Digital Management in the Official Tourist Organizations
Case Study: Egyptian Ministry of Tourism

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Abstract

The study presents a link between the spread of digital thought and the use of digital tools on the one hand and the official management of the tourism sector in Egypt on the other hand, which results in the digitization of all operations and administrative functions within the official tourism organization, represented by the Ministry of Tourism.

The main aim of this study is to explore the importance of digital management to the Egyptian tourism ministry, and how the managers in the ministry are interested in spreading the culture of digital work within the departments and the conviction of the employees, and measuring the consequences of that.

The study used descriptive analytical method, and the study community includes human resources working in the Egyptian Ministry of Tourism, The questionnaire was used as a tool for field study, the data were analyzed and processed statistically using SPSS.

Keywords: Digital Tourism, Digital Management, Ministry of Tourism, EGYTOMS, Official Egyptian Organizations, Human Resources.

Introduction

Digital management is a new term has increasingly spread since everything turned out to be digital. This happened due to the usage of calculators, internet, and computers in everything in our daily life. Yet, it's known that exploiting and applying digital technology in administrative affairs will helps in reaching integration among directors, employees and customers at the end because of dependence on management information systems that assist management in making an effective management decision as soon as possible (Al-kubesi, 2008).

Tourism is a service economic sector that depends on many other industries and it is one of the most important sectors affected by the expansion of digital use. In developed countries, tourists use digital technology for plan their holidays better and faster (Wilson, 2006). For example, in USA, most citizens use digital technology to plan their holidays (Chris, 2012).

Accordingly, any tourist activity can be called digital if it uses digital technologies to offer its services to tourists on the web. Such as tourism product management, tourism marketing, booking and organizing online tours, and after-sales services (Abd El Ghani et al, 2014).

In Egypt, there have been many marketing and promotional web pages to serve the tourism sector. The most important of them is "Intoegypt.com", it is classified as an electronic reservation engine. As well as the world's leading hotel booking engine www.worldres.com which supports the tourism sector in Egypt digitally (Eraqi, 2005).

Many tourism organizations have begun using digital-based management tools to develop their policies and improve their market competitiveness. So, Digital management has become a work method and a development approach, it is not a temporary trend that can be rejected or accepted (Al-Ammar, 2009).

The problem of the study is the lack of integrated and effective implementation of digital management tools in the Egyptian Ministry of Tourism. Consequently, the Egyptian official tourism sector is lagging behind the official tourism sectors in many

neighboring countries. The study also explores the problems caused by the lack of digital application in the Ministry of Tourism, whether related to the internal work system, external communication, available tools or the efficiency of the services provided.

The importance of the study appears in that the application of digital management in the Ministry of Tourism provides a greater opportunity at the strategic level to develop managers' ability to make correct decisions, as well as arranging the movement of work in the institution according to digital systems. These systems will also give the organization more careful planning, better control, higher regulation, development of human resources capabilities, which means overall better management.

The study aims to assess the readiness of the managers and human resources working in the Egyptian Ministry of Tourism to change from traditional work to digital work, explore the requirements of digital management application, review some successful experiences of some countries which implemented digital management within its official tourism institutions and provide effective digital solutions for the development of work management within the Ministry of Tourism.

Literature review
Globalization and Digital Expansion in the Tourism Industry

Digital management is considered as a result of the spread of digital culture in organizations. As for the digital culture, Daba (1999) suggests that we could make a good use of the new technology in providing new cultural vocabulary in a form that can cope with and suit the modern era and its mechanisms. It's also defined by Rashed (2008) as the confident capability to use computer and digital services so as to catch up with the modern communities' life. Accordingly, Abd El Ghani et al (2014) concluded that the tourism digital culture is the intellectual formation and apparent application for all aspects of tourist treatment via using the modern digital technology.

Recently, many terms related to digital work culture have emerged, such as:

- Knowledge Society-KS: is understood as the ability that people have in the face of information, to develop a reflective competence, relating its multiple aspects, according to a particular time and space, with the ability to establish connections with other knowledge and use it in their everyday lives (Lisbôa & Coutinho, 2015)

- Information society-IS: is a society where the creation, distribution, uses, integration and manipulation of information is a significant economic, political, and cultural activity. Its main drivers are digital information and communication technologies, which have resulted in an information explosion and are profoundly changing all aspects of social organization, including the economy (Hilbert, 2015).

- Information technology-IT: is the application of computers and internet to store, study, retrieve, transmit, and manipulate data, or information, often in the context of a business or other enterprise (Daintith, 2009).

Furthermore, there appeared what is so called digital gap which have been defined by Organization for Economic Co-operation and Development - OECD as the gap among individuals, companies and families at the different social and economic levels equally relating the opportunities of reaching Information and communications technology - ICT and its vast usage in activities Buhalis (1998) attributed the reasons of digital gap to the rapid progress in technology and increasing technological monopoly, and costly prices of ICT (Mohammed, 2008).In Developed countries, tourists often use the digital technology in plan their vacation, not only that but they

usually use their mobile phones, personal digital aid - PDA to get the information needed about travel offers (Wilson, 2006).

