

DOCTORAL COURSE IN Economics and Management of Innovation and Sustainability CYCLE XXIX

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Fast-growing companies: a new breed of organizations? Scenario analysis and managerial implications of an emerging phenomenon.

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Abstract

While the phenomenon of fast-growing enterprises is becoming increasingly significant, managerial literature still does not provide many theoretical or empirical studies about them. Some scholars call such enterprises "Unicorns" or "Exponential Organizations", but we still do not have a detailed account of neither the contextual factors that are favorable to their appearance, nor the approaches that these companies utilize to manage their processes and human resources. First, this study aims at analyzing the environmental conditions that facilitate the exponential growth of an enterprise. Then, in more detail, I will focus on some startups that are considered "fast-growing companies". Through a multiple case study conducted in Sweden, I provide qualitative evidence in order to test my hypotheses, with a specific focus on HRM practices. I found several interesting results, including the idea that the presence of Staff on Demand (contractors, freelancers, moonlighters, etc.) is not perceived by the managers of these companies as a crucial factor for the company's growth, contrary to most stipulations currently available in the sparse literature on this subject. For this reason, besides providing some theoretical proposals and empirical evidence, I also hope that my study will encourage further studies in the organizational and managerial literature about this new and interesting phenomenon.

General Introduction

In an economy that is ever increasingly characterized by digitalization and by the massive diffusion of information, change is happening so quickly that it is difficult to understand what is happening. Speed is a central concept to today's productive panorama as it is a factor that heavily affects businesses. Until some ten years ago, companies grew at a sluggish rate and more or less in predictable ways. Today, growth rates are staggering and it is not a rare occurrence to see a startup reach a value that exceeds 1 billion dollars in just 12 or 18 months. It is worthwhile asking ourselves if everything we believed to be true about organizations is still valid or whether, on the other hand, the time has come to find new approaches to organizational studies. This thesis is based on an analysis of the current situation and asks two crucial questions: what are fast-growing companies, the so-called "Exponential Organizations"? And what are the environmental conditions that favor their growth and expansion? The first part of this study is centered on these two research questions. By using a wide analysis of economic and managerial literature, we have tried to build a theoretical framework which tries to explain the links between socio-economical conditions and exponential organizations. The main proposition presented here is that the connection between the environment and exponential businesses is mediated by an important variable: disruptive innovation. In other words, the more an environment is favorable to disruptive innovation, the more likely it is that in that environment exponential organizations will be born. This first contribution would like to be, therefore, a reliable introduction to the themes that will be dealt with, more specifically in parts two and three. Until today, we do not possess any kind of model that is able to conceptually capture the tendency of fast-growing companies, so it became absolutely necessary to structure the first part of this thesis in this way in order to comprehend the theme being dealt with. In the second part, the focus of the study will move from a "macro" level to a "meso" level. Here, in fact, we will start to consider what happens within a fast-growing business, especially with regards to the management of Human Resources. This paper presents a theoretical model that illustrates how the use of digital platforms and of co-working spaces is becoming ever increasingly relevant in personnel

management. Digital platforms are increasingly used by HR managers especially during the recruitment phase. Co-working spaces, however, are starting to have a large impact at a motivational level. The few specific studies carried out on this topic show that people love to work in an environment where they breathe a strong sense of freedom.

The third part, finally, focuses the thesis on a "micro" level, with strong empirical connotations and where a multiple case study regarding five fast-growing Swedish companies is presented. More specifically, starting from the study of Human Resource management practices, we ask ourselves how important the presence of Staff on Demand (contractors, freelancers...) is for the growth of a company. This qualitative approach is important for at least two reasons. Above all, a case study allows us to closely assess whether everything we have stated at a "macro" and "meso" level is true or not. It is an excellent occasion to compare the theory contained in the introduction with what really happens at a practical level. Secondly, the multiple case study allows us to identify the dynamics connected to company growth, dynamics which would otherwise remain in the shadows. Theory, in fact, can not alone help us to fully identify the complex variety of factors that determine the rapid growth of a young company. With regards to Staff on Demand, we will see how its presence is not seen as being a crucial factor for growth, which seems to contradict those who say that exponential growth can not be achieved without contractors.

Sweden was not chosen by coincidence, seeing as after Silicon Valley, it is region where there is the highest concentration of exponential businesses in the world. The qualitative approach used in part three, was the only approach possible. There are currently no databases available containing numerical data on contractors working at any specific company. In the future, the hope is to be able to obtain such information in order to proceed with a rigorous quantitative approach.

This thesis represents an ideal starting point and inspiration for everyone who, over the next few years, decides to study exponential organizations.

The answer to the most important question could possibly be obtained by a fruitful exchange with other researchers: are we really up against a new type of organizations?

Exponential Atlases.

From Disruptive Innovation to Exponential Organizations: Scenario Conditions and their Mutual Interactions.

Abstract

According to Greek mythology, Atlas held up the sky on his shoulders. Nowadays, the term *atlas* refers to "a book of maps or charts." In this paper, the term is used in both senses. On the one hand, the purpose is to understand the conditions favoring – hold up – the birth and the evolution of exponential organizations. Among these conditions, special attention is paid to disruptive innovation. On the other hand, the goal is to draw a concept map that allows us to identify the interactional dynamics among the actors involved in this evolutive process. In other words, first we'll try to know who "holds up the sky" (*static interpretation*), and then we will see who "lives in it" (*moving interpretation*).

To achieve this dual purpose, we will start with the analysis of the environmental characteristics most favorable to the emergence of exponential organizations (ExOs). We will consider the environment from a two viewpoints: economic and regulatory. Afterwards, we will focus on organizational capability, meaning the set of resources an organization needs to try to grow exponentially. All this information will serve to speculate, with a specific model, that disruptive innovation mediates the relationship between environmental/organizational features (conditions) and exponential growth (phenomenon).

The few studies specifically addressing ExOs are confined to ExOs' internal structures and operating methods. Little consideration has been given to the favorable conditions that can allow organizations to become exponential. This paper aims to pave the way for future systematized research on the ExO's genesis and development.

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¹ Oxford Dictionary

1 Introduction.

Exponential Organization: definition and its relevance in the current socio-economic context

The theme of exponential organizations (ExOs) has emerged in recent years, mainly thanks to the work of Salim Ismail (2013) and his colleagues at Singularity University.² From his point of view, "An exponential organization (ExO) is one whose impact (or output) is disproportionally large – at least 10x larger – compared to its peers because of the use of new organizational techniques that leverage accelerating technologies".

The idea of an organization that grows exponentially was inspired by Kurzweil's Law of Accelerating Returns, which is well explained in the homonymous essay of 2001. In this work, Kurzweil points out that technological change is exponential and not linear, as we normally would think. He forecasts that "we won't experience 100 years of progress in the 21st century – it will be more like 20,000 years of progress". Since technology is growing rapidly, organizations must adapt to this new situation and manage it just as quickly. Therefore, explaining an ExO's success is not sufficient to observe technological growth dynamics, but is necessary to focus on the features an organization must have to become exponential. For now, the conditions analysis is postponed to focus on ExOs' relevance in the current socio-economic context. Google, Facebook, Instagram, Uber, and Whatsapp are perfect examples of firms that have grown exponentially.

² http://singularityu.org/

MARKET CAP TO A BILLION

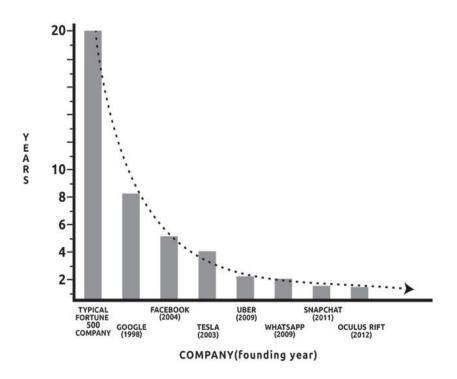


Figure 1. Ismail (2013). The ExO reaches the value of one billion in a very few years.

An ExO's success is mainly based on information technologies and innovative organizational models. However, as we will see, other elements, together with these, make exponential growth possible. We are in the age of digitalization and dematerialization, two phenomena that significantly affect our society and our way of life. These phenomena have dramatically changed the way we buy products and services as well as the way we live our relationships; the way we work; and, ultimately, the way we build our future. Until a little over a decade ago, it was almost impossible to imagine giving up many of the physical experiences we normally had. We don't need to physically move to go to the bank, to visit a friend or a museum, or to shopping. This is the era of immateriality. Today's most successful companies are those that manage such immateriality or that offer access to it. In this scenario, understanding the Internet's relevance is easy.

For this reason, an accurate analysis of the ExO conditions cannot ignore the importance of public investments in technological infrastructures. Regarding these issues, Mariana Mazzucato (2013) provides convincing evidence of how crucial State support is for the success of many recently founded startups that are now among the largest companies in the world. The changes in the current socio-economic context are manifold, involving consumers' tastes, the way companies do business, and the labor market. According to Ismail (2013), "For any ExO, having Staff on Demand is a necessary characteristic for speed, functionality and flexibility in a fast-changing world. Leveraging personnel outside the base organization is key to creating and running a successful ExO". If this observation is correct, then we must try to imagine how the labor market will change in the coming years and the consequences. This change will probably force us to rethink the entire higher education system, which must be consistent with the new demand for labor. The ExOs, with their extensive use of accelerating technologies, highlight the new challenges in Human Resource Management. Undoubtedly, the speed of technological change highlights the issue of skill obsolescence, which could be one of the main causes of unemployment in the near future. More precisely, skill obsolescence is the degree to which professionals lack the up-to-date knowledge or skills necessary to maintain effective performance in their current or future work roles (Kaufman, 1974). Although this phenomenon has been analyzed for many years, only now it is manifested with its wealth of implications, especially among older workers (Allen & de Grip, 2012). According to some researchers, there is no significant correlation between an employee's age and performance, but employees' competencies are important for performance (Güttel et al., 2009).

As we will see later, ExOs' relevance in the current economic context finds expression in the strong connection between exponential growth and disruptive innovations' dissemination. Some innovations fail to be completely successful because they can not overcome the following "barriers to disruption" (Wessel & Christensen, 2012): 1) momentum; 2) tech-implementation; 3) ecosystem; 4) new technologies; 5) business model. Assessing this situation from a different viewpoint, we can

say the organizations that have become exponential have been able to overcame those kinds of barriers.

2 Research questions and general approach

What are the external and internal conditions, whose presence and mutual interaction enables an organization to grow exponentially? What kinds of mediating variables are involved in this process? How an exponential growth can be sustainable over time?

In order to answer these questions, we need to clarify some of the terminology. The terms *external* and *internal* refer to an organization. In this respect, *external conditions* are "environmental conditions" and *internal conditions* are organizational capabilities.

This paper is proposing a twofold interpretation of the ExOs. The first is a *static* interpretation, in the sense that constituent elements of the scenario where the ExOs can grow are examined. In contrast, the second is a *moving* interpretation, which focuses on how the scenario elements can influence each other.

These two proposed interpretations are not mutually exclusive, but rather are two essential elements of the same theoretical framework. In this work, the ExOs are not considered direct results of the scenario conditions, but rather as possible outcomes of a disruptive innovation widely adopted. This view doesn't imply that the environmental and organizational conditions play a secondary role; if anything, the opposite is true. It is not enough to state that ExOs find most of their lifeblood in disruptive innovations; it must be stressed that disruptive innovations result from a process, which is possible thanks to the presence of specific conditions. My general approach to the ExO phenomenon is inspired by Aristotle's *Metaphysics* (4th Century BC) in which the Greek philosopher discusses the concepts of *potentiality* and *actuality*. From Aristotle's point of view, potentiality is a thing's capacity to be in a different and more completed state, whereas actuality is anything currently happening. Consistent with these conceptualizations, Aristotle states that actuality is always prior to potentiality. In our case, the actuality is represented by the scenario

conditions, within which can stem two potentialities: disruptive or not-disruptive innovation. At a later stage, these potentialities may generate a new actuality: an ExO.

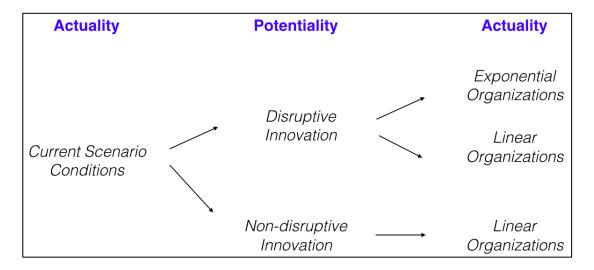


Figure 2. A personal general approach: ExO Resulting from an "Actuality-Potentiality" Process.

Figure 2 summarizes the two interpretations that will be discussed. More specifically, the static and moving interpretations emphasize, firstly, the distinctive aspects of a context favorable to ExOs and, secondly, the way in which we can move from the possibility of an exponential outcome to its concrete realization. To better understand these two phases, see Figure 3.

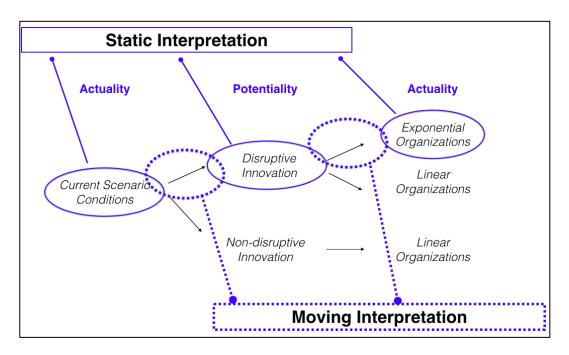


Figure 3. Theoretical Framework for Interpreting an ExO's Genesis.

2.1_1st Interpretation: a static atlas

In this section, we will seek to understand the scenario conditions related to disruptive innovation. Literature on the scenario conditions and on disruptive innovation will be reviewed. Next, Salim Ismail's description of an ExO will be examined. Then these different contributions will be used to construct an interpretative framework for the present ExOs analysis. This type of interpretation allows us to identify swiftly some of the most important conditions from which disruptive innovations and, indirectly, an ExO, may stem. As shown in Figure 3, the static interpretation highlights three elements: scenario conditions, disruptive innovation, and exponential organizations. Before becoming exponential, an organization acts in a particular environment (external conditions) and has certain characteristics (internal conditions). In this work, we consider the scenario conditions as the sum of the external and internal conditions. Figure 4 is an overview of the static interpretation.

Static Interpretation

Level of Analysis:

I_ Actuality

External scenario conditions: ENVIRONMENT

- Economic
- Regulatory

Internal scenario conditions: ORGANIZATION

Organizational Capability

II_ Potentiality

Disruptive Innovation

III_ Actuality

Exponential Organizations

Figure 4. Exponential Organization Conditions: a Static Atlas

External scenario conditions

For many years, researchers have tried to determine the best way to study the economic environment in which organizations act. Many studies focusing on this topic take for granted that

the environment evolves in a predictable way or, in any case, at a rate not too high. Eisenhardt and Martin (2000) state that even in markets where changes are frequent, the evolutionary paths can be relatively stable and linear. Although this observation may be true in traditional contexts, it is difficult to imagine predictable evolutionary paths in a scenario strongly affected by accelerating technologies. While these are very interesting issues, the intent here is not to understand the relationship between organization and environment, but rather between environment and disruptive innovation. Indeed, as we shall see, both the environment and the organization are considered elements influencing this kind of innovation's emergence.

We consider external scenario conditions the *economic* and *regulatory* environments.

The economic environment can be seen from many points of view; moreover, innumerable aspects can be considered. An exhaustive study of all the economic conditions that affect innovation would lead us to analyze all possible aspects of a particular context. This approach would have no practical use because of its exaggerated extension. This study's aim is to suggest a general conceptual framework, which might be integrated with considerations closely linked to the single cases that will be examined. In general, within a given economic environment, the presence of any kind of disruptive innovation is more likely if that context contains two elements:

- 1) public support university R&D
- 2) technological infrastructures.

Since these elements are made available largely by the State, the relationship between economic environment and disruptive innovation can be interpreted by highlighting public investments' role in innovation. For example, public basic research's importance has been emphasized in the pharmaceutical industry, where there is no shortage of evidence about the relationship between academic research and industry innovation (Toole, 2012). According to Salter and Martin (2001), there are three main methodological approaches to publicly funded scientific research's benefits: econometric studies, surveys and case studies. These researchers maintain that each of these methods has limitations; therefore, measuring academic research's economic impact remains

problematic. Nevertheless, we can understand public research's role by observing collaboration between academia and industry. The State, indeed, not only supports university R&D, but also offers funding for university-industry collaborative research (Berman, 1990). Thus, public intervention's importance in highly innovative contexts is undeniable. This kind of support's impact is felt in a great variety of private industry performance outcomes: industry and economy-wide economic performance, new drugs, formation of new companies, direct increases in employment, increased stock of useful knowledge, and skilled engineers' and scientists' training (McMillan & Hamilton III, 2003). Many of the organizations that we consider exponential have been successful thanks to the introduction of innovations that have proven to be disruptive; nevertheless, the presence of specific technological infrastructures made dissemination of these innovations possible. In this case too, public intervention's role is crucial. In other words, we could say that the State's presence is important for two main reasons: creation and diffusion of innovation. If publicsupported university R&D is important for the creation process, the diffusion process cannot do without public infrastructures. This second aspect of the external scenario grabs scholars' attention in different ways. According to Bivens (2012), "public investment by federal, state, and local governments builds the nation's capital stock by devoting resources to the basic physical infrastructure, innovative activity (basic research), green investments, and education". Public infrastructures are critical to firms' performance and, more generally, to economic growth (Morrison & Schwartz, 1996). The public sector is present at every stage of the innovation chain, from basic research to commercialization; and its spending favors the emergence of new markets and sectors, including the Internet (Mazzucato, 2015). The most obvious proof that public investments are crucial for this kind of organization is the fact that most ExOs could not operate without the Internet

The economic environment is not the only source of the disruptive innovation. The regulatory environment must also be considered. Different types of regulations can influence innovation in various ways (Blind, 2012). Generally, in the literature, three types of regulations are discussed:

economic, social and institutional. In this study, we consider more relevant the first one. From the viewpoint of economic regulation's impact on innovation, one of the most important issues is competition regulation policies. The basic rule emerging from the extensive empirical evidence is that competition increases organizations' incentives to innovate, but only up to a point. When the competition gets too intense, companies prefer to imitate rather than innovate (Aghion et al., 2005). The Uber case is helpful in identifying the relationship among regulation, disruptive innovation, and ExOs. Established in 2009, Uber is a ride-sharing platform that connects people who need to move and drivers who are moving towards the same destinations, mainly thanks to its special app for mobile devices. Uber's presence disrupted the traditional taxi services scenario. In some countries, this ExO's growth has been facilitated by a favorable – or, at least, non-hostile – regulation system. In contrast, in other nations, Uber continues to face many obstacles, represented by regulatory systems protecting the traditional market balances. According to Larry Downes (2013), this is proof that "innovation and regulation don't mix."

Internal scenario conditions

To understand the ExO's emergence is not enough to focus on what happens in the external environment. It is also important consider the organization's contribution to its growth. In general, a firm can purchase or develop a disruptive innovation³ or an innovation that could be disruptive. In both cases (purchasing or developing), the organizational capability is important. Organizational capability could be defined as the "ability and capacity of an organization expressed in terms of its human resources, physical and material resources, financial resources, information resources and intellectual resources." This myriad of meanings reveals the complexity of the internal scenario conditions. Capabilities are important because they allow us to fill the gap between our intentions and the outcomes we are able to achieve (Dosi et al., 2001). In his 1994 paper, Collis recognizes three categories of organizational capabilities. The first category is the ability to perform a firm's

³ In the next paragraph we will see a more comprehensive definition of this topic.

