

International Journal of Research in Human Resource Management



E-ISSN: 2663-3361
P-ISSN: 2663-3213
IJRHRM 2025; 7(1): 35-45
www.humanresourcejournal.com
Received: 22-10-2024
Accepted: 27-11-2024

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Agile management of human resources and its impact on enhancing technological vigilance in tourism organizations

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DOI: <https://doi.org/10.33545/26633213.2025.v7.i1.a.254>

Abstract

The research highlights the importance of agile management of human resources in hotel organizations operating in the holy province of Karbala. The research indicates the impact of agile management in enhancing technological vigilance in first-class hotels in the holy province of Karbala, as the research identified a problem that was referred to by several questions, most notably the level of relationship (correlation, influence) between the variables. So the research relied on a one-dimensional scale of induction determined by (10) items, while the variable of technological vigilance was measured by four dimensions (Research and Development, Creativity, Knowledge, Information Technology) and adopted the scale (Nouri, 2021) ^[33]. Through the questionnaire used in data collection and distributed to a sample of workers in (14) first-class hotels in the holy province of Karbala, the sample size was determined (125) according to the equation (Stephen). Thus, structural equation modeling was used with many statistical tools in data analysis and statistical processing by the program (Spss V.26), (Amos V.24). The results indicated a correlation and impact between the research variables according to the results shown in the field side. Therefore, the results produced a new and accurate arrangement of the dimensions were (Kno, Rede, Inte, Cre) of the impact in enhancing technological vigilance in first-class hotels Research sample. One of the most prominent conclusions identified by the research is the validity of hypotheses based on statistical analysis, which indicates a correlation and influence between agile management of human resources and technological vigilance.

The researcher recommends the generalization of the concept of agile management to tourism organizations, both hotel and companies, and educate human resources to develop their skills to suit this management and the requirements of the times because administrative standards have become today one of the basic standards in the development of its organizational structure. In light of this, this research was divided into four sections, the first included the scientific methodology of the research, the second section the cognitive foundations of the research variables, and the third dealt with the analysis of statistical tests for the sample answers, while the fourth section included the most important and most prominent conclusions in the recommendations reached by the research.

Keywords: Agile human resource management, technological vigilance

Introduction

The radical changes of the world are witnessing at this time often presents many opportunities, especially in the field of technology, as globalization has put the world in a stage of development and competition in various productive and service activities. The changes have occurred in the science of management in general and human resources management in particular. It is as an approach and method without compromising the principles they have. Also, the quality of information is one of the main factors that can change the unacceptable situation in the tourism business in the world. This is to help hotel organizations ensure survival and continuity considering the rapid changes in the changing tourism business environment, which is witnessing fierce competition in their classifications and services. They must shift from classic, closed-minded, and adhering to traditional management methods to management. Sophisticated technology is one of its main pillars, hotel organizations that rely mainly on the vigilance of their human resources first. It is one of their priorities to identify and eliminate waste, and on the flexibility of performance, being an integrated system that is always looking for the optimal use of human resources, whether or material, in addition to an important element, which is time.

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Time helps to achieve the best performance, eliminating waste. The omission of activities is one of the goals that hotel organizations seek and the accelerated change prompted many hotel tourism organizations to use advanced tourism approaches and methods to face the developments of high competition. Although agile management has multiple dimensions that can be studied, hotel organizations that build their vigilance according to clear technological strategies increase their creative competitiveness, which gives them the power of intelligence that helps their resources in making appropriate decisions. These decisions contribute to enhancing the quality of its services in the labor market. As a result, it can be noted that the research sought to show the importance of variables in their dimensions in hotel organizations and highlight the impact of agile management in enhancing technological vigilance in them. The research was divided into four sections, the first included the scientific methodology of the research and the second section came with the cognitive foundations of the research variables, while the third section contained the analysis of statistical tests for the sample answers, and the fourth and last section came with conclusions and recommendations.

The first topic scientific methodology of the research

The variables have received increasing attention among many writers and researchers for their scientific and practical importance considering the challenges faced by hotel organizations in general. This requires the pursuit of management that sees the eye of organizational agility with technological vigilance, especially since the modern era is the information age. As a result, the steps of the current research methodology can be indicated as follows:

First: the research problem

The intellectual and practical framework depends on the diagnosis of the research problem and this diagnosis is through work according to an administrative organization. This organization seeks to demonstrate the importance of agile management and vigilance technology and the level of relationship between them in the field. The field problem that diagnoses weakness through field visits and official reports of hotel organizations also plays a role, and accordingly the problem can be summarized with several questions:

1. Statement of the cognitive foundations of research variables in their theoretical dimensions?
2. What is the nature of the correlation between agile management and technological vigilance in its dimensions?
3. What is the level of relationship between the impact of agile human resource management on technological vigilance and its dimensions?

Second: The importance of research

The importance of the variables that the research seeks to measure their impact lies in the following:

1. Demonstrate the impact of agile management in promoting technological vigilance in hotel organizations.
2. The importance of research is shown by studying its variables that the research seeks to address scientifically.
3. The research deals with two very important topics of modern management concepts that determine the vision of future organizations in providing their services.

