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# Human Resources Management and Lean Management Tolls

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**Abstract:** For more than two decades, Algeria has been seeking to diversify its economy through optimal exploitation of available resources and not relying on energy resources. Therefore, the human resources sector has recently received great attention in Algerian economic policies. This research paper aims to research and show the relationship between human resources management and lean management, by studying a sample of workers in the Aïn Témouchent- Algeria Telecom - that is active in the field of services. Lean management refers to a technology that has been developed with the aim of reducing waste from the production process and maximizing the value of the product or service to the customer, without sacrificing quality, Formulated by Toyota's production system, it is part of the distinct thinking, We used the questionnaire as a main tool for this study, as it was distributed to a random sample of 40 workers in the institution under study. At the conclusion of this study, we concluded that there is a positive and statistically significant relationship between training, motivation and lean management, while there is less statistically significant relationship between evaluation, leasing and lean management.

Keywords: Motivation, Training, Evaluation, Leasing, Lean management.

### Introduction

Human resources management has become one of the most important functional departments in modern organizations, so that its efforts are focused on improving the performance of its human resources in carrying out their tasks in order to achieve the goals of the organization with the highest levels of efficiency and effectiveness, and among the modern administrative concepts, which has become the lion's luck in economics is the concept of agile management, as the philosophy of agile management originated in Japan by TOYOTA In the fifties of the 19th century. Then the model was generalized to the automotive industry, after this concept spread after the study carried out by the Institute (MIT) on the automotive industry, and agile management has arisen based on some of the ideologies that preceded it, including total quality management Production on time, these ideas represented the starting spark for the basic components of agile thinking, that is, the production of high-quality products at the lowest cost and only when needed, we will try through this scientific research to take note of some of the theoretical aspects of each of the management of Human resources and agile management, as well as an attempt to link the interaction between them through a field study at the operational institution of Algeria Telecom, Ain Timouchent branch,

### **Previous Studies**

We mention the following studies : Study Sparrow and Otaye (2014) entitled "Agile managment and the capacitiy of the human resources function ": The role of human resources engineering and the location of intellectual capital : the objective of the study is to study the relationship between agile thinking and the role of human resources in achieving agile sustainability, which may lead to changes in intellectual capital surrounding agile thinking and new core experiences. Relying on the case study method to reach results, the study concluded that the organization's human resources must be engineered for the successful implementation of agile management

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through changes in human resources skills, behaviors and competencies as well as changes in human resources practices.

Study Jassem and Al-Zubaidi (2016) entitled: "The reflection of the agile management approach on human resource management practices: field research in telecommunications companies in Iraq (Zain - Asiacell)" This study aimed to test the extent to which the lean management approach is reflected in two of the most important telecommunications companies operating in Iraq, namely (Zain, Asiacell) and determine the extent to which the agile management approach is adopted by the two companies surveyed in a way that improves resource management practices. The research problem was that there were deficiencies in some aspects of the application of the agile management practices, and the questionnaire was used as a major tool for obtaining data and information, as it was distributed to a random sample of 90 individuals working in the departments of human resources and customer service in the two companies surveyed, and the statistical program SPSS was used For data analysis, the researchers have reached a set of results, perhaps the most important of which is that the statistical results of all correlation and influence between agile management tools and human resource management practices were positive and moral, and there are no significant differences between the two companies in the field of application of agile management tools and human resources practices.

Study bin Warith and Jaba (2016) entitled <sup>:</sup> "The role of productive institutions in the application of the agile management method : A field study on Algerian pharmaceutical institutions" This study aims to shed light on one of the most important modern methods of production management, which is the agile management method, and reviews the various forms of waste that the institution may face during the production process. Through the descriptive and analytical approach on which the study relied, the theoretical aspect of the effective role played by the agile management method in eliminating waste in the institution was demonstrated, through a set of mechanisms and tools on which this philosophy is based, with the need to provide a set of basic requirements necessary for the correct application of the method.

Through the applied study on a sample of Algerian pharmaceutical institutions and using the questionnaire tool, the extent to which the method of agile management can be applied has been measured, and it has been concluded that these institutions, represented by the senior management, are largely committed to providing all the necessary capabilities for the application of this method, and the training policy adopted in them is in line to some extent with the basic requirements of it, but the prevailing culture in these institutions, especially the absence of a spirit of cooperation between management and workers, remains. The great obstacle to the application of this management philosophy.

