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What Are the Main Dimensions of Digital Transformation? Case of an Industry

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***Abstract*: Being a socio-economic lever, the digital transformation presents several opportunities to companies of any sector. Nevertheless, aspiring to digitalization, companies are faced with several challenges, the main one is, the digitalization process.**

In lack of a digital strategy, companies tend to equate digitalization with IT integration, which implies confusion between the digitalization process and the IT integration process. The paper's aim is to question this observation, and call for a reorientation of company's digitalization vision from technology to strategy.

In this paper, we contrast a study on the dimensions of digital transformation, supported by a survey on the strategic orientations of digital transformation, and the practices on the ground of this transformation, in order to highlight; the widespread confusion between digital transformation and ICT integration and the limitations of an IT-oriented understanding of the digital transformation.

Keywords: Digital transformation, Digital Strategy, Dimension, Industrial sector, IT process, Ontology.

I. INTRODUCTION

Even if they agree on the revolutionary aspect of digitalization, the research community diverges on its definition [1]. Among the different definitions of digitization found in the literature, the one converging the most to our conception of digitalization, as a new development model, stipulates that ; it is the redefinition of the product offer and service [2], through a structural transformation of the company, impacting all its dimensions, from the organizational to the cultural, through the IT integration and other components [3].

Digitalization of the business and the society is a worldwide trend. As witnessed, the explosive level of the industrial enterprise digitalization, which from 33% in 2016, intends to reach 72% by 2020 as confirmed by the PWC report [4].

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This is not without reason, considering the strong socio-economic impact of digitalization. The report, [5], argues that digitalization is a major contributor for: (i) economic growth (GDP growth, job creation and innovation), (ii) social well-being (quality of life and access to service) and (iii) governance (transparency and government effectiveness).

As a result, an environment of digital keen interest that makes more and more companies embark on a digital transformation process, and this is mainly the object of this article, expressed by the question; what dimensions are considered in a digital transformation.

Through a literature review, we found that the majority of research articles dealing with digitalization processes focus mostly on IT integration, or the digitalization of information, often framed by a sectorial vision. The transformational aspect of digitalization, as a full-fledged economic model, is often absent from the literature [6]. In the absence of consistent support to design a digital transformation strategy, companies are concentrating their digitalization projects on IT and may partly miss the economic opportunity promised by digitalization.

This paper deals with the paralogism existing on the ground, between the digital transformation and the ICT integration in the enterprise.

This hypothesis is advanced by comparing an ontology and a survey on the dimensions of digital transformation to the practices on the ground of this transformation and the literature findings, which we support by a case study of a Moroccan industry.

This paper is organized into 5 sections. After introducing the context of this paper, we present, the Digital Transformation dimensions based on an ontology. Followed by a third section about a survey on the declination of the digital maturity of a company on its conception of the digital transformation. A case study and a synthesis is the subject of the fourth section preparing a conclusion on the opportunity and the prospects of this work.

II. DIGITAL TRANSFORMATION DIMENSIONS

In a study that we conducted on the dimensions of digital transformation [3]. We set up a knowledge/ontology model gathering all the dimensions that should imperatively be considered within a digital transformation framework, to succeed the digital transition while capturing all the opportunities it allows.

We based this study on a literature review, of the existing in terms of digitalization model of the key development sectors; education, health and industry. Which enabled to identify the different dimensions of the digital transformation, and the levels of abstraction in which these dimensions can be assembled together. Because the levels of abstraction are hierarchically related, from the generic to the specific, we opted for an ontological representation of the dimensions of digital transformation. Tables I, II and III provide a description of the dimensions from which, the ontology object of Figure 1 was set up.

