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## THE DEVELOPMENT OF ACCOUNTING INFORMATION SYSTEMS AND THE LIMITATIONS OF DOING SO IN THE DEVELOPING ECONOMIES OF THE WORLD<sup>1</sup>

### MUHASEBE BİLGİ SİSTEMLERİNİN GELİŞİMİ VE DÜNYANIN GELİŞEN EKONOMİLERİNDE UYGULAMA SINIRLAMALARI

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#### Abstract

With globalization, developing nations have managed to acquire or adopt the accounting information system used by the developed nations across the globe. The process of adopting or developing accounting information systems by the developing nations is beneficial but also faces increased challenges. Therefore, the paper aims at identifying the development of accounting information systems, as well as, shortcomings in the establishment processes in the developing states. Thus, it provides a literature review on the feature distinguishing developing nations from the developed nations. It highlights the link between globalization and the creation of accounting information systems across the globe. Moreover, it provides an overview of the role carried out by the accounting system in meeting the development needs of a country. Lastly, it provides an overview of adoption and problems associated to the creation of accounting technologies in the developing nations.

**Keywords:** Accounting Information Systems, Developing Economies, Limitations

#### Özet

Küreselleşmeyle birlikte gelişmekte olan ülkeler, dünya genelinde gelişmiş uluslar tarafından kullanılan muhasebe bilgi sistemlerini kendilerine uyarlamayı başarmıştır. Gelişmekte olan ülkeler tarafından muhasebe bilgi sistemlerinin benimsenmesi veya geliştirilmesi faydalı olmakta ama aynı zamanda süreçte zorluklarla da karşı karşıya kalınmaktadır. Bu nedenle çalışma, muhasebe bilgi sistemlerinin gelişimini ve gelişmekte olan ülkelerdeki kuruluş süreçlerindeki eksiklikleri tespit etmeyi amaçlamaktadır. Böylece, gelişmekte olan ülkeleri gelişmiş ülkelere ayıran özellikler hakkında bir literatür incelemesi sunmakta ve ayrıca küreselleşme ile dünya çapındaki muhasebe bilgi sistemlerinin oluşturulması arasındaki bağlantıyı vurgulamaktadır. Bunlara ek olarak, bir ülkenin kalkınma ihtiyaçlarını karşılamada muhasebe sisteminin oynadığı rol hakkında genel bir bakış sunmaktadır. Son olarak, gelişmekte olan ülkelerde muhasebe teknolojilerinin oluşturulmasıyla ilgili benimsenme ve sorunlara genel bir bakış ortaya koymaktadır.

**Anahtar Kelimeler:** Muhasebe Bilgi Sistemleri, Gelişen Ekonomiler, Sınırlamalar

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## INTRODUCTION

Technology has led to the rise and utilization of information systems in different sectors such as accounting. The use of information system in accounting practices aims at ensuring that the sector accommodates the changing needs and keeps up with the trends in the world of accounts (Socea, 2011). Thus, accounting information systems have proved to be necessary for countries across the globe, especially the developing nations. Literature shows that the evolution of the accounting systems across the globe can be traced to ancient cities such as Mesopotamia (Unegbu, 2014). The trends in the accounting system have evolved over the years and will continue to change in the future with globalization and shifts in the economy. Therefore, countries and organizations need to keep up with these trends and changes to ensure that efficient and effective accounting systems and practices prevail. Arguments have been raised claiming that the accounting systems, as well as, practices of countries differ due to variances in the legal system, earlier history, colonial impacts, economic structures as well as culture among others (Boolaky et al., 2018).

Therefore, it is valid to reason that nations that were colonized by similar powers have similar accounting systems, as well as, practices. However, with increased adoption of accounting practices and systems of developed nations by the developing countries, the argument has changed over time. Currently, it has been argued that nations with varied colonial influences, as well as, culture are uniting their accounting systems and practices through the utilization of international financial reporting standards (Boolaky et al., 2018). With globalization, developing nations have managed to acquire or adopt the accounting information system used by the developed nations across the globe.

The process of adopting or developing accounting information systems by the developing nations is beneficial but also faces increased challenges. Therefore, the paper aims at identifying the development of accounting information systems, as well as, shortcomings in the establishment processes in the developing states. Therefore, it provides a literature review on the feature distinguishing developing nations from the developed nations. It highlights the link between globalization and the creation of accounting information systems across the globe. Moreover, it provides an overview of the role carried out by the accounting system in meeting the development needs of a country. Lastly, it provides an overview of adoption and problems associated to the creation of accounting technologies in the developing nations.