Study Rakaj and Al-Abadla (2017) entitled <sup>5</sup> The availability of the requirements of agile management and its role in human resource development in the Ministry of Education and Higher Education in Gaza: This research is based on studying the availability of the requirements for achieving agile management of work organization, continuous improvement, standard work, multifunctional worker in the Ministry of Education and higher education in Gaza, and their role in achieving human development in the ministry through the indicators of recruitment and training. It was completed based on a random sample selected through 430 forms out of 4119 employees in the ministry and its directorates spread in five regions across the main building of the ministry and seven sub-directorates. The researchers concluded that the concentration and spread of the Ministry of Education and Higher Education in Gaza with its directorates in the governorates, and the method of work followed based on the continuous improvement of work by adopting standard standards and job rotation achieves the requirements of agile management, and therefore there are no significant differences of statistical significance when testing its hypotheses at the level of significance 5%

The researchers also found the need to motivate workers to develop their capabilities and develop them through standard work standards and the rest of the determinants of agile management and that the variation of the correlation between polarization and the paragraph of organizing the work site, and the existence of this relationship between the rest of the paragraphs of the study supports this positive ability to the extent achieved from the requirements of agile management in human resource development. This was confirmed by the statistical tests of the correlation coefficients and their significance at the level of significance

Study Brahimi et al. (2018). entitled<sup>:</sup> The role of agile soft management in achieving total quality (Examples of some agile institutions) This study aimed to illustrate the impact of the use of agile management techniques in improving the quality of products or services based on a set of tools used to achieve this. The business environment in which contemporary institutions are active is characterized by instability and continuous developments as a result of being affected by globalization and technical and technological changes, in addition to the intensity of competition, all of which encouraged organizations to adopt the concept of agile management in order to reach the quality provided to customers, which allows them to excel in the market to ensure their survival.

The study reviewed the theoretical framework of agile management with reference to a package of its tools used: such as workplace organization (5S), Appropriate Time (JIT), Continuous Improvement (Kaizen), Kanban, and Comprehensive Maintenance (TPM). The comprehensive framework for the concept of quality management and the most important principles that it seeks to achieve was clarified, and as the last part of the study, a set of models for agile European institutions (*MARSY- DIETAL-Nummi – Safran-TOKHEIM*), which has achieved positive results in the quality of its products and services

## **Human Resources Management**

Human resources management has known great development and great interest by modern organizations, after it was marginalized and had no impact on the organization's policy, but environmental changes and transformations forced organizations to reconsider again the concept of human resources management appropriate to the organization's general strategies.

### **Definition of Human Resources**

The first definition: it is the only real resource and Peter Druker confirms this as he says that the organization has one real resource, which is the human being (Al-Huwaili , 2002) The second definition: It is also the most important elements of work and production, although all financial resources are important, but human resources are considered the most important, because they are the process of creativity and innovation and they design the product and supervise its manufacture and quality control and are the ones who market it, without effective human resources these things cannot be performed efficiently and no organization will be able to achieve its goals and missi(Al-Hiti, 2018)

Definition of hrm drfned by glueck. w: It is that function in the organization that is concerned with the supply of the necessary human resources, including planning, searching, operating and dispensing with manpower needs (Abdel-Baqi, 1999) Chruden and Sherman defined it : Human resource management includes basic processes that must be performed and rules that must be followed, and the main task of the people manager is to help managers in the organization and provide them with the opinion and advice they need to enable them to manage their subordinates more effectively(Kani, 2014) and he knew it as Smith .G&Grant. J: It is the responsibility of all managers in the organization and a reign for what is done by human resources specialists in people management (Abdel-Baqi, 2001) We conclude from the previous definitions that the Human Resources Department is the department that provides what the facility needs from manpower, maintains, trains and develops it, and works on its stability and raise its morale, and this department also follows up the application of regulations, instructions and laws that participated in the formulation and adoption of the administration from time to time in line with the interest of the public.

