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Digitalisation Success in Learning Organisation: Preliminary Outlook

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ABSTRACT

The use of digital information tools in our daily life, demands technical competencies to navigate through digital information successfully. Every learning organisation today, facing a lot of challenges to keep their institutions going, increasing in growth and sustainable effectively in a modest world. Knowledge is the main resource and the important essence in any of learning organisations. Knowledge management nowadays is practically accessible through digital tools. The need on which digital competency level and resources availability, are the key factors on digitalisation success process. This only a concept paper, hence the purpose of this paper is to reveal that in a learning organisation, the digitalisation process maybe success with the help of technology, resources and the competences of the users. The concept is developed by an extensive literature review of on digitalisation and analysis of different knowledge sources in a learning organisation. The key concept can be used by practitioners in developing a learning organisation to guide them to choose a sufficient subset of tools that covers the digitalisation processes to ensure that no process is overlooked. The result of successful digitalisation is an interesting area for further research. However, the current view on value underlies in it offering practitioners in giving at least a starting point. The paper can be used by educational organisations to guide on successful in digitalisation process effectively and efficiently. The paper addresses some of the social elements related to successful in learning organisations. However, it is more

technically targeted. Researchers have analysed that holistic overview and the effect of digital competence towards the successful of digitalisation process. Furthermore, limited research addresses the successful of digitalisation process because of the constrains in resources.

Keywords: *digitalisation, IT business, technology, learning organisation, business intelligent*

INTRODUCTION

Every organisation today is dying to keep their businesses going, increasing in growth and sustainable effectively in a competitive world. Some of these challenges are high employee turnover, significantly demand on digitised information, also known as big data and cloud management, the requirement to make fast and accurate decisions, the need to eradicate redundancy of efforts, and the need for strong teamwork among employees are vital. These challenges can be flattened in learning organisations by implementing the effective and efficient of knowledge management and business intelligent practices using technological solutions.

Among of all the challenges in learning organisations, there are two issues on the handling and preservation of organisational knowledge, which have gained much attention. Knowledge management in learning organisation shall be in line with the needs of the current environment. According to Singh T. (2010), is it appealed that performance and improvement in the learning organisations are reliant on the amounts of knowledge and information sharing that take place by all the members; and that an organisation's value may depend on the organisation's ability to build and succeed the knowledge management.

The definition of knowledge, according to the literature, is the experiences, communication or inference which is accumulated through time (Zack, 1999). It is supported by (Sousa *et al.*, 2010; Nonaka *et al.*, 2000), and considered in any organisation; this is one of the most important assets. Knowledge can be identified as either tacit or explicit. Tacit knowledge known as highly personal or inner self and subjective, it is based on feelings. Emotions and experiences and learning. This knowledge which is only

understood and applied by the person and it is difficult to eloquent with others. Tacit knowledge is developed from the person's direct experiences and actions, and the person is usually shared through highly interactive conversations, story-telling, forums, table talk, and shared experience. While explicit knowledge, on the other hand, is logical, codified, systematically arranged, more precisely and formally articulated. It is like a manual that everybody can follow straight forwards. When it is explicit, (Mayweg *et al*., 2011), it is simply documented, easy to communicate and everybody can share, using methods such as manuals and formal reports. Polanyi (1967) was first introduced the terms of tacit and explicit knowledge, been using until this recent years.

Knowledge management nowadays is practically accessible through digital tools by intelligent business people. The use of digital information such as data, tools, and systems, demands technical competencies to navigate through out the digital information successfully. Within learning organisation, online learning programs rely on multiple technological components and systems to operate for course delivery. Usova's (2011), where the successful of the integration of on-site and online instruction should have a similar commitment.

RESEARCH QUESTIONS

There are various essentials in digital competencies to develop and handling digital information within learning organisations. Below are the research questions as a guideline in this study:

RQ1. What are the digital competencies required in the successful of digitalisation in learning organisations?

RQ2. What is the level of readiness in the successful of digitalisation in learning organisations?

RQ3: What are the key sources to make the successful of digitalisation in learning organisations?

PROBLEM STATEMENT

There is a great demand for digitalisation alert, among learning organisation

for developing and managing digital content to stay relevant in this 21st century information environment. Learning organisation is struggling in providing the various types of digital content the digital medium, required to work in a digital environment.

Trepanier (2012), stated that digital skills are the competence to use computer hardware and software in managing digital information systems. It also needs to comply with applicable security measures, ethical aspect and to safeguard digital information. Therefore, there is a crucial to identify essential skills digital competencies that may acquire skills to fulfil the digital information needs. It is also important to measure the status of digital competencies among users to address the challenges as well as the constraints of the digitalisation process. There is a view of the related literature showed that only a few studies had been conducted to measure digital competencies in a learning organisation.