As for developing countries, the usage of ICT is mostly confined to a few numbers of people who usually have high purchasing power. Even using this technology in planning for tourist travels is considered a behavior that is confined to few of business men (Minghetti & Buhalis, 2010), in addition, tourism organizations and corporations make a great effort to gain the expertise, capital and techniques that enable them to promote their products, and develop appropriate tools to open new tourist markets.

Both (Minghetti & Buhalis, 2010) have identified the digital development in destinations and tourist markets and how far they are interactive within digital tourist market through three dimensions, which are:

1- Demand Side: It's includes demographical characteristics, social and economic and cultural status and the original country, the psychological tendencies and digital skills for the tourist. Knowingly that this structure shows the individual differences for tourists in using "ICT" with in the tourist market.

2- Offer Side: It comprises the factors which affect the tourist organizations in using "ICT" properly and effectively as the bulk and structure of the organizations and the directors and employee digital skills.

3- Environment Side: It includes the political, social, financial and economic circumstances which affect providing the digital technology and its effective exploitation in the area of tourist request and offer.

The impact of virtual competition on the tourism industry

As a result of the impact of ICT on the tourism industry, Internet web pages have become a logical alternative to traditional tourism marketing, which used posters, brochures and publications. If we refer to the traditional economic model of tourism, we will notice that there is no direct relationship between tourists and tourist suppliers, as the tourist service passes through an intermediary, which is known as mediation case, but with the Internet, both (Ibrahim & Fawzi, 2010) have developed a new economic model for tourism, in which there is a direct relationship between tourists and tourist suppliers, which is known as non-mediation case, Thus, the concept of digital tourism has emerged.

This situation prompted intermediaries such as tourism agencies to be existent in the virtual market as virtual mediators; they study the tourists' needs, provide information about the tourist product, and reconciling tourists and tourist suppliers via the Internet (Sarkar & et al., 1995). It should be noted that If the effectiveness of the virtual mediators increases, the total cost of the tourism product is reduced (Hussein, 2008).

Digital management in the tourism organizations

Most scientists agree on the time when digital management phase first appeared, they returned it back to the end of 1950s and the beginning of 1960s (Al-Salmi & Al-Salmi 2005) (Nejm, 2004). Some digital management definitions are as follows:

- The usage of ICT particularly Internet in all administrates within a certain organization, in order to improve productivity and increase proficiency and effectiveness of performance (Hamed, 2007).

- The usage of advanced IT systems to support the strategic management role of the organization and to improve its performance (Edenies, 2003).

- All changes occurring in the organization as a result of their digital transformation (Hoyer, 2001).

Therefore Abd El Ghani et al (2014) defined the digital tourism management as the usage of advanced digital technologies and communications networks, in the development of business management in tourism organizations, in order to increase the efficiency of managers and employees, reduce their costs and build continuous relationships with their customers.

Digital business re-engineering in tourism organizations
Digital business re-engineering is defined as the usage of technology as a means of helping to develop work, organizations connect each other, and connect organizations with their clients, to achieve high improvements in performance standards and to achieve benefit for client, employee and organizations (Hammer and champy, 2000). According to Abd El Ghani (2006), tourism organizations to succeed in digital businesses re-engineering it must have a strategic vision that is compatible with the general strategy of the state, and must have a desire for digital transformation (Tavmergen & Özdemir, 2001).

ALPHA Air Hospitality Services Company is an example of tourist organizations successfully digital business re-engineered; this company has become a leading provider of airlines in the UK (Baker & Sweeney, 1999). Another example is the Australian Conference Sector Re-engineering Program which has placed Australia the third worldwide and the first in Asia-Pacific region in the conference industry with a growth rate of 124% (Vivienne & Weeks, 1999). As well as Gulliver Travel Agency, which digital business re-engineering helped it in developing its business style, and communicating with customers and suppliers worldwide (Babai, 2000).

Digital business re-engineering in tourism sector must be followed by a good digital information system. This is capable of managing the tourist organization in a way it could achieve its targets. Kurdi (2010) has combined all types of digital information systems used in managing the official tourist organizations as: events processing systems, office automation systems, executive information systems and decision support systems. And table (1) shows a comparison between the traditional official tourism sector and the digital official tourism sector:

Table 1. A comparison between the traditional official tourism sector and the digital official tourism sector

Aspect of comparison	Traditional official tourism sector	Digital official tourism sector
Response level	Slow	Fast
Organizational Structure	Bureaucracy, inflation, central and vertical connections	Networked, it depends on the team and it has vertical connections
Work procedure change	Slow and stiff	Fast and flexible
Work hours	Never exceed 8 hours a day, less in vacations	24 hours continuously daily all the year round
Work errors	high	low
Communication means	Personally	Digitally
The existence	Materialistic confined to state machineries governmental offices	No geographical borders
Information transfer	Slow, human interference needed	Fast, dynamic, available in proper time
Service cost	High	Low as there is no need paper works

Aspect of comparison	Traditional official tourism sector	Digital official tourism sector
Privacy and information safety	Available	Protection legislation are needed
Payment means	Traditional	Digital and traditional
Signature	Manual	Digital

Source: (Hashem, 2012)

Successful Arabic Models in Digital Tourism Management

The UAE is one of the leading Arab models of digital management in official tourism organizations, Dubai Department of Tourism and Commerce Marketing has provided an online website which is www.dubaitourism.ae, offering digital tourism services such as tourist photos, videos, maps, live camera, online complaints receiving and replying, E-tourism brochures, Dubai airport E-gates (UAE E-Government, 2012). There is also www.visitabodhabi.ae, which is a complete portal for monuments, Leisure and tourism activities, Cultural and heritage experiences and events in Abu Dhabi (Abd El Azeem, 2012).