Table- I: Digital transformation knowledge – 3rd level

Dimensions of Abstraction level 3	
Structural Dimension	Involves changing the organizational structure, processes and skills needed to exploit new technologies
Informational Dimension	Involves data/information management
Environmental Dimension	Includes macro-environmental factors influencing ICT integration (Regulatory Framework, Resources)
Security Dimension	Includes; IT security (hardware, application and network), data and human security and environmental security
Quality Dimension	Consists of the quality of the product and service resulting from Digital Transformation
Financial dimension	Consists of investment / return on investment
Cultural Dimension	Consists of all the values and behaviors shared by a community / ICT Culture
Innovation Dimension	Includes innovation in technology design, technology processes and ICT Management
Participative Dimension	Consists of the collaboration / interaction of any stakeholder, including the user

Table- II: Digital transformation knowledge – 2nd level

Dimensions of Abstraction level 2	
Organizational Dimension	Consists of ICT adoption, ICT deployment, Dissemination, Implementation, Infusion, Integration.
Operational Dimension	Definition of all actions / activities after digital transformation
Managerial Dimension	Consists of SI Management / IS Governance
Data Management	Data management process, Collection, Sorting, Analysis.
Information Management	Process for managing information resulting from data processing
Resources	Integrates all technical, technological and human resources.
Regulatory Dimension	Consists of the legal and political framework
SI Security	Hardware, application and network security device
Data security	Tools and means of data security
Service / Product	Prestation offerte/consommée par canal digital
Financial Investment	Funds injected into Digital transformation
Return on investment	The financial gains generated by Digital transformation
ICT adoption	ICT use in people's daily lives
Technological design	Technological creations
Technological process	Steps of design, production and technological commissioning phases
ICT Management	Organization techniques and technology management
Interaction	Interactive use of digital products / services
Collaboration	The user is a key stakeholder in the digital processes.
	Digital offer oriented user.

Table- III: Digital transformation knowledge – 1st level

Dimensions of Abstraction level 1	
ICT integration process	Includes steps in ICT integration, actors, responsibilities and interactions
Work Organization and Design	Reorganization of trades and responsibilities, Creation of new professions
Responsibility for Digital Transformation strategy	Centralized, decentralized, ...
Operational changes	All changes impacting post-digitization actions/activities
Skills building	Training on new jobs created by digitalization
Leadership	Components of a business plan of a company in the context of digital transformation
Governance	
Strategy	
Management	
Technical Dimension	Includes technical infrastructure, development and technical implementation
Technological Dimension	Includes Hardware, Software and Network Components
Human Dimension	The social aspect: knowledge of information technologies and user skills
Legal dimension	Rules governing the digital question (data protection, transaction regulation)
Political dimension	General framework governing a population integrating the digital movement

All the dimensions composing this ontological model are from the literature, nevertheless none of the studied papers covered them completely, due to the sectorial considerations and the digitization approach adopted. That is part of what is driving our study; to reconcile the different approaches of digital transformation into a generic ontology-based model, exhaustive in terms of knowledge and adjustable to various contexts.

In addition to the aforementioned reasons, this study has emerged from the need to propose an alternative to a widespread digitization movement, which focuses the digital transformation only on the IT component. This observation is described in the following section and is counter argued by a study on the different digitalization axes.

III. SURVEY

There are several opinions arguing that digital transformation is mainly addresses by non-scientific papers, the consulting firms in this case have seized this topic [2]. While the speculative aspect of these studies calls into question their adaptability to different contexts, they are a reliable and factual source of investigation and evaluation. This is precisely the purpose of this section.

Already in 2003, a paper titled 'IT does not matter' [7] supported the idea that, unless technology is exclusive to a company, it does not provide a competitive advantage.

To focus the digital question on technology as a purpose or an end in itself, and not as an essential (and not sufficient) mean for the realization of a digital strategy is a trap, in which the majority of companies unfortunately fall.