⁴ Source: businessdictionary.com

basic functional activities; the second category is the capacity to create dynamic improvement in a firm's activities; the third category is the firm's ability to develop novel strategies before competitors do (Collis, 1994). Although this categorization helps us identify organizational capability merely from a conceptual point of view, it is crucial to understanding this capability's concrete forms. In other words, organizational capability is the sum of the things that the organization knows. This definition is perfectly consistent with the idea that organizational capability is the result of an "integration of knowledge" (Grant, 1996). This concept is undoubtedly effective, but alone is not enough to represent the complexity of the concept that we are trying to highlight. Thus, it may be useful to interpret organizational capability as the set of resources that an organization has accumulated over time (Lun et al., 2015) and that, in a given moment, can be used to achieve a competitive advantage. In the present work, the organizational capability represents the following: financial capabilities, physical resources, information resources, HR capabilities, marketing capabilities, structure, culture, strategy, R&D, and any other element the organizational actions are based.

Disruptive innovation

The adjective *disruptive* has acquired great relevance in managerial literature through the contribution of such authors as Bower and Christensen. In their 1995 paper, they focused on disruptive technology and its impacts on markets and on organizational processes. According to Bower and Christensen, innovations are not all equal because of a substantial difference regarding the impact that an innovation might have on a given industry. Depending on the type of impact, an innovation can be sustaining or disruptive. A sustaining innovation is one that helps improve some aspects of a product or service that the customers already know and value. In contrast, a disruptive technology offers a very different experience that initially is found only in a new market (Bower & Christensen, 1995). Over the years, many scholars have dealt with the relationship between disruptive technologies and competition (Adner, 2002; Huang & Sošić, 2010), referring to the idea

that in the early stages, a disruptive innovation is inferior to traditional technology but is appreciated by a niche market (Christensen, 1997). This niche, a bit at a time, expands until it reaches the most consumers in the market. To explain this phenomenon, Christensen (1997) uses the concept of performance oversupply, which states that when the market's needs are met, the consumers' attention begins to focus on the product's features that were initially considered unimportant. While acknowledging the importance of his work, some researchers believe that Christensen has left many questions unanswered (Adner, 2002; Danneels, 2004; King & Baatartogtokh, 2015). The terminology used within the disruptive innovation theory is judged inconsistent (Chesbrough, 2001). In this regard, the following is one of the questions researchers believe Christensen did not answer: "What are the exact criteria for identifying a disruptive technology?" (Danneels, 2004). The open issue is whether it is possible to create a framework to predict ex ante the emergence of a disruptive innovation (Doering & Parayre, 2000; Lepore, 2014). To dispel all doubts, analyzing many practical cases would be useful because the validity and generalizability of Christensen's theory have seldom been tested in the managerial literature (King & Baatartogtokh, 2015). In order to fill this lacuna, the best solution would be to follow the approach of those who integrate the Christensen's model with appropriate analyses from its critics (Govindarajan & Kopalle, 2006), considering that the expression disruptive innovation refers to not only technological products, but also business models (Christensen & Raynor, 2003; Chang & Hang, 2010). Combining these different approaches, we can synthesize the main characteristics of a disruptive innovation (DI):

- 1) underperforms, at early stages, on the attributes that mainstream customers value;
- 2) offers something new to attract price-sensitive customers;
- 3) moves from niche to mainstream market.

Having said this, we must consider that disruptive innovation doesn't always imply that an emerging business will replace incumbents (Yu & Hang, 2010). The three salient features just mentioned are found in the history of Waze, an ExO. At the beginning of its activity, the novelty

Waze introduced was a new navigation system, which was based on sharing location information. This system's construction was made possible by leveraging the GPS sensors installed on the Waze users' phones (Ismail, 2013). At that time (2007), this innovation was inferior compared to the services Nokia offered because smartphone diffusion was still too low (*first charactersitic*). At a later stage, the smartphones' rapid spread and the fact that the app was free (*second characteristic*) led to an increased number of users. The mainstream market was quickly disrupted and Waze, derived from a niche market (*third characteristic*), replaced Nokia.

Exponential Organizations

The managerial literature has not showed great interest in the ExO. In fact, the only work in which this issue has been debated in a very structured way is *Exponential Organizations*, Salim Ismail's 2013 book. In this book, Ismail defines *exponential organization (ExO)* as "one whose impact (or output) is disproportionally large – at least 10X larger – compared to its peers because of the use of new organizational techniques that leverage accelerating technologies". Ismail clarifies that an ExO is not built on "armies of people or large physical plants" but on information technologies. In this respect, ExOs result from a digital data's general tendency spread. The main reason focusing on this kind of organizations is important is that ExOs are different from other organizations in many ways. These differences are manifested at different levels: *strategy, structure, culture, processes, operations, systems, people* and *key performance indicators* (Ismail, 2013). Ismail highlights an ExO's distinctive features by using the metaphor of the brain as illustrated in Figure 5.

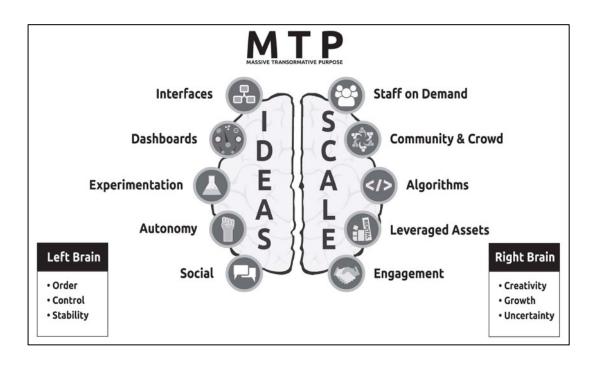


Figure 5. Ismail (2013). An ExO's Main Characteristics of an ExO

The ExOs are not guided by a vision, but by a **Massive Transformative Purpose** (MTP), which reflects the organization's ambition. There are many examples of MTPs including the following: "Ideas worth spreading" (TED); "Organize the world's information" (Google); and "Positively impact one billion people" (Singularity University). According to Ismail, a MTP is the result of the trend, in recent years, to rewrite corporate statements to be shorter, more generalized and aspirational. This kind of purpose must answer two questions: Why do this work? and Why does the organization exist? Obviously, the MTP is only the first step towards analyzing an ExO. The right side of the "brain" in Figure 5 represents the external characteristics, while the left side represents the internal characteristics.

Staff on demand. The basis of this concept is that ExOs do not need a large internal staff. These organizations can grow thanks to freelancers and contractors, whose support may be required from time to time, depending on the demands of the business. For example, when a new product or a new algorithm for managing data is needed, the ExOs address the vast community of Internet users. The people who develop the best project get the job, and the organization saves money.

Community and crowd. An ExO attracts attention from not only the people operating within it but also those who are outside. In this case, the Internet also plays a very important role because it allows everybody to know what the organization is doing and to interact with it. According to Ismail, the difference between community and crowd is the distance that separates a person from the organization's nerve center. The community and the crowd share an ExO's beliefs, needs, resources and risks, independently of the physical proximity. For an organization, the community is represented by core team members, alumni, partners, vendors, customers, users, and fans. In the crowd, instead, we find anyone who is not part of the community, but who is interested in the organization's fate.

Algorithms. When we visit a website or use a home banking service, we should be grateful that someone has developed an appropriate algorithm. A digitally based organization's success is unimaginable without this element's support. For the ExOs, Ismail highlights two types of algorithms that are very important. The first is machine learning, which is the ability to perform new tasks based on processing a huge set of historic data. The second is deep learning, which allows a machine to discover new patterns without processing historic data.

Leveraged Assets. Leveraging an asset is the optimal solution for an ExO that prefers not to own that asset, even though doing so is strategic for the business. Generally, a firm chooses non-ownership when managing an asset is difficult and expensive. Ismail suggests that the ownership could be a good solution only if the asset in question is rare or scarce. This concept doesn't seem very different from the "staff on demand." Just as in that case, in fact, the organization prefers not to create lasting and stable ties with many of the resources it needs.

Engagement. Synthetically, engagement is the element allowing an ExO to convert crowd into community. The main goal, in this sense, is to create a collaborative network through which to develop a deep sense of loyalty towards an organization. In order to facilitate these processes, the ExO can make use of certain tools like *gamification*, namely invite the people to create solutions for a specific problem. Each solution, of course, is presented within a platform game. For example,

Ismail cites Domino's Pizza, which has created a game called Pizza Hero. Through this game, people can invent their own ideal pizza; and those who are considered the best pizza makers are encouraged to apply for jobs.

Interfaces. Interfaces are like a bridge between external and internal ExO dimensions. To understand an interface's functions and characteristics, consider one of the world's most famous interfaces: Apple's App Store. In this case, as in many others, the interface helps the organization manage and engage its community. Needless to say, the ExOs use sophisticated algorithms to be sure that the interface works well; if the interface malfunctions, the ecosystem in which the organization and customers meet would be damaged.

Dashboards. Every day a firm is overrun by millions of data pieces coming from customers and employees. Until a few years ago, this data was processed per quarter or month; but now, that is not often enough. Through appropriate dashboards, ExOs can collect and analyze a huge amount of data daily, providing an effective way to handle and measure, in real time, all the operations carried out within the organization. This system's strength lies in the very short time span between a certain event and reception of feedback related to it.

Experimentation. Experimentation summarizes the philosophy guiding any ExO. Continuous experimentation doesn't necessarily lead to success, but that is why it is important. Very often the failure shows us the road along which we shouldn't walk. Furthermore, experimentation represents a kind of knowledge that may stem from the bottom and that is crucial to offering the possibility of discovering something new in an organization focused on people. As Ismail reminds us, many companies are experimenting with core processes.

Autonomy. Autonomy is closely linked to a specific organizational style whereby authority is decentralized and employees are grouped in independent teams, not subject to any hierarchy. For this reason, many ExOs lack traditional departments or middle managers. These solutions increase organizational agility and the capability to respond quickly to environmental changes.

Social. Using the term *social*, Ismail aims to investigate aspects of communication within organizations. In order to grow exponentially, a firm should use technological platforms that allow it to connect people working in the same organization. Thanks to social technologies, the decision cycles become faster and the knowledge sharing takes place in very little time. Ismail states that social technologies are comprised of seven key elements: social objects, activity streams, task management, file sharing, telepresence, virtual worlds, and emotional sensing. Finally, social technologies increase organizational intimacy and reduce the decision latency.

2.2_2nd Interpretation: a moving atlas

Up to this point, we have seen elements of our analysis isolated from each other. This kind of approach has allowed us to clarify from what point of view we are observing each construct. Now, we will try to understand how these elements are bound together. In addition, we introduce a new element, the rate of early adopters, which represents the fifth link we will see. Figure 6 is a synthetic representation of the "moving atlas."

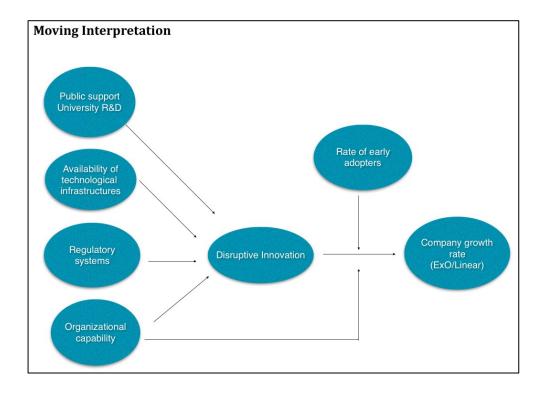


Figure 6. A Moving Interpretation of the ExO.

Each of the four conditions represented here plays a crucial role in the emergence of disruptive innovation. We are going to observe each of them in order to understand that the presence of at least one of these links is essential for innovation.

Proposition 1: An organization can grow exponentially only if its environment and its capabilities are favorable to the emergence or acquisition of disruptive innovation.

This proposition is not enough in itself because a disruptive innovation's presence is only the first step towards exponential growth.

First link (publicly support university R&D-disruptive innovation-ExO). Very often we are unable to understand the link between basic research and innovation. Furthermore, seeing the relationship between basic research and socio-economic well-being is difficult. One of the causes of this situation is the fact that basic research results are non-patentable, so while one firm cannot easily capture basis research's benefits, the government benefits if new insights ripple across the economy (Markovich, 2012). According to Markovich, the federal government is the primary funder for basic research in the United States. In this scenario, the presence of top colleges and universities is outstanding. In recent decades, it has increased the share of gross domestic product (GDP) devoted to basic and applied research. In the 2015 budget for Science, Technology and Innovation, President Barack Obama has allocated \$64.7 billion for federal research, up \$251 million compared to the 2014 enacted level⁵.

The link between publicly funded research (academia) and the innovation coming from firms (industry) can be seen in the Etzkowitz's Triple Helix Model (Etzkowitz 1993; Etzkowitz & Leydesdorff, 1995). In their 1995 paper, Etzkowitz and Leydesdorff discuss a new social contract between a university and the larger society, overcoming the old idea of only long-term contributions of academic knowledge to the economy. In the same paper, they state that the linear models of

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⁵ Source: www.whitehouse.com

"demand pull" or "technology push" have been superceded by an evolutionary model that analyzes economic development in terms of networks. Therefore, science-based socio-economic well-being may stem only from a "triple helix" of academic-industry-government relations. Emblematic of this kind of relationship is the way in which academic research assisted the manufacturing industry in Boston, as reported by Etzkowitz (1993). The presence of public science in innovation processes is felt in many areas, such as biotechnology, which represents an industry that is knowledge-based and predominantly composed of small firms with close ties to university scientists (Audretsch & Stephan, 1996; McMillan et al., 2000). According to some studies, the main reason the government supports academic research is not only science's economic impact (Narin et al., 1997); historically, the Western economies' growth has depended on nations' capability to absorb and utilize scientific knowledge (Rosenberg & Birdzell, 1990).

The success of many ExOs comes from the academic knowledge of those who developed the innovation at the base of the firms' core business. For example, with Tesla, an ExO, one of the most important technologies for its cars is lithium-ion batteries. In fact, electric cars probably wouldn't exist without this type of battery. At the same time, would the lithium-ion batteries exist without academia? To answer this question, we must understand who was behind this innovation. Lithium-ion batteries' invention and success are mainly associated with two innovators: Whittingham and Goodenough. Whittingham was educated at Stamford School in Lincolnshire, Oxford, and Stanford. With his Stanford's colleagues, Whittingham developed the first lithium-ion battery in the 1970s (Levine, 2015). This invention focused Exxon's attention on Whittingham and opened the way to further improvements of this new discovery. The most important improvement was made by Goodenough, who studied at Yale and Chicago and worked at MIT, Oxford, and the University of Texas. Thanks to Goodenough's discoveries, Sony released the first commercial lithium-ion battery in 1991. The lithium-ion battery, as we know it today, is the result of thousands of hours of study and research conducted in classrooms and laboratories. The government and academia have contributed to this innovation's wide diffusion. Without these contributions, we wouldn't have

electric cars and Tesla wouldn't be an ExO. In the same way, without lithium-ion batteries, there would be no smartphones; and many of the most famous ExOs whose products and services are spread thanks to these batteries wouldn't exist.

Proposition 2: An organization can grow exponentially if the public-funded research in its environment is favorable to the emergence of disruptive innovation.

Second link (*technological infrastructures-disruptive innovation-ExO*). In this section, we use the term *technological infrastructures* as a synonym for Information and Communication Technology (ICT). According to Van der Meer and Van Winden (2003), ICT must be analyzed from three points of view: access, content and infrastructure.

Access. Access refers to the capability to use information technologies. Globally, one of the most urgent issues to be addressed is the *digital divide*, which is the inequality between those who can easily use this kind of technology and those who don't have this opportunity. The digital divide refers to both individuals and organizations, and its presence generates a strong impact on the most disadvantaged geographic areas' economic growth, with scarce or no access to ICT. In addition to the digital divide, which describes the gap in access to and use of ICT, another kind of technological inequality is the innovation divide. This second divide describes the gap in technology creation and in ownership of related intellectual property (Drori, 2010). The reasons for these inequalities can be manifold: inability to use an electronic device, lack of income, or absence of electricity or internet infrastructure. As long as these gaps increase, the possibilities for innovation diminish, both for people and organizations. A country that focuses on innovation should first focus on ICT's infrastructure and on access to it. Regarding access, however, another important element is ICT's educational aspect. According to Diaz-Chao and colleagues (2015), ICT improves productivity only when firms and workers achieve the necessary technological competencies.

Content. Van der Meer and Van Winden define content as electronically available information, interactive services, or other content related to a specific locality. Examples of content are local newspapers on the Internet, websites providing traffic situations, and virtual communities. The concept of content has to do with communication. Creating content means to make known outside what happens within a given context. While Van der Meer and Van Winden deal with cities in their paper, we may try to extend the same concept to ExOs. Technological infrastructures are important for organizations to highlight and transmit their own "content" in the form of innovations, products, services and future projects. In order to understand the importance of this component of ICT, consider whether an organization could grow exponentially if no electronic information were available about it.

Infrastructure. The importance of public infrastructure investments for economic growth has been widely debated. Some authors have argued that the lack of public spending on infrastructure in the United States has played a great role in explaining productivity's slowdown since World War II (Aschauer, 1988, 1993). In other countries such as Canada, economic prosperity has been based on continually upgrading infrastructures available for goods production and trade (Wylie, 1996). According to Wylie, "goods production does not occur in a vacuum; it is part of the larger economic system that incorporates the basic infrastructure of economic activity" For this reason, innovation and economic growth require resources that go beyond the firms' production components, such as airports, highways, electric power systems, and commercial services.. All these types of infrastructure are important, but electronic infrastructures are equally crucial for innovation and growth. Physical manifestations of the ICTs, electronic infrastructures (copper, coax lines, wireless networks, fiber optic lines) represent the information society's transportation system, carrying bits and bytes of information (Van der Meer and Van Winden, 2003). To indicate these infrastructures, some scholars use other terms, such as e-infrastructure or cyberinfrastructure (Edwards et al., 2009). The more a country invests in infrastructure, the more the possibility increases for the companies to innovate and develop new solutions and new products. Consequently, an ExO's emergence is

impossible in a context where the government doesn't invest enormous resources for infrastructure. The accelerating technologies that underpin their growth, in fact, cannot express any potential without the presence of physical support.

Proposition 3: An organization can grow exponentially if the ICT infrastructures in its environment are favorable to the emergence of disruptive innovation.

Third link (*regulatory systems-disruptive innovation-ExO*). The link among regulations, innovation, and organizational growth is a relatively unpredictable process. In an interesting 2014 article on Ecosystem Insights' website, the Endeavor Insight researchers asked, "If business regulations are so important, why is Silicon Valley successful?" Their focus was on two seemingly conflicting reports:

- 1) PrivCo's "The top 10 cities of the year for private tech acquisitions 2014"⁷
- 2) U.S. Chamber of Commerce Foundation's "Regulatory Climate Index 2014"8

According to the first report, the San Francisco and Silicon Valley area had more than 280 acquisitions in 2013. The value of the companies acquired was \$5.6 billion. For this reason, this area was at the top of the list. Silicon Valley had four times more acquisitions than New York City (#2) and ten times more than San Diego (#3). This finding raises these questions: How important was the California's regulatory system? Did the Silicon Valley reach first position in this ranking as a result of favorable regulations? The second report seems to say no. Indeed, in the Chamber of Commerce Foundation's ranking is a deep analysis of business regulations in U.S. cities based on many indicators, including procedures, time and costs of launching a company, and costs of conducting day-to-day activities. This analysis ranked the Silicon Valley ninth and New York City tenth. In other words, the second report's findings seem the reverse of the first report, thus raising

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⁶ Online article available on: http://www.ecosysteminsights.org/if-business-regulations-are-so-important-why-is-silicon-valley-successful/

⁷ Available on: http://www.privco.com/privcos-the-top-10-cities-of-the-year-for-private-tech-acquisitions-1-silicon-valley-sf-2-nyc-3-san-diego-4-chicago-5-seattle

⁸ Available on: https://www.uschamberfoundation.org/regulatory-climate-index-2014-section-i

the following questions: What is the truth? How important are the regulations? The Regulatory Climate Index (RCI) is derived from the World Bank's Doing Business (DB) ranking that analyzes the relationship between regulations and business activities since 2004. The DB's aim is to investigate "the scope and manner of regulations that enhance business activity and those that constrain it" (World Bank, 2004). Some scholars argue that countries with better institutions grow faster (Messaoud & Teheni, 2014), but these findings seem to contradict the results from the survey conducted by the Chamber of Commerce Foundation. According to Davis and Kruse (2007), "assessed solely as research project, the DB project is extremely impressive in terms of the creativity of its design, scale and rigor"; but at same time, they argue that the DB's authors should be clearer in describing some of the analyses used to generate their conclusions. Is this the reason the Silicon Valley's position in the RCI's ranking seems paradoxical? Probably not, but many factors could be considered. If Silicon Valley doesn't stand out for its business friendliness, why have so many ExOs emerged and are emerging there? Either a link between regulations and ExOs does not exist, or the relationship between disruptive innovations and ExOs needs to be examined in depth.

