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Research paper

Evolution of Information Management Discipline and Information Industry in Malaysia

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Abstract

Information is very much related to the movement of industry. It is even so close with the development of Malaysia. Information industry have to be understood and realized by both government and private industry its importance and significant towards the development of Malaysia economy and its tertiary education. Information Technology and Information Management is an interrelated field and cannot be separated. This article discusses the problems of IT, development of library and information science education, development, importance of ICT and Internet as new media in Malaysia

Keywords: *Library and Information Science Education, information management field, information industry, Multimedia Super Corridor (MSC).*

1. Introduction

Information industries are a combination of production activities that produce and provide information products and services by utilizing new technology and innovative information processing method. Information industries in Malaysia are getting bigger and bolder where it rapidly growing especially in part of economy. There is an increased demand for information goods and services from consumers.

In case of businesses, information industries include computer programming, system design, finance, insurance and real estate industries, telecommunications, and others. Whereby for consumers, information industries include music and motion picture, personal computers and video game-related industries. When demand for these industries are growing nationally or internationally, it will create an opportunity for an urban, regional or national economy to grow rapidly by specializing on these sectors. Other industries will also be boost by the Innovation and productivity of Information industries. An economy with a strong information industry might be more competitive compared to weaker ones assuming that other factors being equal. Some believe that the effect of the changing economic structure is related to the broader social change. As information becomes the central part of our economic activities, we evolve into an information society with an increased role of mass media, digital technologies and other mediated information in our daily life, leisure activities, social life, work, politics, education, art, and many other aspects of society.

2. The Problem of Information Technology in Malaysia

Internet business nowadays plays a vital part in the economic growth of any country through new business venture formation and development of current Internet firms. Internet business gives us an opportunity to connect, communicate and exchange information with speed and without limitations. The Internet business can be classified to two types of firms using this type of new IT.

The first type is the firms using the Internet along with their physical presence or known as a traditional company. This type of firm will use the Internet as a new distribution channel or alternatively as a logical extension of their traditional business. The second type of firm is known as the pure dot-com firm (Internet Start-up or Cyber Traders). This Internet-based companies revolutionized business by connecting with consumers and end users through the Internet. Such companies generate revenue through online sales, fees on online financial transactions, online searches accompanied by paid advertising, online advertising, social media accompanied by paid advertising, fees on online services (such as travel services), and charges for cloud computing (for related reading see Introduction to the Internet Industry). However, with an increase towards the development of Information Technology (IT) both firms and markets are significantly affected by it. Paynter and Lim [1] stated that Malaysia stepped into the beginning age of the Internet in 1995 and in 1996, the development began for the total Internet hosts in Malaysia. Based on the result of the first Malaysian Internet survey that was implemented since October to November 1995 by MIMOS and Beta Interactive Service, this survey showed that one out of every thousand Malaysians has the access to the Internet in which 20,000 Internet users out of 20 million inhabitants [2]. Lee [3] support that this number increased up to 2.6 per cent compared from the total population in 1998. This increased number of the percentage was proven by the number of computer units sold, which was 467,000 in 1998 and increased to 701,000 in 2000. This percentage indicated an increasing growth of the importance of Internet.

Moreover, a survey conducted by the Malaysian Communication and Multimedia Malaysia (MCMC) [4] on Internet users showed an increase in the percentage of Internet users across Malaysia at 66.6 per cent against 33.4 per cent of non-users. Due to the Internet

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functions in information and idea sharing, the Internet has experienced increasing popularity among Malaysians, which allows the development of new communities, channels, and platforms for substantial business activities. Hence, the study from Omar and Anas [5] found that since the government has provided a huge allocation to this Internet users, therefore they have to ensure that all facilities and requirements related to the ICT sector can be developed and can deliver useful benefits to the communities in Malaysia.

Previously, there are many problems in way of realizing Malaysia as developed country through the new media (Internet) in ICT. The government of Malaysia has faced problem in the need of policy for the ICT sector that includes e-government, capacity building, research and development, infrastructure, digital divide, social and economic development. The citizens of Malaysia are not yet aware of the new media because the usage of ICT was not fully occupied. Problem on balancing the privacy and security management had risen and must be clearly defined by the government without jeopardizing the issue of privacy [6].

