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The Incentive Mechanism for Reducing the Obstacles to Digital Transformation

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Abstract

This study aims to provide one of the important links in order to remove the barriers that can stop digital transformation in organizations, especially in the aspect of human behavior, who symbolizes the interaction of human resources with this change, as this aspect of resources remains the concern of the organization and the answer includes stability about the importance of this link, which is the incentives, which is a priority and a basic supporter that line with many studies of this kind because it does not only contribute to adopting a strategy of giving vital and material motivation to the human resource, but also allows digital transformation to overcome the barrier of resistance to change and include it in the circle of digital culture within it.

Keywords: *digital transformation, incentives, digital transformation obstacles*

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Introduction:

The central axis of today's world has become rapid digital development, which has obliged all organizations, including leading ones, to reengineer their working methods in order to maintain their competitive position by aligning their activities and ways of doing business with the prevailing technological and digital change. Consequently, organizations seek to identify factors that may affect their performance level and to avoid their negative consequences during the transition phase; if this phase is not properly studied, the organization may lose its competitive capacity and position in the market.

This search often leads directly to human resources, which can either serve as a lifeboat for the organization or as a stumbling block it trips over, making them one of the key challenges to be overcome when implementing a digital transformation initiative, given that they are directly affected by each new wave of digital technologies, especially those the organization must adopt as a means of responding positively to this development.

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In the same vein, proactively seizing technological change opportunities and monopolizing new digital technologies requires avoiding transformation failure by preparing for it, starting with human resources. This coincides with the current shift from traditional investment that relies on fixed assets to investment in human resources as intellectual capital, where investing in people leads to superior performance and grants the organization an advantage in understanding and meeting their needs, thus securing a smooth transformation.

Since meeting the needs of human resources is of critical importance and must be honoured, the core research problem of this paper can be formulated as follows: **How can the obstacles to digital transformation be overcome by focusing on motivating human resources within the organization?**

To answer this question, the study will address two main axes: the first presents general concepts related to digital transformation and how to ensure its success, then highlights a set of obstacles that hinder it, most of which revolve around human resources; the second axis is devoted to the incentive system and its role in ensuring successful digital transformation.

1. Digital transformation

1.1 Definition of digital transformation

Digital transformation in the current environment represents the main driver pushing business organizations towards continuous sustainability, as the use of modern technologies in parallel with other resources, such as financial, operational, and human resources, allows them to adapt rapidly.

With change and with meeting the requirements of the current market, whatever its field, and it also reshapes the way individuals interact with one another inside and outside the organization.

Many definitions of digital transformation have been proposed, among them:

"It is a framework that reshapes the way people live, work, think, interact and communicate, relying on available technologies, with continuous planning and constant efforts to re-design practical experiences. It offers huge potential for building competitive and sustainable societies by bringing about a radical change in the services provided to various party's consumers, employees and users while improving their experiences and productivity through a series of aligned processes, together with formulating the procedures necessary for activation and implementation. It is considered a tool for improving efficiency, reducing expenditure, and implementing new services quickly and flexibly."[1]

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"A specialized type of business transformation that seeks innovative digital and/or hybrid business and/or operating models, where the adoption and integration of information, communication and operational technologies play a dominant role in the organization's strategy to create new competitive advantages namely, digital capabilities based on internally and/or externally digitally enabled processes in order to create value for customers, employees and other stakeholders."[2]

"Digital transformation is defined as the use of all available digital technologies to improve firms' performance and to contribute to raising the general standard of living. It is a mechanism based on the use of digital technology and modern electronic techniques to develop institutions and economies."[3]

"Digital transformation concerns how technology is used within institutions and organizations, whether in the public sector or the private sector alike. It helps to improve operational efficiency and the services provided to customers and to the target public of those services. It is based on employing technology in an optimal way that supports workflow within the institution in all its departments, in its dealings with customers and the public, in order to improve services and facilitate access to them, thereby saving time and effort at the same time."[4]

In light of the previous definitions, digital transformation can be regarded as a transformational process undertaken by organizations, focusing mainly on changing how these organizations compete with one another, how they create value, and how they interact with their wider environment of partners and customers through the use of modern technologies.

1.2. Factors of success in moving towards digital transformation

The main success factors for digital transformation can be summarized as follows:[5]

A. Organizational factors

- Pilot projects (i.e., adopting and introducing digital transformation gradually, rather than implementing it fully in all sites at once).
- Future readiness (including the ability to design a roadmap and set strategic and operational objectives).
- Ability to understand customer needs.
- Reliance on autonomous robots (which perform behaviours and tasks with a high degree of autonomy, i.e., they are programmed to act without waiting for a person's commands).
- Employee qualification (employees must be effectively trained and developed).