Furthermore, Abu Dhabi Airport Company has launched a new service which gives travelers the opportunity to complete their travel proceedings automatically depend upon sophisticated devices and equipment such as having boarding cards, baggage cards in only a few minutes before heading for airport (Al-Hamli, 2012).

The second model is KSA, in 2000 the Saudi commission for tourism and national heritage was founded aiming to develop and upgrade tourism as a productive sector, it managed to spread out the digital management by applying the concept of non-paper offices. Therefore, it consolidated a set of applications and systems which are based on ORACLE as governmental corporation resources planning project, which comprises automatic services system, HR system, financial system and purchase system. Moreover, it tried to train its employees upon using these systems perfectly, in an attempt to do without paper treatment with its clients. Altogether, so as to finish its works at utmost speed, and demolish the official red tape and delay caused by paper treatment and using mechanized systems, it is considered one of the digital administrations which adopts a strategy that ensures the ultimate acceptance of users for the work measurements, the matter which resulted in increasing efficiency productivity of usage in as much little time as possible, thus the commission avoids inserting information and data repeated by and the mistakes committed through that. Applying such system has resulted in developing work measurement and policies and rising performance efficiency as well as keeping saving documents and data electronically the matter that helps in regaining them quickly and stealthily (Al-Mousa, 2007).

In addition, a new digital system for tourism visa has been setup by the commission in order to provide the technical support, according to it. Tourist visas could be legally issued via a digital system which is linking with information center data base of the ministry of interior the ministry of foreign affairs, the ministry of Hajj and the Saudi commission for tourism and national heritage. The system includes notifications when entering or departure of the tourists. It can provide tourist statistics and connecting tourist and travel agencies, so as to facilitate the measurement of visas requests digitally by these companies and other relevant department. In addition to other digital systems as digital antiquities, map, digital accommodation system, tourist information and research center on the internet www.mas.gov.sa, www.sct.gov.sa and

www.sauditourim.gov.sa which are considered as an electronic gate visit for tourists, Saudi residents and foreigners as well (Al-Bakhit, 2007).

The digital management in the Egyptian Ministry of Tourism
Although Egypt has a good infrastructure of information and communication technology, they haven't been exploited properly in tourist sector (Abd El Ghani et al. 2014). This aspect may come back to three main reasons which are (WEF, 2012):
- The lack of a specific, clear policy for purchasing and using ICT.
- There is a deficit in computers, programming and communication network.
- Digital qualification for human resources is weak, and they are not convinced of the importance of digital transformation.

The Egyptian government tried many times to insert the digital system in the Egyptian official tourism organizations, As in 2013 when a collaboration protocol was signed between both the ministry of communication & information technology and the ministry of tourism which aimed to use ICT tools to maximize communication between tourists and tourist attractions in Egypt, (Medhat, 2013).

So some digital projects have newly been inserted so as to support the administrating the Egyptian product for developing the digital infrastructure with in Egyptian official tourist organization. One of the most important projects of them is the project of launching a live broad- casting transmission, the project of using Mobile Application, Micro site project and the digital library project (Abd El Azeem, 2013).

On regarding the digital system with in the Egyptian Ministry of Tourism, we find that the ministry has a lot of digital projects as tourist vehicles surveillance via GPS. information network for tourism, hotel occupation average and rating and developing digital infrastructure for hotel sector, the ordering system memory, digital library system, the human resources administration system (Radwan, 2013). Despite all these noteworthy attempts, the culture of rejection of change is still very dominant in the various aspects of governance there.

Communications system in Egyptian Ministry of Tourism
The traditional communication system which is so called the public switches for the phone cell network according to (Babair, 2006) depends upon three elements:
  1- Access: it means the access of users for phone call services via phone.
  2- Transformation: it means transferring ph – calls via switches.
  3- Transmission: it means the process of transmitting the phone calls via networks.

According to the study of Al-Waqadi (2010) which proposed WiMAX as the first alternative, and Intranet/extranet technologies as a second alternative to the implementation of high-quality communication systems, As well Abd El Ghani et al (2014) in his study provided his proposed digital management system with the capability to connect and manage all of the Egyptian Ministry of Tourism functions of a digital effective method; this system is called The Egyptian Tourism Organization Management system - EGY TOMS, the three proposals will be reviewed as follows:
1- Using WiMAX in Egyptian Ministry of Tourism:
WiMAX can be defined as a new technique and technology for a broadband wireless connection devised by a cost of employees of Institute of Electrical and Electronics Engineers - IEEE which means the broad wireless wave. Interoperability for micro wave Access worldwide (Al-Waqadi, 2010). This technology is different from WIFI which is a short form of wireless fidelity because the former required a certain number of transmitters in order to cover a specific area with in average where as such network can't be used as long as it's out of signal coverage area. It's not worthy that