The emergence and development of human resources management: Human resources management in its modern form is not the result of the hour, but is the result of a number of developments dating back to the beginning of the industrial revolution, those developments that contributed to showing the need for a specialized human resources department that takes care of human resources affairs in the facility, there are many reasons that explain the increasing interest in human resources management as a specialized function and as a branch of management, and among these reasons(Al-Huwaili,2002)

Industrial expansion and development in the modern era, helped the emergence of organized labor organizations, where problems began between management and human resources, which led to the need for a specialized department that takes care of and solves the problems of human resources in the enterprise. The great expansion in education and cultural opportunities for workers, which led to increased awareness as a result of their high level of culture and education, which led to the need for specialists in human resources management and modern means to deal with this modern type of resources.

Increased government intervention in relations between workers and employers by issuing labor laws and legislation, which led to the need for a specialized department that maintains the application of laws to avoid the enterprise falling into trouble with the government; the emergence of trade unions and labor organizations that defend human resources and the need to pay attention to the relations of management with labor organizations, which led to the importance of having a specialized department to create cooperation between management and labor organizations.

The most important historical stages that human resources management went through from the middle of the 19th century until now are: the first stage (Salmi, 2001) Industrial life developed after the industrial revolution before

that, industries were confined to the system of specialized sects, where such as industrialists practiced their handicrafts in homes with simple tools, and in terms of human resource management, the industrial revolution was the beginning of many human problems. The second stage : The emergence of the scientific management movement: One of the developments that contributed to the emergence of the importance of human resources management is the spread of the scientific management movement led by Taylor, who reached the four foundations of management, namely:(Al-Hiti, 2005) Real development in management: Taylor means to replace the experimental method or the method of right and wrong in management with the scientific method

Attention to the development and education of human resources : Taylor asserts that the worker will not produce the energy required of him until he has the willingness to work, and appropriate training on the job, which is essential to reach the required level of work; real cooperation between management and human resources: Taylor asserts that it is possible to reconcile in the public interest. Taylor has emphasized labor standards and focused on his demand for workers to perform production rates on the pay-per-wage principle.the third stage : The growth of workers' organizations in the beginning of the twentieth century Labor organizations grew and strengthened in countries, especially in transportation and heavy materials, and the movement of scientific management that tried to exploit the worker, is a direct cause of the emergence of unions. the fourth stage: The beginning of the First World War: Where the first World War showed the need to use new methods of selecting employees before hiring them, such as (alpha and beta) and successfully applied to work to avoid the reasons for their failure after their employment, and with the development of scientific management and industrial psychology, some specialists in human resource management began to appear in facilities to help in recruitment, training, health care and industrial security. the fifth stage: between the First and Second World Wars: The end of the twenties and the beginning of the thirties of this century witnessed developments in the field of human relations, where the Hawthorne experiments were conducted by Elton Mayo, and convinced many of the importance of satisfying workers about their work and providing appropriate conditions for work. sixth stage: after World War II until now: At this stage, the scope of work carried out by human resources management has expanded, as it included training and development of workers and the development of programs to motivate them and rationalize human relations and not only save human resources files and control their attendance and departure routinely, and modern trends in human resources management still focus on human relations and benefit from the results of research for psychology and anthropology.

Human resources management functions : Human Resources Management is interested in achieving efficiency and organizing employees in institutions, this interest is considered the most important entrance capable of ensuring the quality of performance and to achieve this efficiency, the department undertakes a set of functions, the most important of which are : Training function : What is the concept of the training function ? There are many concepts used to express training as a process, there are those who consider it an attempt to improve the current and future performance of workers by increasing their abilities to accomplish their jobs, or administrative and organizational efforts aimed at improving the ability of the individual worker to perform a specific job, or to play a specific role( Deiri & Al-Kiswati,2009) Incentive function: It has been defined as: "A force external to the person, which may be material, moral or in the form of factors present in the environment surrounding the individual, pushing him or below him to raise the level of his human performance to a higher level in order to obtain new advantages" (Deiri, 2009), there are several divisions of incentives and each division is based on a specific basis or aims to highlight a specific aspect.types of incentives according to their trends: Under this division, incentives are divided into two types: positive incentives and negative incentives. Positive incentives : Those incentives that aim to improve the level of performance of individuals through the entrance of encouragement and excitement.