Proposition 4: An organization can grow exponentially if the regulatory system in its environment is not hostile to the emergence of disruptive innovation.

Fourth link (*organizational capability-disruptive innovation-ExO*). In highly innovative contexts such as the ones within which ExOs operate, organizational capabilities are particularly important. The more unique these capabilities are, the more likely the organization can gain an advantage over competitors. If we consider organizational capability as the idiosyncratic, difficult-to-copy resources available to the organization, then a resource-based view (RBV) can be very useful in interpreting this fourth link. A RBV (Penrose, 1959; Grant, 1996) helps to explain the importance of being different in turbulent and highly changeable environments. We know that disruptive innovations create a new market. From this point of view, Prahalad and Hamel (1990) were right in

saying that "the critical task for management is to create an organization capable of infusing products with irresistible functionality or, better yet, creating products that customers need but have not yet even imagined". An interesting 2012 empirical study shows that the organizational ability to sustain innovation has become critical for sustaining business success and that this ability depends largely on the capability to be responsive to change (Lewrick et al., 2012). In order to generate disruptive innovation, both the ability to be different and the ability to change are important. Similarly, an ExO needs to distinguish itself at the beginning of its growth and to change in later stages when its market begins to transform.

Proposition 5: An organization can grow exponentially if their capabilities are favorable to the emergence or acquisition of disruptive innovation.

Fifth link (Organizationational capability-rate of early adopters-disruptive innovation-ExO). As shown in Figure 3, a disruptive innovation can lead to the emergence of either a linear or an exponential organization. All four links that we have analyzed up to now could also be applied to organizations that are not exponential. A linear firm, just like an ExO, needs favorable environmental conditions and adequate wealth of organizational capabilities. The real difference between ExOs and linear organizations (LOs) is time. An ExO grows much faster. In other words, the innovation on which an ExO's growth is based spreads at unprecedented speed. Figure 1 indicates that ExOs reach the value of a billion dollars in just few years as a result of their innovations' diffusion rate. If we did not consider the time involved, all organizations that reach the value of one billion would be considered exponential. In that case, no difference would exist between ExOs and LOs, and writing about this topic would not make sense. The reason for considering the rate of first adopters is simple: the higher this rate, the higher the likelihood that an organization becomes exponential. This indicator immediately indicates an organization's degree of growth.

Proposition 6: A disruptive innovation can lead to exponential growth only if the organization is able to make the innovation attractive and the rate of its adoption is high.

3 Future research horizons and implications.

Consistently with the "actuality-potentiality" approach represented in Figure 2, an ExO results from a complex process involving many environmental and organizational factors (actuality), without which creating any type of innovation (potentiality) is impossible. Innovation is considered potentiality because from it several new possible scenarios can be derived. On the one hand, it can be disruptive or non disruptive; on the other hand, a disruptive innovation is also a potentiality because from it a LO or an ExO may stem. Much depends on the way in which the disruptive innovation is managed, valued and adopted. Only one of this potentiality's possible outcomes is represented by ExO (actuality).

The propositions we have seen are not the secret formula for success. Many other elements contribute to determining an ExO's fate. Nevertheless, if the environment is hostile to disruptive innovation, if the organization is not able to develop or acquire innovation, if the marketing strategies are wrong and the new product or service has a low rate of first adopters, then it is unlikely to give rise to an ExO. From this viewpoint, the propositions do not show what elements are sufficient, but rather show what elements are necessary for exponential growth.

This research domain's future is yet to be written. We have many horizons to explore. We will examine four.

First Horizon (*new extended atlases*). One of the possible directions in which future research might be aimed is linked to this simple question: What other conditions are associated with the emergence of ExOs? In other words, we could extend the static and moving interpretations, incorporating elements that are not taken into account here. The new expanded atlases would contain much more information and would describe more accurately this kind of organization.

Second Horizon (*quantitative atlases*). Starting from the theoretical framework proposed here, we can proceed to collecting, processing, and interpreting data in order to test empirically some concrete hypotheses. This test would allow us to measure the strengths and weaknesses of the conceptual approach just discussed.

Third Horizon (*fragmented atlases*). Taking into account only a part of this conceptual framework, it would be possible to notice details that escape those who observe the entire theoretical model. For example, a possible horizon of research could focus on one of the five links that we have seen in paragraph 2.2.

Fourth Horizon (*sustainability atlas*). Other research can be directed to one aspect that is not examined in depth here: an ExO's sustainability. The model in Figure 7 introduces some variables that become relevant in the long term and that help us answer many questions, including the following:

- How long does the organizational growth remain exponential?
- How does the strategy of the ExO change when its market is disrupted by other ExOs?
- In the long run, are all organizations likely to become linear?

For this reason, the fourth horizon ideally encompasses all other possible horizons.

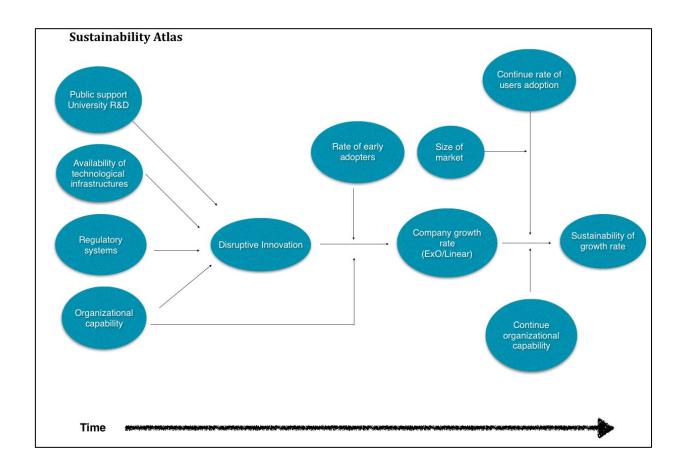


Figure 7. One possible future research horizon could focus on how an ExO changes over time.

At this point, this work's theoretical implication should be clear: to propose a conceptual approach to ExOs' complex reality, in order to understand not only the behavior of these organizations, but also the elements that determine their emergence and their impact. In other words, the aim is to bring attention to not only ExOs, but also their surroundings. Based on the evolution of this theoretical approach, future research should also find practical implications.

4_Conclusions. The organizational year zero: from the Exponential Organizations to the Exponential Organizational Studies

In the coming years, we will hear more and more about Exponential Organizations. Salim Ismail and his colleagues have the credit to have revealed for the first time this theme in a systematic way. The ExOs are very different from the organizations we usually study. All of the following is dramatically different from the reality we know: the way ExOs manage human resources or the processes; the way they face the market; the way they adapt to environmental changes; the way they create new markets and affect the environment; the way they create, obtain and transfer knowledge; the way they use technologies; and the way they have socio-economic impact. The more ExOs differ from traditional organizations, the more organizational studies must to be different from traditional organizational approaches. This is year zero for organizations. Linear organizations will always exist, so the challenge is not to replace the traditional approaches with new ones but to depart from traditional approaches and build new analytical perspectives. I deeply believe that the discipline which studies a certain phenomenon must evolve at the same speed as the phenomenon studied, in order to contribute to the evolution of knowledge about changes affecting our society. Only in this way will managerial science continue being an authentic social science.

The ExO phenomenon's speed is very fast, and our understanding risks falling behind. ExOs are changing the world in an unprecedented way, and future research will represent reflection on not only these new organizations, but also our fate.

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Digital platforms and co-working spaces used as instruments for improving the strategic management of Human Resources in emerging economic and organizational environments

Abstract

In this present economic situation, the use of freelance workers, whose role in organizations runs side by side with that of full time workers, is becoming increasingly more important. The joint presence of these two very different forms of human resource, represents an important challenge to Human Resource Management, which has to adequately exploit the qualities of those who work within the organization, irrespective of the type of contractual ties they may have. Managerial literature has come up with limited contributions on this topic and without finding effective solutions to the integrated management of such an assortment of human resources. This article proposes a theoretical model for the strategic management of human resources, based on the use of digital platforms and co-working spaces. This particular model outlines how these two instruments can assist the work of HR managers, especially with the conception and implementation of recruitment and motivational processes.

1 Introduction

In this present economic situation, the idea that the labor market is undergoing profound transformation, is becoming increasingly more accepted. According to the Bureau of Labor Statistics, more than 53 million Americans earn income from untraditional forms of labor. This is a stunning number of people if you consider that we are talking about 1 in 3 American workers. You frequently hear people talk about the growth of the so-called "freelancer economy" (Schrader, 2015), which is a form of economy in which full time and steady employment both lose their central role in favour of contractors (Storey et al., 2005), who operate autonomously and without stable work ties to any particular company. The number of temporary works is set to increase over the

next few years, with this trend not only involving lowly qualified workers, but also concerning fields with a high concentration of professional workers (Miller & Miller, 2012).

The presence of freelancers is seen as an essential condition for acquiring specialised skills and for improving innovative processes within an organization (Burke & Cowling, 2015). Some researchers talk of "micro-work" or "click-work" (Webster, 2016) for highlighting the role Internet has in this recent tendency, which is rewriting the rules of engagement in this current economic context. The fact that there are so many freelance workers should not, however, mean that their role lessens that of full-time workers. In an interesting article, for example, Barley and Kunda (2006) quote the words of a renowned business strategist, Charles Handy, who asserts that flexibility is the key to survival in a global economy and that this flexibility can only be achieved by using freelance workers within the business. Handy's idea is that these workers should be used alongside full-time employees so as, in the event of problems arising, the company can continue to rely on its own employees and easily freeing itself of contractors. Even with differing dynamics, the situation that is occurring on the labor market and, subsequently, within organizations themselves, is an authentic process of the co-presence of employees and independent workers. In such a similar situation, the role of Human Resource Management becomes crucial, and it has to able to show that is able to manage, in an integrated manner, both types of workers, in order to avoid losing the synergy of its employees to that of the contactors, and vice versa. Starting with a review of the most important economic and managerial literature on this topic, we can start to identify those factors, in the presence of which organizations can nowadays more easily come into contact with and manage this increasingly wide ranging field of Human Resources. There are at least two elements that appear to assist HRM policies and that help make these policies more effective, especially with regards to recruitment and motivation. These are digital platforms and co-working spaces. Both elements are unique features of this emerging economic context, referred to by many as the "gig-economy" (Zumbrun, 2016). Despite the fact that this issue is common knowledge, academic literature appears to pay little attention to the matter. The aim of this article is to create a starting point for future contributions by those researchers who decide to concentrate on this very current theme, by supplying support to new managerial practices aimed at the management of an ever increasing range of human resources. The aim of this article is also that of conveying the idea that the proper use of digital platforms and co-working spaces can lead to the strategic use of Human Resources which, in an economy ever increasingly based on knowledge, represent the true source of distinction and success of a company.

2 Gig Economy and forms of freelance workers

While there is still no clear and unequivocal definition of the "gig economy", we can still trace the most important features of this particular aspect of the economic scene, within which the traditional forms of labor seem to have less importance than before. We can consider the "gigers" as being those who earn their livelihood with an occupation that has no job continuity or stability. All of the transactions relative to this form of employment are usually applied to the fields of digitalized professions. And it is thanks to digital technology that engagement between those who look for freelance workers and freelance workers themselves, can take place. And while these are two extremely different elements, we can often confuse the "gig economy" with the "sharing economy". Even though the two concepts can partially be overlapped, there is no full connection between the two in terms of objectives and relational dynamics. The *gig economy*, on the other hand, is mainly based on employment deriving from online platforms. According to some, this new economic context will lead to a slow but inevitable decline in full time employment, traditionally linked to fixed hours and salaries. With this in mind, the contractor's work is definitely less secure, and this can only have a negative impact in terms of motivation for those who have the role of a freelancer within companies who take them on.

According to Sara Horowitz, the founder of Freelancers Union, "Freelancing is the new normal" and the "Freelancing in America: 2016" report, a yearly independent research commissioned by

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⁹ Available at: https://www.upwork.com/i/freelancing-in-america/2016/

Freelancers Union and Upwork, both seem to confirm this notion. The voice of these workers will increasingly be heard at a political level. And as the report states, it appears that two out of three independent workers are inclined to vote for candidates who support the interests of freelancers, whose weight at an economical level is already considerable. Data obtained (Freelancing in America Report, 2016) suggests that freelancers earned approximately a trillion dollars during 2015. Some people become freelancers out of need, while many others do so by choice, a choice dictated by the desire to receive higher recognition as a worker, and by having the opportunity to decide on their working hours with greater flexibility. One of the reasons that the number of freelancers continues to rise can be found in the fact that it is an occupation which guarantees a great deal of flexibility. If, on the one hand, independent workers can more easily manage their daily routines, they can also find additional work, alongside that of their main occupation. In this way, a freelancer has considerably more opportunities to earn a double income compared to a regular employee.

Obviously, the explanation of this enormous growth in this form of employment, is technology. Many freelancers can easily offer their services thanks to the wide range of innovative digital instruments, which are ever increasingly connected to small and large worldwide networks of companies and workers, and which can be accessed by any type of electronic device.

The fact, however, that this sector is undergoing continuous expansion, must not lead us to presume that the field of freelancing is without its problems. Once again, according to the "Freelancing in America" report, independent workers worry about a number of problems that concern their profession. The main concern regards the uncertainty surrounding their income and the worry of not receiving adequate payment for their services. Secondly, there is the question of medical insurance. Not having full-time employment means that often they find it difficult to obtain insurance policies that can guarantee the highest level of coverage for the workers and their families.

The expression "freelancer" does itself contain a multitude of meanings and which, as we will see in the following paragraphs, can be interpreted in various ways. Etymologically speaking, the term derives from medieval jargon for describing "freelance" mercenary warriors whose services were not exclusively offered to any single master. Nowadays, freelancers are people who negotiate on their own behalf with an employer who is interested in specific professional aspects that only a freelancer can offer.

Seeing as the term "freelancer" is, in itself, far too generic, let's try to shed some light on some of the meanings that are usually associated with it. The "Freelancing in America" report sets out 5 different categories of this type of worker:

- 1) Independent contractors
- 2) Diversified workers
- 3) Moonlighters
- 4) Freelance Business Owner
- 5) Temporary workers

In the following paragraphs we'll discover the characteristics of each of these categories and learn how their presence plays an important role in the *freelance economy*.

2.1 Independent Contractors

This is the largest category of freelancers. They are workers who do not have one single employer and who carry out their profession in complete autonomy. Their services are temporary and are linked, on an ad-hoc basis, to specific projects. The amount of freedom with which independent contractors carry out their profession means that they can manage their work and spare time with wide margins of autonomy. This is the complete opposite to full-time employees who have little freedom in balancing these two aspects.

If contractors, therefore, have the option of operating in complete autonomy, this is, above all, due to ICT technology which, more or less, allows people to work anywhere in the world and at anytime (Sayah, 2013). Issues of the utmost relevance have, in the past, been raised about the figure of the independent contractor. As Reilly mentions (2015), this category of freelancer should be correctly

classified, as very often their role within an organization is very similar that of an employee, and that it can become difficult to distinguish between the two.

An emblematic case was that of Microsoft which, in the eighties, employed a large number of contractors who became so fully integrated into its workforce that in the end it found itself forced to acknowledge their status as employees, therefore having to pay all relative taxes to this new and effectively permanent workforce. The problem of misclassification is one that is extremely prominent in countries like the United States, where companies often hire workers as independent contractors, so as to deprive these workers of certain benefits and avoid the expenses of higher salary conditions. According to some researchers, the wide use of contractors within an organization can be explained by the latter's desire to reduce operating costs while maintaining a high level of flexibility while, at the same time, opening its doors to newer skills (Lemmon et al., 2016). The use of contractors can lead to cost reductions on many fronts. One of these concerns the cost of personnel training. Contractors, in fact, bring to the organization their own means, their own skills and experience, reducing high training costs incurred by employers, which they would otherwise be forced to meet for their employees.

2.2 Diversified Workers

This is a category of workers who build their income by having different occupations. In one particular week, for example, a person could work as a secretary, as a tour guide, and as a proof writer. Literature on the subject does not specifically deal with this category of freelancer, even though in the United States alone, there are around 15.2 million diversified workers. At a first glance, it would appear that this category of worker contributes very little to the growth of a company. This is not the case however. Let's take, for example, a company experiencing a staggering rate of growth, such as Uber. In this case, the task of transporting people, the core business activity of the Californian colossal, is assigned to diversified workers. Independent workers usually find it hard to maintain themselves by solely working as a Uber driver and it is for

this reason that the definition diversified worker is particularly adapt to the context of this type of business. The Uber example helps us to highlight the fact that in the context of the gig economy, not all freelancers are the same. And it's for this reason that not all of them contribute to the growth of the business in the same way and to the same extent. We should then consider that a diversified worker possesses skills that can be used in various and often very far ranging fields. Here we find another difference between diversified workers and the independent contractors that we mentioned earlier. The latter carry out a more specific line of work and operate with greater incisiveness in the organizational framework in which they work.

2.3 Moonlighters

Moonlighters are professionals who, most of the time, have a generally stable occupation, outside of which they have a secondary occupation from which they earn additional income, on top of the income earned from their main occupation. The classical example of a moonlighter is that of a teacher who, in the mornings works at a school and then offers private lessons from home in the afternoons. Contrary to the diversified worker, moonlighters have a full-time occupation and prefer to dedicate their skills to activities similar to their principle field of work, and while the diversified worker carries out very different forms of work, the moonlighter will generally remain in the same professional sphere. The moonlighter is an abnormal category of freelancer. This type of worker does, in fact, already have a full-time occupation and could, therefore, avoid the burden of having a second job. Some say that by virtue of this indisputable evidence, some moonlighters have a second occupation as they are strongly attracted to the idea of being able to avoid paying taxes and therefore earn an income which is completely free of all forms of duties (Oliver, 1993).

In this respect, moonlighting is considered to be related to so-called unreported employment, in other words, types of employment that the State is unaware of. Various studies have dealt with this "invisible" labor market (Meriküll & Staehr, 2010), underlining how difficult it is to supply precise data on this trend, especially if we consider that workers involved prefer to remain anonymous

(Schneider F. & Enste D.H., 2000). As a result, the "shadow economy" is a very difficult argument to deal with, especially due the causes that go towards creating it. With regards to this, a number of methods have been put forward to suggest how to carry out exhaustive research on this topic (Dell'Anno, 2016). Turning our focus back to this article, we can, without doubt, assert that the presence of moonlighters within modern organizations should be carefully monitored in order to comprehend the extent to which the current global productive structure depends on the undeclared workforce and, as a result, the level of influence it has on the shadow economy.