the coverage ranges from 32 meters internally." WiMAX "can cover a wider scale there for it can be set up in order to be benefited from (Andries et al., 2007). Such implement of "WiMAX" can be done at two stages:
- The first stage:
▪ The system can be setup within tourism ministry head office in order to connect the central and main sectors with the head office of the ministry in Misr Tourism Tower:
a) Ministry Sectors which located in the hotel sector in Adly Street.
b) Ministry Sectors which located in the downtown.
c) Sectors of the Egyptian Tourism Authority in Misr Tourism Tower.
d) Sectors of the Egyptian Tourism Development Authority in the Nile Tower in Giza.
e) Egyptian Tourism Federation and its training centers affiliated with it.
▪ Connecting all data bases those are existent in the sectors of Egyptian ministry of tourism. Setting up a unified data base that allows leaders at all levels to know all information, statistics and data which can serve all leaderships and supporting the process of making decision as well.
▪ Traditional telephones are dispensed with among all ministry departments and to be replaced with free new system that helps to save a lot of money which can be transferred to the ministry of communication in return for contact and communication service among ministry departments.
- The second stage:
Internal offices affiliated to the ministry which are all over Egypt are to linked via such system, this requires expansion of the development of the system in terms of the number of points that will be established until access to each office, taking into consideration the utilization of the towers of the Ministry of Telecommunications spread throughout the Republic, which can be installed System antennas on them, so that all offices are linked sequentially.

2- Using Intranet / Extranet in Egyptian Ministry of Tourism:
Intranet and Extranet are both special networks for applying internet so as to show information so they are conducted and operated as well as internet application. There could be different access level for those users who can only use them if they have valid user names and pass words. Surely the characters' identity tells us about the system part s which he could reach side by side with using firewall so as to block out the undesirable bloggers away of the web.
Intranet is an internal network or a web included with in a network of a specific organization, its main goal is to share its information and resources with and among its employees. As for Extranet, it is a network connection among group of Intranet networks which work with in common work (Stambro and Savartbo, 2002).
Through what have already been shown about both Intranet / Extranet so as to make good uses out of their advantages and to be applied as:
- The first stage:
A connected Intranet Network shall be designed in:
a) The head office of the Egyptian Ministry of Tourism and its affiliated sectors in Misr Tourism Tower.
b) Ministry Sectors which located in the hotel sector in Adly Street. Ministry Sectors which located in the downtown.
- The second stage:
A connected Extranet network is to be designed during this stage so as to connect and link all previously designed Internet networks in the first stages consequently a

connection and link will be existent for its data base and to be made a good use of in developing the communication system within it.

- The third stage:

There has a connection among the ministry internal offices and the department affiliated all around Egypt.

3- The Egyptian Tourism Organization Management system-EGY TOMS:

Abd El Ghani et al (2014) provided a conception for digital system for managing the official tourist organizations in Egypt, which helps the official tourist organizations in transforming the data into information the information into knowledge, the knowledge into action consequently the right and correct information will be conveyed to those who are responsible for making decisions in proper and suitable time the matter which helps in planning process and carrying out strategies and following up and re correcting the right track, this system which is called " EGY TOMS".

It was depended upon the technology of Web Applications in designing system and connecting the Internet in order to access and deal with the system anywhere all over the world. Table (2) shows the digital users and type of usage in EGY TOMS:

Table 2. The digital users and type of usage in EGY TOMS

User	Administrative Level	Usage type
The supreme administration and heads of sectors	Strategic level	Include the organizations strategies. Restoring the periodical followed reports that helps in tables decisions in proper time.
System manager	Sub-level	Manage the system users data through determining privileges and validities give to every one.
The directorate branches	Tactical level	Identify tasks and casts according to the time table and following up and carrying out with the employees.
Employees	Executive level	Receive expend types and costs, documenting them raising results include the inquiries and proposals.
Registering employees with windows	Indirect level	Register tourist's data from entry or exit of the country and guests at hotels and these who are dealing via tourist companies.

Source: Abd El Ghani et al. (2014)

This technology ensures emancipation from setting any operating systems and technical support for the final user as all that we need is Web Browser so as to access the system, this digital system requires a design and development team consisting of IT Manager, Systems Analyst, Programmers, Human Factors Specialists and Internal Auditors.

As for the techniques it needs a host system upon the Internet in order to enhance and raise its Data base upon it, them devising a password upon it so as not everyone to access or pass but those who are permitted to enter by the system admin. EGY TOMS consists of a main user administrator in addition to 14 sub-systems, they all are gathering together in order to render services for re-engineering work according to the digital work requirements; the following is a quick showing up for these sub-components Abd El Ghani et al (2014):

1- The admin.
2- The sub-system of planning and following up.
3- The sub-system of managing mandates.
4- The sub-system of training.
5- The sub-system of internal services.

6- The sub-system of import & export.
7- The sub-system of managing complaints.
8- The sub-system of digital communication.
9- The sub-system of digital library sub managing sub- system.
10- The sub-system of vehicle management.
11- Sub-system for follow-up of working time.
12- The sub-system of digital archive.
13- The sub-system of global tracking.
14- The sub-system of managing customers and external affairs.
15- The sub-system of digital statistics.

