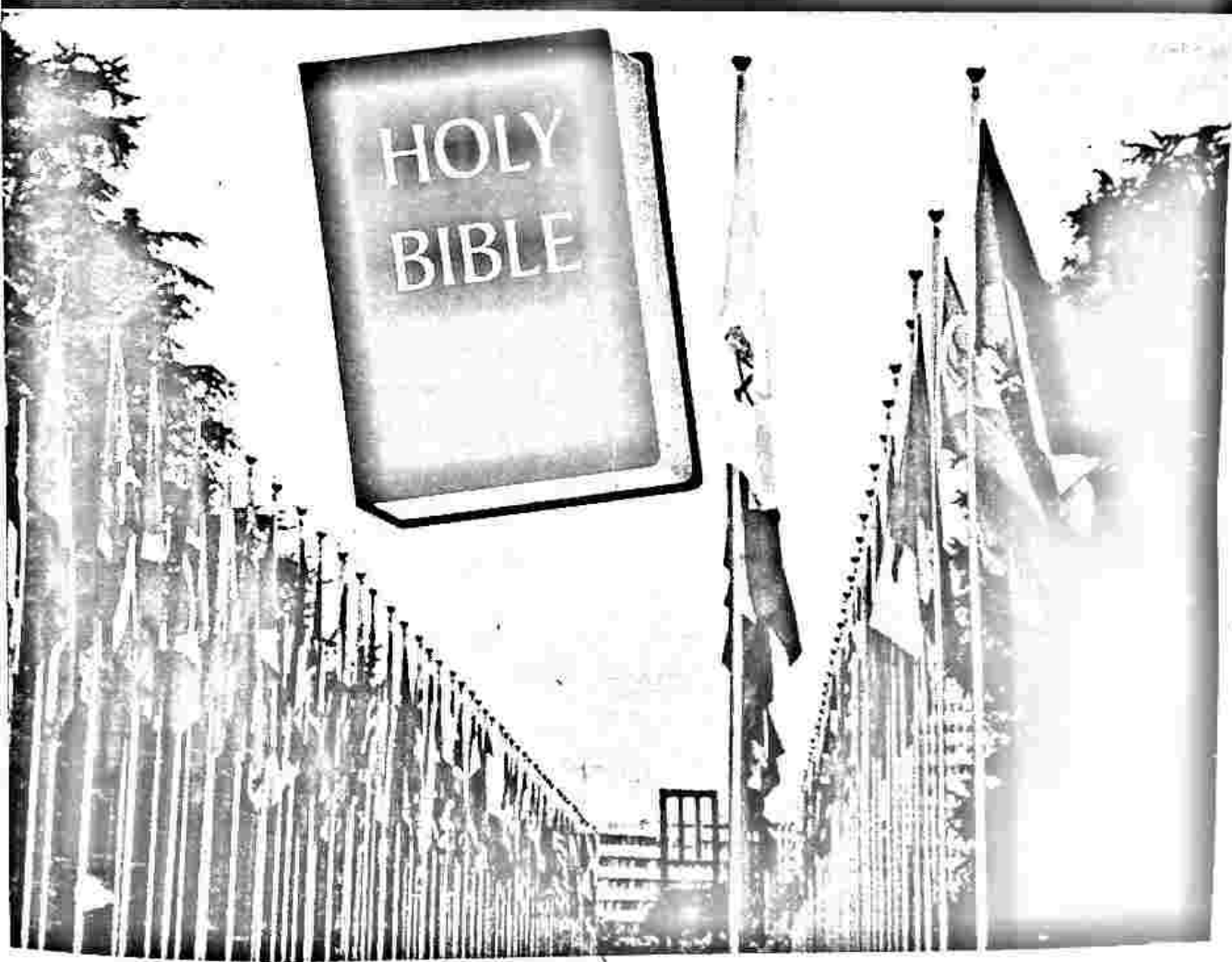


INFORMATION SCIENCE IN THE BIBLE



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CHAPTER 16

u INNOVATION FROM A BIBLICAL PERSPECTIVE AND ITS IMPORTANCE TO LIBRARIES

By
Basahuwa, Comfort Baliyat

INTRODUCTION

Innovation is the creation of a specific product, service or idea with the purpose of obtaining value through its commercialization by satisfying the customers. Beyond the struggle for relevance, engaging in the act of innovation allows libraries to experience unique patronage of users. Innovation however has a unique biblical perspective in its source and creativity. This chapter examines innovation from the biblical perspective and its significance in various library services.

