discussing the current ecosystem and making recommendations, it is important to understand what the issues and challenges are.

Recent government reports and scholarly research have emphasized a number of challenges associated with the development of the Digital Economy Master Plan. Among these challenges includes; (i) cyber security (Zuraini Haji Sharbawi (2018), Moller (2020), (ii) personal privacy and data Mosteanu (2020), and (iii) ethical and moral values (Vial (2021), Scholz). et al. (2018) and Shaughnessy (2018), as well as (iv) human interaction on an economic and individual level (Clark, 2018).

Statistically, a report by Brunei's Computer Emergency Response Team (BRUcerts) (2020) reports that 2,143 cyberattacks were recorded in 2018 and 2,976 in 2019, which represents a 30 percent increase since 2018. According to BRUcerts (2020), the majority of data breaches in Brunei are the result of insufficient ICT security infrastructure, failure of maintenance and abuse of privileges. Due to these incidents, the public and government may look into several alternatives related to digital transformation.

Tsue Yap and Ameera Borhan (2022) addressed data privacy and security concerns and recommend that policymakers in the public sector to review current legislative frameworks and amend them as necessary to ensure that regulations are balanced and well-implemented while maximizing the potential benefits of digitalization.

Zuraini Haji Sharbawi (2018) indicates that Brunei Darussalam records a relatively low number of denial-of-service attacks, non-compliant activity, malicious logic, and various intrusions that affect government websites and services. It has also been observed that social media and the internet are being used to propagate extremist and terrorism propaganda, and several cases have been brought against individuals involved in extremist and terrorism-related activities targeting innocent citizens. The following table 1 illustrates the different kinds of cyber threats and unlawful activities observed in Brunei Darussalam.

Another means of Cyberattacks are usually aimed at accessing, changing, or destroying sensitive information; extorting money from users; or interrupting normal business processes (Mosteanu 2020). Using big data and digital systems, through the internet and IT devices may expose the business secrecy to cyber-attacks. Dispute cyberattacks become the first threat for business, which usually come with financial repercussions.

On the issue of ethics and values, there is no clear indication of what is right and wrong and the matters is not universally agreed upon. It is difficult to establish what is right and wrong in the area of ethics and values without clear indications, and the matter is not universally accepted. It is here that racial ethics and religious values determine public norms. A key component of the discussion is the importance of Islamic values and the culture of the Malay race.

While the secular or conventional interpretation of Development Management consists of the aspects, Islam have provided the most important aspect that has been ignored by the secular and conventional, which is the concept of Tawhid. Tawhid is a concept that endured life's relationship with Allah as the creator of the universe.

In the planning, controlling and managing certain policy, Islam has underlined the importance to seek blessings, guidance and direction from Allah (God) which extends to all individuals deeds where Allah (God) understand every inward and outward action and intention completely, as indicated in Surah Al-Baqarah Verse 186 as follows;

وَإِذَا سَأَلَكَ عِبَادِي عَنِّي فَإِنِّي قَرِيبٌ ۖ أُجِيبُ دَعْوَةَ الدَّاعِ إِذَا دَعَانِ ۖ فَلْيَسْتَجِيبُوا لِي وَلْيُؤْمِنُوا بِي لَعَلَّهُمْ
يُرْشَدُونَ²

When My servants ask you (Prophet) about Me: I am truly nearby. I respond to one's prayer when they call upon Me. So let them respond with obedience to Me and believe in Me, perhaps they will be guided to the Right Way. (Al-Baqarah:186)

The need for Islamic development management comes from the fact that not only must development be Islamic, but the management of development must also follow the principles of Islam. To achieve this, both development and its management shall be rooted in Islamic epistemological and ontological underpinnings. This includes the elements of selecting and electing leaders that can bear responsibilities and have the ability to deal with certain issues depending on their knowledge, expertise, and experience.