2.4 Freelance Business Owner

This is a person who is half way between being an independent contractor and a business owner. The freelance business owner is, in fact, he or she who employs one or more employees for offering a particular service. This would be the case of a communications expert who appoints him or herself as the head of a team of people in order to set up an agency. In that way, the services offered by the freelancer are enhanced by the presence of other workers. The freelance business owner can appear to be a professional hybrid figure which is difficult to place in any determined category. In essence, however, this is a freelancer who employs other freelancers for conducting a freelance business. Unlike a business owner, the freelance business owner takes on fewer risks and doesn't concentrate on the same line of business for long periods, as he or she is mainly concentrated on single projects. Furthermore, the freelance business owner runs a business enterprise in which he is personally involved, and this is a further difference between freelance business owners and a traditional business owner who, in truth, never employs him or herself. In order to work as a freelancer in an economically sustainable manner, and for guaranteeing acceptable standards of efficiency and effectiveness to his business, some people suggest that the freelancer should think like a business owner (Goodman, 2010). In this way, an entrepreneurial approach would help the freelancer to control with extreme care a series of indicators that can reveal the progress of his or her business, such as the hours dedicated to each project, administrative costs and financial requirements. From

this point of view, the freelance business owner appears to be the most adapt person to apply this kind of approach. The relationship between freelance enterprises and businesses is at the centre of a debate involving academic research. According to some, freelancing should be recognized as a form of business enterprise (Kitching & Smallbone, 2012) as this approach would lead to clear advantages in conceptualizing and interpreting the phenomena in a statistically more accurate manner

2.5 Temporary workers

This is a category of freelance worker that has a single employer or, in any case, a single project to which they are dedicated. Their occupational status is temporary in the sense that, unlike an independent contractor, their services are not used over a continuous period of time but for short and specific periods, with gaps and interruptions, meaning that there are moments in which the worker is completely inactive. This is an example of companies that hire seasonal personnel. The business of these companies can increase, for example, during summertime or Christmas holidays, in periods of the year, therefore, when the number of employees is insufficient for meeting demand for products and / or services, which substantially increases during these periods. A large number of employers find that resorting to temporary workers is an advantage, as most of these workers have already been through a preliminary selection process with specific agencies which test the real merits of the workers' expertise and the potential contribution they can supply to the business in which they will be placed.

This category of worker represents a considerable proportion of freelancers, so much so that between 1998 and 2008 the number of so-called TAW (Temporary Agency Workers) doubled (CIETT, 2010). According to some, these agencies supply a valuable service to organizations as they help to provide greater flexibility to the labor market, at lower labor costs, with less responsibility for HR managers and lower expenses for organizations in terms of recruitment and salaries (Torka, 2004).

With regards to temporary workers, there are significant psychological aspects which should be considered. One of the most important is definitely that of commitment, which is particularly difficult to strengthen as workers hired for a short period of time will unlikely feel the desire to be committed with any particular enthusiasm and intensity to the business they will be working for. Some branches of research, however, show that good training techniques for temporary workers can generate surprising and positive results in terms of commitment (De Cuyper & De Witte, 2008;).

3_The impact of digital platforms at an economic-organizational level and new techniques used by Human Resource Management in recruitment processes.

The presence of digital instruments in the world of labor, which help to connect the supply and demand of labor, have become increasingly prominent over the past years. The new agents, on top of the traditional agencies, are those digital platforms where people that are looking for employment can engage with organizations and assess their requirements. Digital platforms are completely transforming the labor market and the means by which organizations focus on hiring new staff. The "Connecting talent with opportunity in the digital age" (2015) report by McKinsey clearly illustrates the impact digitalization has had on a global scale. Experts claim that by 2015 digital platforms will add \$ 2700 billion to the global GDP. This is a significant amount and it demonstrates how finding new employment becomes quicker and more effective. Thanks to these new digital platforms, for example, anyone can take up professions that best suit their skills and experience. In countries with particularly high unemployment rates, being able to create a more dynamic labor market is an undeniable advantage. Organizations that use these instruments do not only use them for placing new personnel into their organization, but for improving the motivational aspect of their workers as well. According to the McKinsey report, the use of these platforms is linked to a 9% productivity increase and a reduction in recruitment costs of around 7%. If, on the one hand, it seems clear that technology is changing the labor market (Howard 2015), on the other hand, academic research has so far failed to show any tangible interest in the connection between the use of digital platforms and the increase in the number of independent workers. On this last topic in particular, there are no official statistics that outline in any precise manner the extent of this trend (Manyiika et al., 2015). When we discuss the role of digital intermediaries in the world of labor, we should carefully consider the influence that platforms such as LinkedIn, Monster and TaskRabbit have. Thanks to these platforms, millions of people around the world have access to professional openings that they would otherwise not have or even know about. The offer and demand on these sites meet up quickly and easily, allowing a huge reduction in the amount of time a worker remains idle, workers who have a greater chance of moving from one position to another without being unemployed for too long.

The McKinsey report distinguishes three categories of digital platforms:

- Platforms that offer the opportunity of finding work and workers; sites such as LinkedIn,
 Monster, Vault, Indeed, Careerbuilder, Xing and Glassdor fall into this category,
- 2) Platforms that create a connection between those who are looking for a particular service, and those in the position to offer that service. In this category we find sites such as Uber, TaskRabbit, Angie's List, Upwork and Amazon Home Service;
- 3) Platforms that discover and manage talent. Examples of these sites are Good.co, Payscale and ReviewSnap.

One of the main characteristics of these sites is that workers can freely choose the type of employment they are looking for, as well as the companies for which they would like to work. In the same way, an employer can set out the minimum requirements candidates should have for any particular position. On a larger scale, the impact digital platforms have can be perceived with particular regards to an increase in the flexibility of the labor market. This flexibility has very evident consequences with regards to productivity, true salaries and levels of unemployment (Davis & Haltiwanger, 2014). The theme of flexibility is one that has great importance in economic literature (Shimer, 1998, 2001; Molloy et al., 2016; Flek et al., 2015) where we can find evidence of a strong connection between a low level of flexibility of the labor market and the deterioration of

the economical performance of that particular country. If digital platforms, therefore, produce greater flexibility and, as a result, improvements in unemployment levels, real salaries and productivity, we can deduce that the expansion of this new instrument for recruitment will, in the long term, provide considerable economical advantages. Researchers have yet to provide any solid contributions to this topic, and they have not yet concentrated on the direct link between the expansion of these digital platforms and the economical performance at an industrial or national level. For the time being, we can focus on the reports described in fig.1, while future attention should be paid to the factors outlined in fig.2.

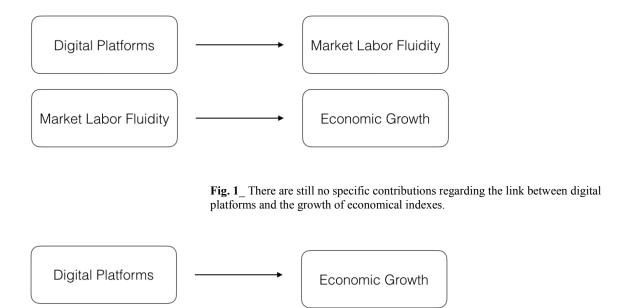


Fig. 2_ It would be interesting to determine if and in which way the use of digital platforms helps to improve economical indexes

Fig. 2, in some ways, summarises the reasons why it is important to discuss digital platforms and the impact they have on the labor market. This market is, in fact, going through a period of profound change where online digital platforms will play an increasingly important role. The use of digital social instruments is currently booming as never before, especially if one considers that around 29% of the world population has at least one active social account (We Are Social, 2016). If, then, we turn our attention from the macroeconomic context to that of organizational aspect, we can not fail to consider the impact these social platforms are having on human resource management

mechanisms, while many researchers are already outlining the extent of this current transformation (Poba-Nzaou et al., 2016). Digital platforms are revolutionizing the way in which organizations communicate with the outside world, making their influence felt in numerous aspects of the life of an organization, such as marketing, operations and human resources (Aral et al., 2013).

Due to the fact that these instruments are relatively new, the various engagement mechanisms by which employers come into contact with workers has yet to be explored in any detail. One of the changes is the creation and sharing of knowledge which, more than ever before, can speed up innovation processes thanks to the way it is created and shared. Over the past few years, specific studies have been carried out on techniques human resource managers can use to deal with the new challenges presented by technology. In this field of research, there is a range of contributions by the Strategic HRM itself (Lengnick-Hall et al. 2009; Marler & Parry, 2016) and of the so-called e-HRM (Strohmeier, 2007; Ruël & van der Kaap, 2012). According to Marler and Fisher (2013) the two fields of research are closely connected, even if we can not describe it as a random strategic approach between human resources and e-HRM. The appearance of these two branches of research is relatively new, and in both cases the emphasis is placed on the role that human resource management can play within organizations when it comes to implementing changes, thus minimizing personnel management costs. It is a fact that the role of HR has changed since the introduction of Internet, helping the creation of an ever increasingly tight relationship between workers' skills and the business objectives of the company, even if some researchers stress that such relationship is not always achievable (Marler, 2009). The Strategic Human Research Management (SHRM) can be observed from two different angles: the strictly strategic angle, which assesses the impact of HR policies on the basis of the engagement the business has with the outside world (Porter, 1985), and the angle which has closer ties to the Resource-Based View (Penrose, 1959). In the first case, while the impact on the outside world is considered to be a determining factor, good human resource management policies can only be successful to the extent of its alignment to the overall strategies of the business. In the second case, the determining factor is considered to be the ability of the organization to place its intellectual wealth at the centre of its business strategies. If we observe the SHRM from the RBV point of view, we can determine how important the role of human resource is in organizations which endeavor to invest in the creation and development of knowledge. Dealing with the impact that digital platforms have on the internal labor organization of businesses is somewhat like revisiting the discussion regarding the relationship between technology and organizations. In a famous article, Orlikowski and Scott (2008), after having reviewed four of the world's leading management journals (The Academy of Management Journal, The Academy of Management Review, Administrative Science Quarterly and Organization Science), came to the conclusion that over 95% of the articles published between January 1997 and December 2006 failed to take into any form of consideration the role played technology within organizations. In other words, technology appears to be considered as an evanescent factor and with very little importance, despite its presence becoming evermore widespread and essential. After having reviewed 2027 articles, Orlikowski and Scott discovered that precise reference was made to the impact technology is having on organizations in only 100 articles (4.9% of the total). Some researchers agree in claiming that this form of indifference has intensified over the last 30 years (Zammuto et al., 2007), just at the time when technology has been increasing its presence in organizations. This statistic leaves us somewhat bewildered as it suggests that the academic world has distanced itself from certain subjects, right at the time when it should, on the other hand, be treating them with far greater attention. One possible explanation could lie in the fact that the technological transformation has been so rapid and unpredictable, that the ability to comprehend could not keep up with the speed of progress (Orlikowski & Scott, 2008). The relationship between technology and organizations inevitably has a large influence on the role of HR, which is why we hear more often about electronic Human Resource Management (e-HRM). This subject deals with the use of electronic instruments as support for human resource management and has been conceptualized in a methodical manner by Strohmeier (2007), in addition to other earlier contributions on this subject (Stanton & Coovert, 2004). HRM can carry out numerous operations with electronic support, even

if, when speaking about digital platforms, we only think essentially of the recruitment phase, so much so that we often speak explicitly about e-Recruitment (Sylva & Mol, 2009). As we have just seen, digital platforms are having an impact on the labor market and organizations like never before. More specifically, what has changed is the way human resource professionals operate. While there are similarities in the ways various managers use electronic instruments for recruitment and personnel management, there can be differences in individual fields of industry. For example, Gibbs and his colleagues (2015) studied the impact digital platforms are having on HR roles in the hospitality industry. It should be stressed that the platforms especially designed for the labor market are not the only ones to have a more or less direct impact on the business world. Alongside sites like LinkedIn and TaskRabbit, we should also consider the role of social media sites (Facebook, Twitter, Instagram, Snapchat, ...) which, while not directly connected to the amalgamation of labor supply and demand, they can, however, influence the way workers are perceived and subsequently recruited by HR managers (Girard et al., 2013). In other words, we should consider digital platforms as being a wide ranging field within which both labor and social platforms are contained. Fig. 3 explains the relationship between the use of digital platforms ("for work" and "social") and the new role played by Human Resource Management, with specific reference to the recruitment phase.

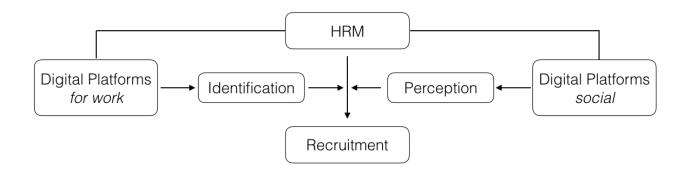


Fig. 3_The use of digital platforms by HRM has varying impacts on the recruitment process, depending on the types of platforms used

Not all digital platforms are the same and even those not specifically designed for the labor market can have a bearing on decisions made by HRM when it comes to recruiting new personnel. Without any doubt, platforms such as LinkedIn help to identify those workers whose characteristics are more suitable to those the business is looking for. A worker can, in fact, promote the entire range of his or her expertise on these sites, placing emphasis, for example, on any of their particularly strong professional expertise that may attract the attention of HR professionals. We should be aware, however, that identification is not enough for finding employment. HR managers very often look at social media profiles of selected candidates before summoning them for an interview, or immediately after the interview, in order to obtain a more detailed picture of the candidate's "lifestyle". From this point of view, social networks represent a force that influences the perception a manager may have of a particular candidate, as often the attention is not only focused on what the person can do, but also, and sometimes above all, on the values the candidate holds and the messages he or she conveys from their personal digital space. It's no mystery, therefore, that a lot of employers read the social pages of those who offer themselves as candidates for employment, in order to decide whether to employ them or otherwise (Brandenburg, 2008; Brown & Vaughn, 2011). The impact digital platforms have on HR practices are not only felt in the private sector but it is also starting to be the subject of studies in the public administration sector as well (Bryer & Zavattaro, 2011; Tufts et al., 2015). If, on the one hand, we can assert that social platforms can influence the perception an organization may have of a particular candidate, on the other hand it is also true that social media can change the perception a worker may have of a certain organization (Melian-Gonzalez & Bulchand-Gidumal, 2016). Over the past years, numerous websites have been created where opinions and evaluations are expressed by workers regarding a particular organization. This trend is known as worker electronic word of mouth (weWOM) (Van Hoye & Lievens, 2009). It is important for us to remember the dual nature of this perception, due to the fact that social platforms accentuate, in both a negative and a positive manner, not only the image of a worker, but also that of an employer. It becomes clear, therefore, that if a potential candidate has a negative perception,

this can keep him or her away from a particular business, resulting in this business appearing to be unappealing and which therefore potentially misses out on skilled candidates. The function of HR in implementing recruitment strategies, is that of understanding how to use its social platforms in the most suitable way. This game of recruitment, in general, and of perception in particular, runs in both directions, from the organization to the individual and from the individual to the business. If "for work" digital platforms allow individuals to identify a work opportunity, and organizations to spot a potential candidate, in the same way social platforms can act on reciprocal perception between individuals and organisations. In a way, it is as if fig.3 were re-elaborated from the point of view of job seekers. The result is shown here in fig. 4.

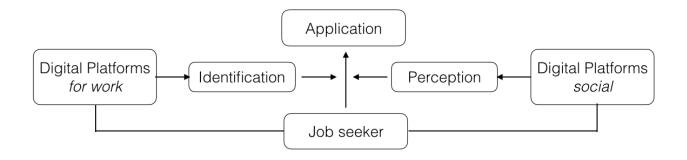


Fig. 4_ The use of digital platforms by job seekers has varying impacts on application processes, depending on the type of digital platform used.

As competition between organisations increases for acquiring the best talents, those who are looking for employment certainly have better instruments for accessing information regarding their career. Today, candidates have a better chance of negotiating than before, as information regarding the subject of their negotiations, such as the salaries of those who have a similar occupation, is more readily available (Phillips-Wren et al., 2016). Managerial literature has, more recently, emphasized the role that these social platforms play in recruitment processes. What, we believe, isn't mentioned, is the fact that not all of these platforms are the same and, for this reason, we should distinguish between platforms specifically created for labor and social platforms. Each of the two types of platform influences decisions made by HR managers and by candidates on two different fronts, identification and perception.

When we talk about *identification*, we are referring to:

- the way in which an organization *identifies* potential candidates, on the basis of information pertaining to their professional characteristics;
- the way in which candidates *identify* an organization for which they would potentially like to work, on the basis of information pertaining to the business activities of the company.

When, however, we talk about *perception*, we are referring to:

- the way in which an organization *perceives* the candidate, on the basis of information pertaining to their extra-professional characteristics
- the way in which the individual *perceives* the organization, on the basis of information pertaining to characteristics not entirely related to its business activities.

Figure 5 shows a summary of the contents of figure 3 and figure 4.

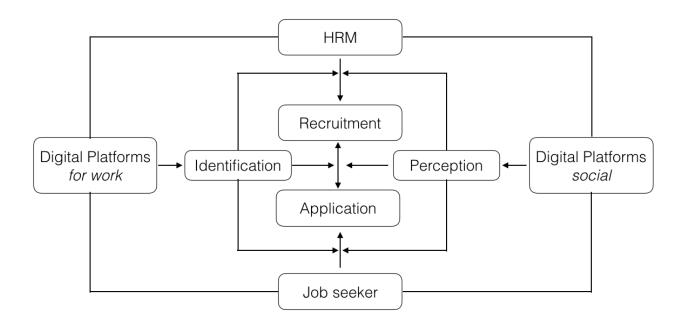


Fig. 5_ Digital platforms have an impact on the identification and perception processes, from both the HRM's and Job Seeker's point of view.

Digital platforms influence the way in which the HRM *identifies* and *perceives* a potential candidate. If both processes are successful, it becomes very likely that the recruitment phase will be reached. In the same way, these same platforms influence the way in which the job seeker identifies and perceives a particular business. Even in this case, if both processes have a successful outcome, the

chances are that the candidate will apply for a position in that particular business. It is apparent that, on the whole, digital platforms not only influence perception and identification by both the HRM and the job seeker, but that they also have a bearing on the engagement between application and recruitment. It is also clear that without a specific application, recruitment would become impossible and that, in the same way, without the wish to reach the recruitment phase, the application would not generate the desired effect. The table shown in fig. 5 is particularly representative of the fields in which both business and individuals with a strong digital vocation operate.

4 The impact Co-working Spaces have on motivational management processes

Over the last few years a large scale phenomenon has been taking place, which is the sharing of work spaces between employees and independent workers. Co-working is somewhat more than just simply sharing an office. It is an opportunity for social interaction, the sharing of knowledge, the continuous engagement between workers, who may even work in fields that are very far apart. In 2015, it was calculated that globally there were around 7800 co-working spaces with a growth rate of 83% between 2012 and 2013 and 36% between 2014 and 2015 (Foertsch, 2013, 2015). According to some, Brad Neuberg was one of the first to use the term "co-working" when, in 2005, he founded the Hat Factory in San Francisco (Jones et al., 2009). The idea at the base of Neuberg's initiative derived from a very simple observation. Until that moment, a worker could choose, when choice was effectively available, between working in an office and working from home. The coworking space, from this point of view, was a form of compromise. A way of disconnecting oneself from the stress of a large office to the solitude of a home. For many, co-working today continues to be just this. In other words, an opportunity for relational engagement outside the boundaries of a traditional office. It is from this relational engagement that significant implications arise with regards to creation and exchange of knowledge. Over the past few years, some researchers have concentrated their studies on the types of relationships that are created by the closeness between

workers within a co-working space, and the flow of knowledge that is thereby generated (Parrino, 2015). The subject becomes particularly interesting if we consider the types of individuals that can be found within a shared space. Traditionally, co-working was a method used by independent professionals who worked as freelancers or who autonomously ran a business enterprise. Gradually, a new reality emerged which saw other individuals inside the confines of these spaces. On this subject, Parrino (2015) outlines the heterogeneity of the new co-working spaces, identifying three large groups of individuals who work inside these spaces:

- 1) freelancers;
- 2) micro-businesses;
- 3) employees or autonomous workers who work for organisations whose head offices are outside the co-working space.

