

Leadership coaching framework tool-based to support worker engagement and retention in Industry 4.0

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Abstract

In a digital paradigm where job turnover is the order of the day, it is necessary to determine strategies that promote a culture of work engagement. Employees need to feel committed to both their work and the organization in order to be retained, and Coaching Leadership is a strategy capable of influencing the psychological state (psychological capital) of employees, with consequent increases in performance, reflected in voice behavior. Thus, this paper aims to demonstrate a first Coaching Leadership framework supported by the concept of a technological tool that aims to promote the engagement factor, as well as an organizational structure supported by a learning culture and training satisfaction (characteristics that have been shown to enhance job retention). This framework was built based on a first literature review and, subsequently, using eleven targeted interviews within a multinational Portuguese organization belonging to the metal-mechanic sector. In a context where volatility is intrinsic, it is essential to develop workforce retention strategies that focus on fostering engagement by creating a leadership culture that is favorable to this promotion.

Keywords

Human Factors, Industry 4.0, Workforce Retention, Coaching Leadership and Engagement

1. Introduction

A commonly used concept referring to the digital paradigm is Industry 4.0 or also known as the fourth industrial revolution. With the introduction of 4.0 technologies, an individualization of customer demand is expected, culminating in customization, flexibility, decisional decentralization, and resource efficiency (Kaasinen et al. 2020). Thus, companies have on their hands one of the biggest challenges ever, namely to tailor their teams of professionals to operate in the digital environment derived from digital transformation. It is therefore necessary for the way human resource management is carried out within companies to change so that the required cultural change can be transposed more quickly (Jim and Maeso-fernandez 2022).

Turnover, especially voluntary turnover, is another conditioning factor of the technological paradigm, and therefore retention mechanisms must be built by companies to mitigate this aspect (Salvadorinho et al. 2021; Salvadorinho and Teixeira 2021).

Employee engagement is known as a solution to contribute to employees being more creative and more absorbed in their tasks, which has an impact on organizational social behavior and on the displayed performance at work, which is higher. In addition to these positive consequences, engagement is an enabler of lower absenteeism and turnover. All of these factors culminate in total dedication and commitment to organizational goals, with the employee being able to put business performance above individual performance (Gaur 2020; Whittington and Galpin 2010).

Coaching Leadership is a kind of leadership capable of influencing the psychological capital of employees, helping them to develop voice behavior, while stimulating their engagement (J. Wang et al. 2022).

Thus, this paper intends to present a first Coaching Leadership framework supported by the conceptualization of a technological tool, capable of positively influencing the organizational population, fostering engagement, and promoting workforce retention. To this end, eleven interviews were conducted in a multinational Portuguese organization belonging to the metal-mechanic sector. These interviews aimed to understand the determinants of work engagement in this same context, while also presenting themselves as a mechanism for validating the concept

of a technological tool that enhances the management of skills and careers, that fosters organizational collaboration and that monitors the state of the organization (using pulse surveys).

The remainder of this work is structured in the following way. Section 2 presents a theoretical background for the importance of human factors in the digital paradigm and the relationship with workforce engagement and exhibits a summary about coaching leadership and how companies can transform managerial positions into leader coaches. In section 3 the data collection and analysis methods of the interviews, as well as the sample characterization are presented. In section 4 the results emerge through qualitative analysis, thus building up to five main focuses: the concept of engagement; the importance of coaching in engagement (from the perspective of the organization surveyed); and the analysis of three modules conceptualized and that integrate the HR management support tool with coaching leadership (pulse surveys, digital passport and collaboration). Section 5 (Discussion and final remarks) demonstrates through a framework the interconnection and the contributions of both the technological conceptualization verified according to the interviews and the coaching leadership identified as a trend in the literature and now also within organizations as a driver of cultural change to support digital transformation.

2. Literature Review

2.1 The human factors in the digital paradigm: engagement promotion

Jim & Maeso-fernandez (2022) points out two key aspects for companies to make the digital transition: firstly, the focus is on the integration of technologies in all the procedures that body the value chain; and a second one, no less important aspect that cannot be neglected, which is based on people, culture and knowledge (Human Resources). It is known that human resources are a source of competitive advantage in any organization, and therefore there is a need for their management to be integrated with the management of all operations, involving technology 4.0.