As a result, all the tasks and responsibilities assigned to mankind, including leaders and management, are a burden to them because of their links to the 'Amanah'. The Islamic values of 'Amanah' have been particularly influential in accepting and holding tasks and responsibilities, particularly for managers and leaders.

Through this Islamic fundamental thrust, it would create an opportunity for the leaders to be visionaries in planning and determining the future of their organization. In supporting that, Goffar (n.d) highlighted that the function of Management has a wider concept that includes planning, organizing, implementation or actuating and controlling. Those four activities require certain standard, guideline and criteria whether it is based on the conventional system or the Islamic system as well as laws. As a Muslim, the deviation of management is a fulfilled task and responsibilities not only to pleased human beings but to Allah the Almighty God. Base on Al-Quran in Surah Al-Hashyr: Ayat 18)

يَا أَيُّهَا الَّذِينَ ءَامَنُوا اتَّقُوا اللَّهَ وَلْتَنْظُرْ نَفْسٌ مَّا قَدَّمَتْ لِغَدٍ ۖ وَاتَّقُوا اللَّهَ ۚ إِنَّ اللَّهَ خَبِيرٌ بِمَا تَعْمَلُونَ

"O you who have believed, fear Allah. And let every soul look to what it has put forth for tomorrow – and fear Allah. Indeed, Allah is Acquainted with what you do." (Al-Hashr:18)

This verse in Al-Quran has been the core thrusts in determining every action and decision for a Muslim. The connection between action and intention highlights the connection between the physical and the spiritual components of any human.

Islamic development management involves rethinking of existing management and development models in the light of Industrial Revolution 4.0, the Internet of Things, cryptocurrency; all of which requires re-modelling of existing practices. Nevertheless, digital disruptions may change the way of doing things but the basic principles taught in Islam remain the same which ensures fairness, justice and equity. A future in which ethics and values become a vital part to ensure efficiency in development management would be a welcome development indeed, upending decades of focusing merely on wealth generation and accumulation. As it comprises interconnected disciplines, Islamic development management covers bigger a scope of discourse related to managing the Islamic development.

² Surah Al-Baqarah. 2:186

Maqasid Sharia and Islamic Development Management are both compatible with all religions and online user behaviours, which will provide a guideline for social media users. It will also help policymakers, application developers, online companies, and the government better understand and count on the effect of five elements to change or adapt the online media or any new technology.

The Government of Brunei Darussalam has put in place several implementing mechanisms for monitoring the cyber threat landscape in relation to Brunei Darussalam on a continuous basis. A consequence of this growth is that it is becoming increasingly difficult for law enforcement agencies and prosecutors to hold cybercriminals accountable for offenses committed with the assistance of such platforms. A variety of laws have been enacted in Brunei Darussalam to address cybercrime offenses as well as cyber-enabled crimes. There are many innovative digital solutions but our focus would on three major categories determined by their functions which cover most of the management needs; digital ecosystem, digital phases and digital environment.

Digital Ecosystem should be strengthened with the spirit of solidarity and the potential from digital transformation could be fully unlocked with solid collaboration between the government and other stakeholders such as from private sector, academia, users and consumers. This framework to build digital ecosystem should be stabilize to seek improvement in the economy and social situation. Accordingly, Awang Haji Mohammad Nazri's (2021) touches on the approaches to lends credibility to policies and strategies that have solid foundations that can improve management and institutional reforms with many aspects of hybridization have been examined in recent years. Throughout the digital transformation process, the government has focused on utilitarian applications, resulting in technology-intensive initiatives to improve services, administration, or management.

It is difficult to determine positive and negative and good and bad definition base on measurement and qualities, however, being modest and virtuous should be based on the racial and customary tradition of the society. In this case, the *Malay Muslim* culture should be the benchmark on how to portray good image and quality human being.