We should not be surprised, therefore, if an increasing number of organisations decide to set up their head offices in spaces like this. The human resource managers in these organisations inevitably find themselves having to face new dynamics of knowledge management. In these cases, managing knowledge is no longer a *closed* process, a process which is born within the more or less clear confines of the business, but it becomes an *open* process in which the flow of knowledge originates from its own workers as well as workers from other organisations. This is the result of proximity between workers, which characterizes a large number of young companies that decide to operate from within a shared structure, and where the presence of another business literally becomes physical.

Inside these co-working spaces, companies not only let their own employees work but, in the same space, they can also attempt to hire new freelancers. Genuine alliances based on the dynamics of co-working can be born from methods of collaboration of this kind. These alliances can grow in the spaces where these individuals physically work, or they can extend themselves beyond the material confines of the work space, leading to virtual co-working (Andrade et al., 2013). The choice of co-working can be the source of numerous benefits. Among these, many underline the clear benefit of

being able to increase the general levels of work productivity (Ross & Ressia, 2015), or that of being able to more easily gain access to a wide range of advanced skills, without forgetting the improved results in terms of job satisfaction and work/life balance (Bosua et al., 2013).

If an organization is looking for so-called *staff on demand*, inside co-working spaces appears to be the ideal place for engaging with freelance workers. As Kubàtovà (2014) does in fact remind us, freelancers are like small business people who offer, from within their co-working spaces, their intellectual wealth to all those organisations that require particular skills. This trend is definitely on the increase while very few studies on the matter have researched in full the implications that this phenomena creates. Rus and Orel (2015) tried to discover the reasons that explain the growth of these shared spaces. In their view, the "creative class" plays an important role, a class which thrives on sharing knowledge and information. This category of worker finds co-working the ideal place for satisfying this need for engagement. This type of explanation should be placed into the much wider context of the profound change that the labor market has undergone over the last decade. Pfeffer and Baron (1988), for example, realised twenty years ago that turning to outsourcing had strongly shaped the way in which organisations related to their workers, underlining the emergence of an ever increasing use of outsourcing in labor relations. The approach adopted by organisations within this field of reference, is a sign of changing times. In this current economic context, we have moved from the age of competition to the age of cooperation (Snow, 2015) and co-working, in this perspective, could well be considered as a means for simplifying, which is the cause and effect of the changing scene in which organisations operate. Bouncken e Reuschl (2016), in one of their recent articles, explicitly expressed their desire to introduce the matter of co-working spaces into managerial science. In their opinion, the way in which this topic has been treated up until now, has not been of a systematic nature. One of the points raised by the authors, and which they were keen to underline, was the fact that all we know about co-working is the fact that it is of a semi-scientific nature, as it derives from sources that, in most cases, have no form of influence in the economic and managerial fields. The study carried out by Spreitzer and colleagues (2015) is an exception to this

state of affairs, a study where the authors tried to comprehend why workers who operate inside coworking spaces appear to perform better than their colleagues who work from traditional offices. After having interviewed numerous founders of co-working spaces, the study outlined three fundamental factors, which can help to explain the connection between co-working and growth in individual performance:

- 1) workers who operate in co-working environments feel that their work has greater purpose;
- 2) there is a feeling that there is greater control of their work in co-working spaces;
- 3) "co-workers" feel as if they are part of a community.

Seeing as the benefits that derive from this form of working environment are numerous and apparent, a lot of business prefer resorting to using co-working spaces for certain activities, even if they already have their own office space. In the same way, there are a lot of employees who, instead of going to work in their company's offices, prefer to work at a desk in a co-working space.

As we have already seen with digital platforms, even here there are significant implications for HRM that should be underlined. In this particular case, the process that mostly comes into play is not that of recruitment but rather that of operational management of human resources, in other words, those decisions that can affect the way in which workers perceive their job and their role within the organization. To explain it in other words, the strategic use of co-working spaces can have a direct impact on personnel motivation and, indirectly, on performance. Let's consider for a moment the question just posed regarding the importance of a person's work. As Spreitzer and colleagues (2015) affirm, those who work in co-working spaces treat their work with far greater importance. Being surrounded by people who carry out professions different to their own, for example, can help to highlight the unique qualities of a professional who, in an environment such as this, has no reason to have a competitive attitude, as he or she will probably never come into contact with other people working on a similar project. Working without this kind of pressure can help to reduce stress levels, and a worker who suffers from less stress certainly has greater motivation to carry out his daily activities. In a co-working space, you are likely to come into contact with people

who need advice or who, quite simply, are looking for an exchange of ideas. In this case, workers feel useful, not only to themselves, but to the people around them, and this can only have a positive impact on their self-esteem. It goes without saying that this further example illustrates an obvious source of motivation. At this stage, we can assert that co-working has beneficial effects in motivational terms, and this can only be an important factor to consider for those who work with human resource management. Co-working can, therefore, be used as a general motivational incentive in the sense that having the opportunity to work in a shared space, in which the full independence of a worker can emerge, represents a strong incentive for everyone. In some cases, for example, the mere fact of holding a meeting in an "on demand meeting room", located inside a co-working space, can break that sense of restriction felt by those you constantly work within the walls of the business they work for. Fig. 6 shows us on which fronts future research should concentrate on in order to examine the aspects of co-working practices relevant to HRM which can subsequently strengthen motivation within a company. From the small amount of literature available to us on this topic, we can deduce that there are three general areas where co-working has an effect:

- 1) work identity
- 2) sense of community
- 3) job control

The strengthening of these factors acts on the motivational aspect of the worker. As a result, HRM can, within the boundaries allowed by the use of co-working, more easily manage motivational aspects in the sense that it can be strengthened by acting upon one single source, rather than on three different sources.

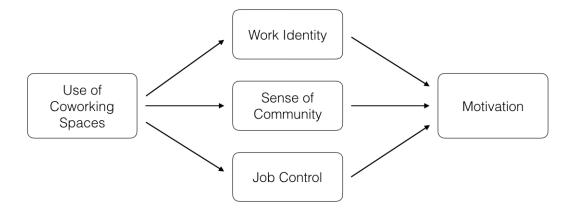


Fig. 6_ Working inside Co-working spaces can improve the worker's conditions on at least three fronts. This type of improvement has a positive effect on motivation.

Some businesses set up their head offices inside co-working spaces or leave their workers free to use them (Waber et al., 2014; Spreitzer et al., 2015). In both cases, what is significant is the effect this decision has on the motivational aspects of workers.

With regards to the link between *identity* and *motivation*, there are various studies that explain how the first factor can lead to an increase in the second. According to widely published theories, work identity has a positive effect on engagement which, in turn, inevitably leads to an increase in motivation (May et al., 2004; Popova-Nowak, 2010). For this reason we can assert that if the coworking space acts on identity which, in turn, has an impact on motivation, there must therefore be a connection between co-working and motivation, albeit an indirect one. With reference to this second connection, it should be said that the generic term *sense of community* can take on numerous meanings according to the field in which it is used (Pretty et al., 2006). Some experts have recently spoken about the need to reconsider businesses as if they were communities (Mintzberg, 2009). Nevertheless, the sense of belonging to a community, when we talk about co-working, does not develop within the boundaries of the company, but in spaces where one is surrounded by workers coming from different fields and with diverse backgrounds. In this case, the method used for improving motivation is different to that normally used. Usually, for example, HRM must deal with

activating processes aimed at increasing commitment, as feeling part of a company in which you work helps to increase motivation (Meyer & Allen, 1991). In the case of co-working, however, it is always the sense of belonging that triggers motivation, but with the important difference that this is not a sense of belonging to the company you work for, but to your community of co-workers. In one sense, the place in which the sense of belonging develops (sense of community) and the place in which the effect of this sense of belonging (*motivation*) produces its results, do not coincide. Finally, we have outlined a further connection between co-working, job control and motivation. The literature that is emerging about connections between co-working spaces and the psychological impact on workers, tells us that working in an environment which is accessible 24 hours a day, helps to provide greater control over a person's work (Spreitzer et al., 2015), as they are free to decide when and how long to work and to manage breaks and workload sharing in full autonomy, and without, therefore, having to endure the stress of strict control over one's work. Managerial literature, on the other hand, often talks about empirical evidence showing proof that control over a person's work helps that person to gain clear benefits in terms of psychophysical health (Minchie et al., 2004; Minchie & West, 2004). If people who control their own work are more greatly motivated and if, at the same time, co-working helps to carry out this form of control, it therefore becomes evident that a connection similar to that outlined in fig. 6 can be found. We would need to combine the traditional literature, looking into Human Resource Management and Organisations, with the more recent studies regarding co-working, so as we can create a new framework, highlighting how new human resource management processes can influence psychological and managerial mechanisms which have widely been discussed in the past

5 Conclusions

The labor market is ever increasingly characterized by the presence of independent workers who, in a very generic way, are known as *freelancers*. These workers make up a large proportion of the total workforce currently present in the current economic context and, for this reason, in order to comprehend their role, we should interpret the concept of freelance workers in the correct way. In this article, we have tried to follow the differentiation offered by "Freelancing in America", thanks to which we can deduce that each and every freelancer plays a different role in the so-called Gig Economy. Organisations, on the other hand, are nowadays having to manage Human Resources which are becoming more and more varied. If, in fact, on the one hand the presence of contractors in business is increasing, on the other hand, the role played by full-time workers is fundamental. As a result, HR mangers are more increasingly finding themselves having to deal with an integrated personnel management system, in other words, a system which has the ability to enhance the contributions offered by both categories of workers. After having reviewed various studies taken from managerial and economical literature on this topic, we found that there are at least two factors that are becoming fundamental for modern organizations, as they provide support for personnel management policies, with regards to both recruitment and motivation. These factors are: digital platforms and co-working spaces. With regards to digital platforms, we have attempted to focus on the role they play in the recruitment process, highlighting the fact that not all platforms are the same. Despite the fact that a large number of researchers do not place emphasis on the difference between these platforms, it has to be said that they have varying methods of use and purposes. If, in fact, "for work" platforms such as LinkedIn and TaskRabbit assist HRM in identifying workers, "social" platforms such as Facebook and Twitter help to catch aspects of potential candidates (values, beliefs, lifestyles) that would otherwise remain in the shadows, and while these aspects are not directly connected to the candidate's professional skills, organisations consider them as being very important. With regards to co-working spaces, on the other hand, the small amount of literature that is currently available to us for consultation tends to assert that these spaces favour the growth of at

least three psychological aspects of workers: work identity, sense of community and job control. A vast amount of literature is available on these three factors which tell us without a shadow of doubt that each of them lead to an improvement in motivation. When we combine, therefore, the emerging literature on co-working with traditional literature focusing on motivation, we can conclude that workers who operate within a shared space, experience a marked improvement in their performance.

6_Implications for HRM

The current context of the so-called "freelancer economy" sees organisations taking on new challenges, which are mainly connected to personnel management. As Human Resources change, we need to rethink and redesign those approaches which were used in the past for resolving worker management problems. Some of the most important problems are those connected to recruitment and motivation. An appropriate use of digital platforms and co-working spaces can lead to a strategic use of Human Resources, as talented people not only have to be enticed and identified in the correct way but, once they are hired, they have to be motivated in the best possible way in order not to risk losing the precious contribution that can be gained from their individual performances. Nowadays, these digital platforms represent one of the main gateways to talent, and talent, in an economy which is ever increasingly based on knowledge, is the principle source of success and differentiation. In the same way, co-working spaces are rapidly booming, a factor which leads us to ask precise questions as to the reason behind this trend. In all likelihood, workers - freelance or otherwise – feel an ever increasing need for autonomy and self-determination when it comes to managing their daily activities, and co-working spaces successfully satisfy these expectations. Once again, then, the challenge facing HRM is that of adapting itself to management procedures and to the policies of our changing times, because never before has this change been so rapid.

Fig. 7 sums up the theoretical approach described in this article.

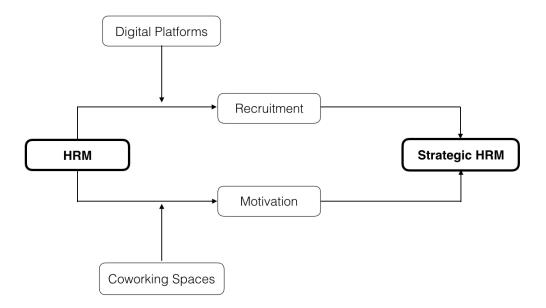


Fig. 7_ The use of digital platforms and resorting to co-working can assist HRM management in improving two important personnel management processes, such as those of motivation and recruitment. In this way, strategic human resource management is simplified.

By using precise instruments or solutions, such as digital platforms and co-working, Human Resource management can become strategically important in at least two ways. From the first point of view and with regards to recruitment, digital platforms supply a more detailed picture of the candidate that is about to be hired. In this way, the human resource that is about to be placed into the heart of the business, can be evaluated in greater detail. From the second point of view and with regards to motivation, co-working improves the psychological state of workers in a number of ways and this can only lead to an increase in individual performances, indirectly improving the all-round performance of the organization.

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The impact of Staff on Demand on HRM Practices and Organizational Growth within young fast-growing companies: a Swedish multiple case study.

Abstract

Young fast-growing companies operating in the digital economy represent a tendency which has, so far, been little explored by academic literature that has, until now, not been able to form a systematic approach to this topic. Among the many factors that can help to explain their rapid evolutionary dynamics, some researchers (Ismail, 2013; Burke, 2015) underline the so-called use of Staff on Demand, that is to say freelance workers. In other words, freelance personnel. One usually thinks that not having stable relationships with the companies for which they work, contractors can help to streamline organizational processes and therefore favour faster growth. By means of a multiple case study, this paper will show that, contrary to belief, Staff on Demand represents an important but not crucial presence for fast-growing companies. The case study was carried out on a number of recently formed Swedish companies. The collection of data and the interviews with their founders, CEOs and HR Officers, clearly show that the most important role is still played by full time employees and that the presence of Staff on Demand does not effect in any substantial way the growth of a company or of Human Resource management.

1 Introduction

It is an undeniable fact that the labor market is becoming ever increasingly more flexible (Süß & Kleiner, 2010) and that the importance of freelancers within modern businesses, especially fast-growing business, is continuously on the increase (Ismail, 2013). Many businesses prefer resorting to freelance workers for a wide range of activities and this tendency could lead us to believe that traditional contractual employees are losing their importance in business growth strategies. If, on the one hand, it is undoubtedly true that today the economic context in which business operate has

changed with regards to human resources, it is also true that there is no clear indication of the precise roles played by freelancers and fulltime employees in the growth process of businesses, and especially of the younger businesses. Managerial literature has not yet dealt with this topic and there are still very few empirical studies focusing on the rapport between business performance and the type of personnel employed. This subject is particularly interesting if one considers businesses that grow rapidly, in a just a few years and sometimes, in just a few months from their foundation. According to Ismail (2013) these so-called exponential organizations grow at a staggering rate thanks to one fundamental presence: staff on demand. All freelance workers who have no fixed or continuous contracts with the business for which they work, fall into this category. Ismail asserts that staff on demand is an essential element for any organization wishing to grow rapidly. He states that "no matter how talented your employees, chances are that most of them are becoming obsolete and uncompetitive right before your eyes ... for any company today having a permanent, full-time workforce is fraught with growing peril as employees fail to keep their skills up to date" (Ismail, 2013). But are we sure about this? Are organizational processes that determine the growth of young companies really based on the role of freelancers? This study will try to answer such questions with a qualitative approach, concentrating on a multiple case study concerning five young Swedish businesses. Emerging literature focusing on these themes often tell us about what happens in Silicon Valley or, more generally, in the United States (Miller & Côté, 1985; Frick, 2016). It will be interesting then to look at what happens in Europe, where Sweden undoubtedly represents a shining example of a nation that provides huge incentives to businesses, especially with regards to startups. Standing out on the Swedish scene is its capital Stockholm, a city with 900,000 inhabitants that attracts into its confines an extremely high number of "unicorns" or, in other words, fast-growing businesses (Knowledge@Wharton, 2015). With this case study, we will try to determine whether the presence of freelance workers is important or otherwise for the rapid growth of the organizations taken into consideration and in which fields these workers are most widely used. We will have to use a qualitative approach due to the fact that no database is available providing the

precise numbers of contractors used by each of these businesses. It is relatively easy to establish the number of stable workers employed by a particular company, but almost impossible to know how many non-stable workers they use. One hopes that, in the future, data can be gathered on this category of worker that will help in carrying out empirical and quantitative research on this topic. The results of this case study illustrate that the role played by stable workers is still crucial for the growth of a business. This seems to at least partially contradict the theories of those who believe that high organizational performance can not be achieved without resorting to freelance workers (Malone et al., 2011; Ismail, 2013; Johns & Gratton, 2013).

2 Why Sweden?

Over the past few years, the number of startups founded in Sweden has risen enormously, so much so that that some experts claim that this Scandinavian country and, in particular, its capital, are Silicon Valley's true rivals, especially with regards to young companies operating in the technology sector (Benwell, 2014). The Swedish ecosystem, so favorable to businesses, has seen the birth of hugely successful companies, the latest of which is undoubtedly Spotify. It is not easy to identify all of the elements that helped to make this company such a success, but it has to be acknowledged that Sweden has invested massively over the years in creating ICT infrastructures, which represent the true driving force of the current digital revolution. On top of that, Sweden has grown at a vertiginous pace thanks to its efficient educational system which, at a university level, concentrates heavily on subjects concerning engineering and information technology programming. As stated by the OECD, 3.3% of Sweden's gross national product is devolved to research, compared to an average of 2.3% devolved by the other OECD countries (Gaitzsch, 2016). So-called "global thinking" is also very widespread in the whole of the country, which creates a tendency to develop personal and work based links with people and organizations from outside the national borders. This undoubtedly means that people are influenced by circumstances foreign to their everyday reality enabling them to expand their thoughts without confines. From a business point of view,

young Swedish business people are constantly looking for original ideas and new connections with foreign companies and institutions, especially in the United States. A successful example of this is Silicon Vikings, a network of companies with a thousand or so affiliates and with the aim of giving birth to a business community in which Scandinavian business people can work in close connection with their colleagues in Silicon Valley, making their ecosystem of innovation even more solid. It is these very people, with their immense baggage of intellectual capital, that supply the impulse to all the successful projects that the Scandinavian countries are currently experiencing, as human resources are, probably, the main resource that allows these innovative small Nordic businesses to be competitive (Tovstiga & Tulugurova, 2009). Today, Sweden can count on a population that is inclined to internationalization and which is very skilled in the use of new technologies. Since the 90's, the government has granted allowances to families for purchasing computers. It is estimated that today about 90% of Swedish households have internet connection. Those who in the 90's were little more than kids, have grown up in a culture that considers the presence of technology in everyday life as being normal. Everything we have mentioned so far would lead us to believe that the leadership of Sweden, and of Stockholm in particular, has been incontestable. In actual fact, however, Swedes have to cope with a series of restrictive elements, most notably: house prices, taxation and legislative barriers (Gaitzsch, 2016). While politicians are trying to make these factors less hostile to businesses, some startups have decided to move their head offices to Germany. An example of this is SoundCloud, an online musical platform that moved to Berlin for cutting costs. In conclusion, we can state that on the one hand Sweden quite rightly continues to invest in its strong areas, enabling the birth of an ever increasing number of innovative domestic businesses, while on the other hand there are a number of problems that make the country struggle to keep these businesses for any lengthy period of time. The risk is, in fact, that of some of leading companies leaving the country after their foundation, with inevitable and negative consequences regarding unemployment and economic growth. As proof of the enormous potential this Scandinavian country

is able to generate, let's consider those shining business examples that have experienced staggering growth over the past few years: Spotify, Mojang, Skype, Klarna and King.