Third: Research Objectives

The objectives of the research can be summarized as follows:

1. Identifying the conceptual framework of research variables.
2. Statement of description and diagnosis of agile management paragraphs and dimensions of technological vigilance at the level of the research sample.
3. Providing a realistic study through the statement of the influential and correlational relationship of the management of first-class hotels in the research sample.

Fourth: Research hypothesis

The research hypotheses must be consistent with the questions brought by the problem as they express in their concepts the expected solutions, and considering this, the following can be noted:

1. The first main hypothesis: there is a significant correlation between agile management and technological vigilance in its dimensions.

The second main hypothesis: there is a significant impact relationship of agile management in technological vigilance in its dimensions.

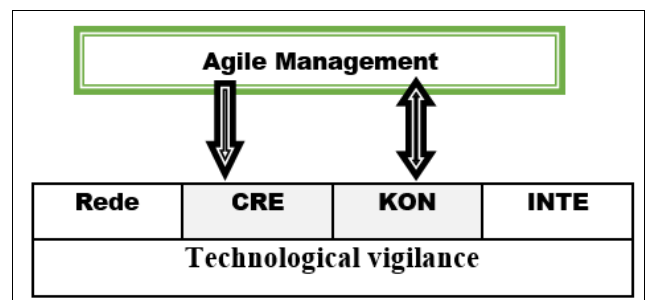


Fig 1: Hypothetical scheme of research variables

Sixth: Research Community and Sample

The research community was represented by the first-class hotels operating in the holy province of Karbala, (14) hotels officially registered in the Directorate of Tourism of Karbala, and a sample of (125) workers was selected distributed over first-class hotels. It determines the sample size and then rely on the equation (Stephen) and to ensure this number has access to it, (130) was distributed according to the following table:

Table 1: Sample Volume Distributions

Percentage %	Valid for analysis	Invalid	Non-refundable	Refunded	Distributed Forms	Number of Employees	Hotels
%96	125	3	2	128	130	125	14

Source: Prepared by the researcher

Seventh: The standards adopted in the research variables: They are included as follows:

Agile management (independent variable)

The researcher relied on building a scale based on ten paragraphs representing the variable.

Technological vigilance (Variable Supported): The scale (Nouri, 2021) [33] was adopted in determining its sub-dimensions, which included Four Dimensions are (INTE KNO CRE Rede) with four equal items.

The second topic Cognitive foundations of research variables: Contemporary hotel organizations seek in their service operations to follow many advanced administrative approaches that help them manage their operations. Agile management is one of the administrative concepts that have been used in various fields of knowledge, including the tourism sector. Therefore the interest of many researchers,

specialists and businessmen has increased recently with agile management and including the agility of its human resources and organizational structure.

First: Lean management

Niccolo refers to a modern management philosophy that works to remove sagging, reduce bureaucracy and identify the negatives that affect the functioning and quality of business. It symbolizes the speed of dealing with variables, so it requires all employees to participate in its principles to develop a conscious organizational culture (Niccolo, 2014:31) [31]. Changing the style, behaviors and ways of thinking of workers in business organizations is one of the challenges facing first-class hotels in particular. Also, organizational culture is one of the main factors that hinder his work to shift to a new approach to management using agile processes called agile management (Nylund, 2013) [21]. So, this can be presented concepts of agile management as indicated by many researchers in Table (2) as follows:

Table 2: Agile Management

No	Author	Lean Management
1	Angelopoulos, <i>et al</i> , (2019) [6]	A method of rapid development of an organization's units or products with minimal processes and expenses focused on reducing human resources using technology.
2	Cardon, <i>et al</i> , (2019) [9]	A set of techniques that are used in the continuous improvement of services and products and reduce waste and waste of resources within a productive organizational system.
3	Ibrahim (2020) [13]	A modern management philosophy based on the rejection of the ideas on which traditional management is based, as the process of its success depends on the owners of experience and administrative work.
4	Shop (2021)	A long-term management process in which small changes are implemented in a systematic manner resulting in increased quality and efficiency.
5	Söderbärg (2021) [29]	A philosophy that makes the organization resource efficient by targeting the exact amount of products required by the consumer in a timely manner and with high quality.
6	Al-Qaragholi, (2023) [5]	A methodology based on reducing the organization's operations (production or service) and shortening the time of their implementation in order to eliminate all work that does not add value to the organization through the use of a set of tools and methods that improve the quality of the product or service and customer satisfaction.

Source: Prepared by the researcher based on the sources given in the table.

Based on the foregoing, agile management can be referred to as a conscious administrative behavior followed by senior management to manage its human resources within a unified organizational culture based on a technological perspective with a reduction of tools and requirements determined by an advanced information approach to improve and increase productivity.