Negative incentives : It is a set of influences that seek to influence the behavior of individuals through the entrance of punishment and deterrence. Types of incentives according to their nature, According to this basis, incentives are material and non-material incentives moral (Abbas,2011) Material incentives : These material incentives mean satisfying human material or physiological needs such as food and clothing. Non-material incentives (moral): they are those aspects that provide the social or self-needs of individuals.

Performance appraisal function: It is a process whereby the efforts of employees are fairly and fairly estimated to be rewarded for what they work and what they produce, based on elements and rates on the basis of which their performance is compared to determine their level of efficiency in the work they work (Abdel Ghaffar, 1993) rental Function: the concept of wage differs in capitalist economic theories from that in socialist economic theories and the reason for this difference is due to their view of work, in capitalist economic theories work is seen as a commodity sold and bought and has a price and that this price is the wage, which is defined in the said system as "the price that the worker gets for the physical or mental efforts he makes in the production process" (Al-Maghribi, 2007).

## Lean Management

*What is lean management* : The Philosophy of agile management originated in japan by toyota in the fifties of the 19th century. The model was then generalized to the automotive industry, after the concept spread after the study carried out by the MIT Institute on the automotive industry) Monden, 2012).

Lean management was built on some of the ideologies that preceded it, including TQM production on time ( Arnhieter & Maleyeff, 2005) These ideas represented the starting point for the basic components of agile thinking, including focusing on producing high-quality products at the lowest cost and only when needed (Didia, 2017) as for the definition of agile management, there is no agreement on a single definition, but there are many definitions of this concept and we present them: Sparrow & Otaye points out that agile management "aims to produce products and services at the lowest cost and as quickly as possible, focuses on efficiency, minimizing waste and eliminating value-added activities, to improve and increase productivity.(Sparrow& Otaye,2014)

It is also "a philosophy that the organization aims to maximize value for its customers by minimizing waste (Nicholas, 2011). Through the above definitions, it is clear that agile management is based on: Creating value based on the needs of the customer, by eliminating all forms of waste, including on-time production, and direct delivery to the customer, with the continuous development of the value creation process through all its stages until the service or product reaches the final consumer, taking into account the high level of quality.

*Principles of lean management*: According to Womack and Jones , there are 5 basic principles of agile management:

Value determination: Value is always determined by customers' need for a specific product.

*Value flow planning*: Define all the steps for each type of product, omitting those that do not create value. All actions are defined within any path through which the product or service travels. This path can be in design, production, human resources, management, distribution, or customer service. The method here is to draw a plan for the flow and flow of materials, and products, through each process, and the goal is to identify every step that does not provide value, and from here find a way to get rid of these Missed steps.

*Flow creation* : After removing the damaged from the value creation path, this step is followed by verifying and ensuring that the remaining steps are proceeding smoothly without interruptions, delays, or congestions." Implementing steps in a tight sequence, which makes the product or service flow smoothly towards the customer" (Didia,2017) this requires moving from a mentality of condescension and silo, to work between jobs that includes all interests, which represents the biggest challenges in the face of management programs.

*Establishment of clouds*: With improved flow, towards the market or customer can improve significantly. Which improves the way products are distributed, which is done according to need only, this means that the customer can attract products from the institution according to his need, that is, the actual demand is what creates production and then sales, and as a result, the products do not need to be manufactured by or stored, a process that arises from expenses for managing these stores, and we can also dispense with them and therefore the This process will reduce costs for both the factory and the customer.

*Mastery and perfection*: If we define the value, and the value paths and streams are set, the wasted steps are deleted, and we enter the flow and attraction, the process must be started again and continued until we reach a state of perfection and mastery, where value is created completely without waste. Agile management is not a fixed system, it requires constant and constant efforts and vigilance to master.

*Requirements for the application of agile management:* In order for agile management to succeed on the ground for the organization, the latter must meet some conditions or requirements, which are as follows: supporting senior management: This is natural as senior management is the one who provides the capabilities and requirements needed by this method, and therefore its conviction is a cornerstone in the success of the application of this method.