IT professional says infrastructure issues, slower bandwidth and lack of fiber optic cables used are some of the factors affecting the country's internet connection. This is because certain areas are not the target market of telecommunications companies and might not even have towers to detect a signal. Belson [15] outlined the average internet performance across the globe, including in 15 South Pacific countries which South Korea was topping the list with 28.6 megabits per second, followed by Hong Kong (21.9 Mbps), Singapore (20.3 Mbps), Japan (20.2 Mbps), Taiwan (16.9 Mbps), Thailand (16 Mbps), New Zealand (14.7 Mbps), Australia (11.1 Mbps), Vietnam (9.5 Mbps), Malaysia (8.9 Mbps), Sri Lanka (8.5 Mbps), China (7.6 Mbps), Indonesia (7.2 Mbps), India (6.5 Mbps) and the Philippines (5.5 Mbps).

The Malaysian Communications and Multimedia Commission (MCMC) are currently playing a key role in creating and setting mandated standards and policies to address conflicting principles. The government should also play a proactive role to facilitate and determine a timeline for the industry to develop and implement an IT speed and security baseline as a medium to oversee performance standards. Internet business can be developed properly if the performance management of the organization to manage it in a good way. Therefore, the Internet business can be carried out successfully with the support of the government authorities focusing on the infrastructure and also able to winning the trust of consumers by looking towards the existing successful Internet business and consistent effort [5]. In many developed and other emerging countries, Internet businesses are important growth engines in driving the their economy.

, including Malaysia which is now focusing towards Fourth Industrial Revolution (IR4.0) that will influence and change how we live, work, and ommunicate.

3. The Development of Library and Information Science Education in Malaysia

Library education in Malaysia has been started early 1955 through the formation of Malayan Library Group (MLG) which today known as Librarian Association of Malaysia (PPM) [7]. MLG has been organized librarianship's classes in order to increase the quality of library services which focus on education, professional training and qualification librarians [8]. The formal education in library education was started in 1968 when *Universiti Teknologi MARA* (previously known as *Institut Teknologi MARA* (ITM)) introduce a professional course in librarianship leading to the Library Association (United Kingdom) examination and accreditation. At first, the librarianship program was replicated from ALA syllabus, and was later restructured and fixed with local contents [9]. A new curriculum has been developed in 1972 for three-year course of Diploma in Library science rationale to include local content for the training of library and information professional. In order to follow international and national changes, It has been conducting regular curriculum reviews resulting in the combination of information science mechanisms into the curriculum. In 1979, the school change the name to "School of Library and Information Science" with the addition of Archival and Records Management under the big umbrella of 'Information', the school name was changed again to "Faculty of Information Studies" in 1997. Currently the name of "Faculty of Information Management" has been in use since 2005 as a result of UiTM's reorganizing of various academic programs and disciplines campus-wide. In 1987/1988, University of Malaya officially offered Master of Library and Information Program (MLIS) under the auspices of the Institute of Advanced Studies but it was suspended the following year, and then it was back in November 1994 under the Faculty of Computer Science and Information Technology.

Table 1: The Development of Library and Information Science Program in Malaysia

Year	Milestone
1960	Librarians Association of Malaysia (PPM) has supported the proposal submitted by W.J. Plume, University Malaya Librarian to UM authorities to have a library school in the second phase of the university library programs.
1960s	To prepare candidates for Library Association Examination, United Kingdom, there are part time classes that was conducted by PPM.
1965	A memorandum has been sent by PPM to the UM authorities urging for the creation of a library school.
1967	The Higher Education Planning Committee (HEPC) report revitalized the establishment of the library school
1968	Fulltime program in Librarianship preparing students for British Associate of Library Association (ALA, UK) has been conducted by Department of Library science under School of Public Administration and Law which establish in *Institut Teknologi MARA* (ITM)
1969	At the International Council of Archives (SARBICA) Conference in Jakarta, both SARBICA and PPM agreed to the establishment of a post-graduate school of Librarianship at UM
1970	ITM established the School of Library Science: changed its name to "School of Library and Information Science" in 1979: it was once again changed to "Faculty of Information Studies" in 1997 and the current name "Faculty of Information Management" has been use since 2005
1972	For the establishment of the school at UM, a memorandum was sent to National Library Committee (NLC) With the end of the external ALA program, ITM introduced a 3-year Diploma in Library Science program, with local contents planned into curriculum 1-year Post Graduate Diploma in Library Science program has been introduced by ITM
1986	ITM and UNESCO have conducted the first National manpower survey of libraries and information services in Malaysia.
1987	UM was offered the Masters in Library and Information Science program (MLIS) for the 1987/1988 session. But, the course was suspended the following year
1991	A 4-years Honours Degree program at ITM was upgraded from 3-years Diploma in Library Science (equivalent to General Degree), and in 1999, ITM was changed its name to *Universiti Teknologi MARA* (UiTM)
1992	Department of Library and Information Science, Kulliyah of ICT at The International Islamic University, Malaysia (IIUM) introduced the MLIS program
1994	At UM, the MLIS program was revived and housed at the Faculty of Computer Science and Information Technology
1996	Diploma in Library Science program launched at UNISEL
1997	UiTM's Bachelor in Information Studies (Hons.) program branched out into 4 specializations: i. Library and Information Management