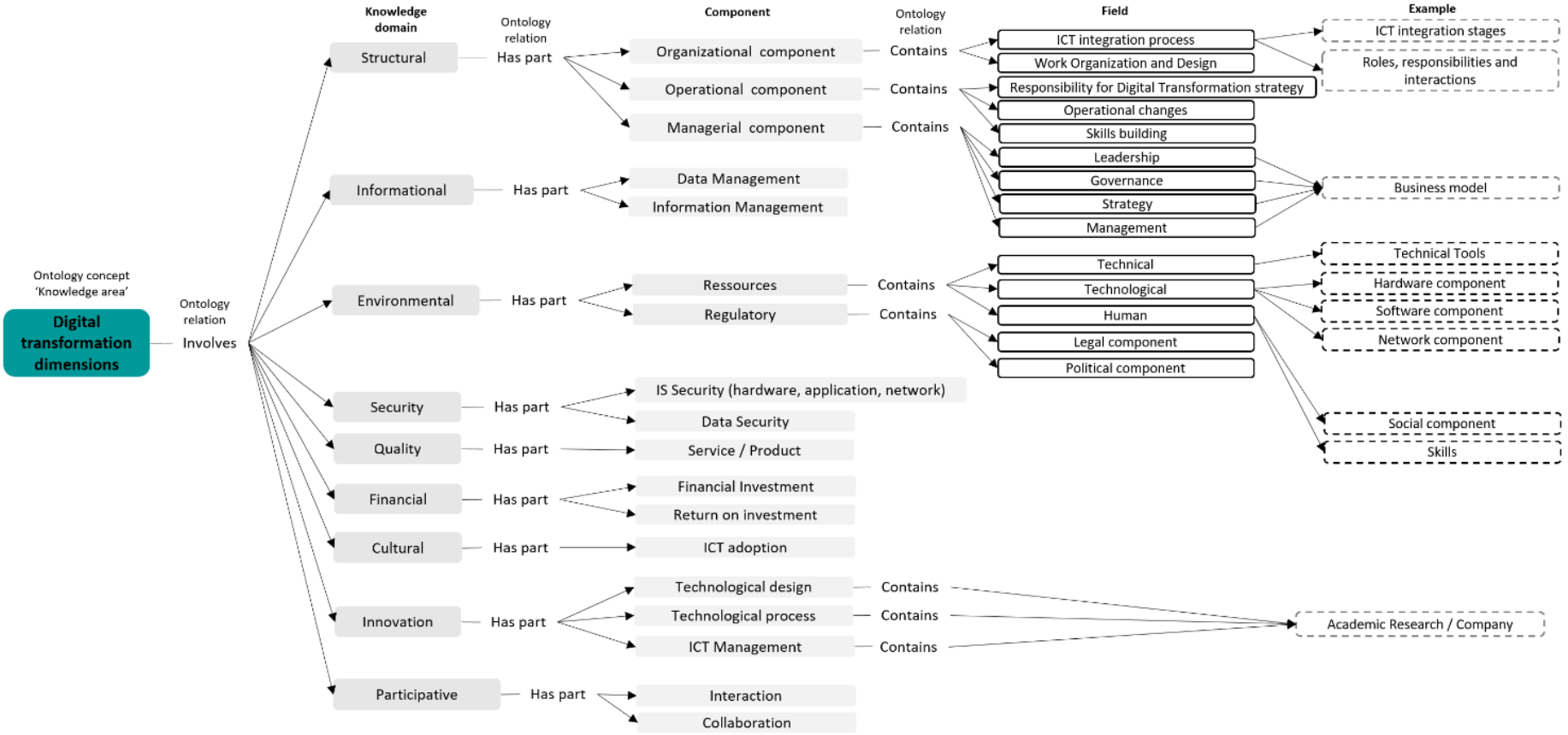


Fig. 1.Ontology-Based Model for Digital Transformation's knowledge [3]

In this sense, the MIT / DELOITTE report [8] proposes a survey of 4300 companies of different nationalities, represented by their employees, holding various positions and responsibilities. The companies targeted are classified into 3 levels of digital maturity, early, developing and maturing, according to the score given by the employees to their company, in response to the question: Rate the company against an ideal organization, transformed by digital technologies and capabilities on a scale of 1 to 10.

Two main findings were identified from this study, namely:

Digital strategy drives digital maturity. Only 15% of respondents from early digital maturity stage companies say that, their companies are adopting a coherent digital strategy. Against 81% from digitally mature companies. The communication on the digital strategy within the company is also fundamental; they are 90% to affirm to be correctly informed on the digital strategy of their digitally mature companies, against 63% of the companies at the early stage.