Research hypotheses
1- There is a weakness in the digital work culture of human resources employed in the Egyptian Ministry of Tourism.
2- The digital work training policy within the Egyptian Ministry of Tourism is ineffective.

Research methodology
The study used descriptive analytical method, and the study community includes human resources working in the Egyptian Ministry of Tourism, with a total of 1359 employees. A random sample of 139 employees was selected. The questionnaire was used as a tool for field study; the data were analyzed and processed statistically using SPSS. The 42 questions of the questionnaire have been divided in to four main sides that are shown in the following table (3):

Table 3. The questionnaire sides

No	Side	Number Of Phrases
1	Demographic Data	7 phrases
2	Digital Work Thought	6 phrases
3	Digital Management	19 phrases
4	Digital Training	10 phrases

Results and discussions
The questionnaire has been presented in its elementary shape to a number of experienced and specialized arbitrators of faculty members, they have shown their remarks, proposals and observations, then the additions and modifications, which they have recommended, have been done, as soon as the questionnaire had taken its final shape, it was applied to an exploration sample randomly.

After that, Pearson correlation among all the questionnaire sides was to be calculated; consequently the study total's correlations were found to be high, this indicates the strength of coherence and internal consistency of all study paragraphs, as well as among its sides. The following Table (4) shows this:

Table 4. Internal consistency of the questionnaire sides

side	Item numbers	Correlations	Significance level
Digital Work Thought side	6	0.63	0.01
Digital Management side	19	0.60	0.01
Digital training side	10	0.67	0.01
Overall congruity	35	0.66	0.01

The study tool has been verified and its reliability by using Cronbach's Alpha, whereas the correlations was applied to the exploration sample previously taken,

Cronbach's Alpha's value was 0.749, which was considered a high value. Which means the validity of using such questionnaire, thus it was possible to calculate the self-honesty coefficient, which is equal to the square root of the correlation of Cronbach's Alpha, so the result was 0.866 which means that the standard is self-authentic and consistently stable.

The deductive analysis had been applied to closed-answer phrases prepared according to the five-point Likert scale, which were the digital management side and the digital training side, the following Tables (5) & (6) show this:

Table 5. Digital management side analysis

No	The Phrase	Ministry of Tourist	
		Arithmetic Mean	Standard Deviation
1	The Ministry has a connection by the Internet with its branches and the governmental and private tourism agencies and institutions that deal with it	3.57	0.66
2	I think that digital connection devices and systems in The Ministry are enough.	3.24	1.06
3	I think that The Ministry is using a more sophisticated digital devices and systems than others.	3.94	1.00
4	The Ministry depends upon digital devices and systems in planning and strategies.	3.87	0.71
5	I've the possibility to keep in touch with the supreme administration with proposals and complaints and receiving replies, using digital technology.	4.2	0.86
6	The Ministry tries to modernize the regulative and organizing structure so as to so as to catch-up with the digital administration applications.	3.82	0.82
7	The Ministry is interested in increasing the number of technicians specialized in research and development and digital information department	3.81	0.83
8	The Ministry provides continuous maintenance and updating for devices and operating systems.	3.82	0.83
9	I think there are wasted efforts and time greatly during current work.	2.11	1.33
10	I think that transferring from traditional to digital work wick help in developing the work performance.	2.12	1.34
11	I think that information and facilities are a line for my Nark place are enough, applicable and clear.	3.98	0.95
12	I have been observing a relieving in work burden and no congestion or crowdedness since the e – site on line was launched.	3.99	0.95
13	I think it's necessary to have a highly organized digital system to be in charge of running the corporation digitally.	1.29	0.84
14	The Ministry has information about the short comings in office technological devices.	2.04	0.65
15	Employees are to get opportunities for explaining and eliciting in devised ways and techniques for enhancing and developing the digitally, mechanized work.	3.79	0.98
16	The extra wages bonuses and post – promotions all are depending upon how for the employees are efficient digitally and how for they acquire digital technology.	4.10	0.73
17	I believe in the idea that The Ministry frame work has been transformed from traditional paper system to into an effective digital one.	4.28	0.89
18	I look up to the digital management as an educational experience	59	0.78

	Through which I acquired a variety of skills that qualify me to succeed in my work.		
19	The most experienced employees in the digital business are committed to following, guiding and qualifying the others.	2.68	1.15

Table 6. Digital training side analysis

No	The Phrase	The ministry of Tourist	
		Arithmetic Mean	Standard Deviation
1	The Ministry has contributed to the development of my computer and Internet skills.	3.99	0.46
2	The current training system in The Ministry is effective and sufficient to meet the training needs of the employees	3.79	0.98
3	Surveys are conducted periodically on the extent to which employees need courses to develop their digital skills	3.80	0.35
4	I think that the financial allocations available for training and the development of staff digital skills are enough.	3.99	0.46
5	I think that the process of selecting candidates for training is impartial and effective.	2.68	1.16
6	The ministry sends to me E-mails about digital work	3.99	0.46
7	An equipped lab is provided by the administration for training the employees.	4.42	0.94
8	The Ministry provides the opportunity to participate in workshops and seminars on the development of digital work.	4.42	0.94
9	The Ministry provides training programs related to the work.	2.68	1.15
10	The Ministry provided to me training courses on methods that reduce the pressures of digital work such as meditation, relaxation, effective time management, lifestyle management, etc.	3.99	0.45