	ii. Information Systems Management iii. Records Management iv. Resource Centre Management UiTM started the MSc. Information Management program
1999	UiTM started the PhD in Information Management program UiTM started the Diploma in Information Management program Bachelor degree in Sunnah Studies with Information Management started at Islamic Science University (USIM)
2003	Master of Knowledge Management program started at UiTM
2004	A study on human resource need for Library and information Services in Malaysia commission by National Library of Malaysia
2006	Master in Library Science program started at UiTM
2008	Diploma in Library Science program started in UNISEL
2010	Bachelor of Information Technology (Knowledge Management) (Honours) started in UNISEL
2013	Doctor of Philosophy (Library and Information Science) started in IIUM
2014	Bachelor in Library Science program started in UNISEL
2015	Master of Science in Records and Documents Management program started at UiTM
2017	Master of Science in Information System Management program started at UiTM
	The Faculty of Education, UiTM also offered Bachelor of Education (Hons) (Resource Centre Management) as training for teachers of vocational subjects.

Table 2: Malaysian Qualifications Agency (MQA). NEC FIELD (National Education Code): 322 (Library, information, archive)

NO	NAME OF INSTITUTION	PROGRAMME CODE	NAME OF QUALIFICATIONS
1	AIMST University (Previously known as: Asian Institute of Medicine, Science & Technology (AIMST))	A4799	BSc (Hons) Management Information Systems
2	FTMS College (Previously known as: Institut Latihan FTMS-ICL (Lebuh Ampang))	MQA/FA3568	MSC. Information Management in collaboration with Leeds Metropolitan University, UK
3	Institut Pengurusan Teknologi Utara	A0244	Diploma in Information Management
4	International College of Technology & Professional (Previously known as: Kolej Teknologi dan Profesional Indera Kayangan)	A3776	Information Systems Administration Level 4 (MLVK)
5	International Islamic University Malaysia (IIUM)	MQA/FA6586	Doctor of Philosophy (Library and Information Science)
6	International Islamic University Malaysia (IIUM)	MQA/FA6587	Doctor of Philosophy (Library and Information Science)
7	International Islamic University Malaysia (IIUM)	MQA/FA6583	Master of Library and Information Science
8	International Islamic University Malaysia (IIUM)	MQA/FA6584	Master of Library and Information Science
9	Universiti Selangor (UNISEL), Kampus Bestari Jaya (Previously known as: Universiti Selangor (UNISEL), Kampus Berjuntai Bestari)	MQA/FA0255	Bachelor of Library Science (Hons)
10	Universiti Selangor (UNISEL), Kampus Bestari Jaya (Previously known as: Universiti Selangor (UNISEL), Kampus Berjuntai Bestari)	A7401	Diploma in Library Science
11	Universiti Teknologi MARA (UiTM) (Shah Alam)	10835	Bachelor of Science in Information Studies (Hons) (Information Management Systems)/Bachelor of Information Science (Hons) Information Management System /Bachelor of Information Management System (Hons) /Bachelor of Science Information Studies with Honours - Information Management Systems
12	Universiti Teknologi MARA (UiTM) (Shah Alam)	10838	Bachelor of Science Information Studies (Hons) (Information Resource Center Management)/Bachelor of Information Science (Hons) Information Resource Centre Management /Bachelor of Information Centre Management (Hons) /Bachelor of Science Information Studies with Honours - Resource Centre Management
13	Universiti Teknologi MARA (UiTM) (Shah Alam)	10836	Bachelor of Science Information Studies (Hons) (Library and Information Management)/Bachelor of Information Science (Hons) Library Management /Bachelor of Library Science and Information Management (Hons) /Bachelor of Science Information Studies with Honours - Library and Information Management
14	Universiti Teknologi MARA (UiTM) (Shah Alam)	10837	Bachelor of Science Information Studies (Hons) (Records Management)/ Bachelor of Science Information Studies (Hons) (Records Management)/Bachelor of Information Science (Hons) Records Management /Bachelor of Records Management (Hons) /Bachelor of Science Information Studies with Honours - Records Management
15	Universiti Teknologi MARA (UiTM) (Shah Alam)	10902	Diploma in Information Management