## 1. THE CHARACTERISTICS OF DEVELOPING COUNTRIES

There has been increased debates across the globe on what features makes a country either a developing or a developed nation over the years. In this regard, developing countries are also known as third world countries and are considered less developed compared to developed nations and most of them gained independence by the end of the 1950s (Shareia, 2016a). They mostly include countries from the African continent, Asia, Latin America, the Middle East, as well as, Oceania. Developing nations across the globe have various features that differentiate them from developed nations. **However, although developing nations have shared similarities, they also show differences in their GDP, number of people, culture, degree of literacy, and economic, as well as, political structures among others. Despite these features, the developing nations have a**

**number of characteristics that are common to most of them.** For instance, developing nations have a lower per-capita income compared to the developed nations.

As a result, they lag behind in terms of development compared to the developed nations that have a high per capita income. Secondly, developing nations have a low level of human capital due to the low per capita income among other factors. As a result, such countries have low human development scores because of low human capital levels in regards to education and health. Thirdly, developing countries, especially low-income countries have a reportedly high rate of poverty and increased incidences of hunger, as well as, undernutrition. Statistics from studies carried out in 2005 indicate that 24% of individuals in low-income nations were under-nourished (Skoet and Stamoulis, 2006). Undernourishment poses a public health threat in such nations hence the need for the government to develop policies that can address such issues in the long-term.

Additionally, World Bank reports indicate that individuals living on less than \$1 a day are estimated to be 9.1% in East Asia and Pacific, 8.6% in Latin America and the Caribbean, as well as, 41.1% in sub-Saharan Africa. The fourth distinct feature of developing countries is their elevated population increase proportions resulting from high birth proportions, which contribute to further poverty due to a shortage of resources. The fifth feature is the increased predominance of agriculture in addition to reduced levels of industrialization and urbanization. Furthermore, such countries rely heavily on the informal sectors, which exposes more people to low paying jobs, as well as, reduced productivity (Oplatka, 2004). Lastly, developing nations have poorly developed labor, financial and other markets that undermine their ability to compete favorably with most of the developed nations.

It can be concluded that developing nations face more problems in their economy and other aspects than the developed nations do. Therefore, the developing nations need to adopt strategies that are utilized by developed nations to foster their development and growth to liberate or improve their situations. Globalization has provided a platform that the developing nations can use to learn from the developed nations with the aim of improving their practices and economies.

## **2. GLOBALIZATION AND THE DEVELOPMENT OF ACCOUNTING INFORMATION SYSTEMS**

Globalization has become an important aspect of the contemporary society and has significant impacts on people and institutions. Globalization is defined as the process in which the transfer of information, goods, services and human resources takes place across the national borders (Elsharif, 2019). A study by Boolaky et al. (2018) indicates that the current trend in globalization has facilitated the assumption of international financial reporting standards in countries across the globe in the field of accounting. The adoption of accounting standards regulating the functionality of accounting information systems in the age of globalization has proved beneficial for accounting profession. For instance, evidence from research depicts that IFRS espousal promotes market development and provides a tool for financial growth in addition to increased investment in emerging economies (Boolaky et al., 2018). Globalization has promoted financial market liberalization, as well as, accounting standards in accounting (Shareia, 2015). As a result,

western accounting technologies and practices have become widely shared and adopted by countries across the globe.

Technology has facilitated the establishment and utilization of information systems even in accounting practices in the age of globalization. Therefore, in the age of globalization, accounting information systems have led to continuous improvement and changes in the accounting processes hence ensuring efficiency and effectiveness of financial reports (Elsharif, 2019). A study carried out in Malaysian public sector agencies shows that current accounting information systems has essential effects on task efficiency in activities such as monetary reporting, auditing and budgeting (Zakaria et al., 2017). This is because the system facilitates gathering and analysis of data to aid in the decision-making process, as well as, sharing of accounting information and practices between countries (Salehi et al., 2010). Furthermore, globalization has resulted in the unification of accounting processes in countries across the globe by facilitating sharing of information and skills through the accounting information system.

Particularly, this has been reported between the developed and developing countries where universal accounting standards have been used or shared. Therefore, it is valid to argue that the duty of bookkeeping systems in evolving nations is a global practice that is experiencing increased changes to become aligned with western countries' accounting standards and practices (Shareia, 2015). However, in addition to positive outcomes, globalization and accounting information systems may have adverse impacts on organizations and countries. Therefore, there is a need to regulate the application or utilization of these practices to ensure a balance between negative and positive impacts. With future changes in accounting technologies and practices across the globe, globalization provides an effective tool that can be used to facilitate information sharing in different nations.