The two previous tables show that most of the employees in the Egyptian Ministry of Tourism are proficient in dealing with the operating system, Office applications and the Internet, although the Ministry does not provide a computer for each employee, but rather provides it according to its vision of work, even a particular department may share a single device, Therefore, the use of digital technologies is often limited to the nature of their work, which does not allow them to develop their digital skills automatically, It was also noted that there is a desire among the employees to develop their digital skills in a way that benefits them and benefits the work if the possibilities are available.

The results also showed the absence of an integrated digital management system within the Ministry of Tourism, there is no complete digital communication between Top-Level management and its internal divisions or between it and its external branches, the ministry also does not take any action to ensure the work and functional structures re-engineering to suit the digital management transformation.

In addition, the Ministry does not take into consideration the digital management transformation when developing plans or strategies, or when employees are promoted or given incentives, thus discouraging employees to develop their digital skills, The Ministry of Tourism's lack of interest in digital development has also reflected its interest in the periodic maintenance of its devices.

Further, the results showed that the Ministry of Tourism employees are aware of the Ministry is digitally delay than some other government organizations in Egypt, and

the website design of the Ministry lacks the interaction and clarity of the facilities and information provided, which does not reduce the workload.

The Ministry provides the digital training only to employees whose work requires it not to raise the digital employee culture in general; therefore, the Ministry does not put digital training within its priorities. When organizing any digital training, the ministry sends its employees for training in other government organizations such as the Ministry of Administrative Development or some private digital training centers.

Based on previous results, we can accept the two study hypotheses, where the results proved that there is a weakness in the digital work culture of human resources employed in the Egyptian Ministry of Tourism, and the digital work training policy within the Egyptian Ministry of Tourism is ineffective.

The One Way ANOVA analysis was calculated by means of F test to determine if there were statistically significant differences between the attitudes of the sample members towards the study sides according to gender, age, academic qualification, compatibility of the job with their academic qualifications, marital status, and years of experience at significant level of 0.05. Table (7) shows that:

Table 7. One Way ANOVA analysis results

The Phrase	side	Disparity source	Squares total sum	Freedom degrees	Squares overages	Value	significance
One Way ANOVA analysis according to gender	Digital Management	Among groups	2.20	1	2.20	3.362	0.068
		Inside groups	16.890	258	0.65		
	Digital training	Among groups	7.65	1	0.765	3.362	0.061
		Inside groups	55.791	258	0.216		
One Way ANOVA analysis according to ages	Digital Management	Among groups	0.364	3	0.121	1.854	0.138
		Inside groups	16.746	265	0.065		
	Digital training	Among groups	0.364	3	0.121	5.53	0.646
		Inside groups	56.192	256	0.219		
One Way ANOVA analysis according to the academic qualifications	Digital Management	Among groups	0.296	3	099	1.504	0.214
		Inside groups	16.814	2.56	0.66		
	Digital training	Among groups	0.125	3	0.042	0.188	0.904
		Inside groups	56.432	2.56	0.220		
One Way ANOVA analysis according to marital status	Digital Management	Among groups	0.239	3	0.80	1.210	0.307
		Inside groups	16.871	256	0.66		
	Digital training	Among groups	0.488	3	0.163	0.743	0.527
		Inside groups	56.068	256	0.219		
One Way ANOVA analysis according	Digital Management	Among groups	036	1	0.036	0.539	0.463
		Inside groups	17.074	2.58	0.066		
	Digital	Among groups	0.019	1	0.019	0.086	0.769

to compatibility of the job with the academic qualifications	training	Inside groups	56.537	258	0.219		
One Way ANOVA analysis according to the years of experiences	Digital Management	Among groups	0.364	3	0.121	1.854	0.138
		Inside groups	16.746	256	0.056		
	Digital training	Among groups	0.364	3	0.121	0.553	0.646
		Inside groups	56.192	256	0.219		

From the previous table, there were no statistically significant differences between the answers of the sample members on the digital management and digital training sides and their gender, age, academic qualification, compatibility of the job with their academic qualifications, marital status, and years of experience at significant level of 0.05; this confirms what was confirmed by the previous results, and confirms the validity of the hypotheses of the study.

Conclusions

From this study, it was concluded that the employee's digital work culture does not only mean dealing with digital tools, But understanding the digital content and the full purpose for which it was designed, and the power is not only in information, but in the ability to manufacture, process and retrieve it.

Egypt is seeking every day to buy digital products without working for localization. So, the digital delay in Egypt can not be attributed to any other reason except for poor strategic planning and poor implementation. India, Malaysia, UAE, Saudi Arabia, Japan, and the two Koreas have started to plan their civilization after Egypt for decades and under worse conditions, and they are now classified from the digital developed communities in all sectors, especially the tourism sector.