16	Universiti Teknologi MARA (UiTM) (Shah Alam)	MQA/FA6698	Doctor of Philosophy (Information Management)
17	Universiti Teknologi MARA (UiTM) (Shah Alam)	MQA/FA6696	Master in Library Science
18	Universiti Teknologi MARA (UiTM) (Shah Alam)	MQA/FA6697	Master of Science (Information Management)
19	Universiti Teknologi MARA (UiTM) (Shah Alam)	MQA/FA6694	Master of Science in Information Management
20	Universiti Teknologi MARA (UiTM) (Shah Alam)	MQA/FA6695	Master of Science in Knowledge Management
21	Universiti Tun Abdul Razak (UNIRAZAK) (Previously known as: Universiti Tun Abdul Razak (PINTAR Campus))	A7409	Bachelor of Information Systems (Hons)
22	Universiti Tunku Abdul Rahman (UTAR), Kuala Lumpur Campus	A6336	Master of Information Systems
23	Universiti Utara Malaysia (UUM)	MQA/FA6426	Master of Science (Media Management)
24	University of Malaya	MQA/FA7243	Master of Library and Information Science
25	University of Malaya	MQA/FA7244	Master of Library and Information Science

Note: Accreditation is granted based on the location where the program is conducted by the HEP unless stated otherwise. Effective from January 1, 2017, the Malaysian government recognition for the purpose of appointment into the public service sector is under the purview of MQA.

Overall, in 2017 there 25 programs offering Library, Information and Archive program in Malaysia as stated in Table 2.

In Table 3 below shows the summarize program offered in universities in Malaysia. From these universities, UiTM can be consider as the leader in offering the training of LIS professional from diploma to Postgraduate levels (Masters and Doctoral degrees).

Table 3: Summary of Library and Information Studies program among Universities in Malaysia

UNIVERSITY, FACULTY/CENTRE/SCHOOL/ COLLEGE	POSTGRADUATE	UNDERGRADUATE
Universiti Teknologi MARA (UiTM), Faculty of Information Management	Doctor of Philosophy (Information Management) Master of Science (Information Management) (Research) Master of Science in Records and Documents Management (Coursework) Master of Science in Information Management (Coursework) Master of Science in Information Management (FLP Mode) Master of Science in Knowledge Management (Coursework) Master in Library Science Master of Science in Information System Management	Bachelor of Information Science (Hons) Library Management Bachelor of Information Science (Hons) Information Systems Management Bachelor of Information Science (Hons) Records Management Bachelor of Information Science (Hons) Resource Centre Management Diploma in Information Management Diploma in Library Science
Universiti Teknologi MARA (UiTM), Faculty of Communication and Media Studies, Centre for Media and Information Warfare Studies (CMIWS)	MA in Media and Information Warfare Studies Ph.D in Media and Information Warfare Studies	
International Islamic University (IIUM) Kulliyyah of ICT - Department of Library and Information Science	Doctor of Philosophy (Information Management) Master of Library and Information Science	
Universiti Malaya (UM). Faculty of Computer Science and Information Technology Department of Library & Information Science	Doctor of Philosophy Master of Library and Information Science (Coursework) Master of Information Science (Library Science) (Coursework and Dissertation) Master of Information Science (Research)	Bachelor of Computer Science (Information Systems)
Universiti Selangor (UNISEL), Faculty of Education and Social Science - Department of Library Science		Bachelor in Lib. Sci. Diploma in Lib. Sci
Universiti Sains Islam Malaysia (USIM) - Faculty of Quranic and Sunnah Studies		Bachelor of Sunnah Studies with Information Management (Honours)
Universiti Pendidikan Sultan Idris Shah (UPSI), Faculty of Art, Computing and Creative Industry	Information System Management Information System and Management Doctor of Philosophy (Information Design) Doctor of Philosophy (Information System and Management)	