Spotify is, without doubt, one of the leading musical platforms worldwide. With over 75 million active users and reaching 58 countries, the company today has an estimated value of 8.53 billion dollars. Mojang is itself another flagship of the Swedish economy. Founded by Markus Persson in May 2009, Mojang was acquired by Microsoft in 2014 at a cost of 2.5 billion dollars. Skype, which is the most widely used Instant Messaging service in the world, was founded in 2003 by the Swede Niklas Zennström in collaboration with his Danish and Estonian colleagues. Since its foundation, the company has been the subject of four acquisitions, the last of which was in 2011 when it was acquired by Microsoft for a sum of 8.5 billion dollars. This all goes to show how attractive the business had become in the years immediately following its foundation.

Alongside these companies, there is a wide array of other small business that continue to emerge everyday. Of course, not all of them will reach the growth level of Skype or Spotify, but the mere fact that there are so many business initiatives is solid proof of how the Swedish economical context is considered to be favorable by young Swedish business people.

3 Methodology: an introduction

With this study, we will try to comprehend which role Staff on Demand plays within young fast-growing companies from at least two different points of view, which are summed up in the following research questions:

1st RQ: Does the presence of Staff on Demand influence the way in which Human Resource processes are organized and managed?

2nd RQ: Is the presence of Staff on Demand really crucial for a fast-growing young company?

In order to answer these questions, we will use a multiple case study based on a qualitative approach. The aim is that of contributing to the creation of a detailed and systematic study into the expansion dynamics of young fast-growing companies. The use of this type of approach can be

useful when dealing with questions that researchers have not yet posed or questions that have not yet been adequately researched (Eisenhardt & Graebner, 2007) which, in the case of fast-growing companies, is particularly true. As Eisenhardt (1989) reminds us, those who carry out research into businesses, usually develop their theories basing themselves on pre-existing literature regarding a certain topic. In this case, this choice would be unfeasible due to the fact that there is very little material available on the topic we are dealing with. Research being carried out by the use of case studies continues to meet with increasing success (Yin, 2013), proving that it is valid and perfectly suitable approach for developing new areas of research into fields which have so far been rarely investigated.

Companies with similar business lines were chosen and all of them operate in the field of new technology and have a strong innovative vocation with strong emphasis on digitalization. The only company that differs is Orbital Systems which offers services and products very different to businesses that work in the field of cyber security or website creation. Orbital Systems, in fact, works in the field of water recycling and the choice of including such a company is not casual. It helps us to understand if the management dynamics and the importance of Staff on Demand depend on the type of business a company is involved in. As we will see, the fact that Orbital Systems operates in a field that tends to be different from the other four companies, does not appear to mean that it has a different approach to Human Resource management or a different way of dealing with company growth. The case study was initiated starting from the collection of data relating to various key indicators (sales, profit, number of customers/users, number of stable employees and the number of contractors) and then to interviewing the Human Resource managers, CEO's and founders of various companies. The results are presented in a narrative and synthetic form in Tale 1. In the next sections we will go more in depth into methodological aspects.

3.1 Methodology: Case Study Design

In the words of Yin (2013), "a case study investigates a contemporary phenomenon in its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident" (p.2). In our case, such a statement is totally pertinent and this is why, from a methodological point of view, this work is based on the theories of Robert Yin, one of the world's leading experts in this field.

Research design elements

1) Case study questions

- ✓ Does the presence of Staff on Demand influence the way in which Human Resource processes are organized and managed?
- ✓ Is the presence of Staff on Demand really crucial for a fast-growing young company?

2) Propositions

Since our study is explorative in nature, Yin suggests that "some studies may have a legitimate reason for not having any propositions. This is the condition in which a topic is the subject of 'exploration'... Every exploration, however, should still have some purpose" (p.30).

The purpose of this case study is to create the foundations for understanding the way in which Staff on Demand influences *HRM processes* and the *organizational growth*. In particular we have chosen three main processes:

- a) recruitment
- b) training
- c) motivation

With regards to *organizational growth*, it should be remembered that this concept does not have a univocal meaning, and it can, therefore, take on different connotations depending on the company we are dealing with (Odongo & Owuor, 2015; Don-Solomon & Tiebiri, 2015). Generally speaking,

the growth of the companies that we have taken into consideration is measured by their number of customers. For some, however, growth is linked to other factors, such as its ability to transmit the company's values throughout its workforce.

In consideration of the fact that by preparing this study we will be presenting a *purpose*, the propositions will be listed at the end of this case study.

3) Units of analysis

Yin (2013) reminds us that the units of analysis of a case study must be very well defined. One should never, therefore, concentrate on units that are vague or that are hard to delineate.

In particular he describes units of analysis such as relationships, communities and projects as being "less concrete". On the other hand, he considers units such as individuals, small groups and organizations as being "more concrete". In our particular case, by choosing organizations as our unit of analysis, we are loyal to the solidity guidelines set out by Yin.

More specifically, the units of analysis that we have used are represented by young Swedish companies that experienced very rapid growth in the few years after their foundation. These companies are:

- a) Weld
- b) Detectify
- c) Mentimeter
- d) Apptimate
- e) Orbital Systems

All of these companies have their head offices in Sweden and were founded over the last 5 years. All of them, except for Orbital Systems, offer digital services that range from cyber security to program language development. Orbital Systems, however, works in the field of system development for water recycling. As we will explain in the next few paragraphs, this choice was far from casual. The aim is that of establishing whether a company that is focused on a different type of business perceives the importance of Staff on Demand in any significantly different way.

4) Links between data and propositions

The data gathered during the visits to these businesses were analyzed by using the *Explanation Building* technique (Yin, 2013), the purpose of which is, indeed, to construct an explanation as to why certain circumstances found while preparing this case study exist exactly as they do and not in a different way. As we will see in the "Analysis of evidence" section, this is a particularly suitable approach for those studies that do not intend to put forward conclusions, but rather create the foundation for future research. With this in mind, the purpose of this study is exactly that: to encourage future research on fast-growing companies and the role played by Staff on Demand within them.

5) Criteria for interpreting

As Yin (2013) reminds us, quantitive studies use the criteria of "statistical significance" for interpreting the obtained data. When dealing with a qualitative case study, however, a good criteria for interpreting data is that of using the so-called *rivals explanations*. Basically, if what we forecast does, in reality, not materialize, alternative explanations can be put forward. As we will see, in this case, the alternative explanations are nothing but the arrival point of our study and, at the same time, the starting point of possible future research. These explanations are contained in the paragraph dedicated to the conclusions.

Collection of evidence

Yin (2013) lays out six sources of evidence. Amongst these, one of the most widely used is the interview. In this case study, use was made, in particular, of a *shorter case study interview*. This is an interview carried out in the form of a conversation. More specifically, interviews of an average of 60 minutes were carried out with HR Officers, CEOs and Founders. During these interviews, the people interviewed even supplied numerical data regarding the performance of their businesses in terms of profit growth and the number of customers gained over a certain period of time.

Analysis of evidence

Even the collected data analysis is based on five techniques put forward by Yin (2013). In particular and as already mentioned, the technique of *Explanation Building* was used. On the basis of the collected data, we tried to understand if a fast-growing company changes its procedures (recruitment, training, motivation) on the basis of whether Staff on Demand is present in the organization. Secondly, we tried to explain why Staff on Demand is considered as being either important or irrelevant for company growth. As Yin (2013) explains: "in a multiple-case study, one goal is to build a general explanation that fits each individual case, even though will vary in their details. The objective is analogous to creating an overall explanation, in science, for the findings from multiple experiments" (p. 148).

Even in our particular case, the "details" that emerge from individual cases are all different, but the general picture does present a lot of coherent aspects. This allows us to put forward an overall explanation of the studied tendency.

Yin also states that "in most case studies, explanation building occurs in a narrative form" (p. 147). In this study we used this very narrative form. We will see, therefore, a paragraph dedicated to each individual business, in which the main facts will be presented in a narrative form.

Final report of case study

As Yin (2013) suggests, "your full multiple-case report will consist of the single cases, usually presented as separate chapters or sections" (p. 184). This case study was carried out in this particular way, meaning that a specific paragraph is dedicated to each individual organization.

Research Design Elements	1_ Case Study Questions	a) Does the presence of Staff on			
		Demand influence the way in			
		which Human Resource Processes			
		are organized and managed?			
		b) Is the presence of Staff on Demand			
		really crucial for a fast-growing			
		young companies?			
	2_ Purpose/Propositions	Purpose: How does the Staff on Demand			
		(SoD) influence HRM processes and			
		organizational growth?			
		Propositions:			
		1) Regardless of whether there is Staff			
		on Demand or otherwise, fast-			
		· · · · · · · · · · · · · · · · · · ·			
		growing companies tend to give			
		core business tasks to permanent			
		personnel.			
		2) The recruitment process is more			
		formalized if the company tends to			
		use more permanent staff than SoD.			
		3) The recruitment process is less			
		formalized if the company tends to			
		use more SoD than permanent staff.			
		4) The presence or absence of SoD			
		_			
		within a company does not			
		influence the way in which HRM			
		manages training processes.			
		5) The presence or absence of SoD			
		within a company does not			
		influence the way in which HRM			
		manages motivational processes.			
		6) SoD does not represent a crucial			
		element for company growth.			
		ciement for company growth.			
	3_ Units of Analysis	5 Swedish organizations:			
	5_ Onits of Analysis	1) Weld			
		,			
		2) Detectify			
		3) Mentimeter			
		4) Apptimate			
		5) Orbital Systems			
		2 aspects:			
		a) HRM processes			
		- recruitment			
		- training			
		- motivation			
		b) Organizational Growth			
	4 Links between Data and	Explanation Building			
	Propositions				
	5_ Criteria for Interpreting	Rival Explanations			
Collection of Evidence	Shorter Case Study Interview	1) Founders			
		2) HR Officers			
		3) CEOs			
Analysis of Evidence	Explanation Building	Narrative form			
Final report	Separate sections	One section for each company			
rmai report	Separate sections	One section for each company			

Table 1_ A synthesis of the methodology adopted.

3.2 Methodology: Phases of Case Study

Phase 0 Identification of useful database on Swedish startups

(**January 2016**)

- siliconvikings.com
- stockholm.startup-list.com
- oresundstartups.com
- malmostartups.com
- eu-startups.com
- angel.co/sweden
- swedishstartupspace.com

Phase 1 Preliminary contact

(February-April 2016)

121 young companies operating and headquartered in Sweden.

This contact took place by email and it has been helpful to understand whether and how many companies were willing to participate in this case study research.

Phase 2 Collection of feedback:

(February-May 2016)

> no replies : 58

> not willing: 37

➤ willing: 26

Phase 3_ Direct contact with the "willing" companies:

(May-August 2016)

1st moment: Primary selection

Among the "willing" companies, I've selected the ones founded over the last 5 years. For a total of 19 companies. The contact took place by email.

<u>2nd moment</u>: Secondary selection

I tried to get in touch with the Founders/CEOs/HR Officers of the 19 companies previously

selected, in order to arrange the company's visit and the interviews. I succeeded in doing this

with 14 companies. The contact took place by email and by Skype.

3rd moment: Sample restriction

I restricted the sample to 8 companies, in order to meet the recommendations about the number

of cases which a researcher should include in a multiple case study (Eisenhardt, 1989).

I've selected companies headquartered in Stockholm and Malmö to optimize the time I would

have spent in Sweden.

4th moment: Definition of time limits and procedures for company's visit.

The contact took place by email.

5th moment: Sample redefinition

Three companies canceled their participation in this research a few days before I went to

Sweden. There was no time to replace them.

Phase 4 Conduction of case study

(September 2016)

I visited three companies in Stockholm (Weld, Detectify, Mentimeter) and two companies in

Malmö (Apptimate, Orbital Systems). I had the possibility to visit the headquarters and to get

information and data about revenues, profit, number of users, etc. Furthermore, I was able to

engage in good informal discussions with employees and I interviewed the Founders, CEOs,

and HR Officers.

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Phase 5_ Reporting

(October-December 2016)

For the final report I preferred to write concise paragraphs. Such a decision can be justifiable on methodological ground, at least for two reasons:

- 1) according to Yin (2013), it's important that the researcher makes "an exhaustive effort to collect all the relevant evidence. The documentation of such evidence need not be placed in the text of case study, thereby dulling its content" (p. 203);
- 2) the same author states that "the report should be engaging ... a good manuscript is one that 'seduces' the eye" (Yin, 2013; p.203).

4 The organizations taken into consideration

Weld

Weld is a recently formed business reality whose strategy is so evident that it can be summed up in just a few words: give anyone a chance to build a web site. These very young business people from Stockholm lead by their CEO Tom Söderlund, started off with a very straightforward notion. That very few people know what programming language is or how to use it. These same people, however, could in any moment of their life, need to build a web page with whatever content they desire. And so Weld offers a wide range of mobile and desktop solutions for professionals and companies that desire to convey their message via the web.

The startup was in 2014 and in just two years the company reached decisively positive results. If we look at their annual growth rate between September 2015 and September 2016, there was an increase of 30% in registered users and a 190% increase in revenue. Today, there are a total of 25.000 active accounts. Weld can manage this by employing only 3 stable employees and about 10 contractors. In other words, there is a net prevalence of so-called Staff on Demand. Tom Söderlund confirms to us this impression when we ask about the perceived importance of this category of worker. "Very high" he acknowledges, explaining that "Staff on Demand is flexible. You can try different people for the same task". There are two crucial concepts that could explain the decision by Weld to heavily focus on freelance workers. The first regards flexibility (Eisenhardt & Martin, 2000; Do et al., 2016). With this particular category of human resource we can, in fact, research and find new solutions, both from a point of view of services offered and process management. The second crucial concept is freedom, meaning the option of constantly looking for the highest possible level of the desired skills, and with the subsequent formation and demolition of work relationships. Stable and freelance workers at Weld differ, not only from a numerical point of view, but also with regards to the type of activities they carry out. The former are involved with core-business tasks, such as software development, marketing, fund raising, and to some extent, sales. Freelance

workers, however, essentially deal with graphic design, accounting and general administrative tasks. The choice of taking on workers on demand is not perceived as a temporary requirement. With regards to the future the CEO in fact tells us about the company's intention to maintain a team of a rather reduced number of stable employees and to continuously increase the use of freelancers. All of this is aimed at maintaining business approach coherency, which is that of continuous innovation. At Weld, rather than placing the emphasis on commitment, it is placed on experimentation, meaning the decision of the company to continuously rely on new personnel for creating new synergies and growth opportunities. It is clear that by adopting this approach there is very little room for creating lasting and permanent working relationships, with everything that can result from it at a personal involvement and motivational level. The "new" people are used to find solutions to problems that can arise on a daily basis. Söderlund says "We need to bring like a fresh eyes", confirming once again how crucial the presence of freelancers is in his company. At the same time, however, he admits that sometimes resorting to temporary workers for finding effective solutions is not enough. In certain moments, the best method is that of resorting to stable employees who, after being part of the business for a lengthier period of time, may have a much better knowledge of certain aspects connected with the business itself. The management of Human Resources in Weld is carried out by Söderlund himself along with the startup's co-founder. From this point of view, we can see how HR Management is not a formalized function, but rather one integrated under the umbrella of the responsibilities of the administrators. Even with regards to HRM procedures, there is nothing prearranged with preference placed on experimentation. Each time recruitment, training and motivation are dealt with, differing solutions are used, using various platforms and different managerial methods. The management of Human Resources also differs in another way. On the one hand, procedures exist that are exclusively dedicated to stable employees, with whom work contracts containing precise conditions are drawn up. On the other hand, however, specific agreements and "ad hoc" contracts are drawn up for staff on demand. With this category of worker, negotiations are carried out, establishing precise objectives regarding a particular project, deciding

on the length of time required for carrying it out and with the subsequent agreement on payment. The difference between managing stable workers and contractors becomes evident when dealing with recruitment. Usually, when looking for stable workers, specific advertisements are placed on the company's website, on social media and on recruitment platforms, of which one of the most widely used is Jobylon. For staff on demand, however, there are various solutions. Different digital platforms can be used for example, on the basis of the specific skills required. In this field, for example, the most widely used platforms are Voicebunny and Fiverr. With regards to training, even here there are no formal training procedures as the general approach is that of mentorship. New workers, who need to acquire the knowledge for carrying out their new role, will find themselves working side by side with workers with greater expertise. In this way, the direct observation of the work carried out by the senior worker will be the main form of training. With regards to motivation, there are at least a couple of important aspects to be considered. Firstly, it is difficult to motivate people who will only be working at the company for a limited period of time, and this represents a serious challenge for HRM. Secondly, a lot of freelance workers work off-site and, as a result, it is impossible for motivational initiatives to lead to direct daily contact. Therefore the question of physical presence leads to considerable challenges, emphasized by the fact that different workers are tied to the company with varying forms of contracts (Collier, 1969).

The presence of staff on demand at Weld is very strong, but at the same time their activities are not considered as being crucial to the growth of the company. This is surprising if you consider that everything we have explained so far would seem to suggest the opposite. According to the CEO, Weld can only grow thanks to the presence of permanent staff. Freelancers are important, but not critical. Thanks to contractors, knowledge is gained, strengthened and relayed, but only the bonding actions of its founders and management team can transform all of this into a growing force. Another essential factor for company expansion is that of fund raising which, for Weld, is an activity which is integrated into its core business. Without continuous external financing, the business would not be able to remain on the market for any length of time, especially in these first years of activity.

Detectify

Detectify is a young company that works in the field of web security. Founded in Stockholm in 2013, it immediately became noticed on the international scene, winning numerous prizes worldwide. The founders have been friends since schooldays and their curiosity and passion for the world of digital technology prompted them into developing a strong vocation for the web and for the way in which the web is constructed. The web, in fact, is full of traps and with its services, Detectify tries to help in a decisive manner with solutions to the numerous problems regarding the vulnerability of the web. Their vision is very clear: to make internet a safer place. The people at the helm of the company are Fredrick Almroth Nordberg, Co-Founder and Head of Engineering; Rickard Carlsson, CEO; Frans Rosen, Knowledge Advisor; and Johan Norrman, CIO and Head of Recruiting.

The situation at Detectify with regards to personnel is completely different to that we witnessed in Weld. At Detectify the number of stable workers is 20, while the number of freelance workers is none. Its monthly growth rate is 15% while the annual growth rate is around 8-9%. This data refers to the growth rate of active users month by month and year by year. In September 2016 it had approximately 25.000 users. We asked Joahn Norrman how important staff on demand is for Detectify. Looking at the figures, his answer was not surprising. Using contractors is not in any way important. At the start of its activities, the company did hire freelance workers for brief periods, but this was an isolated occurrence and was, more than anything, related to matters of graphic design. Today, all of the attention paid to Human Resources is concentrated on stable workers (Fonti & Maoret, 2016). The reason behind this is simple and has to do with the aim of creating strong commitment within the company (Meyer & Allen, 1991). For Detectify, this is a completely central theme, around which revolve the personnel management processes. People who work at Detectify do, in fact, profoundly believe in their job and are not exclusively motivated by economic motives. According to Norman, there are no doubts on the matter: "The people who work here are not really working for money". What matters then is their mission. To make internet a safer place to be. The

main activities with which the employees are involved are various. One of the main areas of activity is that of Marketing & Sales, two aspects which, for Detectify, are strictly related. Those who work in this field have the role, amongst others, of producing content for customers and carrying out research into cyber security. Two blogs have been started with regards to this. The first one publishes content accessible by any customer while the second, on the other hand, was developed for specialists and for internal use. Another very important role is that of the Tech Teams, work groups dedicated to both developing the company website and to strengthening a crowdsourcing platform which deals with the sharing of research into security matters on a worldwide level. Another team working in the same field is the team dedicated to the development and deepening of its knowledge of the world of hacking. With regards to future prospects of using staff on demand, there do not seem to be any signs of a change of tendency. Even over the next few years, Detectify will continue to hire stable workers rather than resort to contractors. This is a decision which is coherent with the company's aim to create commitment, and is also one that is deeply rooted in the values of everyone within the business. Just to clear any doubt, Norrman clearly explains that "We don't need staff on demand to grow". When hiring someone, it is immediately made clear that the salary will not be particularly high. But despite this, it appears that the new arrivals show a strong sense of participation, demonstrating their utter desire to be a part of that world. Sometimes, however, the need of external consultation can arise when completely new problems have to be tackled. In this case, Norrman explains that the solution is looked for within the work environment. How? Detectify set up its head office in a co-working space, where various startups operate with professionals that are highly specialized in a series of problems similar to those that Detectify encounters everyday. In this way, and without resorting to the formal assistance of a contractor, reciprocal mechanisms are activated thanks to which the company requiring assistance with a particular problem, asks a colleague working for another company in the same space. All naturally free of charge. If the co-working space can not be of assistance, they can always resort to a wider network of startups. The SUP46, a network of young companies that puts Swedish business people

and workers into touch with each other, thus helping to maintain continuous collaboration and exchange of ideas between them.