Taking into account the current Digital Ecosystem, Digital Phases, and Digital Environment, the Quranic verse as mentioned below (Az-Zumar Verse 18) should serve as the basis for each of these components. A recommendation for this has been provided by international organizations such as the World Bank (2020), the International Telecommunication Union (ITU) (2020), the Organisation for Economic Cooperation and Development (OECD) (2019), and the ASEAN Digital Framework (2021). By assessing the recommendation, Brunei Darussalam will be able to establish a framework for its digital process by adapting good governance and examples from above mentioned organizations.

الَّذِينَ يَسْتَمِعُونَ الْقَوْلَ فَيَتَّبِعُونَ أَحْسَنَهُ ۚ أُولَٰئِكَ الَّذِينَ هَدَاهُمُ اللَّهُ ۖ وَأُولَٰئِكَ هُمْ الْأُولَٰئِبِ

"Who listen to speech and follow the best of it. Those are the ones Allah has guided, and those are people of understanding." (Surah Az-Zumar: verse 18)

First process that Government should review on is the implementation stages and phases. The current policy indicate that the on-off policy would not be enough to formulate and transform Brunei into a straightforward 'Smart Nation'. Realistically, in the case of Brunei Darussalam, five years would not be enough for the government especially with limited financial budget and experts in the field of digitalization process. Digitalization allows institution and organization to grow rapidly. There are three different mechanisms that allow an organization to scale quickly: data-driven operation, instant release, and swift transformation. The process of embarking on sustainable Digital Transformation requires

step-by-step approaches and implementation phases. Thus, this paper proposed the government to have three implementation phases namely;

- (i) The **Foundation and Planning stages** require the establishment of baseline metrics to ensure an appropriate data management system that adheres to international standards and protects the privacy of individuals. It is, therefore, necessary to establish legal authorities that ensure that laws, rules, and regulations regarding ICT and Digitalization are enacted and implemented, as well as the construction of state-of-the-art digital infrastructure across the country is security-ready. During this period, the current five-year planning process will be conducted. During the Foundation and Planning stages, the government will need to engage stakeholders and key industry players to participate more actively in providing Artificial Intelligence and Digital Solutions for any other pilot projects and monitoring. In this process, the public should be address and educate with Digital knowledge in order to create digital society. In other words, there are two important dimensions in this phase to be included: digital capabilities and digital leadership.
- (ii) **Evolving and Transformation Stages**, the digital infrastructure will be maintained (using automated projections) over two to three years. Furthermore, the Government should ensure that the country has an optimal level of connectivity and provides cyber-security services. As part of this stage, the government should also focus on information management and analytics, as well as the protection of property and wealth for business sectors, individuals and society.
- (iii) In the **Optimizing and Smart Nation Projection stages**, the government is expected to be able to handle the final product of the digital transformation process. This will enable it to create an environment of interoperability within the public sector. It will also encourage private companies to capitalize on the opportunities of Digital Platforms and the Digital Environment. Furthermore, the government should also develop a strategic policy plan beyond digitalization and the Smart Nation.

Table 1. Recommended Implementation Phases for Digital Transformation adapting Maqasid Sharia and Islamic Development Management and adopting International Standards

Stages / Period	Foundation and Planning	Evolving and Transformation	Optimizing and Smart Nation Projection
Projected year	2020-2025	2025-2028	2028-2033
Time Frame	5 Years	2-3 Years	5 Years
Focus	Developing a digital maturity strategy and a digital transformation process from the beginning	Providing connectivity, data management, and cyber security services	Managing the interoperability process
Key Areas	Business Process Transformation - Identify Goals - Establish Baseline Metrics - Engage Stakeholders - Pilot Project / Scenario - Monitoring	Information Management & Analytics - Data Strategy & Management - Cybersecurity - Data Intelligence - Advanced Analytics - Artificial Intelligence	Automation & Execution - Workflow Mapping - Automation and Prefill - Automated Operations - Agile Development and Delivery - Strategic Planning