Universiti Technologi Malaysia (UTM), Advanced Informatics School (AIS)	Master of Science (Informatics) Master of Science (Information Assurance)	
Universiti Teknologi Malaysia (UTM), Faculty of Computing - Department of Computer Science	Masters of Computer Science (Information Security)	
Universiti Technologi Malaysia (UTM), Faculty of Computing - Department of Information System	Doctor of Philosophy in Information Systems	
Multimedia University, Faculty of Computing and Informatics		Bachelor of Computer Science (Hons.) with Specialization in Information Systems
Multimedia University, Faculty of Information Science and Technology (FIST)	Master in Information Technology (Information Systems)	Bachelor of Science (Hons.) Bioinformatics
Multimedia University, Business/Management/Accounting	Master of Knowledge Management (Research)	
Universiti Utara Malaysia, UUM College of Arts and Sciences, School of Computing (SOC)	Doctor of Philosophy in Information Technology Master of Science in Information Technology Master of Science in Information and Communication Technology	
AIMST University, Faculty of Business and Management		BSc. (Hons.) in Management Information System
Management and Science University (MSU), Faculty of Information Science & Engineering - Department of Information Sciences & Computing	PhD in Information and Technology Master in Information and Technology	Bachelor of Information System in Auditing (Hons). Bachelor in Information Technology (Hons) Mobile Wireless and Technology Diploma in Information Technology

Nowadays, LIS professionals need to be trained with cotemporary skills and technology in order to follow the national agenda for producing knowledge worker for promoting knowledge society and information expert. It is vital to the universities to develop curriculum of LIS that meet the current demand and requirement based on the statement that LIS has been established in the universities in order to cater the current needs. LIS nowadays becoming more challenging due to the rapid changing in development of information communication technologies (ICT). Therefore, the development of ICT, new media (Internet) and the evolution of information management field become significance and importance through the understanding of the development of this information industry in Malaysia.

4. The Development of ICT and New Media (Internet) in Malaysia

The information industries considered one of the most important economic sectors for a variety of reasons. In the 1970s, towards a more multi-sector economy based on mining and agricultural began a transition. Since the 1980s, the industrial sector, with a high level of investment, has led the country's growth. Malaysia has grown rapidly to support the facilities momentum with growing investments in data centres and ICT infrastructure specially to develop information technology in Malaysia. The information industry including computer programming, system design, telecommunications and others. It is mostly identified for government sector for decision-making, productivity growth and innovation, knowledge management and organizational performances at once leading organizations in implementing modernization strategies for Malaysian public services. According to Kassim, Baharuddin and Samad [10], information technology infrastructure factor scored the highest mean information and technology are effective at improving organizational performance.

Teh [16] reported that in Malaysia (*Tanah Melayu*) the beginning of the era of telecommunications in Malaysia was laid by the Department of Posts and Telegraph in 1874 is the telegraph line connected the British Resident at Perak House in Kuala Kangsar to the house of Deputy British Resident in Perak at Taiping. This telegraph line measured 42.5 km and travelled across a forest at Bukit Berapit. When country's Independence in 1957, the Malayan Telecommunications Department changed to *Jabatan Telekom*. The main objective is to provide telecommunications facilities throughout the nation, as part of the Rural Development Plan. The Federation of Malaya and Singapore became partners in 1961, with Malaya investing about RM12 million in it. At the first phase on 15 January 1964, SEACOM between Singapore and Jesselton (Kota Kinabalu), in Sabah, was opened. On 30 March 1967 the entire system was commissioned. The first television services in Peninsular Malaysia in 1963 launched by TELEKOM, using the same system. *Jabatan Telekom* managed the transmission of microwaves from the studio to home and While *Radio Television Malaysia* (RTM) controlled the content of local TV.