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- Culture (organizational culture tells us what should be done when the CEO is not in the office).
- Ability to provide, use, and collect large amounts of big data.
- Managerial support (including providing projects with the necessary resources, knowledge, and time).
- Ease of use (ensures alignment between technology and tasks).
- A multidisciplinary work environment (a multidisciplinary work team).

B. Environmental factors

- Connectivity (involves smooth data exchange between networks and within the same network).
- High degree of transparency (requires trust in data sharing).
- Necessity of cooperation across company boundaries (because tasks cannot be solved individually due to their complexity).
- Co-value creation (the process of generating additional value by innovatively combining products the tangible component and services the intangible component).
- Compliance with standards (standards set by international bodies).

C. Technological factors

- Infrastructure (providing a suitable and effective infrastructure).
- Reliability (the system ensures correct and accurate data).
- Relevance (providing the right data to the right user).
- Adaptability (a flexible system that can adapt to new information needs and to the company using the system).
- Security (it is the basis for information exchange).
- Information completeness (information must be provided in a way that covers all aspects and different alternatives).
- Availability (ensures access to the system).
- Timeliness of data (data must be available at the right time without delay).

In return, adopting digital transformation gives the organization a priority in achieving many benefits, such as improving work quality, reducing costs, shortening the time required to perform activities, and expanding in line with the scale of innovative operations it produces, thereby achieving sustainable competitiveness.

1.3. Current challenges to digital transformation

There are many obstacles that may hinder the optimal implementation of digital transformation and prevent full utilization of its potential. These obstacles differ from one country to another and from one society to another, depending on the

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administrative, economic, political, educational, and cultural conditions of each society. Nevertheless, a set of the most important barriers can be presented as follows:[6]

Administrative obstacles

Among the most prominent administrative obstacles that many countries may face in implementing digital transformation are the following:

A. Ambiguity of the concept

Many administrative leaders in governments and organizations still do not clearly understand the concept of e-government, which makes it necessary to clarify the concept and establish an intellectual foundation for them.

B. Resistance to change

Implementing such a project involves many changes at the level of organizations, departments, and units, as well as a redistribution of tasks and authorities. This requires changes in administrative leadership and job positions, which often leads to resistance to change from managers and employees.

Physical (material) obstacles:

They are reflected in the significant need for material resources to provide information technology, especially at the level of the state as a whole, and these technologies are constantly evolving, which makes keeping up with such developments difficult.

Security obstacles:

The information revolution has led to new forms of threats and crimes, including cyber-piracy, which represents a source of threat to the security of information in the state. The growing interconnection between institutions and the increasing reliance of organizations, states, and societies on digital information and electronic means to store, transmit, and display it further heighten this sensitivity.

From the above, it can be said that moving towards digital transformation is accompanied by many difficulties that may prevent accurate benefit from its advantages, which requires searching for the necessary mechanisms to ensure its full success. One of the most important of these mechanisms is incentives, which are considered one of the key approaches to managing the human resources implementing digital transformation and paying attention to them in order to obtain higher performance and greater engagement this will be discussed in the following section.

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2. The relationship between the incentive system and digital transformation

2.1 General concepts about the incentive system

Human resources management occupies great importance among scholars and practitioners, due to the position it has come to hold in investing in human resources in a way that ensures the success of institutions and the achievement of their objectives. It consists of a set of activities, programs, applications, and decisions that aim to provide the organization with its needs of qualified human resources, and to work on developing, improving, and retaining them in order to reach the highest levels of outstanding performance.

Human resources management is the primary entity responsible for human resources in the organization. This responsibility arises from the functions it performs such as job analysis and description, planning, recruitment, and so on along with establishing an incentive system concerned with the organization's human resources. Most organizations resort to an incentive system to stimulate and mobilize human capabilities to work efficiently and to achieve both the organization's goals and those of its employees. Among the definitions given for incentives is the following:

"Incentives are defined as the counterpart or return for the distinguished performance of employees working in the organization."[7]

"Incentives are defined as a set of external factors that aim to stimulate the latent forces within the individual, that is, they affect his behaviour in order to satisfy his needs; in other words, incentives are something external that attracts the individual as a means to satisfying the needs that drive him."[8]

"They are the totality of external stimuli, both material and moral, that lead to the satisfaction of workers' needs and desires on the one hand, and to the achievement of the organization's goals and outstanding performance on the other hand."[9]

"Incentives are considered as the counterpart for outstanding performance, meaning that incentives are essentially based on rewarding employees for their excellence in performance."[10]

From the above, we conclude that incentives are a set of means available to the individual in his surrounding environment, which enable him to direct his behaviour and willingness towards performing a specific task, with the aim of satisfying his desires and needs. This, in turn, leads to achieving the goals of the institution to which he belongs and to raising its level of performance.