Second: Lean management: Chamanifard, *et al*, 2015:200 [10], Al-Khulaifat, 2016: 102 [3], and Ibrahim, 2020: 104 [13] point to the importance of agile management as follows:

- 1 Reduce waiting time for customers who have contracted services.
- 2 Improve cognitive management and processes to reduce the level of errors by repeating the process.
- 3 Achieve profits in a shorter period through speed of delivery.
- 4 An integrated system as the most important modern methods of managing productivity in organizations.
- 5 It helps to optimize the use of human and material resources and save time during implementation.
- 6 Eliminate waste within the entire organization.
- 7 Reduce unjustified waste in all departments of organizations and work on continuous improvements in their operations.
- 8 Rationalizing alternatives that do not add value to the

organization using high-precision technology with smart human resources

- 9 Create a culture of solving problems quickly and deliver superior managerial and financial results.
- 10 Take advantage of all the powers and capabilities of the company's employees.
- 11 Move away as much as possible from bureaucracy.

Third: Technological vigilance (concept)

Hotel organizations always need vigilance at all levels to know their external environment. Yet, technological vigilance is linked to information as it has become the important competitive factor that distinguishes it in the markets. Dawood *www.humanresourcejournal.com* referred to technological vigilance as an information revolution to achieve sustainable knowledge in light of external challenges being an essential and constant element for monitoring modern technology at the local and global levels (Dawood, *et al*, 2018:8) [12]. Berkane *www.humanresourcejournal.com* referred to it quickly respond to technological changes through the capabilities of hotel organizations within the culture of creativity and innovation and the search for what is new in their development (Berkane *www.humanresourcejournal.com*, 2022: 316) [7]. Thus, technological vigilance can be referred to through Table (3) and the following:

Table 3: Technological Vigilance

t	source	Technological vigilance
1	Lebert, 2018 ^[16]	Activities carried out by business organizations to keep pace with technological developments related to innovation, which are reflected in the services provided using different programs, equipment and applications in competing organizations.
2	Mahmoud, 2019 ^[18]	It is concerned with collecting information that helps the organization to achieve a precedent in the field of technological innovation, technological and technical development, technological renewal, scientific discoveries, and improving the steps of research and development, industry and patents.
3	Black, 2020 ^[32]	The activity through which the institution monitors the scientific and technological environment associated with it, through the collection and analysis of information, and its submission to decision-making centers, the main objective of which is to monitor new technology in the technological field, which contributes to building the institution.
4	Jalod <i>www.humanresourcejournal.com</i> , 2021 ^[14]	Processes carried out by the organization's control in analyzing the technological environment of competitors to identify the opportunities and threats that accompany this environment with the uses of modern technology that enhance its competitiveness and achieve quality in its required outputs in the markets.
5	Ramadan <i>www.humanresourcejournal.com</i> , 2023 ^[23]	Monitoring the internal and external technological environment and using it optimally to enhance the performance of human resources, increase their creativity and innovations, save time, effort and cost to face threats and exploit opportunities to achieve a competitive advantage that the organization advances over its competitors in the same field.

This table is prepared by the researcher based on the sources given in the table above

Based on the above, technological vigilance often refers to technological modernity and the development of scientific concepts in hotel business organizations as a system that helps to analyze the environment of internal and external organizations, supply and demand. They help them make strategic decisions regarding their development activities, and analyze the environment of the institution and current and future economic effects to identify opportunities and threats. It also focuses mainly on information and development of its hotel services.

Fourth: Technological vigilance

It is worth mentioning here the dimensions on which technological vigilance is based, which can be clarified (Al-Okaidi *www.humanresourcejournal.com*, 2019; Nouri, 2021; Sahibi & Shaaban, 2023) ^[24, 4, 33] as follows:

Research and development: The development of hotel organizations is a fundamental principle of any management and is the best way to improve the level of human resources capabilities working in them. Shandi and Hassan (2015) ^[26] referred to it as the activity associated with generating creative knowledge and transforming it into practical applications in the form of goods and services with a relentless aspiration to achieve the highest levels of performance. Yet (Schilling) Research and development is the investment of innovation of new products and services and the adaptation of their operations according to the needs of organizations within a deliberate plan (Schilling, 2017:38) ^[25]. Ali points out that it is a creative work based on a systematic basis to increase the stock of individuals and society of knowledge and the use of new innovative applications that embody the R&D activity in the activity (Ali, 2018) ^[2].

Creativity: The process of creativity is a complex process with different dimensions in its concept. Pot.*et al* referred to

creativity as a strategy in which organizations adopt in their management practices that lead to continuous improvement of organizational performance and quality of services at the same time (Pot, *www.humanresourcejournal.com* 2012:262) ^[22]. Kanagal has referred to creativity as new and different things that have not been tried before that need new knowledge or a new invention (Kanagal, 2015:1) ^[15]. Moon *www.humanresourcejournal.com* cited creativity as an integral part of a comprehensive strategy that helps achieve the organization's goals (Moon, *www.humanresourcejournal.com* 2020: 15) ^[19]. Others referred to creativity as a combination of flexible science fiction to develop old ideas or find new ideas that produce a distinct and unusual production that can be used, applied and benefited from (Sahibi, *www.humanresourcejournal.com* 2023: 3) ^[24].