The power of a digital transformation strategy lies in its scope and objective. The digital orientation of companies differs according to their digital maturity. Less digitally mature organizations focus mainly on operational changes, fully concentrated on digital technologies, against digitally mature companies aiming to the business model transformation.

These findings are confirmed by the 80% of the answers from companies at early digital maturity stage, affirming that, through digitalization, they target, improving efficiency and customer experience. Only 52% of the answers speak of business model transformation as an objective of digitalization.

As for maturing companies, digitalization is a support for strategic purposes. 90% say that one of the key directives of their digital strategies is to transform the business activity. These companies place their attention on the innovation that can develop the digital technologies and not on the technologies themselves. They are 90% questioned to confirm it; against 60% of low digital maturity companies.

Overall, the digital transformation must cover the business model, the operational processes and the customer relationship.

In the Table IV, a summary is proposed, by digital maturity level covering:

- Firm's rate and score,
- Firm's digital strategy adoption,
- Firm's objectives.

Other axes have been addressed by this report; besides the strategic aspect of the digital transformation, supporting this paper's view, which is to free the reflection on the digital question of the technological hold for a strategy-oriented reflection on digitalization [2, 8, 9, 10]. While noting that better understanding the scope of the digital transformation is a fundamental step for designing the digitalization process. As shown in the Table V, the findings of this study cover: barriers to digital transformation, digital strategy, digital culture, digital skills development, digital leadership and related responses by maturity level.

We can verify in Table V, that the digital maturity gap is evident from the companies behaviors, which are not visible in the technological aspect but in the fundamentals of the company. Digitally mature companies are engaged in transformation strategies; supported by collaborative cultures, open to risk taking and digital skills development. This confirms the absence of a digital approach for companies at early stage of digital maturity, unlike digitally mature companies.

Overall, behind any company's digital maturity, there is a digital strategy implying a structural reform of the company and above all considering all the dimensions of the ontology of figure 1. Without restriction on the technological aspect only.

Despite what this survey confirms, and the generic vision of the ontology presented in the previous section, on the ground, the digital transformation exercise is mainly focused on IT. This is what the literature on the IT orientation of the digital transformation confirms in the following.

Generally, the concept of digitalization is systematically correlated to a given sector (health, education, industrial...), to IT integration, or to a case study. This is what we find in the paper [11] dealing with the digital transformation of the health sector, the whole reflection is based on IT integration, from design, to assessment, passing by implementation and adoption. Affirming that technology is behind the transformational momentum of this sector and the improvement of the quality of the service.

In other papers dealing with digitized industry, we find that Industry 4.0 is primarily based on technological renewal.

In the paper [12], Big Data, Autonomous Robots, 3D Simulations, Internet of Things, Cyber Security and Cloud are considered the pillars of the digital industry and the guarantors of economic prosperity of which; improving productivity, rising incomes, investment and job creation.

In paper [13], the bridge between the current plant and the digitized factory is Cyber-Physical Systems integration into industrial production (processes and services), supporting what we consider to be a purely a technological approach to the company's digitalization [14]. Such visions tend to neglect other aspects, in particular, structural and organizational ones in the digital transformation [14].

Still in the industry sector, the main digitalization laboratory, the paper [15], also present an IT-oriented digital transformation, but in the condition to provide the organizational conditions necessary for IT integration and adoption within the industry. The paper proposes a 4 stages digitalization process: the assessment of the digital maturity, the identification of the strengths and weaknesses, the identification of the opportunities and the definition of the roadmap of the digital transformation. The latter, in turn, is composed by on 3 phases: the feasibility study of the identified opportunities, the prioritization of opportunities whose feasibility have been verified and their application.