In 1970, further expanding Malaysia's international connectivity, an earth satellite station was built near Kuantan for communications via the Indian Ocean Intelsat III satellite. The station, costing RM9 million, was completed in a record 12 month by a fully local team. The station was to serve primarily external telephone, telegraph and telex communications however it also enhanced the reception of international television programmes in terms of system, the year 1985 was a watershed. This was when Automatic Telephone using Radio (ATUR) 450-the earliest precursor in Malaysia to today's mobile service was introduced. The service provided almost universal coverage with the installation of five mobile telephone exchanges and many radio base stations. In Mei 17,1994 National Telecommunication Policy (NTP) have been launched by government to integration of the telecommunications and computer industries. The outcome of this is rapid growth of sophisticated technology which ushers in a new information Technology based country. Two important criteria that form the basis for the NTP in its aim of achieving the vision of a developed, united, caring and civilised Malaysian nation are efficiency and effectiveness. In order to face the future challenges and supports the attainment of the objectives of vision 2020, the formulation of NTP is important as it provides guidelines for the development of the Malaysian telecommunications sector.

In Southeast Asia, Malaysia is among the earliest nation that undertakes to design a National Cyber Security Policy to enact cyber related laws. To making Malaysia a major global centre and hub for communications and multimedia information and content services. On 1st. of April 1999, the Communications and Multimedia Act 1998 has introduced a regulatory framework to cater for the convergence of the telecommunications, broadcasting and computing industries. Its objective among others as the sole regulator of the new regulatory regime which were appointed on the 1st November 1998. It includes the ICT and multimedia content indus-

tries as the form of licensing is provided for, one of the cornerstones of the new regulatory framework is self-regulation by the various industries. To ensure that they are protected to the level commensurate with the risks they face, Malaysia's National Cyber Security Policy objective is to address the risks to the Critical National Information Infrastructures (CNI). The policy recognises the critical and highly interdependent nature of the CNII and to develop then establish a comprehensive programme and a series of frameworks that will ensure the effectiveness of cyber security controls over vital assets covering several sectors. National economic strength, national image, national defence and security are those angles covered under the function of government and public health and safety.

Multimedia Super Corridor (MSC)

A Special Economic Zone and high-technology business district in Malaysia as known as MSC Malaysia (*Multimedia Super Corridor*) were announced by the 4th. Malaysian Prime Minister Mahathir Mohamad on 12 February 1996. In January 1997 Dr Mahathir visited the United States of Americato to promote the MSC. It succeeded in attracting the interest of many large information technology companies there. During the visit, an international advisory panel comprising 30 information technology experts was formed to exchange ideas toward the success of the MSC. The establishment of the MSC program was crucial to accelerate the objectives of Vision 2020 and to transform Malaysia into a modern state by the year 2020, with the adoption of a knowledge-based society framework.

Omar and Anas [5] found that due to the development of the current ICT, Malaysians nowadays are more knowledgeable and informative because the information is always ready and available with one click on the search engine. Hence, with the development of ICT, it helps the individuals to generate positive thinking skills and abilities to brainstorm their valuable ideas in order to increase the source of income for an individual and the organization. Thus, this statement has been supported by previous studies from Musa, Ismail, & Othman [11], he highlighted that with ICT facilities and skills, it will allow individuals to gain extra knowledge in various fields for the use of social, employment, economy, educations and politics as well. With this, ICT are known as a gateway for the unlimited access to knowledge [11]. In order to transform the nation into digital economy, there are numbers of ICT initiatives continued to be implemented when looking towards Tenth Malaysia Plan (Tenth Plan), 2011-2015 [12].

MSC flagship applications were launched to boost the MSC Malaysia initiatives and a Consortium comprising both the local and foreign companies (MNCs) collaborated with various government agencies, departments and ministries to enhance the socio-economic development of Malaysia in the new millennium (Information Age) to create a hub for innovative producers and users of multimedia technology. As a global test bed (hub) MAS was created to achieve Malaysia's Vision 2020 and also to endeavour the best environment to harness the full potential of the multimedia without any artificial limits.