Knowledge

Knowledge is an important dimension of research in the social sciences as it is the essence of the life and development of organizations. It is a kind of remnant of the accumulated science about the use of information technology and experience in thinking. According to Shehzad *www.humanresourcejournal.com*, the best and effective use of information is a fundamental pillar for business success in a highly competitive environment (Shehzad, *www.humanresourcejournal.com* 2022:4) ^[27]. It is pointed out that it represents data and information related to the product and competitors as it contributes to the excellence of hotel organizations when used in administrative and organizational disciplines (sleep, *www.humanresourcejournal.com* 2023:11) ^[28].

Information Technology

Hotel business organizations always seek to develop their capabilities and human resources skills and information technology is one of the important elements in moving the organization from one organization to another as it is a strategic weapon that helps strengthen and build its

capabilities. Chang *et al* stated that it achieves a balance between the organization's strategies and this is what brings it to a state of complete harmony (Chang, *www.humanresourcejournal.com* 2019: 6) [11]. Bukhari indicated that it represents the organizational structure of knowledge that goes into the production of goods and services. Also, technological development is one of the tools that can be directed to achieve the goals and concerns of hotel business organizations (Bukhari, 2020) [8]. Based on Tawfiq *www.humanresourcejournal.com* on information technology, the organization's ability to achieve a balance between the exploitation and exploration processes to ensure its unification and flexibility to ensure maximum benefit from it (Tawfiq, *www.humanresourcejournal.com*, 2023: 200) [34]

The third topic: Statistical analysis of the answers of the sample surveyed

First: Lean Management Scale sample tests.

Test the normal distribution of the scale of agile management: The researcher seeks to find appropriate statistical tools for testing the answers of the sample. From these tests, the important thing that determines the medical statistical analysis is the test of the natural distribution as it represents the analytical probability distributions. If the data has been distributed naturally, the researcher uses the statistics of his teachers and vice versa. Non-parametric statistics can be used when the distribution of data is abnormal. To prove this, Table (4) shows that all the lower and upper flattening and torsion coefficients appeared within the normal limits of the distribution, which were referred to by many sources and confirmed that their value is confined between (+-2.54). This confirms that all agile management paragraphs follow the normal distribution, which indicates the possibility of using parametric statistics in the test.

Table 4: Test of the normal distribution of the agile management variable

Assessment of normality (Group number 1)

Variable	Who?	Max	Skow	C.R.	kurtosis	C.R.
AM10	1.000	5.000	-.967	-4.413	-.748	-1.707
AM9	1.000	5.000	-.921	-4.205	-.840	-1.916
AM8	1.000	5.000	-.801	-3.657	-.749	-1.708
AM7	1.000	5.000	-.689	-3.145	-1.017	-2.321
AM6	1.000	5.000	-.432	-1.971	-1.314	-2.998
AM5	1.000	5.000	-.346	-1.578	-1.381	-3.151
AM4	1.000	5.000	-1.298	-5.924	-.075	-.170
AM1	1.000	5.000	-.982	-4.481	-.746	-1.703
AM2	1.000	5.000	-.528	-2.408	-1.291	-2.946
LISTEN	1.000	5.000	-1.331	-6.077	.128	.292
Multivariate					68.425	24.691

This table is the preparation of the researcher based on the outputs of the SPSS.v.26 program

Factorial Analysis of Lean Management Scale

Correct statistical analysis comes by reaching the required regression weights with good matching quality indicators. Figure (2) is the items of the agile management scale and its standard parametric estimates that exceeded its share (40%) and the phenomenon on the shares that link the variable to the items. So they were all significant, and this confirms the truth and feasibility of these parameters, while the results of

the conformity indicators all meet the acceptance rule. Table (5) shows the analysis of the structural model and the statement of the ratio (C.R), which exceeded its value of (+-2.56) at a significant level of 1%, which indicates the sincerity and feasibility of the parameters. This confirms that the model has a high level of conformity and that the agile management variable was measured by (10) items.

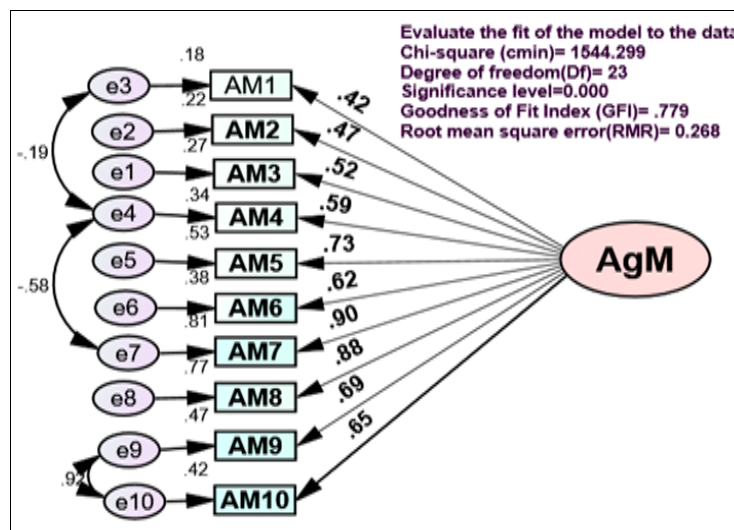


Fig 2: Test of the confirmatory factor analysis of the agile management variable.