The creation process as recorded in Gen.1:1-4 “in the beginning God created the heaven and the earth... And there was evening and there was morning, the first day” can be regarded as first innovation to have ever taken place. Creation is thus the moment of 'givenness', which provides a “commonly held system” upon which human innovation is founded and dependent. Innovation is an important aspect of human endeavour and the library has benefitted immensely from the concept. For example, there has been an ongoing evolution from acquiring books, journals and serials in print to providing access electronically, thus moving towards virtual library and changing the scope of the library. Few organizations can remain static in this information age which is characterized by rapid change in social, economic and political influences as a result of innovation. Innovation has brought fast change to information environment where media and ICTs are spreading innovation in developed and developing countries alike, spurring new business models and unleashing new opportunities. Libraries have to anticipate and adapt the change to preserve their central role in providing access to information and knowledge. Libraries have opportunity to seize the information society revolution to strengthen their role in society and be recognized as agents for development and inclusion in developing and developed countries alike through innovation. As testified by Carr (2009) “Innovation and transformation are important concepts in today's libraries especially in light of libraries ongoing transition from acquiring serials in print to providing access electronically, thus moving towards the virtual library”. In order for libraries to remain relevant to their users, they must follow the fundamental rule of business, that is to supply what is demanded by their users i.e. adequate and relevant

information resources and services, all have to shift from book-centric to user-centric. The objectives of this chapter are to examine innovation, the different types and the drivers of innovation, importance of innovation in libraries and trace the Biblical perspective of innovation.

INNOVATION, BIBLE AND THE LIBRARY

Various definitions of innovation have been provided. Innovation has been defined as “the introduction into the organization of a new product, a new service, a new technology, or a new administrative practice, or a significant improvement to an existing product, services, technology, or administrative practice” (Daft, 1978). *The Oxford English Dictionary* (2014) defines innovation as “introducing new things”. *Merriam Webster's learner Dictionary* (2015) defines innovation as “a new idea, device or method or the act or process of introducing new ideas, device or method”. It is obvious that innovation is something new and it is everyday language used in this broad meaning. Grudin (1990: 15) notes that “the generation of ideas involves factors that are not exclusively cerebral, factors that include the physiology, the emotions and the outer world. We do not create, nor even learn by conscious concentration alone...original thought is the product not of the brain, but of the full self”. Gary (1990) argued that faith would accordingly be included in that self. Innovation may serve as a means of redeeming mankind. Experience of Christians and the scripture reveals God uses innovation for humans to know more of him, to communicate with Him and to ultimately accomplish His earthly will for mankind. It is worthy of note that while man can make things different or better, it is only God who makes something entirely new. Only God can make something out of nothing, hence He is the only one who deserves the title of Creator. God's creative power can be seen in His power of Salvation.

All innovation begins and ends with the needs of end-users. Librarians have clients with a special relationship of deep concern ordained by God and specifically outlined in the Bible as, “A new commandment will I give to you, that you love one another” (John 13:34). If the librarians are innovative in creating, writing, cataloguing, organizing information materials, and in the use of retrieval tools, it can open up such space in time through which God may speak to their users.

TYPES OF INNOVATION AND THEIR EQUIVALENTS IN THE BIBLE

There are different types of innovation. Innovation is relevant in the library and can be applied to a number of instances in the Bible.