The transformation to digital work at the Egyptian Ministry of Tourism requires the conviction of those who manage it, and the re-engineering of its work and structures according to the requirements of the transformation process. In addition, Egypt does not have the appropriate legislations to protect digital tourism transactions.

In addition, the digital infrastructure of the Egyptian Ministry of Tourism was not completed in such a way as to ensure the effective and integrated digital transformation, and the ministry adopts the digital management ostensibly only and ineffectively, does not take digital thought as a fundamental approach to planning and strategy development, It also did not provide a digitally qualified leadership of its employees prepared to lead various departments. The ministry either relies on digitally qualified external elements, or only those who have a traditional administrative efficiency at work, even if they are not digitally skilled.

Therefore, we can say that the Ministry does not adopt an integrated digital system but only limited attempts to manage some business digitally, and it should be noted that both employees and managers are responsible for delaying the digital transition on the other side.

Recommendations

According to the results, the study recommends developing a clear and effective strategy to spread the culture of digital work within the Egyptian Ministry of Tourism, as well as the development of information infrastructure in a way that raises performance to the global levels, while raising managers and employees awareness of the digital transformation importance.

Moreover, it is necessary to establish Think Tank centers, and establish a digital vocational training center within the ministry whose mission is to provide digital training courses for employees, and to ensure that the ministry has digitally qualified young cadres, as well as develop the ministry websites to work interactively.

Finally, the study recommends that the Egyptian Ministry of Tourism should depend on an integrated digital management system such as EGY TOMS or any other integrated digital system.

References:

Abd El Azeem, M. (2012). "Abu Dhabi Tourism and Culture", Economic Union. Available at: Http://www.alittihad.ae/details.php?id=53642&y=2012&article=full/ (Last accessed 3 Feb 2018)

Abd El Ghani, A., Fayed, H. & Abd El Galil, S. (2014): "The role of digital culture in developing of Egyptian tourist product management applied to the official tourist organizations", PhD, Faculty of Tourism and Hotels, Fayoum University.

Abd El Ghani, F. (2006): "Business and E-Business Re-Engineering: Symposium on the Impact of the Internet on Management in Arab Governmental Institutions", Arab Organization for Administrative Development, 7-9 October, Cairo.

Al-Ammar, A. (2009): "E-Tourism", Al-Jazeerah Newspaper, Issue No. 13471, August 16, Riyadh.

Al-Bakhit, S. (2007): "Tourism Authority, Arab and international awards in electronic transactions", electronic newspaper, Issue No. 5084, September 12. Available at: Http://www.aleqt.com/2007/09/12/article_107983.print/ (Last accessed 9 Dec 2017).

Al-Hamli, H. (2012): "Abu Dhabi Airports Company ADAC allows passengers to complete their own travel procedures at the Crowne Plaza Abu Dhabi on Yas Island", Abu Dhabi Airports Company, Media Center.

Al-kubesi, A. (2008): "Public Policies as an Approach to Government Performance Development", Arab Organization for Administrative Development, Cairo.

Al-Mousa, A. (2007): "The concept of paperless offices was conducted by the Tourism Authority for International Awards", Al-Eqtisadah Newspaper, Issue No. 4972, on 23 May. Available at: Http://www.aleqt.com/2007/05/23/article_93004.print/ (Last accessed 22 Oct 2017).

Al-Salmi, A. and Al-Salami, H. (2005): "Electronic Management Networks", Dar Wael Printing & Publishing, First Printing, Amman.

Al-Waqadi, K. (2010): "Development of communication and information exchange systems using WiMAX technology", Leadership Development Center for the Governmental Sector, Central Organization for Management and Management, Cairo.

Andries, M., Bogdan, I., Nicolaescu, S. & Scripcariu, L. (2007): "WiMAX - Features and Applications", Annual Telecommunications, No. 1/2007, Romania.

Babai, D. (2000): "Gulliver's Travel Agency, The Tourism Industry in the 21 Century: New Technologies", New Ways of Doing Business.

Babair, Y. (2006): "WiMAX Technology Says Farewell to Telecom Companies' Monopoly", Digital World Magazine, Issue No. 159, Sunday, April 23, Jeddah.

Baker, M. & Sweeney, G. (1999): "Business Process Reengineering in the Hospitality Industry :Process, Improvement in ALPHA Flight Services", Information Technology & Tourism, Vol. 2, No.1.

Buhalis, D. (1998): "Strategic Use of Information Technologies in Tourism, Tourism Management", Vol. 19, No.1.

Chris, P. (2012): "What is digital culture?", Available at: http://chris.pirillo.com/what-is-digital-culture/ (Last accessed 25 Jan 2018).

Daba, M. (1999): "Margins on Electronic Culture", Faculty of Dar Al Uloom, Fayoum University.

Daintith, J. (2009): "IT", A Dictionary of Physics, Oxford University Press.

Edenies, M. (2003): "E-management", Center for Information and Communication Research, Stockholm. Available at: http://www.adac.ae/arabic/media-centre/press-releases/2012/2012-06-04-ADAC-Launches-Self-Service-Check-in-at-Crowne-Plaza-Abu-Dhabi-Yas-Island.aspx/ (Last accessed 10 Sep 2017)

Eraqi, M. (2005): "IT As A Means For Enhancing Competitive Advantage", Anatolia: An International Journal of Tourism and Hospitality Research, Vol. 17, No. 1.