This table is prepared by the researcher based on the outputs of the SPSS.v.26 program (Amos.v.24)

Table 5: Test of Empirical Empirical Analysis of the Agile Management Variable

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
LISTEN	<---	AgM	1.000			
AM2	<---	AgM	1.170	.305	3.837	***
AM1	<---	AgM	1.100	.281	3.913	***
AM4	<---	AgM	1.126	.279	4.035	***
AM5	<---	AgM	1.552	.326	4.767	***
AM6	<---	AgM	1.382	.305	4.536	***
AM7	<---	AgM	1.915	.368	5.203	***
AM8	<---	AgM	1.888	.360	5.249	***
AM9	<---	AgM	1.798	.360	4.988	***
AM10	<---	AgM	1.732	.351	4.930	***

Source: Preparation of the researcher based on the outputs of the SPSS.v.26 program (Amos.v.24)

Description and diagnosis of the Lean Management Scale:

All the descriptive statistics of the one-dimensional agile management scale that appeared in Table (6) have been accepted in their general averages, as the average of the general weighted arithmetic mean was (4.4) with a standard deviation of (1.01) and a standard difference factor of (22.90%) and a relative importance of (88.75%) and through the statistical results. The answers of the sample and apparent in Table (6) indicated their consistency and sincerity. It confirms that the employment and use of agile

management has an impact in stimulating the technological vigilance of hotel organizations because of its importance in the activities of the organizations of the research sample. If the organizations want to reach the ranks of international organizations in the tourism markets, either the items of the scale of agile management according to the level of their relative importance have achieved items(10AM) in the first place with (94.08%) importance, item (AM6) came in second with importance (90.56%), while AM2 came in last place with (81.12%).

Table 6: Description and diagnosis of the variable of agile management

Variable	Weighted arithmetic mean	Standard Deviation	Coefficient of variation %	Relative importance%	Rank
AM1	4.4	0.88	19.99	87.84	8
AM2	4.1	0.82	20.31	81.12	10
LISTEN	4.5	1.61	35.62	90.56	3
AM4	4.4	0.89	20.14	88.64	6
AM5	4.5	1.04	23.15	89.60	5
AM6	4.5	1.00	22.14	90.56	2
AM7	4.3	1.05	24.19	86.72	9
AM8	4.4	1.86	42.37	88.00	7
AM9	4.5	0.53	11.70	90.40	4
AM10	4.7	0.44	9.39	94.08	1
Agile Management	4.4	1.01	22.90	88.75	

Source: Preparation of the researcher based on the outputs of the SPSS.v.26 program

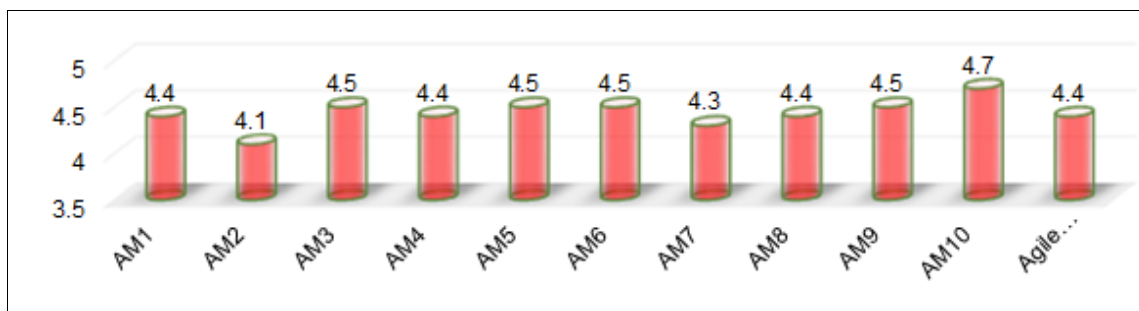


Fig 3: Agile Management

The researcher prepared this item based on the outputs of the SPSS.v.26 program (Excel.2016). Secondly Technological Vigilance Scale Tests

Test the normal distribution of technological vigilance

The researcher seeks to find appropriate statistical tools for the tests of the sample answers. From these tests, the important that determines the medical statistical analysis is the test of the normal distribution as it represents the distributions of analytical probability. If the data has been

distributed naturally, the researcher uses the statistics of his teachers and vice versa can use non-parametric statistics when the distribution of data is abnormal. This is to prove this table (7) that all the lower and upper flattening and torsion coefficients appeared within the normal limits of distribution, which were referred to by many sources and confirmed that their value is confined between (+-2.54). This confirms that all items of technological vigilance follow the normal distribution, which indicates the possibility of using parametric statistics in the test.