### **3. THE ROLE OF ACCOUNTING SYSTEMS IN MEETING DEVELOPMENT NEEDS**

The issue of the role played by the accounting technologies in meeting the expansion requirements of a country has attracted the attention of researchers over the years. Studies have indicated that the accounting system of a republic plays a crucial role in all stages of economic, as well as, social development of a developing nation (Shareia, 2016b). This is because the system provides adequate information that can be used in the planning, implementation, control and making development decisions of a country as in the situation of Libya. Therefore, accounting technologies have had significant impacts on socio-economic and political development through the improvement of decision-making processes and resource management in countries across the globe (Unegbu, 2014).

According to Thompson (2016), the existence of a reliable and proficient accounting system performs an essential role in meeting the development needs of an economy. Countries that adopt effective accounting systems are likely to become more developed than those without. For instance, a study carried out by the United Nations in 2008 shows that reliable and efficient accounting systems in accounting result in greater economic prosperity, effective allocation of resources, increased foreign investments in addition to the low cost of capital as cited by Thompson (2016). Consequently, it can be claimed that accounting systems promote economic development by ensuring improved

mobilization of local and international investment, providing a conducive environment for investment and transparency hence promoting the financial stability of the nation as indicated by ACCA (2012). Evidence of this fact is provided by a study carried out in the Island Kingdom of Tonga showing that improvement of their accounting systems facilitated the economic growth of the region (Taufu'i, 1996).

They led to effective financial reporting and management, efficient distribution of resources in addition to improvement in the utilization of existing resources on the region. Therefore, the accounting professionals in more developing nations should be encouraged to use the opportunities provided by globalization to advance their accounting information systems for the sake of development. However, although many studies have focused on the role of the accounting systems in attaining economic growth needs, they also promote social and political development. Therefore, in the future, more studies will need to provide more details on how the accounting system promotes social, political and other developments in states across the globe.

#### **4. ADOPTION OF ACCOUNTING SYSTEMS FROM DEVELOPED COUNTRIES**

Accounting systems refer to a method used to control income, expenditures besides other fiscal activities of an organization or a country. Since their development, accounting systems have become highly recognized and adopted across the globe. Third world countries have adopted accounting systems and practices from the developed nations to improve their financial reporting and accounting in the economy. Studies have indicated that an estimate of more than 100 nations have accepted or are willing to implement international accounting standards (Zehri and Abdelbaki, 2013). Based on the modernization theory, it is beneficial for underdeveloped countries to adopt practices done by the developed republics to reach a more advanced degree of development (Shareia, 2015). The adoption of the accounting system and standards from developed nations saves the developing nations the cost they could have incurred establishing their accounting practices (Antwi, 2010).

The resources saved by these nations can be used to fund other development projects that promote economic progress and efficiency of financial markets of these countries. Such perceived benefits explain why many developing nations have adopted or are willing to embrace accounting processes utilized in emerging nations. However, studies have indicated that less attention has been provided to the influence of local needs and environmental aspects in the implementation of the accounting system from developed countries. Therefore, it can be concluded that globalization has presented a challenge to the developing nations in relation to successful adaptation of accounting systems that are derived from the developed nations (Shareia, 2016a).

Masoud (2016) conducted a study in Libya to identify how the environmental differences between the country and those of the United States, as well as, United Kingdom from which they have adopted their accounting systems have influenced their successful adoption. The findings of this study show that for the adoption process to be effective, there is a need to consider local needs and environmental factors of a country (Masoud, 2016). Individuals involved in the adoption process must utilize new technologies to gather data about the local needs and environment of a region before

making a decision to adopt accounting practices from other countries. It will ensure that the adopted accounting systems are effective in meeting the specific needs at the local context of a nation hence saving on time and resources. This is because adopting ineffective accounting technologies waste time and resources that could be used to promote other development in such regions.

Therefore, it can be concluded that different countries have different accounting systems due to differences in environmental factors that influence the decision or policymaking process of a region (Shareia, 2016b). Therefore, each country needs to establish its individualized accounting technology that is appropriate to its requirements in addition to being consistent with its individual environmental factors. With globalization, sharing of knowledge and practices have been made possible by the adaptation of accounting systems from developed nations to the third world countries has faced challenges. In this case, environmental factors have led to these changes hence the push towards the development of universal accounting standards, as well as, practices to promote effective adaptation and adoption of accounting systems among different countries.