One of the most raised issues within organizations is the preponderance of voluntary turnover, in that a high rate of voluntary turnover is costly to organizations because it hurts organizational effectiveness and success. Losing good employees not only affects an organization's competitive advantage (through the loss of tacit and therefore organizational knowledge), but also reduces the morale of other employees, their productivity, and the quality of their work (which reflects their engagement¹)(Urrutia Pereira et al. 2021). Thus, there is a need to keep people sufficiently engaged to reduce turnover levels, while at the same time a whole peaceful organizational environment is promoted(Evdoxia Lithoxoidou et al. 2017).

Two of the strategies that promote work engagement and, consequently, organizational turnover, are the fostering of a learning culture (Urrutia Pereira et al. 2021) and satisfaction with training(Memon and Salleh 2016). It should be noted that the first may contain the second strategy, but it transports us to a more general concept. It is also added that according to the 2019 Deloitte Global Human Capital Trends report, the number one reason professionals leave their companies is the inability to learn and grow (Urrutia Pereira et al. 2021).

Regarding the learning culture concept, Flores et al. (2020) present in their research a different form of communication within business with the entry of the digital paradigm. The authors, before the paradigm, consider communication to be in a pyramid mode, which is inherent in the typical hierarchical interaction between people working in a factory and where management and instructions are centralized, running from high levels to low levels, and vice versa. During the paradigm, the trend is toward networking, culminating in the breaking down of the need for centralized decision-making and opening up for flexibility. In this way, each node of this network will represent a member of the organization and each "line", a channel of interaction, thus creating a network of human labor. The advantages of this change are based on greater flexibility, and decentralized decision making, while making room for employee input in this regard, generating global knowledge (so there is no centralized or stored information). This creates the possibility for faster interactions, which promotes improvements in the company's changes and manufacturing processes. All of this has the potential to culminate in increased motivation, responsibility, coordination, creativity, and lifelong learning for employees.

Within the I4.0 environment making all information flows continuous is essential, and if knowledge and level of expertise are employed, it is important that knowledge is disseminated to solve problems easily and as quickly as

¹Employee engagement is a state of commitment and involvement that an employee feels about his/her organization and its values (Alshammari, 2015)

possible. Social collaboration platforms are currently highly popular in industrial environments and intend to solve this issue through the creation of communities (E. Lithoxidou et al. 2020; Evdoxia Lithoxidou et al. 2017). In the literature, gamification is seen as the new way of raising employee engagement, that is, the application of game elements in environments that are not the game context (Evdoxia Lithoxidou et al. 2017; Ulmer et al. 2020). In their work, Lithoxidou et al. (2020) embed gamification into a collaborative platform and get it used regularly by workers with different levels of experience and expertise. This proves that the match of a gamified collaborative platform in an industrial environment is useful, welcoming, and promotes organizational knowledge, helping to optimize the teaching time of new employees. These interactions took place through employees' involvement in answering questions that resulted in them obtaining awards that designated them as experts in their field.

Regarding the satisfaction with training, as it can be seen, the collaboration between humans, machines, and software systems is becoming more and more prevalent in the organizational climate, and the human factor is changing in this fourth industrial revolution, as it requires both high technical knowledge and extensive social skills (Ciccarelli et al. 2022).

This digital shift has created a need for industry leaders to invest in their workforce, thus providing opportunities for upskilling, reskilling and lifelong learning. Due to the volatility of current jobs and the emergence of new tasks, it is paramount that a whole transition is made smoothly with regard to skills (on the part of employees and employers) (Flores et al. 2020; Gaur 2020; Mahlmann et al. 2021).

Due to this change, employees must nimbly access their skills and acquire a whole new set of knowledge to create a new curriculum. Therefore, the workers' training must be adapted to new models of teaching and learning focused on improving interdisciplinary skills and expanding the problem-solving capabilities, to face the challenges presented by the fourth industrial revolution (Grenčíková et al. 2021; Mahlmann et al. 2021).

2.2 Leadership Coaching

The Coaching strategy encompasses a set of skills that is based on a dialogue between a coach and one or more coachees (the ones being coached), to increase the potential of the coachee(s) (Berg and Karlsen 2013; Milner et al. 2018). Skills such as listening, questioning, assigning feedback, and setting goals are part of the coaching managers' curriculum (Ladegard and Gjerde 2014; Milner et al. 2018). By applying these skills managers want employees to be able to generate their answers to a problem rather than provide solutions. In this way, management coaching can be considered an approach that leads to the empowerment of the coachee (Milner et al. 2018).