Participatory management ensures that all employee suggestions are used, whether in finding solutions to problems or developing new work patterns that allow the organization to continuously improve its performance, and find optimal formulas for production without waste( Wilson,2010). Training : Training aims to change the behavior and convictions of individuals from those that existed before the formation process. Agile management requires highly qualified workers to identify, detect and avoid errors, and this is only possible with rigorous training designed to spread the culture of eradication of heather. In addition to providing workers with skills in line with the principles of agile management.

Culture : Every change in the organization must be preceded by a flexible culture that enables and paves the way for this change to be well received by the workers, if we want it to continue and succeed. If we go back to the

emergence of agile management in its infancy, Toyota in Japan, we find that one of the foundations of its success is the culture that characterizes the Japanese worker, which is characterized by strong belonging to the institution in which he works, and stems from his sense of belonging and loyalty to his country.

*Agile management tools* : There are many tools that fall under the agile management methodology, which enables obtaining the highest results by getting rid of waste and waste and thus increasing the efficiency of institutions. The following are the authors' most frequent and service-related tools:

*Organization of the work site*: There is no doubt about the importance of arranging and cleanliness of the workplace, and their role in increasing the productivity of workers so that the elimination of clutter can access things easily and quickly, and the tool of (5s) is the starting point to achieve this (Glover & Jackson, 2010). It improves the surroundings of workers by adhering to five principles: 5 words starting with "S".

*Continuous improvement*: It is a Japanese method that depends on the inclusion of small and continuous improvements, on each of the products, services, or processes, these improvements lead to reducing waste and waste, and continuous improvement is a comprehensive concept for all aspects of the organization, where all employees in the organization are engaged in the improvement process, regardless of their administrative levels, and their job positions from the top of the administrative pyramid to the front lines(Glover& Jackson,2010).

*Standard work:* refers to the standardization of executive procedures at the workplace, where it shows and answers: what?, where?, when? Who?, and how? Tasks should be done to ensure the best results. In this way, customer satisfaction is achieved, and the continuity of the improvement process is ensured, by reaching the best possible way to perform the work (Michalaska & Szewiecze, 2010)

*Multifunctional workers* : This concept focuses on the presence of skilled workers and at the same time possessing multiple skills, undergoing specialized training in order to enable them to have high capabilities to solve problems related to each activity, and to develop it for the better, and this method is a tool to train workers to deal with more than one task within the organization) Glover & Jackson, 2010).

*Six sigma:* A strategic systematic approach to improving the process and new services, using scientific and statistical methods to raise the level of customer satisfaction with the services provided to them.

## The Reality of Lean Management in the Ain Temouchent - Algeria Telecom -

In support of what we have presented in the theoretical aspect, and in view of the nature of the topic that requires trying to project theoretical concepts on practical reality and know the extent of their application in the Algerian institution, and in order to answer the problem posed and related to the extent of the role of human resources management in adopting agile management tools in the institution, we chose Algeria Telecom due to its advantages over other institutions at the national level, and it is also recently seeking to develop its services Under fierce competition.

#### Algeria Telecom

Algeria telecom is a public institution with shares of a commercial nature in the field of services, especially in the field of telecommunications, and it is active at the national level, its opening capital is estimated at 100 million algerian dinars until 2005 and then raised to 50 billion algerian dinars, and registered in the commercial register No. 02B0018083 and its social headquarters in algiers, on the national road no. 5 of the five homes of Mohammedia 16211 Algeria, and the age of the institution is legally defined by ninety-nine years, and the number of its workers is about 23 thousand workers, including 45% technicians, The turnover during the year 2010 amounted to 60 billion dinars, about 40%, of which is the duration of the fixed telephone horse. adsl, 15% Internet the directorate general of algeria is divided into regional regional commissions, the latter divided into state directorates and directorates into commercial agencies.

*The role of training in adopting agile management tools within the algeria telecom*: There are several types of training , internal training : It is within the institution with internal efficiency and currently its duration is between a week and three methods as needed in order to enable employees to practice their work in good conditions, which earns the institution a profit for time and money.