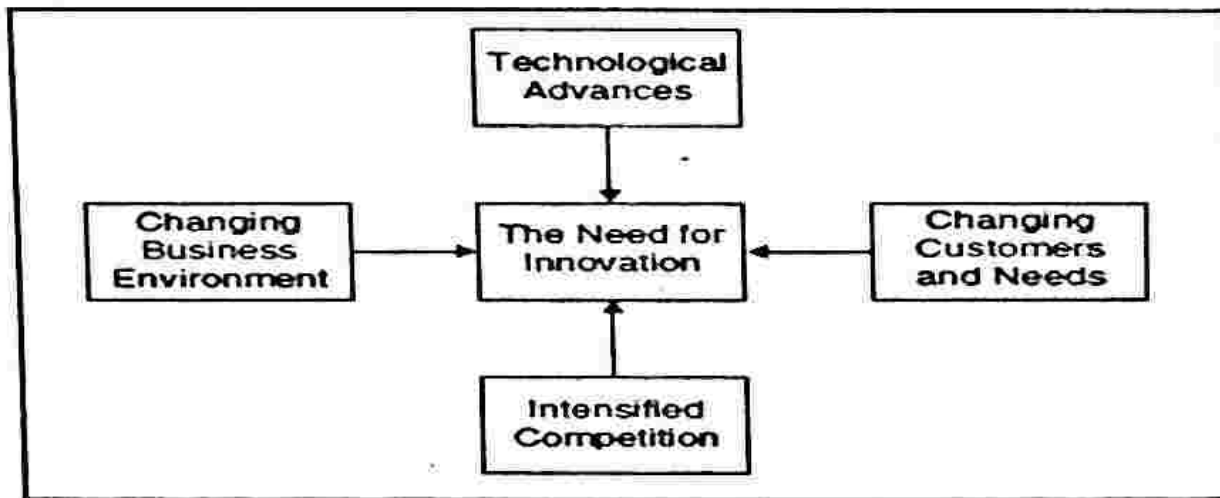
- (a) **Product/Service Innovation:** Introduction of goods or services which are new or substantially improved. This could include improvements in functional use, convenience or technical capabilities. **An example of new thing coming up is in**

Genesis 1:1-31, the creation story “In the beginning God created the heaven and the earth...”

- (b) **Process Innovation:** Implementing a new or significantly improved production or delivery methods.
- (c) **Business Model Innovation:** A change about the way business is done, for example, outsourcing services. A biblical example of this can be found in **Psalms 119:105** - Thy word [is] a lamp unto my feet, and a light unto my path. Leaving our ways of doing it to apply God's instructed way.
- (d) **Organizational Innovation:** Creating or changing business structures, practices and models. Example of this can be found in **Mark 2:21-22** – “No man also seweth a piece of new cloth on an old garment: else the new piece that filled it up taketh away from the old, and the rent is made worse.”
- (e) **Marketing Innovation:** Developing alternative marketing techniques to deliver improvements in price, position, packaging, product design or promotion. Example of this can be found in **Galatians 1:8** – “But though we, or an angel from heaven, preach any other gospel unto you than that which we have preached unto you, let him be accursed.”
- (f) **Supply Chain Innovation:** Improving the way that materials are sourced from suppliers or improving methods of product delivery to customers. Example of this can be found in **1 John 2:24** – “Let that therefore abide in you, which ye have heard from the beginning. If that which ye have heard from the beginning shall remain in you, ye also shall continue in the Son, and in the Father”.
- (g) **Financial Innovation Brings Together Basic Financial Concepts:** This might include credit, risk-sharing, ownership or liquidity to produce new financial services, products, or ways of managing business operations.

INNOVATION DRIVERS

There are many technologies and ideologies that are elevating and driving innovation. Here, some of those creativities will be highlighted and treated. This diagram is a summary of such drivers, and each of them will be commented on.