2.2 Types of incentives

There are several classifications of incentives, and each classification is based on a certain criterion or aims to highlight a specific aspect of the different types of

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incentives. They can be divided according to their nature and according to their effects, as follows:

A. Incentives according to their nature or value

They are divided into two types: material and non-material.

- ***Material incentives:***

  These are what is given to workers in cash or in kind in order to increase their production rates, whether directly or indirectly. Bonuses, profit-sharing, and job and social security are all considered material incentives, and wages represent the most important material incentive and the foremost need that workers seek to fulfil through their work.

- ***Non-material incentives:***

These incentives encourage individuals' social and self-needs, which are linked to their psychological needs, with the aim of raising their morale and improving the surrounding work climate. They are often needed in the workplace even more than material incentives, since financial rewards alone are not sufficient to achieve management's objectives, whereas moral incentives give the worker the feeling that what he or she offers is genuinely appreciated. Examples of such incentives include:

- Job security and stability
- Opportunities for promotion and advancement
- Verbal praise and commendation in front of colleagues
- Listing outstanding employees' names on honour boards inside the institution and in special records
- Participation in decision-making
-

B. Incentives according to their effect on the individual

These are divided into positive incentives and negative incentives, as follows:[11]

- ***Positive incentives:***

  These are incentives that attract employees toward accomplishing a specific task targeted by the organization. They include material incentives such as wages, bonuses, and annual raises, and non-material incentives such as promotion and involving employees in management, etc. Such incentives foster a spirit of creativity and innovation at work.

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- ***Negative incentives:***

  These are incentives that the individual does not wish to receive and that are perceived as punishments, which he or she tries to avoid, such as salary deduction, dismissal from service, warnings, harsh treatment by superiors, fatigue and overwork, lack of respect, belittling, and feeling unimportant.

For negative incentives to play their role, the following conditions must be met:

- The incentive must be proportionate to the error committed and not exceed it, so that it does not appear as revenge against employees.
- It must be applied in temporal proximity to the occurrence of the undesirable behaviour, so as not to encourage others to commit the same mistake, or the same person to repeat it.
- It should serve as a guarantee of work quality and a means of protecting employees from those who seek to undermine or harm the organization.

These negative incentives include material ones such as demotion in grade, suspension of bonuses, and temporary dismissal, while non-material incentives include depriving the individual of having their name displayed on the honour board, issuing a formal warning for poor performance, and posting such notices on the bulletin board.[12]

C. Incentives according to the beneficiaries

These are divided into two types: individual and group incentives.

- ***Individual incentives:***

  These are allocated to a single person to reward their efforts and good behaviour in performing their work. They are granted to increase production levels, especially when the work can be separated by departments within the organization and does not rely directly on other departments, where they are most effective when workers can perform without depending heavily on each other.

  These incentives encourage specific individuals to increase their output. For example, granting a bonus to the employee who produces the best results, awarding a prize to the best teacher, or giving a gift to the top student in the class all fall under individual incentives. They are directed at the individual rather than the group and are likely to increase positive competition among individuals in pursuit of better output and higher performance, although excessive reliance on individual incentives may negatively affect team spirit, which is the core of the management process.[13]

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- ***Group incentives:***

These are a type of incentive provided to a group of workers and aim to encourage teamwork and increase overall productivity. They relate to the efforts of the working group and the outcome of their cooperation.

Examples of group incentives include profit-sharing schemes for workers and allowing them to participate in decision-making. They are characterized by encouraging coordination among employees and mutual assistance, and by ensuring that no single individual bears full responsibility for losses. Group incentives typically take the form of group bonuses paid to employees according to clear and predefined criteria.