*External training* : It is of two types of short-term, i.e. from one month to three months, and it is with a contractor and is also subject to the low price up to fifty thousand dinars, but if it is above fifty dinars, the institution must contract with two or three, while long-term, i.e. three months up to six months, it is for groups that work in the

technical field. The role of motivation in adopting agile management tools in the algeria telecom: which in turn is material and moral, financial incentives : there are social activities health services excursions the Foundation also conducts a lottery for workers to go to Umrah every year, and whoever wins the Hajj lottery costs the Foundation.

*Moral incentives* : The institution has moral incentives aimed at providing an appropriate climate for the worker in conditioning and achieving belonging to it, and according to the same social agreement dated 13/07/2003 grants the worker the right to these moral incentives.

*Negative incentives*: However, just as there are positive incentives for the institution, on the other hand, there are negative incentives, and according to what is stated in the internal organization of the institution in Article 118 based on what is authorized by Article 72 of the Social Agreement Code contained on 13/07/2003, it is classified as penalties applied to it according to professional errors, and public discipline.

The role of evaluation in adopting agile management tools in the Algeria Telecom : The Department of Human Resources Management distributes cards to evaluate the performance of workers to the heads of work teams in order to evaluate employees for a grant of points that are according to discipline, performance, biography, the number of interventions made by the worker in order to solve customer problems and the number of sales that he makes and be an addition to him in the base wage he obtains, the evaluation process in the institution in general is subject to the productivity of each worker in his field in the institution.

*The role of leasing in adopting agile management tools within Algeria Telecom*: The wage is an effective tool in stimulating the human resource and improving its standard of living, which helps in attracting and attracting highly efficient people, the wages in the operational directorate of Algeria Telecom are improved for the rest of the public institutions, where the lowest wage ranges from three thousand Algerian dinars, an institution that attracts highly qualified employees.

### Field Study Methodology (Data Analysis and Hypothesis Testing)

We will learn about the methodological framework of the study, then present and analyze the results of the study, then test the hypotheses to come up with hypotheses

Field study methodology: In this study, we relied on the descriptive analytical approach in order to identify the phenomenon under study, and the program of the statistical package for the social sciences (SPSS.V.20) was used in order to process the data obtained through the field study of the surveyed sample.

Determine the population and sample of the study all the employees of Algeria Telecom, Ain Temouchent branch, including executives, technicians and executive workers, numbered 200 workers in 2018, where we distributed 40 questionnaires and retrieved 33 questionnaires.

Study tools and sources of information: To achieve the objective of the study of knowing the role of human resources management in adopting the principles of agile management in Algeria Telecom, then using the questionnaire as a tool to collect data as: the independent variable: human resources management with its various functions (motivation, training, evaluation, leasing), the dependent variable: agile management (work organization, continuous improvement, standard work, multifunctional workers, six sigma).

Stability of the study tool: It means the stability of the results obtained using the measurement tool several times, where the stability coefficient was used depending on the internal consistency factor Cronbach's alpha, as the closer the value of the stability coefficient to one, the higher the stability and the closer it is to zero, the low stability.

Table 1. Stability coefficient for	or allstatistique de fiabilité measures
Alpha Crowe Laboratories	Number of ferries
0.96	33

Source: Prepared by researchers based on SPSS V.20 outputs

From the chart, we conclude that the total statements of the study variables have satisfactory credibility and satisfactory stability, as the value of Alvacronbach is 0.96, which is an acceptable and strong stability coefficient of 96%.

*Main hypothesis test*: There is a positive and statistically significant relationship between human resources management and agile management tools in the Algeria Telecom to find out the impact of human resources management on the adoption of agile management tools in the operational directorate of Ain Temouchent, we

used a simple linear regression model. As HRM is an independent variable and agile management tools are a dependent variable at a moral level of 5%. Thus we write the following equation:

y= ao+a1x1 +e  $\epsilon$  (y = dependent variable x= independent variable, ao=constant, a1 = regression coefficient, e  $\epsilon$ = uncertainty coefficient remainders)

Constant	Significance	Degree of	Factor	t	Determination	Correlation
a <sub>0</sub>	Level	Freedom	Regression a <sub>1</sub>	Calculated	Coefficient	Coefficient
0.198	0.009	1 31 32	0.939	5.320	0.477	0.691

Table 1. Linear correlation and level of significance for human resources management