Table 7: Test of the Normal Distribution of the Technological Vigilance Scale

Assessment of normality (Group number 1)

Variable	Who?	Max	Skow	C.R.	kurtosis	C.R.
IT1	1.000	5.000	-1.511	-6.895	.514	1.173
IT2	1.000	5.000	-1.271	-5.801	-.108	-.245
IT3	1.000	5.000	-1.057	-4.824	-.146	-.333
IT4	1.000	5.000	-1.318	-6.017	.142	.325
IT5	1.000	5.000	-1.682	-7.677	1.476	3.368
CR1	1.000	5.000	-.863	-3.940	-.643	-1.467
CR2	1.000	5.000	-.803	-3.664	-.837	-1.909
CR3	1.000	5.000	-1.005	-4.589	-.431	-.985
CR4	1.000	5.000	-.315	-1.440	-1.877	-4.283
CR5	1.000	5.000	-.837	-3.822	-1.241	-2.833
RD1	1.000	5.000	-.308	-1.404	-1.905	-4.348
RD2	1.000	5.000	-.683	-3.116	-1.523	-3.475
DETERRENT	1.000	5.000	-.650	-2.968	-1.189	-2.713
RD4	1.000	5.000	-1.104	-5.040	-.380	-.868
RD5	1.000	5.000	-1.051	-4.796	-.524	-1.197
KN1	1.000	5.000	-1.462	-6.671	.631	1.440
KN2	1.000	5.000	-1.338	-6.108	.389	.888
KN3	1.000	5.000	-1.530	-6.982	.962	2.195
KN4	1.000	5.000	-1.237	-5.645	.140	.319
KN5	1.000	5.000	-.454	-2.070	-1.469	-3.352
Multivariate					47.395	8.931

Source: Preparation of the researcher based on the outputs of the SPSS.v.26 program

Confirmation factor analysis of the technological vigilance scale: Analysis of sample answers correct statistical analysis comes by reaching the required regression weights with good matching quality indicators. Figure (4) refers to the items of the technological vigilance scale and its standard parametric estimates that exceeded its percentage (40%) and the phenomenon on the shares that link the dimensions to the items. So they were all significant, and this confirms the validity and feasibility of

these parameters, while the results of the conformity indicators showed that all meet the acceptance rule. Table (8) shows the analysis of the structural model and the statement of the ratio (C.R), which exceeded its value of (+/- 2.56) at a significant level of 1%, which indicates the validity and feasibility of the parameters, which confirms that the technological vigilance variable was measured by (20) items divided equally on (4) dimensions.

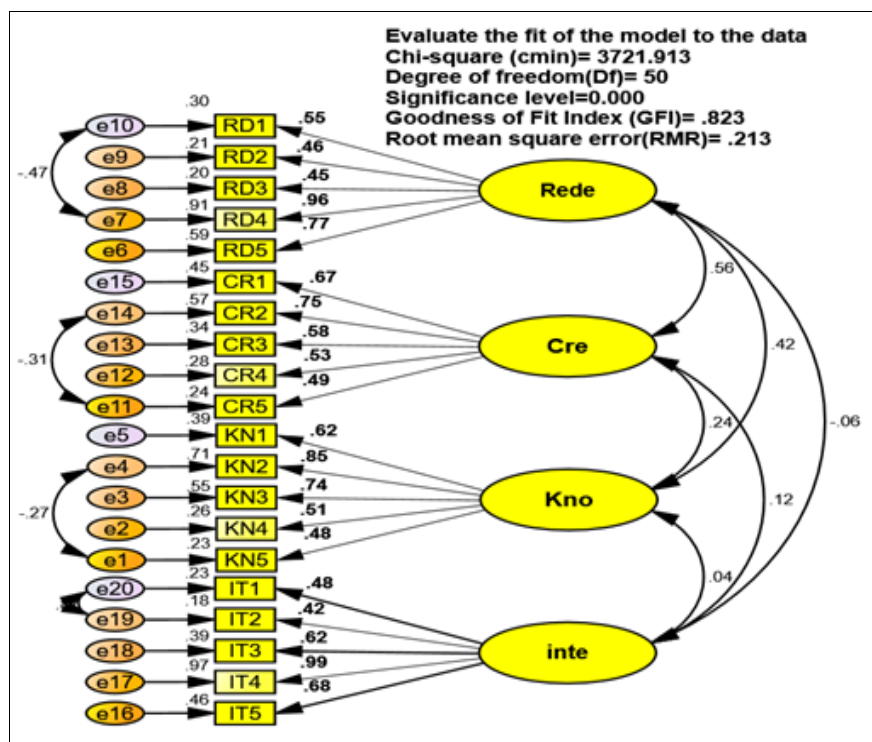


Fig 4: Test of the confirmatory factor analysis of the variable of agile management

Prepared the researcher based on the outputs of the SPSS.v.26 program (Amos.v.24)

Table 8: Test of Empirical Empirical Analysis of the Technological Vigilance Variable