Table IV. Firm's score and orientations by maturity level

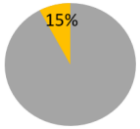
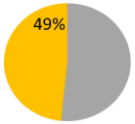
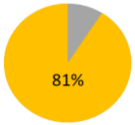
Digital Maturity Level	Score	Rate	Companies with clear and coherent Digital Strategy	Objectives				
				Customer Experience & Engagement	Efficiency	Business Decision Making	Innovation	Business Transformation
Early	1	3%		72%	78%	50%	44%	30%
	2	8%		78%	67%	56%	52%	52%
	3	15%		83%	80%	64%	66%	55%
Developing	4	14%		85%	96%	73%	72%	69%
	5	14%		86%	83%	73%	78%	71%
	6	17%		92%	87%	82%	82%	76%
Maturing	7	15%		92%	90%	85%	86%	83%
	8	9%		92%	92%	88%	90%	89%
	9	3%		92%	94%	92%	92%	92%
	10	2%		94%	92%	88%	92%	92%

Table V. Summary findings by level of maturity

	Barriers	Strategy	Culture	Talent	Leadership
Early	**Lack of strategy:** More than 50% have not a digital strategy	**Customer & productivity driven:** 80% oriented customer experience and efficiency	**Siloed:** 34% Collaborative 26% innovative	**Tepid interest:** 19% of companies provide the needed resources to build digital knowledge	**Lacking skills:** 15% of leadership has enough digital skills
Developing	**Managing distractions**: About 50% have multiple priorities. Against a third lacking a digital strategy	**Growing vision:** 70% Transformation & innovation	**Integrating:** 57% Collaborative 54% innovative	**Investing**: 43% of companies provide the needed resources to build digital knowledge	**Learning**: 39% leadership has enough digital skills
Maturing	**Security focus**: 30% of answers is about Security vs 38% about priority management	**Transformation vision:** 87% Transformation & innovation	**Integrated & innovative:** 81% Collaborative 26% innovative	**Committed:** 76% of companies provide the needed resources to build digital knowledge	**Sophisticated:** 76% leadership has enough digital skills

In the paper [16], after identifying the IT-oriented bases of Industry 4.0, being: Technical assistance (Virtual or physical assistance), Interconnection (Collaboration, standards, Security), Information transparency (Data analytics, Provision information), Decentralized decisions. The paper proposes as process to industry 4.0: Create a common understanding of Industry 4.0, Identify and specify Industry 4.0 scenarios, Evaluate the identified scenario, Specify and re-evaluate the scenarios and finally Prepare the selected scenarios for implementation.

Note that, all the identified axes in the ontology are marginalized by the prevalence of the IT dimension, as shown in Figure 2. Digital transformation is commonly restricted to ICT integration and this is something we verified in a field study that we conducted of a digitization project of a Moroccan industry, which we report in the next section.