\*Researcher's result based on SPSS outputs

The source is prepared by researchers based on the outputs of SPSS. V.20. Through the table, the level of significance is equal to 0.00, which is less than the level of significance 0.05, and therefore it can be said that there is a statistically significant relationship between the two variables, and this is confirmed by the correlation coefficient estimated at 0.691, which indicates a strong positive relationship between the mand from the coefficient of determination, we find that human resources management affects and controls the adoption of agile management tools by 47.7%, accordingly, there is a positive and statistically significant relationship between human resources management tools in the institution, and the following equation shows the relationship between two variables  $y= 0.198 + 0.939 x + e\varepsilon$  at a significant level of 5%.

We note through the model presented between human resources management and the adoption of agile management tools that the higher the percentage of human resources management by one unit, the more agile management rises by 0.939 units at a level of 5%.

*Testing the first sub-hypothesis* : There is a positive and statistically significant relationship between motivation and lean management tools in the operational directorate of algeria telecom Ain Timouchent branchTo test the first hypothesis, we used a simple linear regression model. Motivation is an independent variable and agile management tools are a dependent variable

Constant	Significance	Degree of	Factor	t	Determination	Correlation
a <sub>0</sub>	Level	Freedom	Regression a <sub>1</sub>	Calculated	Coefficient	Coefficient
1.299	0.000	1	0.636	5.320	0.477	0.691
		31				
		32				

Table 2. Linear correlation and significance level of motivation

\*Researcher's result based on SPSS outputs

Through the table, the level of significance is equal to 0.00, which is less than the level of morality.0.05 Thus, it can be said that there is a statistically significant relationship between motivation for human resources and the adoption of agile management tools, this is confirmed by the correlation coefficient estimated at 0.633, which indicates a strong positive relationship between them, and from the coefficient of determination, we find that motivation affects and controls the adoption of agile management tools by 40.1%, and therefore we confirm the validity of the hypothesis that there is a positive and significant relationshipStatistical significance between motivation and agile management tools in Algeria Telecom in Ain Temouchent at a moral level of 5%

The following equation shows the relationship between motivation and the variable of adopting agile management.  $y=1.299+0.636x1+e \epsilon$ 

We note through the presented model: the greater the value of motivation by one unit, the more agile management rises by 0.636 units.

*Testing the second sub-hypothesis*: There is a positive and statistically significant relationship between training and lean management tools in the Algeria Telecom Ain Timouchent branch to test this hypothesis we used a simple linear regression model. Training is an independent variable and agile management tools are a dependent variable at a moral level of 5%.

Table 3. Linear correlation and level of significance for training

	140	ole 5. Ellieur	conclution and leve	i of significance	ior training	
Constant	Significance	Degree of	Factor	t	Determination	Correlation
a <sub>0</sub>	Level	Freedom	Regression a <sub>1</sub>	Calculated	Coefficient	Coefficient

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0.249	0.000	1	0.831	5.209	0.467	0.683
		31				
		32				
D 1	1 1 1	1 CDCC				

\*Researcher's result based on SPSS outputs

From the table, the significance level is 0.00 and is less than Morale level 0.05 Thus, it can be said that there is a statistically significant relationship between HR training and the adoption of Tools Agile management This is confirmed by the correlation coefficient of the estimated by: 0.683, which indicates a strong positive relationship between them, and from the coefficient of determination, we find that human resources training affects and controls the adoption of agile management by: 46.7% · Therefore, we confirm the validity of the hypothesis that That there is a positive and significant relationship Statistics Between training and Tools Agile management in the operational directorate Algeria Telecom Ain Temouchent Branch at a moral level of 05%. The following linear equation shows the relationship between two variables:  $y=0.249 + 0831 x^2 + e\varepsilon$ 

We note through the model provided that the higher the value of training in one unit, the higher the value of agile management by: 0.831 unitS. Testing the third sub-hypothesis there is a positive and statistically significant relationship between evaluation and lean management tools in the Algeria Telecom Ain Timouchent branch