Learning organisations need not only to adopt technologies and services but also to align organisational structures and cultures to provide services in the context of rapidly changing demographics and demands in learning organisation context. Roth *et al.* (2015) at UC San Diego described their need to create a scalable orientation activity on an online, and it is a mobile platform. In spite of the significant contributions of technology adoption and continuous research on understanding the digitalisation process in a learning organisation, there are unknown resources on technological readiness. The questions on the successfully digitalise on individuals and the learning organisations itself, whether they are ready to embrace high-tech innovations have remained unrequited. To successfully in digitalisation this is a very important aspect to look into, to parallel with the technology readiness research.

Digitalisation process is the ability to make progress on digital collections with currents resources that contribute to society. Digitalisation in the definition is the integration of products as physical objects, people and processes through the internet of things. It may not require permanent staff or sustained funding, and the use of volunteers can incite the perception 'that volunteers are viable replacements for the progress on the digitalisation process' (Bartlett, 2013). Therefore, it is crucial in learning organisation to successfully implementing the digitalisation process for the benefit of its

leaning organisations itself. There is a view of the related literature showed that only a few studies had been conducted to measure the key sources on the successful digitalisation process in a learning organisation. This study attempts to find the answer.

LITERATURE REVIEW

Digital content is any content that exists in the form of digital data. Digital content is created by digital media, it is stored in either digital or analogue, and it has the specific format, according to the origin. Forms of digital content may include information that is digitally broadcast, streamed, or contained in computer files that may be accessed through digital media. In other terms, the example of digital content which is usually created by popular media types, such as a computer, handheld, tablets, and smartphone. While in a broader approach it may conclude any digital information, an example of digitally updated on weather forecasts, tracking system, humidity sensory and any others information, stored in digital content. In a learning organisation, the digital content is the knowledge management where all the academic resources such as books, forms, manuals, module and non-academic such as event, advertisement or any related content that is vital within the learning organisation. To create digital content creation, it requires deliberate leadership, sustainability strategies, and awareness of best practice in the field. During the creation of digital content, the valuable skills of the competence individuals are crucial to build, coding, create and upload digital content. The new audience is coming in when this types of materials being uploaded to the world. The latest digital content may be useful in the learning organisation, that it is important for them to have the updated knowledge on the current issued. However, it is expensive, with the high-quality digital content if it is considered (McMenemy D., 2007).

Internet access has made easy to everybody. Digital content can be viewed anywhere and everywhere by households who have accessed the Internet. Contra with the traditional platforms, digital content has made it easier for an individual to receive their news and watch TV online, and it is increased. Increased access to the Internet has also led to the mass publication of digital content through individuals in the form of eBooks, blog posts, and even Facebook posts.

In a learning organisation, digital content mostly applied in case of digitalisation of materials, such as books, newspapers, journals, reports, modules, syllabus and any other materials to make easy to users to access anywhere and everywhere.

Digital competence, during this recent years, has become a key concept in the discussion of what kind of skills and understanding every people should have in the knowledge society. Every people has a different level of understanding, implementing and using digital tools. Therefore, digital competence is the most topical concept in labelling technology-related skills. Recently, many words or terms are used to describe the skills and competence of using digital technologies, such as IT skills ICT skills, technology skills, information technology skills, 21st century skills, information literacy, digital literacy, and digital skills. These terms are also often used as synonyms; e.g., digital competence and digital literacy.

According to the Internet World Statistics, Asia is the biggest internet users in the world, specified by Geographic Regions, recorded on last June 2017. There are 1,938M of Asia users, followed by 659M Europe users and other regions are actively using the internet for specific usage and needs. It showed that Asia spent longer time using internet compared others.

There is a believed that individual nowadays, usually express themselves more in digital writing, because they fear to face the crowd. With this platform, digital content or online is the learners more favour the best way of learning either partial or full. There is a claim that it will give an individual's chance to write their views in learning organisation, they will express unrelatedly, unethically of the reactions of the instructors. Currently, almost every university student in any leaning organisations, has one form of digital device or media, no matter what the dimension is. It made the practitioner as well as the lecturer, persuade the student experience in digital literacy skills through assignments or work related that require the using digital information in web search. It is also to support a green environment, especially in these days printed materials are abundant. Statistics on internet penetration by ITU-T stated that Malaysian users using the internet and the percentage is 78.8%. Malaysia internet users by the end year 2016 is 24M and from that 19M are Facebook subscribers.