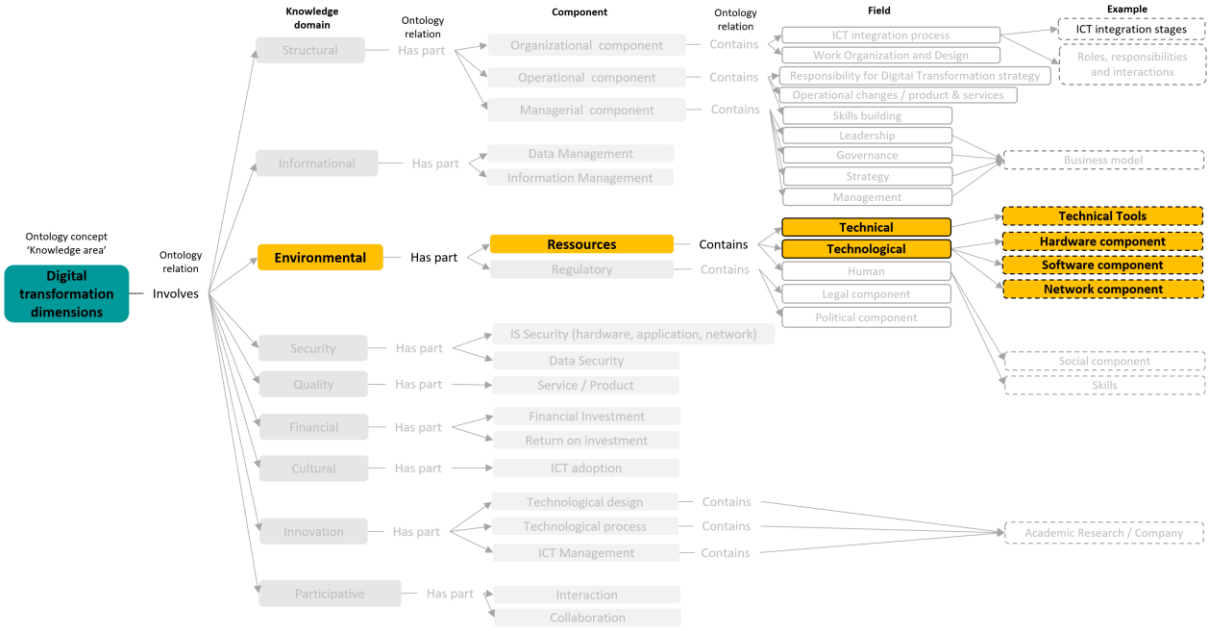


Fig. 2.Ontology-Based Model for Digital Transformation's knowledge - Survey

IV. CASE STUDY

The purpose of this section is to report on a field survey on a digital transformation project of a Moroccan industry. To do this, we firstly place in context this project with a brief overview of the digital transformation of industry, followed by the context analysis of the studied case and the overview of the digitalization project.

A. The digital transformation of industry – Moroccan context

The industrial sector knows the emergence of Cyber Physical Systems (CPS), which create a real revolution within it, qualified in the industrial place of the 4th industrial revolution or the Industry 4.0. As each industrial revolution is marked by a technological innovation, this one lays the foundation for a smart digital factory.

The digital transformation has become a strategic issue for the positioning of the new industrial leaders, around whom gravitate a set of actors such as public authorities, technological companies, consulting firms and of course the scientific community.

Indeed, IT tools meet the need to think of new opportunities for the value creation within the industrial sector, becoming more and more customer-oriented.

Because the motto of this transformation is the data, the technological tool is mobilized for the interconnection of the machines in order to collect, analyze and exploit the data to improve the industrial value chain. As examples:

- Value creation on each segment of the industrial process,
- Predictive maintenance to anticipate incidents,
- Prescriptive maintenance for assessment and continuous improvement (Machines and processes),
- Energy consumption analysis of machines to regulate their consumption and improve their performance,
- Etc.

Therefore, digital transformation becomes an important industrial process improvement lever.

In Morocco, more than 90% of the national economic fabric is composed of VSMEs (Very small and medium business), which make the Moroccan company at the centre of reflection on the digital transformation. As confirmed by the official communications, the last one dating from November 13th 2019 in the Global Industry 4.0 Conference [17, 18], the industrialists seem to be aware that digital transformation is an imperative Moroccan economy growth. Moreover, the new version 2.0 of the Industrial Acceleration Plan is expected to support the digital launch of Industry 4.0 in Morocco. [19].

This transformation is progressively taking place, mainly in the automotive and aeronautics sector. Nevertheless, we note a real lack of official figures to qualify the digital inclusion rate of the Moroccan company and above all, field studies to identify the potential obstacles to the digital transformation of the Moroccan company.

A study conducted by IRES (Royal Institute for Strategic Studies) on the digital transformation and maturity of Moroccan enterprises and administrations [20] highlights as weaknesses, concerning the overall situation of Morocco related to the digital use and production, mainly the following:

- Lack of integrated global strategy and governance.
- A weakness of the "ecosystem" approach.
- A weakness in infrastructure.

In order to contextualize our approach, it is necessary to refer to a case study of a Moroccan company conducting a project of digital transformation. The purpose of this study is to find out what is the Moroccan company understanding of digital transformation and what is the approach adopted to digitize?

B. Context analysis

a. Company presentation

For confidentiality reasons, the studied company will be referred in the following by Factory.