## **5. PROBLEMS IN THE DEVELOPMENT OF ACCOUNTING SYSTEMS IN DEVELOPING COUNTRIES**

Although accounting systems are beneficial to developing countries, their development poses various challenges that need to be addressed. Evidence from research has indicated that while more than 100 developing countries show interest in adopting accounting systems, they have faced issues with the development, as well as, implementation of such programs (Zehri and Chouaibi, 2013). For instance, the lack of sufficiently established regulatory systems has hindered the enactment of international financial reporting standards in evolving countries. Most of the developing nations have lacked effective accounting regulations, which makes it hard to develop a working accounting system.

Therefore, there is a need for stakeholders in developing nations to collaborate in developing more reliable and effective accounting regulatory frameworks that are similar to those used in developed nations. The development and implementation of the accounting system requires the stakeholders involved to have adequate skills and knowledge in the field of accounting. If quality accounting education is lacking, then countries face issues with the establishment of an efficient accounting system (Ćerne, 2009). Accounting education is weak in developing countries, which also lack qualified professionals hence hindering their accounting system establishment processes. For instance, a study carried out in Jordan by Helles (1992) depicts that the establishment of the accounting technologies in the country has faced various problems. Such issues included a deficiency of competent accountants, weaknesses, as well as, the underdevelopment of accounting programs in the country in addition to the lack of adequately trained staff (Helles, 1992).

Therefore, countries like Jordan should invest more resources in ensuring improved education and training of accounting professionals, who can successfully develop and implement country-specific systems to adopt international accounting standards. However, it is not the best solution for the developing nations sourcing accountants from developed nations because different developed nations may have

different accounting systems from those of developing nations (Černe, 2009). The lack of information on accounting in developing nations hinders the development of the accounting system. For instance, studies indicate that developing nations have reduced the perceived value of the accounting system in addition to showing negligence in the use of related information (Shareia, 2016a). As a result, many developing nations have lagged behind in the development of effective accounting systems and policymakers face increased reluctance by people, who do not appreciate changes in the existing status quo.

Additionally, the lack of adequate resources such as finances and accounting infrastructure may hinder the development of accounting systems. Adequate attention has failed to be given to the environmental and local needs of the developing nations during the adoption of accounting systems from developed countries. As a result, the developed or adopted accounting systems are irrelevant and inconsistent with the environmental and developmental needs of a country in its local context (Hopper et al., 2017). This leads to standard overall at the corporate and national levels since organizations are forced to comply with accounting standards and practices that are beyond its corporate needs in convolution plus expertise of their staff (Antwi, 2010).

Issues of corruption or lack of accountability of public resources in emerging economies affect the development and implementation of the accounting system. Corruption leads to misappropriated efforts, wasted resources, as well as, financial losses thereby undermining the establishment of operational and competent accounting systems in these nations (Shareia, 2016b). The factors or challenges can be concluded to be the major causes of inefficiency of developing nations to have sustainable accounting information systems. Thus, for effective development and implementation of accounting systems and standards, the developing nations must address the factors hindering these practices. Investing in research and development may help these countries in coming up with better solutions to issues limiting their successful development of accounting systems. Therefore, stakeholders should collaborate in such efforts to ensure the attainment of desired accounting outcomes in the developing nations.

## **CONCLUSION**

Developing accounting information systems have proved necessary in the contemporary society, especially in the developing world. Therefore, many developing nations are utilizing or adopting accounting standards and practices developed by developed nations. However, the process of adoption does not always bear the desired outcomes due to their failure to meet the local needs of a country hence the need to develop own systems in each country. The existence of international accounting standards in countries across the world has facilitated the standardization process in the accounting practices. However, few studies have focused on the adoption, as well as, compliance with these standards in developing nations.

Therefore, it can be recommended that future studies should provide more details on the level of compliance and adoption of international accounting standards in different developing nations. However, it can be claimed establishing accounting systems specific to each evolving economy is challenging hence the need to address such issues in the future policymaking. More studies should provide more evidence-based insight into strategies that can be used to eliminate the issues encountered in the establishment of

accounting programs in emerging nations in the long-term. Such strategies may include establishing better education and accounting infrastructure in developing nations to meet the challenge of economic development. Investing in research and development will help the developing nations to keep up to date with development in accounting information systems amidst the changing economic environment across the globe. Moreover, the process of efficient and effective development of accounting systems requires collaboration between governments, accounting organizations and other stakeholders in different countries. The study has implications for developing countries and their policymakers in ensuring effective development and adoption of the accounting systems and standards in the long-term.

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