Atique Tahir (2021) indicated that the most important and most basic of all fundamental rights and liberties is the 'Right to Privacy' or 'the privacy of an individual'. It is the concern of all legal systems, civilizations, cultures and religions. As stated by Tsue Yap

and Ameera Borhan (2022), the Government needs to amend and enact new law and policy to protect the people and its governmental institutions from being a threat of cybersecurity. According to Brunei Darussalam Government Official Websites (2021)³ currently there are eight (8) orders and chapters of law related to IT in Brunei Darussalam: -

- a) Chapter 153 Official Secrets Act - An act to safeguard official and Government information;
- b) Chapter 194 Computer Misuse Act - An Act to make provisions for securing computer material against unauthorized access or modification and for related matters;
- c) Chapter 196 Electronic Transactions Act - An Act to make provision for the security and use of electronic transactions, electronic communications, electronic commerce, and for connected purposes;
- d) Chapter 197 Anti-Terrorism (Financial and Other Measures) Act - Interpretation of a Terrorist Act (Clause 2) to include "the action is designed to disrupt any public computer system or the provision of services directly related to communications infrastructure, banking and financial services, public utilities, public transportation or public key infrastructure;
- e) Chapter 180 Broadcasting Act - Internet Code of Practice - Act responsible for broadcasting matters, which includes online content, to ensure that nothing is included in any broadcasting service or content provider (including individuals) which is against the public interest or national harmony or which offends against good taste or decency;
- f) Telecommunications Order, 2001 (s38/01) - An Order to provide for the operation and provision of telecommunication systems and services in Brunei Darussalam, and for matters related with it;
- g) Chapter 108 Evidence Act - An Act to unify within Brunei Darussalam the law relating to evidence. This act touches on the admissibility of statements produced by computers as evidence in any proceedings in court. [S 29/97] (Clause 35A); and
- h) Copyright Order 1999 - The Order that defines computer programs, database of data or other machine-readable forms, original by reason of selection or arrangement of contents are considered as "literary work" entitled for copyright protection.

However, the specific laws in Digital Cyber Security and Digital Process have yet to be endorsed. The Government should have taken a quick action in dealing with cybersecurity and digitalization as indicated in Digital Economy Master Plan (2020) that want to ensure safe environment in digital platforms. Besides the enactment of laws and regulations, the Government should start to implement the monitoring organization of the laws or in short-term solution is to utilize the existing body such as Authority for Info communication and Technology Industry (AITI) and Cyber Security Brunei (CBS) as the main authority to monitor cyber activities in digital platforms using national bandwidth connection. The protection of individual rights is mandated by the Quran (Surah An-Nisa: Verse 135) and is meant to ensure justice for all mankind, regardless of race, religion, or nation-state, not only for the government and its people, but also for everyone else. In truth, providing justice to all parties is one of the ways in which Allah's (God's) protection of the country can be ensured from being unfair to certain types, especially minorities.

³ Refers to <https://www.gov.bn/SitePages/Digital%20Government%20Strategic%20Plans%20and%20Legislation.aspx>

يَا أَيُّهَا الَّذِينَ آمَنُوا كُونُوا قَوَّامِينَ بِالْقِسْطِ شُهَدَاءَ لِلَّهِ وَلَوْ عَلَى أَنْفُسِكُمْ أَوِ الْوَالِدِينَ وَالْأَقْرَبِينَ إِن يَكُنْ غَنِيًّا
أَوْ فَقِيرًا فَاللَّهُ أَوْلَىٰ بِهِمَا فَلَا تَتَّبِعُوا الْهَوَىٰ أَنْ تَعْدِلُوا وَإِنْ تَلَوُّوا أَوْ تَعْرِضُوا فَإِنَّ اللَّهَ كَانَ بِمَا تَعْمَلُونَ
خَبِيرًا

O you who believe, be upholders of justice - witnesses for Allah, even though against (the interest of) your selves or the parents, and the kinsmen. One may be rich or poor, Allah is better caretaker of both. So do not follow desires, lest you should swerve. If you twist or avoid (the evidence), then, Allah is all-aware of what you do (An-Nisa :135)

As part of this paper, we hope to help the policymaker assess the current state, as well as make our policy a success, by improving the current state of policy, in this case, Digital Economy Master Plan, and by making it easier for policy makers to plan, monitor, and implement our recommendations. As stated in Surah An-Nisa verse 28, Allah (God) has made everything (including planning, assessment, and management) easier, but men make it challenging.