Coaching-based management (commonly referred to as managerial coaching) has received attention from academia as a way to motivate, develop, and retain the workforce within organizations (Anthony 2017; Park et al. 2021). The behavior inherent in this type of management is called Coaching Leadership Behavior (CL) and is considered a leadership behavior that influences the subordinate's feelings, attitudes, and behaviors at work through guidance, facilitation, and inspiration, which consequently induces job satisfaction in employees (Rapp-Ricciardi et al. 2018; J. Wang et al. 2022; Y. Wang et al. 2017).

A leader can then affect/influence an employee's psychological state and, it is known from the literature, that psychological capital is a positive psychological state that has a motivating effect on improving an employee's work attitudes and behaviors. It is known from previous studies that coaching leadership has a significant positive influence on employee self-efficacy (the component that constitutes psychological capital). Employees with this characteristic are shown to have a strong belief in their self-efficacy with respect to voice behavior² challenges. Thus, and as previously studied and validated, the reason why coaching leadership can facilitate employee voice behavior is that this strategy influences employee psychological state (which has, as seen before, a direct impact on voice behavior) (Y. Wang et al. 2017).

Figure 1 intends to summarize the essential characteristics that an employee must admit to moving from a management position to a leadership coaching position (according to (Rapp-Ricciardi et al. 2018)). Furthermore, it illustrates the outputs of a leader coach when managing a team (considering the perspective of Park et al. (2021) and Peláez Zuberbühler et al. (2021)).

²Behavior that falls into challenging the status quo to improve rather than just criticize.

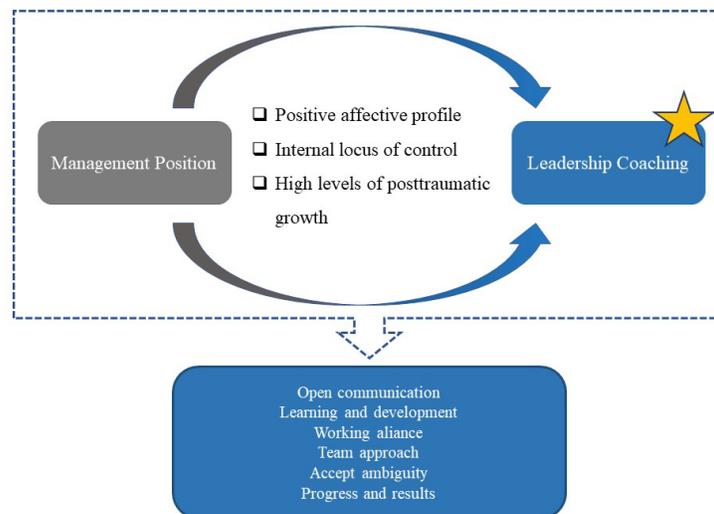


Figure 1. Essential characteristics to move from a management position to a leadership coaching position and outputs of this type of leadership

According to Rapp-Ricciardi et al. (2018), for a transition between management position and leadership coaching position to happen successfully, it is essential that the employee manifests a positive affective (PA) profile, internal locus of control, and high levels of post-traumatic growth. In terms of PA, this can be seen as feelings of excitement, tenderness and happiness, while NA (negative affective profile) are feelings of anxiety, depression, hatred, guilt and disgust. Self-fulfilled individuals are characterized by experiencing high levels of PA and low levels of NA and therefore exhibit a high degree of self-esteem and intrinsic motivation, are optimistic and have a high level of internal locus of control (people who believe that have control over what happens). Regarding post-traumatic growth, this is realized as the occurrence of the challenge to individuals' inner perception of the world and their beliefs. Typically, these events broaden the personal perspective, creating an increased sense of satisfaction with life. Challenging personal values and beliefs require the expenditure of time and energy, but in the end, individuals develop an understanding and acceptance that becomes integrated into their basic belief structure.