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
KN5	<---	They were	1.000			
KN4	<---	They were	.906	.235	3.855	***
KN3	<---	They were	1.270	.283	4.484	***
KN2	<---	They were	1.474	.326	4.528	***
KN1	<---	They were	1.115	.263	4.233	***
RD5	<---	Rede	1.000			
RD4	<---	Rede	1.226	.132	9.323	***
DETERRENT	<---	Rede	.602	.120	5.025	***
RD2	<---	Rede	.740	.143	5.166	***
RD1	<---	Rede	.930	.177	5.258	***
CR5	<---	Cre	1.000			
CR4	<---	Cre	1.148	.292	3.934	***
CR3	<---	Cre	.936	.227	4.127	***
CR2	<---	Cre	1.261	.299	4.213	***
CR1	<---	Cre	1.075	.245	4.380	***
IT5	<---	You	1.000			
IT4	<---	You	1.616	.214	7.534	***
IT3	<---	You	.943	.142	6.636	***
IT2	<---	You	.730	.160	4.571	***
IT1	<---	You	.807	.156	5.183	***

Source: Preparation of the researcher based on the outputs of the SPSS.v.26 (program Amos.v.24)

Description and diagnosis of technological vigilance scale: All the descriptive statistics of the technological vigilance scale that appeared in Table (9) have been accepted in their general averages, as the average of the general weighted arithmetic mean reached (4.3) with a standard deviation of (1.26) and a standard difference coefficient of (29.57%) and a relative importance of (86.61%). Through the good scientific rates reported and apparent in the clear statistical results in the sample answers that indicated their harmony and sincerity, the employment and use of agile management is confirmed. Also, it indicated

an impact on stimulating the technological vigilance of hotel organizations because of their importance in the activities of the research sample organizations. If the organizations want to reach the ranks of international organizations in the tourism markets, as for the items of the technological vigilance scale according to the level of their relative importance, KNO ranked first, with a percentage of importance (87.68%) and Rede the second with an importance rate of (87.30%), while the Cre last, with its percentage (85.15%).

Table 9: Description and Diagnosis of the Technological Vigilance Scale

Variable	Weighted arithmetic mean	Standard Deviation	Coefficient of variation %	Relative importance%	Rank
Rede	4.4	1.10	25.54	87.30	2
Cre	4.3	1.44	33.99	85.15	4
They were	4.4	1.21	27.97	87.68	1
You	4.3	1.30	30.78	86.30	3
Technological Vigilance	4.3	1.26	29.57	86.61	

Source: Preparation of the researcher based on the outputs of the SPSS.v.26 program

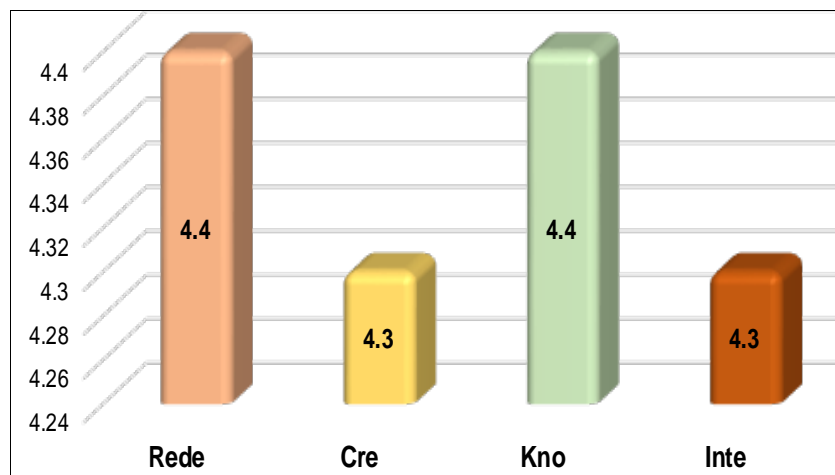


Fig 5: Graph of the Technological Vigilance Scale prepared by The researcher based on the outputs of the SPSS.v.26 program (Excel.2016).

Thirdly: Correlational and Impact Hypothesis Tests for Research Variables

Testing the first hypothesis (there is a significant correlation between agile management and technological vigilance in its dimensions):

When testing the first main hypothesis related to correlation, the simple correlation coefficient (Pearson) was used to indicate the level of relationship between the variables.

Table (10) shows the sample size (125), the type of test (2-tailed), and the abbreviation (Sig), which indicates the significance of the correlation coefficient through a comparison within the test between the values of t calculated with its tabular value without showing it in the table. Yo determine the strength of the correlation, this is done through the rule (Cohen & Cohen, 1983) [35] and according to Table (11), as follows:

Table 11: Levels of Correlation

Magnitude of correlation R	Correlation level	t
If the correlation coefficient is less than 0.10	Low correlation	1
If the value of the correlation coefficient is between 0.10 - 0.30	Moderate correlation	2
If the value of the correlation coefficient is higher than 0.30	Strong correlation	3

Source: Cohen, J., & Cohen, P. 1983 [35] "Applied Multiple Regression, Correlation Analysis for the Behavioral Sciences", 2nd Ed. New York: Lawrence Erlbaum Associates.

Table (10) indicates that there is a correlation between the research variables and this correlation is strong and significant, as its value reached (.685**) with a significant level of 1% with a confidence score of 99%. So, the first main hypothesis can be accepted, and to support the validity of accepting the first hypothesis, Table (10) shows the

correlation relations between the agile management variable and the dimensions of technological vigilance. Table (10) indicates that all correlation values have exceeded (0.30), which confirms the strength of the correlation with a significant significance at the level of 1% with 99% confidence.