The Multimedia Super Corridor (MSC) is a Government-designated zone in Malaysia designed to leapfrog Malaysia into the information and knowledge age, where the limits of the possible can be explored and new ways of living, working, and playing in the new area of the information. It attracts companies (FDI) with temporary tax breaks and facilities such as high-speed Internet access and proximity to the Kuala Lumpur International Airport. MSC Malaysia covers an area of approximately 15 km (9.3 mi) × 50 km (31 mi) (that is, 750 km2 (290 sq mi) stretching from the Petronas Twin Towers to the Kuala Lumpur International Airport and including the towns of Putrajaya and Cyberjaya (Port Klang was added to the MSC on 7 December 2006). The Multimedia Development Corporation (MDeC, formerly MDC) was created to responsibilities oversee development of the MSC. There are many agencies from government will be provided and enhanced the information industry. Most of them is the Ministry of Communications and Multimedia (Malay: *Kementerian Komunikasi dan Multimedia*), abbreviated KKMM, is a ministry of the Government of Malaysia that is responsible or communications, multimedia, broadcasting, information, personal data protection, special affairs, media industry, film industry, domain name, postal, courier, mobile service, fixed service, broad band, digital signature, universal service, international broadcasting, content. The others are like National Achieves Malaysia, National Library Malaysia etc.

5. The Importance of ICT and New Media (Internet) In Malaysia

Nowadays people can communicate with the other side of world by using the Internet, the communication has widely changed their platform through the Internet or the new media and can do so many life affairs without barriers. Learning new knowledge, passing new information, sharing interests and so on can be done through this new media. For 2050 as our Prime Minister had announce the new policy of Malaysia that is '*Transformasi Nasional 2050*' or TN50 as an initiative to plan for the future of Malaysia in the period 2020 to 2050 while in Vision 2020 just around the corner. The Malaysian Government also has realized this potential of the new media and ICT and thus doing everything possible to maximize the use and reap the benefits of it [13]. Government policy is very important and crucial to help utilize the ICT innovation to bring about development. In order to achieve the new era of globalization and knowledge, Ariff & Goh [14] mentioned that the government took initiative to establish the Multimedia Super Corridor (MSC) in 1996 by Fifth Prime Minister of Malaysia, Tun Dr. Mahathir Mohamad in Asia Multimedia Conference. The technology initiatives by both the government for IT literacy in education and the private sectors are expected to contribute to a steady growth in the personal computer market. The technology helps improve processes and workflow and ultimately an organization's overall operations. Both the government and the industry play an important role for the development of new media in Malaysia [13]. In addition, using the new media (Internet), it will trigger the economic growth of Malaysia since it's been used worldwide while user can transcend borders and have access to any information and knowledge because it is the most recent communication tools over the world.

During the first stage of implementing the new media of ICT in Malaysia, the government and the industry are well recognized and realized the important of new media for Malaysia's development because it trigger the development of economic growth, innovations and technologies of both software and hardware. Furthermore, the educational evolvements are also taken to account by having the new media throughout the Malaysia. In order to achieve as developed country in 2020, Malaysia must enhance and empowered the usage of the new media for ICT with the necessary ICT policies and realizing well together the benefits of the new media and ICT. The formulated and sustainable are needed with necessary ICT policies, the workable and efficient infrastructures and relevant cooperation between both government and private sector would strides the benefits of the new media and ICT in the development of Malaysia. Both Malaysia government and private sector need to have appropriate infrastructures, instructions and work together to fulfil the need of Malaysian citizen towards the whole new global era of technology for the present and the future.

6. Conclusion

As mentioned above, the development of ICT and new media (Internet) in Malaysia has begun from educational system that been started through library education. Malaysian citizens are introduced with the idea of how importance new media were

through the evolvement of world education changed. Indirectly, Malaysia government also was involved because of its crucial need for the national biggest outcome and even the great development for Malaysia in the future. Various strategies and innovations had been done for making Malaysia in line with world technologies and move forward to the highest income state towards 2020. The private sector also plays a big role in achieving Malaysia as developed country. Most of the enhancement of Malaysia is depending on the usage of technology by the industry bodies where economic growth purely comes from them. The government development is depending on the billions transaction done by private sector. Hence, there are a lot of related factors need to be handled and build from its infrastructures, software elements, hardware needs and even its privacy and security mechanism must be developed in order to the smooth run of the new media in Malaysia.

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