Technological Advances: New educational models are being implemented which adopt changing models of teaching and learning and whereby students are offered more freedom in choosing the time, location and manner of their learning. Digital technologies and especially the World Wide Web (WWW), have made it possible for students to access library and information resources at anytime of the day or night from their homes, workplace and community libraries (providing adequate communications and computing infrastructure). One can get a glimpse, in the Bible, of some tools and technologies developed that shaped the conditions of mankind. In Genesis 6:14, Noah builds an ark out of gopher wood, requiring tools to fell the wood and construct a boat of that size and there are several biblical references to refining silver (Proverbs 25:4, Zechariah 13:9, Isaiah 48:10). Refinement of precious metals also included some learned technological processes.

Changing Customers and Needs: This is changing characteristics and requirements of customers. For users' need to be met, new form of users' instruction and support are necessary. This is as a result of change in task of libraries. Classic tasks like collective building, cataloguing and indexing have changed and gotten new methods of performing them. Libraries are changing somewhere on the continuum between the "paper library" to the "virtual library" to fulfill the new mission of libraries successfully. It is necessary that emphasis is given to new functions and skills to meet developments of new products, services and marketing of information products.

Instructive and communicative skills and other ways of domains knowledge are important factors in this development. It is important that new developments in ICT skills are adapted and integrated in the relevant levels of the library. Libraries are in a process of continuous and rapid development, requiring an ongoing professionalization of the staff. Therefore, the need and demand for additional learning is expected. Genesis 37 records that Joseph wore a coat of many colors. The fabric was derived from animal hair and woven in some process, and then dyed in another process. There are many references to sandals, belts and other clothing items that had some unique process governing their manufacture in order to make the users happy.

Intensifying Competition: Open and competitive markets, both within and between nations, foster innovation and efficiency and provide opportunities for all to improve their living condition. Users' involvement in innovation in new services and product development will intensify competition in libraries, for example, Alam and Perry (2002) have developed a stage model of new service development. This framework takes into account the care elements of user's involvements in new service development, highlighting objectives and purposes of involvement. They find involvement of customers in ideas' generation and screening as the most important input to service and innovation. Nanbisan (2002) has likewise identified a number of stages of new product development. He has come up with three roles: customer as a resource, customer as co-creator and customer as users. James 3:4 mentions rudders that were used to steer boats. John 21:11 tells us that Simon Peter caught many fish using netting. Rudders and netting are just two of many "tools" used in the ancient world to be productive. Deuteronomy 27:15 says that 'Cursed is the man who makes an idol or a molten image, an abomination to the LORD, the work of the hands of the craftsman, and sets it up in secret ' And all the people shall answer and say, 'Amen.' These are examples of business men competing for superiority among themselves. Library profession is currently facing competition with other information disciplines like ICT. It needs to create/innovate new methods of doing things in order not to be left behind in the scheme of things.

Changing Business Environment: Traditionally the core roles of library staff lay in acquiring, processing and lending library materials and in responding to the user information queries. Today, combination of outsourcing and self-help mechanism have replaced these previously "core" roles. Libraries are typically involved in three educational activities of teaching, research and community service. The role of librarians in libraries must be integrated into all these activities if they are to ensure their continued relevance in the information age. The library must turn from ownership mechanism to access mechanism and from re-active to pro-active involvement to enable them meet the user needs. Isaiah 40:19-20 reads "As for the idol, a craftsman casts it, a goldsmith plates it with gold, and a silversmith fashions chains of silver. He who is too impoverished for such an offering selects a tree that does not rot; He seeks out for himself a skillful craftsman, to prepare an idol that will not totter. These are Bible verses emphasizing changing business environment where hardwork is more important to stay on top.

CONCEPT OF LIBRARY

A library has been defined by Aina (2011) "as a store house of knowledge for reading and study. It is also a collection of information sources, resources and services and the structure in which it is housed". A library is an organization with a mission which transcends the barriers of space and time and its existence is not dependent on the physical form of documents. Its mission is to provide a link between the past and the present and shape the future of society by preserving the records of human culture, as well as enhance access to global transformation by integrating the emerging information

processing, storage and communication technologies which have revolutionised the role of libraries in disseminating information to their users. Libraries can be categorized into four major types. This is based on their collections and the groups of people they serve. These can further be subdivided into groups. These include:

Public Libraries: This is a library which is accessible to the public and is generally funded from public sources. They can be at any level from local to national/central government level.