ضَعِيفًا الْإِنْسَنُ وَخُلِقَ ۖ عَنْكُمْ يُخَفِّفُ أَنْ اللَّهُ يُرِيدُ

Allah intends to make things easy on you. And man has been created weak (An-Nisa: 28)

Having someone choose to be the leader who has no knowledge in a certain field should have presented a challenge. The paper therefore recommends the involvement of digital industry players that have the capability, knowledge, and experience to examine policy directions they know well as hinted by the Quran Surah Al-Qasas Verse 28. This paper offers a number of recommendations relating to structure, phases, and the digital environment prior to the establishment of a Smart Nation as stated in Figure C.

قَالَتْ إِحْدَاهُمَا يَأَبَتِ اسْتَجِرْهُ ۖ إِنَّ خَيْرَ مَنْ اسْتَجَرْتَ الْقَوِيُّ الْأَمِينُ

One of the two daughters suggested, “O my dear father! Hire him. The best man for employment is definitely the strong and trustworthy ‘one’.” (Al Qasas: 28)

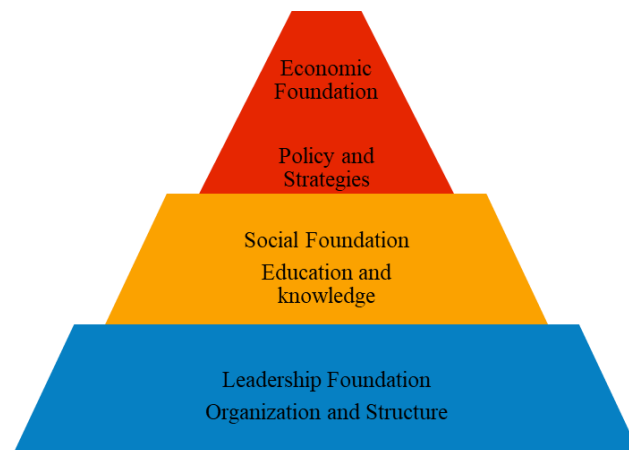


Figure 3. Digital Foundation to be improved

CONCLUSION

This digital transformation ecosystem functions within the broader socio-economic context of the nation. In particular, broad policies concerning trade, education, the business environment, and innovation play crucial roles in enabling Digitalization adoption, effective use, digital transformation, and economic impact. Given the externalities and network effects of ICT investments, tax incentives or subsidies, appropriately targeted, can also play a role in promoting adoption. With further and detailed research would certainly help Digital Transformation process in Brunei Darussalam to be fully committed and the rate of success can certainly be higher.

It is necessary to undertake a comprehensive and coherent assessment of the risks, vulnerabilities, and outcomes of the other Digital Transformation models and digital platforms, particularly social media platforms, in the context of growing online harm on a global basis.