Table 12: Matrix of correlation coefficients between agile management and technological vigilance.

		Correlations					
		Jumeirah	TeVi	REPLY	CR	BE	IT
Jumeirah	Pearson Correlation	1	.685**	.433**	.505**	.446**	.525**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	125	125	125	125	125	125
TeVi	Pearson Correlation	.685**	1	.498**	.661**	.599**	** **
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	125	125	125	125	125	125
REPLY	Pearson Correlation	.433**	.498**	1	.751**	.425	.445**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	125	125	125	125	125	125
CR	Pearson Correlation	.505**	.661**	.751**	1	.606**	.581**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	125	125	125	125	125	125
BE	Pearson Correlation	.446**	.599**	.425	.606**	1	.696**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	125	125	125	125	125	125
IT	Pearson Correlation	.525**	** **	.445**	.581**	.696**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	125	125	125	125	125	125

** Correlation is significant at the 0.01 level (2-tailed).

Source: Researcher preparation based on the outputs of the Spss.v26 program).

Testing the second main hypothesis: (there is a significant effect relationship for agile management in technological vigilance in its dimensions):

Table (12) shows the results of the second hypothesis test, as the researcher used simple linear regression analysis with its statistical parameters represented by the F test), the partial regression coefficient (beta/B) and the determination coefficient (R2) to enhance the importance of agile management of human resources in the technological vigilance of first-class hotels in the holy province of Karbala. Table (12) indicates the value (F) calculated for the simple linear regression model of (108.541) which is greater than its tabular value of (3.920) with a significant level of (0.05) with a high degree of confidence. It confirms the strength of the model and the significance of the regression

equation, while the coefficient of determination (R2) in the language of its value (0.685). It proved that agile management explains (69%) of the changes that appeared in the promotion of technological vigilance dimensions in the first-class hotels of the research sample, while the remaining percentage and adult (31%) is due to variables not included in the research model. The researcher has pointed to the values of the marginal slope of the angle of regression B of (0.947) which determined the significant value of the model by the contribution of agile management in the research through because the calculated value of t of (10.418) is greater than its tabular value of (1.976) with a level of significance (0.05) with a confidence score of (95%). So, the significance of the simple linear regression coefficient is proven.

Table 13: Simple Linear Regression Test Results

(R2)	(F)	Technological vigilance			Minion Independent
		(i) Adoption of the Covenant on	B	Constant	
0.685	108.541	10.418	.947	.657	Lean Management (Jeddah)

Source: Researcher preparation based on the outputs of the Spss.v26 program).

The fourth topic: Conclusions and recommendations

First: Conclusions: After the statistical analysis, the most important conclusions reached by the researcher appear scientific and practical serving the research sample as follows:

- 1 Agile management is a scientific management methodology that has a positive impact on hotel organizations that most first-class hotels seek to benefit from to achieve competitive advantage.
- 2 The research measures had a high level in the first-class hotels of the research sample, which confirms the importance of the scales according to the results of descriptive statistics, as the value of agile management came (88.75). Yet, the measure of technological vigilance was (86.61), which indicates that the scale of agile management that was built by the researcher won the highest level and this indicates the acceptability of the scale by the research sample.
- 3 The research measures achieved a good level of structural honesty to some extent at the level of first-class hotels of the research sample. This indicates the conformity of the measures in question with its data that have been processed proving the relationship between the variables with their paragraphs and dimensions and that the number of paragraphs that measured the agile management variable is acceptable in number and clear, which indicates that the scale is built appropriately with the measure of technological vigilance.
- 4 There is an attention of first-class hotels in the research sample to the scale of agile management. These hotels always strive to reduce their human resources and compensate them with technology and introduce them into their main operations that help develop their services, which enhances the possibility of their organizational capabilities.
- 5 First-class hotels of the research sample rely on a scientific research method to deliver the culture of agile management to their human resources through tools that help them develop the level of human resources skills, which enhances their technological vigilance that serves the quality of their services.

Second: Recommendations

We show some recommendations considering the above conclusions that can be used when the college uses the research sample of the digital citizenship system in the educational process as follows.

- 1 Promoting a culture of agile management and developing human resources skills in first-class hotels, and the technological vigilance of human resources and urging them to use them in accordance with scientific standards and rules that serve the outputs of tourism organizations.
- 2 Urging human resources to use agility in their organizational and service work within a clear scientific and electronic plan that contributes to the development of the administrative process of organizations.

- 3 Benefiting from the results of the field study, especially the scale of agile management, which was built according to the nature of first-class hotels, the research sample, and working to circulate this scale to all tourism organizations.
- 4 The need to focus the management of hotel organizations in all their classifications on the agile management approach as a correct scientific approach to reap profits and increase tourism revenues.
- 5 The need to hold intensive training courses for human resources to develop their technological and administrative skills and enhance their creativity within a constructive approach based on consolidating the idea of agility in the organizational process.
- 6 It is important to spread the culture of non-extravagance among human resources in first-class hotels in the research sample in their hotel activities and operations and the adoption of the productivity base for money.

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