Academic Libraries: According to Hoare (1997), an academic library is a library that is attached to academic institutions above the secondary level, serving the teaching and research needs of students and staff. These libraries serve two complementary purposes: to support the school's curriculum, and to support the research of the university's faculty and students. Thus, the library plays a key role in building nation's education system.

School Libraries: These are libraries that are established in primary or secondary. The goal of this library is to acquire current and relevant materials that will support the school develop reading culture in them.

Special Libraries: These are libraries essentially meant for research on a particular field or study, and are patronized by specialists and researchers. They are organized along subject lines or disciplines because they are limited in scope and are inclined to a single subjects that comprises a field of activity or study. The interest of the parent organizations or institutions of special libraries usually determine their scope. These types of libraries are established to meet the highly specialized requirements of professional or business groups. A library can also be referred to as special library if it collects specialized collections such as films, museum objects or maps. A library can be special if it is established to serve a particular group of users such as lawyers, doctors, or nurses (Aina, 2004).

The role of library cannot be over emphasized; they are key actors in providing information. They encourage social inclusion by striving to serve all those in their user communities regardless of age, gender, economic or employment status, literacy or technical skills, cultural or ethnic origin, religion a political belief, sexual orientation, and physical or mental ability. The community they serve may be geographically based or increasingly linked by technology and shared interest (IFLA, 2013).

BIBLICAL PERSPECTIVES OF INNOVATION AND ITS IMPORTANCE TO LIBRARIES

The Bible did not specifically mention innovation in the context of introducing something new as it exists today, it however discussed how God the Father, Son and Holy Spirit (Trinity), prophets, and some disciples and apostles of Jesus use new ideas to change and add value to many people's lives. In Mark 5: 25-34 (NKJ), there was a story of "a certain woman, which had an issue of blood twelve years.... And he said unto her; Daughter, thy faith hath made thee whole, go in peace". This is a woman that suffered for twelve years

with the issue of blood, went to physicians, spent all she had but could not get better but when she saw Jesus and believed He could heal her, immediately she touched His garment the blood dried up. Libraries are established for the systematic collection, organization, preservation and dissemination of knowledge and information. It is essential for libraries to preserve and maintained the valuable knowledge and information contained in books and documents in order to make them available to the right user, at the right time and in the right format. The woman with the issue of blood came to Jesus and her need was met. Apostle Paul was a first Century innovator who travelled throughout Asia Minor telling people how they could be transformed by faith in Jesus Christ. To the Christians in Rome Paul wrote "And be not conformed by this world, but be ye transformed by the renewing of your mind, that ye may prove what is good, and acceptable, and perfect, will of God"(Romans 12:2 NKJ). The world at large has been undergoing innovation from the beginning till date, as such, libraries need innovation as pointed out by Layten (1997) that "innovation is no longer an option but a necessity for libraries".

Biblical Perspective of Innovation: Technological Advances in Libraries

The world as a whole sees digitalization as the solution to a wide range of problems emanating from the new technology. Isaiah 11:9 says, "for the earthly shall be full of the knowledge of the lord, as the water cover the sea." This means that many people will acquire new things which will come up and change the former ways in which people were living and doing things. The advent of ICT has expanded the scope of library and information services. ICT, according to Abubakar (2011), has been introduced and included in all aspects of library services. E-library and e-resources are becoming the order of the day in library and information practices. The WWW, search engines and other platforms such as Whatsapp and Instagram are media that help to achieve many exploits - keeping in touch with friends and family by e-mail, find new friends, seeking information, doing research, listening to news, playing online games, and marketing of products and goods. In a Biblical perspective, the web is similar to how individuals are connected to God through prayers. That is to say that the whole world is connected to God just like the spider web which hangs on a tree is connected to several branches of the tree. ICT has enhanced the use of library, because in the case of academic library many students come to the library to access the internet.