Factory was founded in 1997 in Morocco. Its main activity is to manufacture and market sugar and chocolate confectionery. It currently has more than 15,000m² of modern manufacturing facilities, storage and shipping of a wide range of products. With an average production capacity of 12 tons/day and a workforce of 250 employees, Factory is the leader in its sector.

The production unit is organized into the 4 zones, listed hereafter in the Table VI.

Table VI. Factory's zones

#1	**Storage area of the raw material**
Material raw storage room for confectionery and chocolate, made up of three blocks, one for sugar and glucose, one for powder bags and one for packaging.	
#2	**Kitchen area and fitness**
Area dedicated to product manufacturing processes.	
#3	**Packing area**
Area with packaging machines where products are packaged.	
#4	**Finished product storage area**
Storage location for packaged and ready-to-market finished products.	

b. Existing infrastructure

Digital transformation is a project entirely led by the IT team. The study of the existing consists of the study and the evaluation of the infrastructure and the operating IT.

Factory's industrial communication infrastructure is arranged in a star-shaped layout, all machines located in industrial plants communicate via the Profibus protocol with a master PLC that is connected to a server via the Profinet protocol.

Each product is cooked in a cooker fed by raw material tanks controlled by "Gravomats". These are in turn controlled by Siemens PLCs that execute instructions ordered according to the predefined recipe.

The PLCs are used to collect data, namely process parameters (cooking temperature, pressure, etc.), states (on/off) and meters (number of pieces produced) trough sensors installed on each cooker. The collected data is sent by the Profibus protocol to secondary PLCs (slaves) to be finally routed to a Master PLC directly linked to a server by a Profinet, processing them according to Factory's business needs.

Factory has a customized MES covering the features bellow:

- Production monitoring reports generation
- KPI Visualization: MTBF, Efficiency, TRS, hour rate, % PP gap
- Real-time monitoring of different process parameters
- Material consumption monitoring
- Qualification of major stops
- Control command system.

Although the existing infrastructure and MES meet the Factory's needs, the managers find it limited in comparison with the evolutionary momentum of the company, aiming a digital transformation of the industrial unit.

Concerning the MES, it is mainly because of the high development cost and time, random and unstructured updates, lack of connection with the ERP.

As for the infrastructure's limitations, it is essentially its cumbersome aspect, no control/no correction of stored data, incompatibility with Siemens MindConnect.

A number of recommendations resulted from this evaluation; in connection with MES ProdPlus, we find for example, in the imminent, the need to adopt an IoT solution, agile, fully interfaced with the Factory's ERP, usable to support decision making process and meeting safety standards. As for the infrastructure, and over the long term, to invest in smart CPUs compatible with the new Siemens technologies targeted by Factory.

Based on these recommendations, the company has defined its orientations in terms of digital transformation; namely, to evolve the company toward a Smart Factory and adopt IoT technologies.

C. Factory's digital transformation

The company, aiming to assert its position, particularly the optimization and growth of activity, started a reflection on digital transformation. The company has launched a digitization project based on the aforementioned orientations. This project was conducted in two phases, firstly a market research of IoT solutions (in order to identify the one covering the perspectives of Factory.), followed by the development of the Factory's solution.

From the study of the market offer in terms of digitalization solutions, 3 main categories of solutions have been identified as shown in Table VII.

Table VII. Market solutions by category

Solutions Categories	Examples of solutions on the market
IoT development platforms	Microsoft Azure IOT Hub, IBM BlueMix (Watson IOT), AWS IOT Platform
IoT middleware tools	ThingsBoard, OpenIOT, Hurence, Kaa
Ecosystems or IoT operating systems	Mindsphere IOT Platform, Predix (General Electric), Eco-Structure (Schneider)

- IoT development platforms

IOT development platforms offer toolkits for developing a custom IoT platform, providing a cloud-based environment for developing customized end-to-end solutions. They provide endpoints for easily connecting connectivity objects and data analysis services for use in the application.

· IoT middleware tools

The middleware connects different programs, often complex and already existing. Originally, there were not designed to be connected. The very essence of the Internet of Things connects and communicates data over a network. Middleware is part of the connectivity architecture for many different things by providing a layer of connectivity for sensors and also for application layers that provide services that ensure effective communication between software.