The recruitment process represents a very delicate phase in Human Resource management. The quickest and most widely used method to contact Detectify is through its website, where you can access specific areas containing all the required information and relative links for applying for any particular position. After having received the applications, the first screening of the applicants takes place. Those who pass this first step receive a "technical challenge" by email. This is a test regarding an authentic problem. The aim is to establish the abilities of this potential employee in problem solving. Usually only 30% of those who receive this "technical challenge" are able to solve the problem adequately. The third step, for those who successfully get through the first two phases, is an interview with Johan Norrman who takes care of the general evaluation, aimed at establishing the motives that drive someone to apply for a position at Detectify as well as the personal values of that person on which these motives rest. Lastly, there is a final interview during which each candidate meets the head of the team of which he or she is about to become part of. With regards to training, a meeting known as "competence sharing" is held every second week of the month. Basically, each employee can state what he or she wishes to learn, or in which line of competence or knowledge they wish to advance. On the basis of the requests received, monthly meeting are organized during which the themes which are considered to be most relevant, are discussed. Another crucial aspect of Human Resource management is that of motivation. In order to motivate people, the time factor is widely applied. "The more time you spend with people, the more connected you get them" says Norrman, explaining that not all the time spent in the company is dedicated to work. With this in mind, an important factor is the coffee breaks (Trougakos et al., 2014) and the other various moments of coming together. Furthermore, Detectify does not have specific working hours as more importance is given to quality rather than to the number of hours people spend in the office. The use of digital platforms is an important element for Detectify, but less so than it is for Weld. One of the most used recruitment tools are, in fact, job fairs, especially

those specifically aimed at startups. During these fairs, companies can meet up with potential candidates, clearing up any doubts they may have and answering anything they may be curious about. While direct contact with people is important, use is also made of digital platforms. One of the most widely used is Teamtailor, which supports companies with recruitment and which allows these businesses to attract the best talents. Detectify will, in the future, become more and more digitalized, meaning that it will make even greater use of digital platforms. With this in mind, one of its main objectives is to open new Sales Offices and expand into new markets, such as the Indian market.

Speaking about the factors that determined the growth of Detectify, Norman sets out three main factors. The first is the company's ability to locate the right people, meaning those employees that create a connection between the business and its objectives. The second factor is direct contact with candidates, which is achieved by attending job fairs and by creating projects by collaborating with schools and universities. From this point of view, the company's vision is clear: "It's important that education prepares for specific work". The third factor at the root of the company's growth is commitment, because the business and worker have to grow together, accomplishing objectives with which both identify themselves.

For some, such growth could create a loss of control. This, however, is not a problem for Detectify as the solution is that of always having the right people. If you have people you can trust, you don't lose control. Control is simply conveyed to the company's workers with a sense of granting full responsibility to personnel. Finally, as in the case of Weld, even at Detectify fund raising is considered part of its core business as it is impossible to support growth without the backing of external investors. In Detectify's particular case, the investors have sound knowledge of the cyber security market and therefore are fully aware of what they are investing in.

Mentimeter

Founded in Stockholm in 2014, Mentimeter offers software solutions for those who wish to offer their services in an interactive form. In essence, thanks to the purposely developed app, anyone can interact with the speaker during a meeting, conference or lesson. This allows for immediate and real time feedback and lets people ask questions to those who are attending a presentation, with the answers appearing on-screen and on mobile devices. Mentimeter has 9 stable employees and no contractors. As in the case of Detectify, even at Mentimeter there is an almost total absence of staff on demand. Despite this, growth rates have been high. In only two years, the company has, in fact, moved from 50 to 2000 customers, while employees have only increased from 7 to 9. As one can easily deduce, we are dealing with a company that grows at a staggering rate while maintaining almost the same number of workers. The business model adopted is that of boosting sales while sustaining the lowest possible costs. In other words, selling as much as possible without increasing, at the same rate, the number of employees dedicated to sales. The importance given to freelancers is very low, as the sporadic use of contractors is only made when small accessory services are acquired by the company. The company made concrete use of staff on demand during the first months following its foundation. As CEO and founder Johnny Warström explains, contractors were necessary for carrying out initial tasks, for which people within the company still had insufficient knowledge. When this knowledge was gained by personnel within Mentimeter, there was no further use required for staff on demand. Nowadays, people who work at the company are extremely competent. For example, knowledge of the Java Script language is such that Mentimeter would find it hard to find people with greater expertise externally. The absence of staff on demand is, therefore, explained by practical reasons, such as skills, rather than factors concerning values, as those we found in Detectify. With regards to the roles played by its employees, they mainly deal with product development and, more specifically, coding. Some of the other main activities are those carried out by the Marketing & Sales team. One of the main activities of this team is the analysis of customer behavior. They try to understand how the offered services are used, after which customers are

placed into specific categories and market strategies are then developed and which are aimed at specific user targets. In this way, solutions offered by the Marketing & Sales team become more personalized. Furthermore, some products are modified on the basis of market research results so as the customer can receive an offer that is "made to measure".

In the future, the policies of its Human Resources will remain unchanged. Warström, who also deals with HR functions, confirms that Mentimeter's objectives with regards to this will remain unchanged. The aim is that of more heavily investing in stable employees, so as to form highly skilled people who have deep knowledge of the sector of the company in which they work. "We want to build knowledge internally, we learn so much from having employees figuring this out" says the CEO, stating that only those who work permanently at Mentimeter profoundly know its products, the market and sales techniques. Knowledge gained externally is seen as a lengthy and very costly process, so collaborating with external contractors is pointless. The decision to not resort to staff on demand would not change even in light of any new and unprecedented problem. The reason is simple, and Warström explains it to us: "I don't see any problem big enough". Basically, problems can never be considered as being too big, because if you know extremely well the world in which you work, it is almost impossible to come up against insurmountable obstacles. In other words, if you know Mentimeter inside out, you will certainly know the right thing to do for the good of the company and, therefore, any decision taken by an employee will be better than any decision an external person could take. As we saw with Detectify, even here the recruitment process has precise phases. Usually advertisements regarding new positions are placed on social media or on the company's website. There are four recruitment phases. The first is the "first interview". This is an interview carried out in person and is for filtering candidates. It is not strictly based on work topics, while rather trying to comprehend the cultural fit level of the candidate with regards to the company. Afterwards comes the "second interview", the aim of which is to examine specific knowledge the candidate may have. The questions are based on precise topics concerning the type of role the candidate has applied for. Those who pass this second phase move on to the "third

interview" which is generally held by a manager. During this phase, the decision is made as to whether the candidate will be hired or not. The questions are based on both cultural and professional aspects. Amongst other things, the manager tries to establish the candidate's career ambitions and what their long-term decisions in life could be. Finally, we come to the fourth phase which is that of the proposal. The candidate will be made a financial offer and will be given a detailed job description. Even the training phase involves various approaches depending on which appears to be the most suitable direction to take on a case by case basis. The first training method is the so-called "internal way". These are methods involving self-teaching and the exchange of knowledge within one particular team. The contribution given from outside the team is minimal in that skill is developed thanks to the cooperation of colleagues working in the same team. If one of the colleagues, for example, learns something new by attending specialization courses, this newly acquired knowledge will be conveyed to his or her colleagues. Then there is the "external way", which is knowledge gained thanks to the involvement of people outside the team or even outside the company itself. This, however, is a less frequent training method compared to the "internal way". Finally, there is a third alternative: mentorship (Grindrod, 2016; Park et al., 2016). Basically, everyone at Mentimeter can single out one or more mentors, to whom they turn in case of need. Usually, the mentor is a professional with many years of experience in a particular field and, thanks to his or her knowledge, can assist in resolving particularly complicated problems. Some people may have as many as six or seven mentors in different fields. This is, in any case, a rather informal training method. Another important aspect regarding HRM procedures is that of managing motivation. According to Warström, people need to understand the exact picture they will help to draw with their actions. Everything that is done, therefore, has to have sense and workers will only be able to make sense of their work if they understand the contribution they are offering to the company. "The motivation is the job. You really want to love what you're doing. You really want to know that what you're doing contribute to something bigger and better, and you really like to be a part of a good team" says Warström. The concept is clear: motivation derives from the certainty of

contributing to something which is larger than ourselves. It is actually quite difficult to imagine that there are economical motivations driving workers at Mentimeter, which is still a startup and where salaries are not high enough to represent a particularly strong source of motivation. A lot of workers prefer to work at Mentimeter rather than moving to multinationals where the salaries can be twice as high. Intrinsic motivations (Boxall et al., 2015), therefore, play a very large role. With regards to digital platforms, it should be said that these are not used for recruitment. When a certain position is vacant, the company prefers to use specialized consultancy services offered by agencies in the field of Human Resources. Over the next few years, use of digital platforms will not increase and will remain at a very low level. The company will continue to resort to stable workers and to knowledge gained from within the organization. With particular regards to recruitment, the aim is to become real experts in spotting talents and knowing how to attract and hold on to them (Narayanan, 2016). If then, even if this case, the presence of staff on demand is not vital for company growth, we naturally ask ourselves which is the decisive element for the growth of the business. According to Warström "The organizational growth is not a goal in itself. We can grow the business, we can grow the product usage, without growing the organization". At least a couple of interesting aspects emerge from this statement. Above all, the growth of the company is considered as being something completely different to the volume of business. Secondly, the objective is that of continuing to be a company with reduced dimensions and, thanks to scaleability of the business, to achieve better and better results. For reaching this goal, the company aims at optimizing the use of resources. As if to say it tries to use the least possible resources but to optimize their use in order to achieve an ever increasingly higher return. After all, the company's growth ambitions are no mystery. Mentimeter intends to reach one hundred million users over the next three years. How can a company go from 2000 to 100 million customers in just three years? Warström has no doubts: "Our power is the people". The secret, therefore, does not lie in the strategy but in people. It is not a question of applying a winning strategy, but of strategically managing a group of people. The strength of Mentimeter is that of the knowledge people possess and the way in which these are combined. Once

again, the question of fund raising emerges. External financial contributions are important for Mentimeter as well, albeit less so than they are for Weld and Detectify. The first act of obtaining contributions was carried out in 2014, immediately following after startup. Currently, due to the fact that the business appears to be producing the desired results, the question is being asked as to whether a second round of fund raising is really necessary. With regards to loss of control, this type of risk is in no way perceived. On the contrary, control is considered as being a scarcely important element in the management of the company. After having spoken about the motivations that drive the workforce, let's look at the business motivation aspect and ask ourselves what drives young people to start a new company, and we are told that wealth is not the main motivation. There is another motive: "We want to create something new".

Apptimate

Apptimate is a Swedish company with its head office in Malmö operating in the field of cyber security and the so-called Internet of Things. It was founded in 2011 by Fredrik Beckman and Andreas Ekengren. In the first months of 2016, and following a deep financial crisis, the company started to go through a period of profound restructuring. Appitmate's relaunch is not yet complete but we did ask Beckman about which projects and Human Resource management approaches he intends to adopt. His ideas on this are very clear. He tells us that the new Apptimate will have 5 stable employees while, with regards to staff on demand, there will be no more than 3 to 5 contractors. Having freelance workers is not particularly important, according to Beckman, especially in the first few months following the company's foundation. Immediately after the startup, the most important thing is, in fact, to have trustworthy people that will go towards making up the main team, around which all the other company activities will revolve. The contribution given by contractors is important in the early phases, but only with regards to the ideas they may bring, as the growth of the company is, in any case, tied to the actions of stable employees. In the early stages of its life, Apptimate had developed an app that allowed skiers and excursionists to be

traced if they were to become lost in the mountains. At a certain point, a thought came to mind. Beckman and his partners tell each other that the true value of their business is not an app in itself, but rather the technology that it is at the root of it. Basically, it was a form of technology that tried to provide secure communication between those who used the localization service offered by the app. Communication security then became the core of the services subsequently offered by Apptimate. . "The importance of the staff on demand is very situational, it depends on the moment" says Beckman. His vision regarding staff on demand is half way between that held by Weld, where staff on demand is considered to be fundamental for the growth of the company, and that held by Detectify and Mentimeter where staff on demand is given little importance. At Apptimate, things are different. Here, staff on demand is not fundamental but neither are they useless. Its role changes depending on the various situations in which the business may find itself. In particular, the role of stable workers is perceived as being more important when the product or service offered is mature. Moreover, it is important that the team acts like a family (Alakavuklar, 2009; Brotheridge & Lee, 2006). Only in this way can growth rates be maintained. It would be impossible to create any form of strong or long term rapports with contractors. According to Beckman, the business can only expand if it is transformed into a family. "You need commitment to you, that becomes loyalty" and, in his view, a contractor will find it hard to become a member of the family as the economic aspects tend to be more important than those of his or her connections to the company. With regards to responsibilities held within the organization, there is no doubt that all activities connected to the core business should be carried out by stable staff. All non-core activities, on the other hand, can be carried out by staff on demand. The outlook for the future is, in any case, clear, meaning that over the next few years Apptimate will make greater use of freelance personnel. In other words, the services to be offered will be established first, and for doing so stable staff will be required. Afterwards, the aspects of accessories and features added to single products will be dealt with, and for this type of activity, a large number of contractors will be used. Beckman is not only the founder and CEO of Apptimate, but he is also the HR Officer and it is he who explains to us how

recruitment is dealt with. The first contact with potential candidates is through the company website, where there is a dedicated section called "Work with us". Other networks with which Apptimate is connected are used, from simple rumors to word and mouth. Without, of course, forgetting digital platforms. "We use digital platforms as much as possible" says Beckman. The most important aspect in this phase of personnel recruitment are the specific skills a candidate possesses in a certain field: "The most important thing is that they have a lot of skills in a specific task". The most important characteristic, therefore, has nothing to do with cultural aspects or values. The most important thing is a full understanding of the tasks they are about to carry out. The Apptimate environment is, in any case, an extremely encompassing environment which pays attention to diversity (Ghorashi & Sabelis, 2013; Marfelt & Muhr, 2016). These characteristics can be summed up in the following statement: "We are trying to develop a culture which is extremely open, extremely forgiving. The people are not supposed to be a clone of each other. They have to be different, but different in the same way. We try to develop a sense of family". Everyone is given the opportunity to be themselves and that opportunity is granted to everyone and at the same level, without any difference in the amount of freedom granted. Basically, if someone needs to learn something, the company will do everything it can to make sure this happens. The preferred method is that of learning by doing, because "The best way to learn things is doing them". Then there are a series of learning opportunities, courses, meetings, conferences and online lessons. All of this is, in any case, based on the sharing of knowledge. The training culture at Apptimate is that of physical proximity, in the sense that the company strongly believes that the best way to resolve a problem, is to learn either sitting side by side or working together and sharing the same space (Bandura, 1977; Manz & Sims, 1981). This space is not necessarily a desk, because you can even learn simply by drinking a cup of coffee together. What encourages people to learn, is the need to cooperate. In other words, cooperation breeds knowledge. In brief: "Training is cooperation". There are few doubts even with regards to motivation. In a family, there is no need to draw up HRM procedures aimed at motivation, in that motivation is created by simply feeling part of a cohesive nucleus of

people. Certainly the economical aspect tied to extrinsic motivations is important, but it isn't everything. Salaries in Apptimate can reach considerable levels, but the most important thing is knowing how to create team spirit, because there are levers which money can not pull. Going back for a moment to recruitment, it should be said that a contractor can easily become a stable employee, so resorting to staff on demand can sometimes be an efficient way of hiring personnel. The reasons behind such a choice are simple. Contractors are very often people with expertise in a certain field and their knowledge can be so valuable to a business that the best option is to incorporate them into the organization.

The growth of Apptimate is not the company's priority at the moment. The main objective is to create a solid organization that knows how to get through difficult moments without irreparable damage. To ensure this, once again we return to the family concept. According to Beckman, this is the secret that explains the success of large companies such as Google, Facebook and Apple. Their core teams have, since the outset, acted in tight symbiosis. If the actions of the organization revolve around a tight group of people that share the same values and the same approach to business, everything becomes easier. The next step for Apptimate is its relaunch. After having accomplished this important result, the organizational structure will be restored. Even here, fund raising is very important, interest from external financers not only means having more funds available, but also means having great trust in the company's abilities to manage business. Finally, even if growth is not a priority in this period of restructuring, we asked Beckman what the most important factor is for growth. His answer shows once again a great practical sense: "Customers".