Biblical Perspective of Innovation: Changing Customers and Needs of Users: It has always been said that change is constant and it affects many aspects of human life. The information age is characterized by ICT use. Libraries are obliged to moving with the current trend in order to meet the needs of its users. It is all about considering local circumstances and the users' community needs. This involves conducting extensive process of seeking solution to adoption. Chesbrough (2003: 2006) has argued that "the process of innovation has shifted from one close system, informal to the organization, to a new mode of open systems involving a range of external players" which means - collaboration between library resources and users can lead to a mutual understanding of

the customers' needs and wishes as well as understanding of the technological opportunity. In Mathew 4:23 (NKJ) the Bible says "And Jesus went about Galilee, teaching in their synagogues, and preaching the gospel of the kingdom, and healing all manner of sickness and diseases among the people". This implied Jesus travelled on sea, cross broader, beyond Jordan, Galilee to reach out to those who were in need. Being the all-knowing God he knew when, where and the time to go to a particular place to meet people's needs. Just like Jesus' work was associated with many innovations in His relationship with peoples, it is necessary for libraries to emphasis on new functions and skills like redefining user needs and developing new products and services.

Biblical Perspective of Innovation and Competition in Libraries: Open and competition market, both within and between nations of the world fosters innovation and efficiency and provides opportunities for all library and information centres to improve their services. Alam and Perry (2002) have developed a stage model of new service development. They find involvement of customers in ideas' generation and idea screening as the most important input to service innovation. In Jesus' time, many people were running after Him for their needs to be met, this brought competition even within His disciples as stated in Mathew 18:1 "At the same time came the disciples into Jesus, saying, who is the greatest in the kingdom of heaven?" Also in Mark 10:35 (NKJ) "And James and John, the son of Zebedee, come unto him, saying, Master, we would that thou should do for us whatever we shall desire. Zebedee's children came to Jesus wanting Him to meet their desire which was to let one of them sit at God's right hand and the other at the left in His glory. The above verses enumerate competition in service rendering. Jesus gave them an innovative answer by letting them know that whoever wants to be the greatest must be a servant to others. This He demonstrated by washing the feet of His disciples during the Feast of Passover. That is to say also that Jesus offered services that were needed and that drew many people to him. Libraries should in the same vein offer variety of services and activities that will make them have an edge to their competitors in the information society and be innovative too.

Biblical Perspective of Innovation: Changing Business Environment: New forms of cooperation among governments, societies and organizations are required to achieve this goal of innovation. Library's staff traditional core role lies in acquiring, processing, and lending materials and responding to user generated information queries. The combination of outsourcing and self-help mechanisms of today have replaced previously "core" roles of library. The concept of flexible delivery has captured much attention in many countries, therefore libraries must imbibe innovation concept and turn from ownership mechanism to access mechanism and from re-active to pro-active involvement of activities around their community. Libraries should no longer afford to sit in the library building, waiting for users to seek them out. Jesus reached out to many villages and people to change their present environment. In Mathew 4: 19 (NKJ), Jesus says "follow me and I will make you fishers of men". The brother of Mary and Martha who was Jesus' friend died in Bethany while Jesus was in Jerusalem, His attention was called while

mourning was in progress. When Jesus arrived at the deceased house it was four days after the demise of His friend but He brought back life to Lazarus his friend. Jesus went to their house and not Mary and Martha going to Jesus' house.

CONCLUSION

Libraries, both in public and corporate organizations, have been strategically shifting away from “doing for” users to enabling users to use the available content and resources to do what they can and what they want to do by themselves. In John 3: 16 (NKJ), the Bible says “For God so loved the world, that He gave His only begotten Son, that whoever believeth in Him should not perish, but have everlasting life. God loves us and has made a perfect innovation for us by giving us His Son, who reconciled us back to Him by dying on the cross, buried and rose the third day. He has given us the Holy Spirit to guide us in all our ways and a continuum innovation forever. If we believe, libraries can keep to the strategies of innovation as a continuum process to maintain their status and be key players in the development of the nation.

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