· Ecosystems or IoT operating systems

Large industrial companies have been thinking of developing end-to-end solutions that recover data from the lower level of sensors to their own platform for implementation in their own proprietary applications.

Focusing on productivity growth, Factory is moving towards smart factoring, aimed at establishing continuous and instant communication between the various tools and workstations integrated into the production and supply chains. There are several providers of different smart factoring solutions, including Siemens, which offers a solution to support both the hardware layer with Mindconnect devices and software using the Mindsphere cloud platform.

Mindsphere IoT OS is Siemens open, cloud-based IoT operating system that connects real-world objects to the digital world and enables powerful industrial applications and digital services to drive business development. The Mindsphere solution is an ecosystem that aims to integrate and support all the different communication layers namely the industrial and the other application.

After identifying some of the solutions offered by the market, Factory decided to develop a tailor-made solution. This digitization project resulted in the development of an IoT solution driven by; the architecture and target development tools selection and the design of the solution.

Integrating the following features:

· **Authentication**: The first step being the access management, an authentication screen has been is made available to users for connection to the solution according to the granted credentials.

· **State of play of the different areas of the factory**: A consolidated situation of the different zones is available to users in order to have a generic idea about the state of production.

· **History - By production area**: By production area, the user can view the production history of this area.

· **All equipment - By production area:** All indicators returned from the equipment can be consulted by production area to have a generic view of the zone.

· **Set of sensors - By equipment**: An interface dedicated to the sensors installed at the level of each equipment can be consulted in detail.

For Factory, from the reflection on digital transformation has resulted the adoption of a solution of communicating equipment. Connected objects are both transmitters and information sensors that interact with other operating systems and generate data that will be collected and used to improve the business activity.

D. Analysis and synthesis

Based on this study case, we can note concerning the digital transformation exercise conducted by this industry the following;

- The IT team is in charge of the digital transformation,
- The pre-digitalization evaluation is restricted to the technological tool,
- The established diagnosis is focused on IT limitations,
- The defined digitalization objectives are of a purely technological nature, overcoming the IT identified limitations,

These points can be qualified as dysfunctions, confirming the hypothesis of this paper:

- The digital transformation of the company is horizontal and include only the technological dimension and does not not involve all the stakeholders,
- There is a lack of a strategic/vertical vision of digitization covering the digitization axes stated in the ontology,
- The customer component is neglected,
- The digital transformation is not driven by the processes governing the activity of the company,
- Etc.

The digital transformation process of Factory presents a typical case of what we see in the professional environment. To digitize is to equip technologically the operator. It is a question of transforming the exercise of the activity and not the activity and the company itself. This nuance is fundamental, insofar as, the digital transformation is essentially a production model that includes all the dimensions of the company [3].

It is imperative to broaden the reflection about digital transformation to the other dimensions in order to rebuild digitally a company, and to seize the new opportunities for value creation allowed by this transformation.

V. CONCLUSION

Digital transformation is a fundamental lever for economic growth. In Morocco, the challenges are major. The country relies on multi sectorial digital transformation to meet the targeted development challenges. In this sense, and as part of a reflection on digital transformation's scope and processes, we noted that, in practice, digital transformation is limited to technological implementation. Admittedly, IT is a key component, but surely not sufficient for a digital transformation. This observation feeds the hypothesis of this paper, which we structure as follows;

- An ontology that aims to identify the dimensions of a digital transformation and confirms its multidimensional nature.
- A survey on strategic thrusts of the digital transformation, confirming the correlation between digital maturity and digital strategy.
- A case study of a Moroccan industry that has led an IT-oriented digital transformation project.

The purpose of this work is to become aware of the common confusion existing in the field between digital transformation and ICT integration. This paper also aims to make companies aware of the limitations of the restrictive aspect of an IT-oriented understanding of the digital transformation, and the need to identify all the dimensions of this transformation, in addition to the IT one, to seize the opportunities of digital transformation.

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