Table 4. Linear correlation and significance level of evaluation							
Constant	Significance	Degree of	Factor	t	Determination	Correlation	
a <sub>0</sub>	Level	Freedom	Regression a <sub>1</sub>	Calculated	Coefficient	Coefficient	
2.013	0.013	1	0.418	2.648	0.184	0.429	
		31					
		32					

\*Researcher's result based on SPSS outputs

Through the table, the level of significance is equal to 0.013, which is less than the level of morality 0.05, and therefore it can be said that there is a statistically significant relationship between the evaluation of human resources and the adoption of agile management, while the correlation coefficient estimated at 0.429, which shows that there is a low positive relationship between evaluation and agile management, and the coefficient of determination shows that the evaluation of human resources affects by 18.4% on the adoption of agile management tools, and therefore we confirm the validity of the hypothesis that There is a positive and statistically significant relationship between the evaluation of human resources and lean management tools in the operational directorate of Algeria Telecom, Ain Temouchent branch, at a significant level of 05%. And the following equation shows the relationship between the two variables:  $y = 2.013 + 0.418 x^2 + e\varepsilon$ 

We note through the model presented between evaluation and agile management tools, where the higher the value of evaluation by one value, the adoption of agile management principles rises by 0.418 units at a moral level of 05%

Hypothesis test IV: There is a positive and statistically significant relationship between leasing and lean management tools in the Algeria Telecom Ain Timouchent branch

Table 5. Linear correlation and level of significance for leasing							
Significance	Degree of	Factor	t	Determinatio	Correlation		
Level	Freedom	Regression a <sub>1</sub>	Calculated	n Coefficient	Coefficient		
0.016	1	0.431	2.543	0.173	0.416		
	31						
	32						
	Significance Level	SignificanceDegree ofLevelFreedom0.016131	SignificanceDegree of FreedomFactor Regression a10.01610.4313131	SignificanceDegree of FreedomFactor Regression a1t Calculated0.01610.4312.54331313131	Significance LevelDegree of FreedomFactor Regression a1tDeterminatio Calculated0.01610.4312.5430.1733131313131		

\*Researcher's result based on SPSS outputs

From the above table, the significance level is equal to 0.016, which is less than the moral level of 0.05, and therefore it can be said that there is a statistically significant relationship between leasing and the adoption of agile management. This is confirmed by the correlation coefficient estimated at 0.416, which shows that there is a low positive relationship between leasing and the adoption of agile management tools and the coefficient of determination, which explains that human resources leasing affects agile management tools by 17.3%, and therefore we confirm the validity of the hypothesis. According to the statement that there is a positive and statistically significant relationship between therental and lean management tools of the Algeria Telecom, Ain Temouchent branch, at a significant level of 05%. The following linear equation shows the relationship between y  $= 1.726 + 0.431 \text{ x4+e } \epsilon$ 

We can see through the model, the higher the leasing value by one unit, the more agile management tools rise by 0.431 units.

#### Conclusion

The results obtained from the analysis of the questionnaire were as follows:Motivation and training have a statistically significant impact on the adoption of lean management tools in the operational directorate of Algeria Telecom in Ain Timouchent, and this confirms that the directorate gives great attention to the motivation and training functions of its employees, which improves their performance and the quality of their services, through these results it can be said that workers show high approval as evidence of the good performance of human resources management.

The evaluation and leasing have a statistically significant impact, which reflects positively on the adoption of the principles of lean management, which in turn affects the friendly return of the directorate, but there is a disparity in the functions as the evaluation and leasing functions are still incomplete compared to the rest of the jobs.

#### Recommendation

Based on the results of the study, we offer a number of recommendations, the most important of which are : Increased attention and wider use of agile management tools by the Algeria Telecom in ain Temouchent it is important to spread the culture of reducing waste among employees through continuous improvement activities of the company's activities even if there are no problems so as to significantly improve the value of products and services provided to customers.

The function of human resources management has an effective role and it positively affects the adoption of the principles of lean management in the operational directorate of Algeria Telecom in Ain Temouchent, but the functions of evaluation and leasing require increased attention to them and activation by the administration, because of their important role in consolidating agile management tools whose objectives are in line with the objectives set for the facility.

#### **Scientific Ethics Declaration**

The author declares that the scientific ethical and legal responsibility of this article published in EPESS journal belongs to the author.

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