Orbital Systems

Founded in Malmö in 2012, Orbital Systems has developed technology aimed at domestic water recycling. Thanks to its systems, for example, 90% of the water used for showering can be saved. The idea at the heart of this business was born from a project developed in cooperation with NASA and with Niklas Zennström, the founder of Skype. The core team is made up of Mehrdad Mahdjoubi, founder and CEO; Ilja Koren, Chief People Officer; Daniel Ketabchi, IT Support Specialist and Madjid Mahdjoubi, Chief Digital Officer. As of September 2016, Orbital Systems has 40 stable employees and around 10 contractors. On top of the head office in Malmö, a new office was opened in Palo Alto in California. The first thing that we will try to understand is how important the use of staff on demand is. We are told that not all contractors are the same, so it is not therefore possible to generally say how important the presence of freelancers is. There are, in fact, highly qualified freelancers, the presence of which is crucial for the business. For example, in the R&D sector, there are highly experienced senior consultants, whose work is vital for developing new company technology. Hiring this type of worker fulltime would be very costly for a young company, so the choice of staff on demand is the easiest. On the other hand, however, there are contractors which are "low-skilled workers", for which reason they play a less important role in the company. With regards to duties, stable employees work in a wide range of activities: commercial, operations, engineering, IT, finance, HR, design. Contractors, however, are used essentially in Research & Development. Concerning the prospects regarding the use of freelance workers in the future, the idea is to no longer resort to using contractors and to use the knowledge from within the organization (Argote et al., 2003), even in the R&D sector. This implies a progressive reduction in the use of staff on demand until only stable workers are used. At the moment, recruitment procedures are clear. When a contractor is to be hired, Orbital Systems turns to specialized recruitment companies who have access to a wide network of people available to work on commission. Human Resource managers constantly monitor the needs of each company department and elaborate a precise job description, for outlining the precise required skills. These job

descriptions are published on the company website and on specific digital platforms, the most important of which is Workable. Companies looking for personnel can find thousands of CV's on these platforms and where there is a dual exchange. On the one hand, the candidate can find the most suitable company, and on the other, business can find their ideal candidate. The recruitment phases in Orbital Systems are very distinct. Initially, a job description is published and those you have the required characteristics can send in their application. Following this phase, comes the interview. This can be done over the phone or, if the company is particularly interested in a candidate, in person. The next phase is a more technical one, during which the candidate will be asked to find a solution to an authentic problem. Before moving on to permanent hiring, a personality assessment phase may be carried out. With regards to training, Orbital Systems is working to create a network of knowledge sharing, but this process has not yet been fully developed. When it comes to hiring someone, one of the most highly appreciated characteristics is the so-called quick learner. In other words, the more a person is proactive in wanting to learn, the greater the chances are of this person obtaining the job. Proactivity is particularly important because being ahead of the game in rapidly changing environment is considered to be an essential quality. Training, therefore, is a process which can be supported by precise HRM practices, but can never totally be formalized. With regards to motivation, the HR manager tells us that "It's important to find the person for the right job" so, therefore, the first step towards motivating personnel consists in ensuring that each worker has a role that he or she is most suited to. Workers can only feel comfortable if they have a role which brings out their potential. This type of motivational approach is also connected to the topic of responsibility. In a small company, each individual may, in fact, have to cope with numerous responsibilities. A motivated person will be better at taking on the challenges that these responsibilities may present. At Orbital Systems a system of OKRs (Objectives and Key Results) has been established based on planning and achievement of company objectives. Each objective is linked to particular indicators which provide constant and accurate results. Each OKR is linked to the others in such a way that the achievement of each single

objective only represents one tile of the wider mosaic of expected results. The individual objectives are, therefore, are linked to the objectives of the department of which each worker is a member of. The objectives of each department are, in turn, linked to the wider objectives of the company (Locke & Latham, 1990; Heimerdinger & Hinsz, 2008). In this way, motivation stems from the fact that everyone perfectly knows, in any given moment, the extent to which their performance has an impact on company performance. The OKRs guide the actions of the workers and, at the same time, motivate. Currently, every worker at Orbital Systems is offered free company shares. This means that everyone is, in fact, an owner of the company. The sense of ownership, along with responsibilities given by the OKRs, only helps to increasing the sense of belonging to the company. It is in these methods the general process of the strengthening of motivation has its roots. A "worker-owner" is more greatly incentivized to achieve higher performance as better results not only mean the certainty of receiving a salary, but the increase of the company value as well. Going back to staff on demand, even here, just as we saw with Apptimate, a contractor can become a stable worker. Sometimes Orbital Systems resorts to companies such as Manpower for hiring consultants. After a three month contract, for example, some of these consultants receive an offer to become a permanent part of the company. We have already seen how even Orbital Systems resorts to the use of digital platforms. A part from Workable, another frequently used platform is Youcruit, a platform with two specific sections, one dedicated to companies and the other dedicated to those looking for work. In both cases, services and advice are offered for making an offer or one's profile more attractive. When we talk about growth, the main worry is that of the value created rather than the increase of income. Orbital Systems is going through an expansion phase and it is therefore important for it to appear as attractive as possible to partners and potential investors, concentrating on a truly innovative product line. The crucial factor at the heart of growth is not staff on demand: "The most important factor for growth is stable employees". Contrary to what we saw at Weld, even in this case contractors are not considered as being fundamental to the growth of the business. Even if freelance consultants can be a valuable resource, in actual fact their contribution is not placed into

a long term association. Lasting relationships between the company and its personnel are considered to be essential for creating value. The secret then is to hire young workers, rather than turning to the consultancy of senior experts. These experts can be of great help, but their dedication to the company will never be as deep as those who are employed full-time. Commitment is once again seen as the cornerstone of growth and it is in this aspect that three fundamental values of Orbital Systems come into play. These values are not to be considered as empty slogans. On the contrary, they are taken into great consideration, especially in the recruitment phase. The first of these three values is summed up with the expression "We solve it!". Orbital Systems is dedicated to solving one big problem, which is the efficient use of water, considered as precious resource that should not be wasted. The problem that the company intends to resolve is a worldwide problem, and represents an enormous challenge for all of those who have an organizational role. The second value is enclosed in the phrase "Avant-garde". Orbital Systems intends to completely change the approach that people have to water, completely rethinking the way in which people go about its use. Even if Sweden that does not have a drought problem as in California, this does not mean that one can not reflect on the most intelligent way to use such a precious resource. In order to do this, one needs to look ahead and in an unconventional manner. This is the company's mission: to use water in a completely different way than before. Finally, the third value is represented by the motto "Love for the craft". It is a very clear wish: that everyone should take their work into great consideration, and love it. This is the only way that the best of oneself can come out and to continue to learn and develop new skills. Feeling fully involved in what one does is a forceful motivational lever and provides sense to individual performance. This applies indiscriminately to all workers. The values of Orbital Systems are, in fact, shared by everyone: engineers, managers, sales staff, software developers and plumbers.

	Year of Foundation	Number of Stable Employees	Number of Contractors	Perceived importance of having Staff on Demand	Future Staff on Demand Trends	Main Tasks performed by Stable Employees	Main Tasks Performed by Contractors	Recruitment	Training	Motivation	Crucial Factors for the Growth
Weld	2014	3	10	High	More Contractors	Core Business Tasks: - Software development - Marketing - Fund raising	Core and Non- Core Business Tasks: - Graphic design - Accounting - Generic Administrative Tasks	- Corporate website - Digital platforms for stable employees (e.g. Jobylon) and for contractors (e.g. Voicebunny, Fiverr)	- Informal procedures - Mentorship	No specific initiatives	- Fund raising - Experimen- tation
Detectify	2013	20	0	Low	No Contractors	Core Business Tasks: - Marketing & Sales - Tech functions - Hacking		- Corporate website - Digital platforms (e.g. Teamtailor) § Formal process: 1) Screening 2) Technical challenge 3) Generic interview 4) Specific interview	- Competence sharing	- No formal working time - Breaks from work	- People - Commitment - Fund raising
Mentimeter	2014	9	0	Low	No Contractors	Core Business Tasks: - Product development - Coding - Marketing & Sales		- Recruitment Agencies § Formal process: 1) First interview 2) Second interview 3) Third interview 4) Offer	- Internal way - External way - Mentorship	- Job in itself	-People - Efficiency
Apptimate	2011	5	3-5	Medium	More Contractors	Core Business Tasks	Non-Core Business Tasks	-Corporate website - Network - Word of mouth - Digital platforms	- Learning by doing - Meetings - Conferences	- Cooperation - Sense of belonging	- Team as a family - Customers
Orbital Systems	2012	40	10	Medium	Not more Contractors	Core Business Tasks: - Commercial - Operations - IT - Finance - HRM - IT - Design	Core Business Tasks (High skilled contractors) Non-Core Business Tasks (Low skilled contractors)	- Recruitment Agencies - Digital platforms (e.g. Workable, Youcruit) - Corporate website § Formal process: 1) Job description 2) Interview 3) Technical questions 4) Personality assessment	"Ad hoc" practices	- Right people in the right job - Ownership	- Values

Table 2_ A synthesis of the main findings.

5 Main findings and propositions

The businesses taken into consideration have all been founded recently and, with the exception of Apptimate, which is undergoing a restructuring phase, all of them have a common tendency towards growth. The element that immediately catches the eye is the different approach they have to Staff on Demand. For some, it is an important element while for others it is an unessential factor for the business. From the point of view of the tasks performed, generally we can state that tasks connected to the core business are given to stable employees. This means that greater trust is given to stable employees and that the lasting working relationship is seen as a guarantee for the successful outcome of company actions.

Proposition 1: Regardless of whether there is staff on demand or otherwise, fast-growing companies tend to give core business tasks to permanent personnel.

The startups, while all having growth in common, adopt different HRM practices. From the recruitment point of view, not all of them implement formal procedures. For Weld, the use of digital platforms is far more important. The result is not surprising, since it is a company in which contractors are prevalent. Detectify, on the other hand, also uses digital platforms but at the same time also uses a precise method of recruitment. The fact that there are four distinct recruitment phases clearly shows us how important it is to get to know the candidate in view of his or her hiring. We can deduce that a company interested in having only stable workers is more greatly focused on recruitment. It is no coincidence then if the same situation can also be found at Mentimeter which, just like Detectify, concentrates its attention to stable personnel. At Apptimate, there is no precise formalization of the recruitment phase, while it is true that here the presence of contractors is nearly equal to that of stable employees. Finally, there is also a formalization of recruitment at Orbital Systems. This type of choice appears to be coherent with the decision to hire an ever increasing number of stable workers and continuously less contractors.

In general, with regards to recruitment, we can sum up the conclusions in the following propositions:

Proposition 2: The recruitment process is more formalized if the company tends to use more permanent staff than staff on demand.

Proposition 3: The recruitment process is less formalized if the company tends to use more staff on demand than permanent staff.

With regards to training, it is not easy to identify clear tendencies. In the case of mentorship, for example, this practice is used both in Weld and in Mentimeter, in other words, two companies that from their approach to staff on demand point of view are completely different. A reasonable conclusion with regards to this could be that the training practices are not linked to any particular composition of Human Resources and that, consequently, they do not have any particular link to the presence or otherwise of staff on demand.

Proposition 4: The presence or absence of staff on demand within a company does not influence the way in which HRM manages training processes.

With regards to motivation, we can more or less observe the same situation concerning training. Even in this case, there does not, in fact, seem to be any notable difference in the way personnel is motivated both in companies with a high presence of staff on demand and in companies with little or no staff on demand. We can reflect, however, on at least two points.

First of all, in Weld there are no specific practices for strengthening motivation. This could mean that staff on demand is hard to motivate by factors other than economical factors. On the other hand, we can see what happens at Detectify and at Mentimeter, two companies where motivation is driven by the way in which time at work is organized and by the content of this work. In these two companies, therefore, it seems that intrinsic motivations have the better over those of an extrinsic

nature. An ideal compromise is that of Orbital Systems, where motivation is strengthened by giving

the "right task to the right person" (intrinsic motivation) and by owning a part of the company

(extrinsic motivation). Seeing as, even in this case, we can not identify clear tendencies, we will say

the same as we said with regards to training.

Proposition 5: The presence or absence of staff on demand within a company does not influence

the way in which HRM manages motivational processes.

In conclusion, looking at the factors which are perceived as being crucial for company growth,

nobody stated that staff on demand was an essential element for the expansion of the business. Even

in cases where people are considered crucial for company growth, it has to be said that reference

was always made to people who work permanently for a company. To sum up, what appears to be

important for company growth is knowledge (that gained internally from other people), fund raising,

customers and values. Staff on demand, therefore, appears to be important for carrying out

accessory activities which are not linked to the core business but does not appear to be fundamental

for growth. There is an important detail that confirms this, which is the fact that two out of five

companies don not even use contractors and despite this, they are experiencing relatively rapid

growth.

Proposition 6: Staff on demand does not represent a crucial element for company growth.

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7 Conclusions

The summary contained in table 1 and the propositions put forward in the previous paragraph, only refer to the companies taken into consideration, even if we can imagine that the situation in similar companies is not very different. Contrary to what macroeconomics would lead us to believe, the importance of contractors in the current socio-economic context appears to be less crucial that predicted. Basically, young companies are happy to rely on staff on demand in case of need, but the importance of stable staff was never put into doubt. It is with stable staff, in fact, that the core team is made up of, the team that performs the most important activities of the company. In managing the principle procedures connected to Human Resources, these young fast-growing Swedish companies do not seem to be influenced by the presence of staff on demand. With the exception of recruitment, in fact, the training practices and motivational procedures do not seem to be effected by the presence of this particular category of worker. Staff on Demand seems to have little impact on both the activities of HR management and company growth. The perception of the CEOs, of HR specialists and of the Founders goes in this direction, in the sense that according to all of them, their growth is linked to factors which have nothing to do with Staff on Demand. The most important people are always stable employees because only with them can long term working relationships can be achieved and strong commitment be developed. Another explanation regarding growth factors could have its roots in core business tasks. If the growth of a company is based on particular activities and if these particular activities are carried out by stable employees, there can be no doubt that growth does not depend on contractors. Another interesting thought is the observation of future tendencies towards the hiring of freelance workers. Practically the only company that intends to hire more contractors in the future is Weld, in other words, the only company where the number of contractors exceeds the number of permanent workers.

We could say that if a startup is born with one form of Human Resource, it will tend to maintain the same structure in the future. We could ask ourselves how knowledge, especially in a tacit form, can possibly be developed and managed when people who possess it are not permanently employed by

the company. One possible answer could be that of knowledge which, today, is generated and updated so very quickly that only highly specialized contractors can keep up with the pace of change. Such an answer, however, would be in complete contrast with this case study, as most of the companies taken into consideration have knowledge generated internally and is possessed by permanent staff. This apparent presence of contradictions will have to be studied, but it should also be said that every business model has different peculiarities that make it impossible to generalize on managerial dynamics, especially those related to knowledge management.

As a final analysis, we should not forget that environmental factors are always important. The companies taken into consideration were born and operate in Sweden, a country that has precise characteristics and that has made innovation a priority. Everything we can learn from the study of a Swedish company should be placed into a much wider picture where factors such as public infrastructures, state investments into research and development and the education system, only to mention a few, play a crucial role.

6.1 Methodological Conclusions

Significance

Yin (2013) believes that a case study can be considered as being important when it focuses on "some real-world situation that social scientists had not been able to study in the past" (p.202).

The case study that we are proposing here focuses on a topic that has so far not been dealt with in a systematic manner by managerial literature. Some researchers, for example, assert that, today, businesses rely more and more on freelance workers for absorbing external knowledge (Nesheim, 2003; Kozica et al., 2014). In actual fact, the evidence obtained by this case study shows that the tendency is the opposite. What emerges, in fact, is a firm desire to rely on permanent workers and on knowledge obtained from within the organization. The various state of affairs found in the five Swedish companies could represent an interesting point of discussion, especially because they seem to contradict what literature has, until now, told us. Furthermore, and with regards to existing

literature on this subject, we can see an almost total absence of contributions regarding the connection between HRM processes and the type of personnel used. This study singles out three processes (recruitment, training and motivation) and pairs them to two distinct categories of Human Resource (stable employees and staff on demand).

Completeness

According to Yin (2013), there are some aspects that have to be taken into consideration in order for a case study to be considered as being "complete". A crucial aspect is described in this statement: "The complete case is one in which a researcher gives clear attention to the boundaries of the case – that is, the distinction between the phenomenon being studied and its context" (p. 202). In this study, we tried to clearly define both the boundaries within which the study was conducted (Sweden) and the individual features of these businesses (company's founded in recent years and that showed wide margins for growth).

Sufficient evidence

According to Yin (2013), a case study that is presented in an appropriate manner "should enable a reader of the case study report to reach an independent judgment regarding the merits of your case study and its findings" (p. 205). With this present case study, we have tried to supply a sufficient amount of information that could inspire thought and encourage further study of the themes dealt with in the future. The organizations taken into consideration represent a small sample that does not allow wider generalization. It is, however, a wide enough sample for representing a microcosm which, at the present moment, still remains widely unexplored.

7 Future research development

There are a lot of areas on which future research regarding fast-growing companies could focus itself. Above all, it would be interesting to carry out quantitive studies on the impact that Staff on Demand has on Human Resource management processes and on the growth of companies, even if at the moment there do not appear to any data bases that gather comprehensive data on this category of worker. From this point of view, it should be said that it is difficult to estimate how many contractors there are in any company and at any one time, because we are dealing with numbers that are continuously changing and that can alter from one month to another and from one week to another.

Another interesting front could be that of the procedures of Human Resource management taken into consideration. In this paper we have considered recruitment, training and motivation, but there are evidentially a large number of other management phases that concern HRM and that are equally interesting.

And as further development, there should be research into the way in which knowledge is created and generated in fast-growing companies and, above all, into the way in which the presence of Staff on Demand influences knowledge management.

And further still, it would be useful in the near future to study once again the companies taken into consideration here to compare them to their situation in time 1 and to their situation in time 2, in order to understand what has changed and, above all, why.

Finally, it would also be interesting to learn what happens in other countries and to duplicate the same case study to other countries. For example, we could try to understand what impact Staff on Demand has on young Italian, German or French startups.

All of this would certainly enrich the panorama of research into young fast-growing companies and would allow us to understand how these types of companies are changing our world today.

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General Conclusion

It is impossible for us to say what happens within an organization if we fail to observe what happens on its outside. Vice versa, only an adequate understanding of the developmental dynamics of an organization can allow us to interpret and govern the changes that affect our economy and society. Today, fast-growing companies represent the type of organization that most greatly influences the macro-economic situation of developed countries, impacting, for example, on occupational structures and consumer habits. Exponential organizations can be found everywhere in our smart phones, our cars, in our computers, at work and at school, in our health services, in our social relationships, in the way we behave and in the way we look at the world. If such companies have so much influence on everyday life, then organizational studies are obliged to ask precise questions about them. This study is an attempt to move in the direction of comprehension, fully aware that nothing it contains can be exhaustive. Organizational change is nothing new. It has been spoken about for a long time and researchers have always been looking into it. *Fast* organizational change, however, is largely unexplored and is a universe which mutates quickly, and for which reason, must be placed at the center of the scientific discussion in an informed and systematic

The "macro" analysis, put forward in part one, was useful for outlining the confines within which the phenomena of exponential organizations takes form. We have seen how the characteristics of the socio-economic environment are important for rapid growth. This demonstrates that no business can reach such high levels of performance if it is not surrounded by elements of a favorable context. It is no coincidence then that fast growing companies are nearly always concentrated in areas where, amongst other things, there is a strong presence of ICT structures and where academic research investment is available. With regards to favorable conditions, it should not be forgotten that even the aptitude of the organization itself towards innovation has to be developed, so as to adequately harvest all of the opportunities that the environment offers.

The second part draws the attention to within the organizations, outlining, in particular, two emerging trends concerning Human Resources: the use of digital platforms and of co-working spaces. Digital platforms are not only important for companies that want to attract the best talents, but are also important for people who want to find the business that best reflect their expectations and values. In brief, we could say that digital platforms help work demand and supply to meet up. Another increasing trend in the business world is the use of co-working spaces. These spaces are, in fact, used, on the one hand, as a work place for all those businesses that set up their head office in shared spaces and, on the other hand, as a tool for motivation. This last point is particularly interesting because the fact that a space is transformed into an incentive for individual performance improvement means that it should be studied in greater detail.

In conclusion, in the final part we took a close look at the situation described in the previous paragraphs. In particular, the analysis became so "micro" that we concentrated on one single aspect of fast growing companies: Staff on Demand. The little literature there is on this subject tells us that this category of worker has a great deal of influence on business growth. But in actual fact, the multiple case study relative to young Swedish companies seems to show the opposite. Basically it is permanent staff that is crucial to growth, just as it is in "non exponential" organizations. Moreover, the presence of Staff on Demand does not have any significant impact on the methods of Human Resource management.

Ultimately, fast growing companies tend to trust their core business tasks to permanent employees, just as they do in "traditional" companies. We should then ask ourselves what characteristics, from a Human Resource point of view, distinguish exponential organizations from "non exponential" organizations. The secret of success of a fast growing company does probably not lie in the type of personnel used, but in the way in which it is managed. The secret probably lies in the style of management, in the culture and values of CEOs, Founders and HR Officers. We should ask ourselves what makes them different and how they can motivate people without offering them large

sums of money or material rewards. The intrinsic motivations play an absolute central role in this and are the ideal arrival point for this study.

Short personal notes

The way in which a company is organized can change the world. In other words, organizational change can lead to world change. We have already seen it once and the car that we have in our garage is an example. There is another aspect that should anyway be considered. The changes that we are witnessing today are not only rapid in their manifestation but also and, above all, rapid in the effects they produce.

A company that in eight years reaches a value of \$ 25 billion (Airbnb) or that seven years after its foundation is valued at more than \$ 60 billion (Uber), deserves our attention. These are enormous figures and they are achieved thanks to a relatively reduced number of employees, and it is not difficult to understand that we are in the presence of wealth that does not generate exceptionally high results with regards to employment levels. A lot of things can and have to be said about exponential organizations and this study is only the first step in that direction. Having profound knowledge of businesses can, more so today than ever before, be useful for intercepting and interpreting change and ensure that it does not take on a chaotic form.