Group incentives are characterized by the following:

- Integrating each individual into the organization's common goal rather than focusing solely on their personal goal.
- Avoiding placing full responsibility for losses especially when individual responsibility is hard to determine on a single person.
- They remain, in essence, either material or non-material, and may be positive or negative.
- They help instil team spirit, encourage direct and continuous communication, and promote cooperation among individuals; examples include workers' participation in management and the improvement of working conditions.
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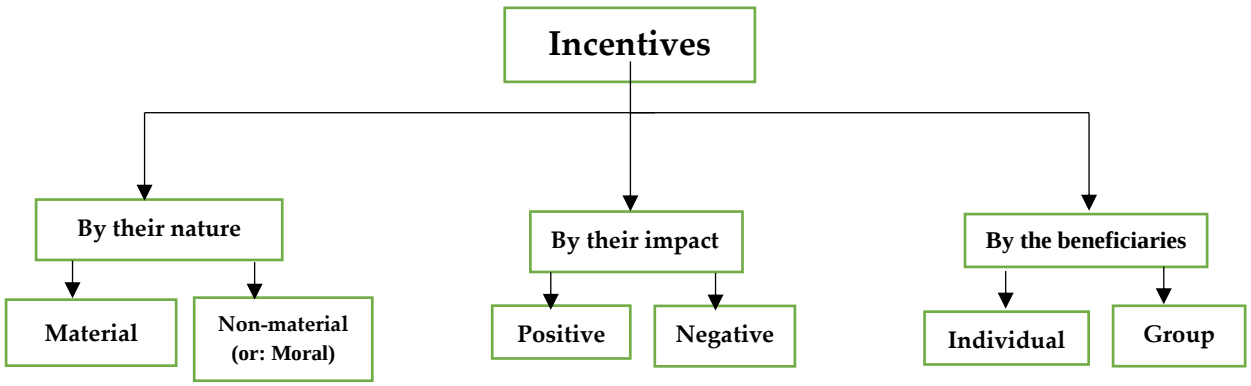
Figure 1: Diagram of the types of incentives



Source: Prepared by the researchers

2.3. The role of incentives in ensuring successful digital transformation

The incentive system within the organization aims to achieve alignment between the needs of its human resources and the requirements of digital transformation, thereby creating the flexible environment necessary for a smooth transition and encouraging

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individuals to take steps to build skills that are compatible with digitization and modern technologies, up to the stage of innovation and participation in related decision-making.

In the same context, today's leaders strive to make digital transformation successful in order to preserve their organizations' competitive capacity by providing incentives that support this goal, serving as a pillar for raising the performance level of human resources and enhancing their professional and intellectual competencies on the one hand, while on the other hand attracting them through financial and material rewards that increase their acceptance of ongoing change.

Moreover, the knowledge requirements of digital transformation in the field of technologies necessitate the establishment of training programs and measures to meet the needs of human resources, moving them from a circle of fear and resistance to a circle of trust in the transformation itself, expanding cooperation between them and decision-makers, and giving them the opportunity to propose how change should be shaped, which in turn raises their professional ambitions.

On this basis, every organization seeks ways to effectively integrate its human resources with digital technologies across all its units and operations, by motivating them to communicate and collaborate and by opening the door for their participation. This is a purely non-material form of incentive that contributes to increasing the intellectual efficiency and productivity of human resources, so that they do not hesitate to join the work team and to engage in digital transformation.

Conclusion:

Digital transformation is forcing organizations to confront the challenge of shifting to the requirements of the digital age and the obstacles that accompany it. Despite the financial and material resources allocated to this transformation, many organizations still prioritize these resources at the expense of the key implementing resource: human resources. To avoid this problem, many organizations have turned to addressing these barriers foremost among them the human resource barrier and giving it priority.

The aim of these measures is to provide sufficient time for human resources to adapt and respond to the demands of digital transformation so that they become qualified to contribute and improve their performance, instead of being classified as an obstacle to digital transformation. This goal cannot be achieved without providing certain requirements specific to them, which fall within the framework of motivating them. Accordingly, some recommendations can be proposed in this regard, including:

- Establishing an incentive system that is aligned with the requirements of digital transformation and based on competence and productivity at work.

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- Avoiding an exclusive focus on material incentives and instead giving greater space to non-material incentives that go beyond financial rewards to encouraging individuals, empowering them, and allowing them to participate in decision-making and in planning for digital transformation.
- Treating resistance to digital transformation as an ally that helps to identify weaknesses and flaws in transformation plans.
- Understanding individuals' fears of digital transformation, especially given that it is a change characterized by speed.
- Organizing carefully designed training programs in digitization, tailored to the specific shortcomings expressed by each resource individually.
- Providing the material resources necessary for digital transformation in order to give human resources psychological reassurance about the seriousness and credibility of the transition.

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