REFERENCES

- Aysan, Ahmet and Unal, Ibrahim Musa, Fintech, Digitalization, and Blockchain in Islamic Finance: Retrospective Investigation (November 15, 2022). Available at SSRN: <https://ssrn.com/abstract=4279850> or <http://dx.doi.org/10.2139/ssrn.4279850>
- Ascarya, & Sakti, A. (2021). Proposing New Islamic Microfinance Model for Sustainable Islamic Microfinance Institution. In K. Hassan, M. Sarac, & A. Khan, Islamic Finance and Sustainable Development: A Sustainable Economic Framework for Muslim and Non-Muslim Countries (pp. 349-376). Cham, Switzerland: Springer Nature.
- ASEAN. (2021, September). The Bandar Seri Begawan Roadmap . An Asean Digital Transformation Agenda to Accelerate Asean's. Bandar Seri Begawan, Brunei Darussalam: ASEAN.
- ASEAN (The Association of Southeast Asian Nations). (2021, August 17). Digital Transformation in the ASEAN region. Bandar Seri Begawan, Brunei Darussalam.
- Campra, M., Brescia, V., Jafari-Sadeghi, V., & Calandra, D. (2021, April). Islamic countries and Maqasid al-Shariah towards the circular economy. The Dubai case study. EJIF - European Journal of Islamic Finance(17), 1-9. doi:10.13135/2421-2172/4560
- Deloitte. (2019). Tech Trends Deloitte Insights.
- Digital Economic Council. (2020). Digital Economy Master Plan 2025. Bandar Seri Begawan: Government of Brunei Darussalam.
- Hassan, K., Sarac, M., & Khan, A. (2021). Islamic Finance and Sustainable Development: A Sustainable Economic Framework for Muslim and Non-Muslim Countries. Cham, Switzerland: Springer Nature.
- International Telecommunication Union (ITU). (2010). Measuring the Information Society. Geneva, Switzerland: International Telecommunication Union (ITU).
- Moller, D. (2020). Introduction to Cybersecurity. In D. Moller, Cybersecurity in Digital Transformation (pp. 11-27). Springer. doi:10.1007/978-3-030-60570-4_2
- Mosteanu, N. R. (2020). Challenges for organizational structure and design as a result of digitization and cybersecurity. Conference proceedings of the Centre for Business & Economic Research (CBER), ICBED - 2020. 11, pp. 278-286. New York: Centre for Business & Economic Research. doi:2047-2854
- Muri, N. (2013). A Digital Masterplan for Dublin . Dublin: Dublin City Council.
- Mushtaq, M., Saghir, A., Kayani, M., & Bukhari, T. (2014). Islamic Management System and its Application in the 21st Century World. International Journal of Academic Research in Economics and Management Sciences, 3(3), 92-99. doi:2226-3264

- OECD. (2016). *Harnessing the digital economy for developing countries*. Paris: OECD Development Centre.
- OECD. (2019). *Measuring the Digital Transformation : A Roadmap for the Future*. Paris: OECD Publishing.
- Scholz, R., Bartelsman, E., Diefenbach, S., Franke, L., Grunwald, A., Helbing, D., . . . Pereira, G. (2018). Unintended Side Effects of the Digital Transition: European Scientists' Message from a Proposition-Based Expert Round Table. *Sustainability*, 1-48. doi:10.3390/su10062001
- Schwertner, K. (2017). Digital Transformation of Business. *Trakia Journal of Sciences*, 15(1), 388-393.
- Solis, B., Li, C., & Szymanski, J. (2017). *The 2017 State of Digital Transformation*. Altimeter .
- The Organisation for Economic Co-operation and Development (OECD). (2020). *A Roadmap Toward A Common Framework For Measuring The Digital Economy : Report For The G20 Economy Task Force Saudi Arabia 2020*. paris: OECD.
- Tsue Yap, & Ameerra Borhan. (2021). Implications of The Digital Economy on Policy-Making. *Journal of Business and Economic Analysis*, 157-176.
- Vial, G. (2021). *Understanding digital transformation*. Routledge. doi:9781003008637
- World Economic Forum. (2021). *ASEAN Digital Generation Report: Pathways to ASEAN's Inclusive digital transformation and recovery*.
- Yaacob, H., Yaacob, A., Basir, K., & Ali, Q. (2021). Enabling Legal Environment of Islamic Finance and Social Finance in Brunei Darussalam: A Demand for Improvement. In A. Sarea, *Impact of Zakat on Sustainable Economic Development* (pp. 186-195). IGI Global.