For the outputs of leadership coaching, there are the following definitions: Open communication- Open communication between managers and employees fosters mutual understanding and enables relationships to develop. This type of communication requires managers to share information, opinions and values, and to actively listen to their staff (Park et al. 2021; Peláez Zuberbühler et al. 2021). Framing questions should accompany this active listening, and is considered an essential coaching behavior that stimulates motivation and subsequently provokes deeper awareness and reflection, while the employee feels more understood (Peláez Zuberbühler et al. 2021); Learning and development- As coaches, leaders need to provide employees with opportunities for progress and continuous learning, and they can achieve this by providing constructive feedback, helping employees identify, develop, and use personal strengths to drive them toward intended goals. Coaching techniques can be used in this strategy, such as questioning, providing feedback and suggestions, encouraging the ability to excel, broadening employees' perspectives, providing learning guidance, and being a learning resource (Park et al. 2021; Peláez Zuberbühler et al. 2021). It should also be noted that coaching leadership is an excellent resource that positively affects the intention to share knowledge and therefore increases this phenomenon within the company, contributing to an increase in organizational knowledge, which is closely related to human capital learning (W. Wang et al. 2021); Working alliance- This characteristic is intended to create a secure and strong relationship in the teams, where there is mutual respect, trust, transparency and where the leader is sincere, shows interest in the well-being and future of the employees, establishes clear agreements and keeps promises (Peláez Zuberbühler et al. 2021); Team approach- It is essential that leaders see and treat their employees as team partners, working together. Only with this attitude (rather than the control inherent in the managerial position) can employees become more empowered (Park et al. 2021); Accept ambiguity- This stance is closely related to the need for leaders to be open to new ideas and to explore multiple solutions, always considering multiple perspectives (even considering other

people) when making decisions (Park et al. 2021); Progress and results- As far as this is concerned, another of the functions expected of a leader is to support the definition of objectives, monitoring, and performance evaluation of his or her employees. For this, it is imperative that there is collaboration to establish objectives that motivate superior performance (Peláez Zuberbühler et al. 2021).

3. Materials and Methods

The main goal of this paper is to create a Coaching Leadership Framework supported by a tool conceptualization capable of fostering workforce engagement, as well as organizational retention. To this end, the methods followed included a review of what is being researched in the academic world about this topic and interviews conducted within a multinational Portuguese organization belonging to the metal-mechanic sector, whose production focuses on providing hot water solutions through water heaters (electric and gas), boilers and heat pumps worldwide.

The literature review enabled the contextualization of the engagement phenomenon associated with industrial digitalization, with the identification of potential predictors, as well as techniques to support the promotion of this emotional state.

3.1 Data Collection and Analysis Methods

The interviews were conducted after this primary awareness by the literature review. Through them, it was possible to analyze the perception of engagement by respondents (mostly leaders), the strategies applied by the company in the promotion of this state and a set of requirements from the literature (regarding potential modules that integrate the technological tool) were taken to these interviews, to understand the receptivity of employees. With the feedback obtained, the requirements were adjusted, thus following a user-centered design methodology, while creating an organizational coaching leadership orientation framework.

A script was applied to conduct the interviews with the following six objectives: (a) to characterize the respondents taking into account their roles in the company and familiarity with technology in general; (b) to discuss the concept of engagement; (c) to list the organization's existing practices to increase work engagement, as well as those that could be implemented; (d) to understand the receptiveness for a technological module capable of launching questions from questionnaires (of engagement and predictors of it) based on the gamification process; (e) perceive the opinion of respondents regarding the construction of a social collaboration module for knowledge sharing and submission of suggestions for improvement; and, (f) verify the receptiveness of a supervision support module (focused on competency maps and individual development plans).

As far as data analysis is concerned, NVivo® software was used for qualitative interpretation in order to facilitate the categorization of the results.

3.2 The sample characterization

The interviews included the participation of 11 people (see Table 1) more related to management positions, namely in the areas of human resources, communication, product development, engineering, industry 4.0, quality, continuous improvement and production systems, purchasing and administration. Management positions were carefully chosen, as they are more connected to leadership and team management statutes. All interviews were conducted by the researcher through TEAMS communication software and recorded with the consent of the interviewees.

Table 1. Respondent profiles

Cod.	Interviewed Profile	Age	Familiarity with technology³	Interview duration (min.)
B1	Agile coach (Agile coordination and disciplinary responsibility for a	30-40	5	72

³Rate on a scale of 1 to 5, where: 1- I have never contacted with technology; 2- I have contacted with technologies, but I don't use them; 3- I contact with technologies, but with difficulties; 4- I contact with technologies with some ease; 5- For me, it is very easy to contact with technologies.

firmware team)				
B2	HR development partner and internal coach	30-40	4	106
B3	Quality Department Director	20-30	5	64
B4	Business owner	40-50	4	54
B5	Manufacturing Process and Digitalization Department Director	40-50	5	74
B6	Human Resources Management Department Director	30-40	4	52
B7	Plant Manager	40-50	5	83
B8	Product Architect and Innovation Manager	40-50	5	52
B9	Responsible for the industry digitalization (for all the group's factories)	50-60	5	63
B10	Purchasing Project Engineer	30-40	5	43
B11	Head of Communication	30-40	5	45

4. Results

The objectives mentioned above will now be discussed one by one, based on the answers given by the respondents.