Hamed, H. (2007): "Electronic Management and Tourism Sector", Police Press Printing, Publishing and Distribution, Cairo.

Hammer, M. & Champy, J. (2000): "Reengineering The Corporation", A Manifesto For Business Revolution. Available at: https://www.Summaries.Com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&ved=0CDwQFjAB&url=http%3A%2F%2Fmoodleappres.unitec.ac.nz%2Fpluginfile.php%2F192283%2Fmod_resource%2Fcontent%2F0%2FReengineering_The_Corporation.pdf&ei=Mr4YUs_kJ8HStQakmYDADw&usg=AFQjCNEdVnKJEmXXYYE0r87dVC5qg7YKBA&sig2=KAXu_ATM0QjsB4AK-n95lg/ (Last accessed 21 Dec 2017).

Hashem, A. (2012): "The Role of E-Government and its Tools in the Development of Emirates Tourism - Lessons Learned", Faculty of Tourism and Hotels, Alexandria University.

Hilbert, M. (2015): "Digital Technology and Social Change", Online Course, the University of California, US.

Hoyer, C. (2001): "Preparing Leaders For The Digital Economy", Global E-Management Program, Business School, Copenhagen.

Hussein, A. (2008): "The role of banks in E-Tourism", the first Arab international conference for e-tourism. Available at: Http://www.euoticonf.com/p2%20dr%20Adel%20anafi.doc/ (Last accessed 8 Nov 2017).

Ibrahim, B. and Fawzi, C. (2010): "The Role of Information Technology and Communication in the Development of the Tourism and Hotels Sector", Al-Bahar Magazine, No. 7, University of Ouargla, Algeria.

Kurdi, A. (2010): "Tourism marketing information systems", Available at: Http://kenanaonline.com/users/ahmedkordy/posts/197593/ (Last accessed 15 Jan 2018).

Lisbôa, E. & Coutinho C. (2015): "Information, Knowledge, and Learning Society, International Journal of Rough Sets and Data Analysis", University of Minho, Portugal.

Medhat, A. (2013): "Activating the role of information technology in activating tourism movement: The most important recommendations of the meeting of the Ministers of Communications and Tourism", Monday, April 22. Available at:
Http://www.algareda.com/2013/04/%D8%AA%D9%81%D8%B9%D9%8A%D9%84%D8%AF%D9%88%D8%B1%D8%AA % D9% 83% D9% 86% D9% 88% 84% D9% 88% D8% AC% D9% 8A% D8% A7% D8% A7% D9% 84% D9% 85% D8% B9% D9 84% D9% 88% D9% 85% D8% A7% D8% AA% D9% 81% D9% 8A% D8% AA% D9% 86% D8% B4% D9% 8A/
(Last accessed 2 Mai 2018).

Minghetti, V. & Buhalis, D. (2010): Digital Divide in Tourism, Journal of Travel Research, SAGE Publications, UK.

Mohammed, A. (2008): "Strategies for Bridging the Digital Divide in ESCWA Countries", Journal of Economic and Administrative Sciences, Volume 14/52, Baghdad, Iraq.

Nejm, N. (2004): "Electronic Management", Dar Al-Marikh Publishing, Riyadh.

Radwan, Y. (2013): "Table of discussions of the meeting of the protocol committee of cooperation between the Ministry of Communications and Information Technology", Unpublished official speech, Central Administration for Information, Documentation and Decision Support, Ministry of Tourism.

Rashed, H. (2008): "Digital Culture Concept and Understanding", Arab Union for Electronic Media, Secretariat. Available at: Http://auem.yoo7.com/t63-topic/ (Last accessed 16 Nov 2017).

Sarkar, M., Butler, B. & Steinfield, C. (1995): "A Continuing Role for Mediating Players in the Electronic Marketplace", Journal of Computer Mediated Communication, Vol. 1, No.3.

Stambro, R. & Svartbo, E. (2002): "Extranet Use in Supply Chain Management", Master's Thesis, International Business and Economics Program, University of Technology, Stockholm.

Tavmergen, I. & Özdemir, P. (2001): "Re-engineering in Tourism: Application and Success Factors", Faculty of management and economy, Celal Bayar University, Vol. 7 No.1. Available at: http://www.alittihad.ae/details.php?id=53642&y=2012&article=full/ (Last accessed 13 Jan 2018).

UAE E-Government (2012): "The Department of Tourism launches a new website for Dubai on the Internet". Available at: http://www.emirtesegov.ae/ (Last accessed 30 Jan 2018).

Vivienne, M. & Weeks, P. (1999): "Re-Engineering MICE, An Organizational Model For Convention Services Management In 4-5 Star Hotels", 9th CAUTHE National Research Conference, Council for Australian University Tourism and Hospitality Education National Research Conference, Australia.

WEF (2012): "The Middle East/North Africa travel & tourism competitiveness report", Available at: http://www.weforum.org/events/world-economic-forum-Middle-East-North-Africa-2012/ (Last accessed 5 Dec 2017).

Wilson, E. (2006): "The Information Revolution and Developing Countries", MIT Press, Cambridge.