The terms digital competence is known as the set of skills, knowledge, and attitudes to empower the confident, with the use of technologies and systems through creative and critical ways. A confident digital user is a person that able to interact and collaborate digitally, able to produce work digitally and confident in handling digital data and computational thinking as well to solve a problem that requires the digital media. It is the vital skill that digital competence needs to have. Digital competence is a creative and critical way to use of technologies and systems in an increasingly digital world. The digital user may be competences differently with other users. A user with digital competence can exploit the opportunities offered by ICT and use them critically and innovatively in education and work. They can use digital technology to communicate, manage and create information to contribute knowledge to the society.

"Technology has slowly but surely in the last decade made significant inroads into education especially in the mainstream, urban schools," Sampath Kumar B.T., Basavaraja M.T., (2014), as well as other regions. Students require new skills to work effectively in this digital environment and to meet the challenges in digital. "Digital technologies provide a great opportunity to make students more active participants in classroom learning, to tailor learning better to individual students' needs and to give students access to the worlds current research and thinking," said Barbara Ischinger (2015).

The terms 'fourth industrial revolution' and 'Industry 4.0' often make an appearance during conferences and in media coverage. Malaysia is one of the countries support the IR 4.0. Malaysia is moving towards Education 4.0, whereby the important issues need to emphasize are more on 'Knowledge, Industry, and Humanity' as is the theme of the 2018 mandate from Higher Education Minister Datuk Seri Idris Jusoh on Malaysia's higher education ecosystem. The mandate looked at how higher education institutions in Malaysia are to remain relevant and competitive in the Fourth Industrial Revolution (Industry 4.0). To address the challenges of Industry 4.0, he said that the process of teaching and learning at higher education institutions must be changed (Rozana Sani, 2018).

"In 50 years' time, as we reach artificial intelligence, computers will be more prevalent. Companies will need to change processes and train

people to help them transition. Without training, companies doing business the way they have for the past ten years may become obsolete," said the Chief Executive Officer of Knowledgecom, Rubaneswaran, S. T. in the Digital New Asia.

According to global consulting firm McKinsey, Industry 4.0 "is the next phase in the digitisation of the manufacturing sector, driven by four disruptions: the astonishing rise in data volumes, computational power, and connectivity, especially new low-power wide-area networks; the emergence of analytics and business-intelligence capabilities; new forms of human-machine interaction such as touch interfaces and augmented-reality systems; and improvements in transferring digital instructions to the physical world, such as advanced robotics and 3-D printing."

Today's revolution on big data comes from sensors in objects, which implemented in engineering fields, such as machines industry, household equipment, cars, mobile phones, and other technology related equipment. Smartphones could track your location, social networks through social media platform could make you popular, wireless networking and make payment by pay wave credit cards. All these data are too huge and intricate to make sense to humans, but with the AI technologies, they can extract some conclusions and can suggest the solutions as well.

SUMMARY

In conclusion, the successful digitalisation in a learning organisation, support from different sources and the organisational learning culture itself is needed. The helps technology, finances, and demographics will only further the digital transform of the learning organisation. The learning cultures development within the learning organisations that produce trends, skills and local institutional will dynamically deliver services and value to users and the decision makers. The professionals, the employees, will also need a new set of skills to adapt to the evolving environment of digitalisation of higher education. The learning organisation shall be responsive today and even more, in the future will rely on a culture that embraces user awareness and engagement. User populations will continue to evolve. The management and professionals need to think dynamically on how digital

collections and digital content could be collected, organised, completed and manage differently due to the changing environments. Without a qualified digital skilled people, it may slower the process, investment on manpower, additional on infrastructure. Thus it may result in the unsuccessful of digitalisation in the learning organisation.

It is to suggest that further effort could be made to assess the involvement regarding readiness in regards to the adoption of digitalisation that suits the learning organisations.

Even it is in decline in resources, the implementation of digitalisation continues with the strategic navigation and fast decision to make sure in sustaining and growing of digital collections. Important resources such from financial, people, support form organisational itself, the institutional and users as well, will determine the adaptable of scalable services to support the digitalisation. Overall, even with declining resources, with skills n supportive organisation, the digitalisation will increase success, sustain, growth and maintain. Learning culture within the organisations shall be developed to produce developments, abilities in providing service and value to users and institutional decision makers.

The successful of digitalisation process in a learning organisation is based on what they have learned and what they do now, will better position tomorrow's learning environment.

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