Engagement concept

Regarding the meaning of engagement as interpreted by the respondents, the general view focuses on the commitment of people to the organization and the alignment of the values of both parties. In addition to this, it was mentioned that someone with a high level of engagement feels committed not only to the job, but also to the surrounding environment, this includes the working team and organizational practices that contribute to the stabilization of the organizational climate. The existence of overlap in the concept of organizational commitment was denoted here. As seen earlier in the theoretical background, engagement differs from organizational commitment to the extent that the former focuses on the state of involvement with the job which can denote physical, emotional, spiritual, and intellectual. The second concept establishes that the person with a high level of commitment wants to keep the bond with the organization, mainly due to the alignment of values. In the extreme, one may even conclude that someone with high engagement may not want to maintain the bond with the organization (because in another organization assigned the same function, he/she would obtain the same engagement). However, the opposite may not be true; that is, a person who is committed to the organization in the first place, is assumed to be engaged enough.

It is a person who is very committed not only to the role but to his/her environment. (B3)

It is a person with a great sense of mission for what the organization's objectives are and this implies a great identification with the values and purpose. (B9)

Despite the overlap, the perspective is also based on the idea that engaged people are employees with a sense of what the company and team's missions are and, not only do they return high commitment to that part, but they also have the ability to contribute even more in times of crisis and/or need. Taking the Plant Manager of the company surveyed as a reference, it is assumed that, since salaries are aligned with the market, this is no longer a differentiating factor in work engagement, since it should be sufficient so that it is not thought of as a way of negatively influencing people involvement.

My perspective of engagement is based on those people who are aware of the missions we have set ourselves and who, in addition to committing themselves, have the ability to raise their hand to contribute even more in times of crisis or need, or when certain areas are in need. Engagement is not restricted to our framework (...)(B4)

What motivates us is not money, it is not a differentiating factor. Money must be enough for me not to think about money, for it to affect my engagement. If I don't get paid well, it is obviously a crucial factor for me to have engagement. If today I give extra money to an employee, he/she will be very happy, but the next day, if the other conditions are not met, it's no use, because the salary has been checked and is now forgotten. (B7)

Engagement Promotion- The coaching importance

As mentioned earlier, one of the questions asked during the interview focused on what respondents perceived as activities that fostered work engagement within the organization. According to the respondents' answers, the initiatives that proved to be most important in increasing engagement are (Table 2):

Table 2. Engagement initiatives

Engagement initiatives	Quotations from interviews
a) Training (e.g. communication and conflict management)	We have many trainings on communication, conflict management (...) people realize that they can develop outside the technical box. (B1)
b) Communication, transparency, and information accessibility	Regular communication for both good and bad is key. It brings transparency and is a catalyst for keeping people informed. (B4)
c) Work team empowerment	Another thing has to do with empowerment and in my team, we always try to keep trainees (contributing to the training of people) and the selection of them I delegated it to my subordinates and HR called my attention, because supposedly that role would be the leader. But I preferred that the initial selection was done by the team, even because it would be with them that the trainees would have to work. Anyway, I didn't take off the leader role, I simply trusted in my team's capacity and that's empowerment. (B9)
d) Trust in people (no need to control check-out and check-in times, for example)	There is an attitude of trust when it comes to people, and there is no need for control of hours. This is what I like most...I feel that there is trust in my work. At no time have I ever felt that anyone controls what time I come in. (B1)
e) Involve human resources in the organization's decisions and strategy by establishing purpose	The question of purpose is very important, that is, people understand what they are contributing to. (B6) It's not just about setting goals and giving them to employees. People must be involved in defining the strategy. (B4)
f) Creation of teambuilding and celebration events (for example Christmas and family day)	(...) I would add recreational activities, teambuildings, and non-work sharing (...) If there are recreational activities, and non-work sharing where people create connections, there is a connection and therefore less judgment. It actually fosters empathy. (B10)
g) Recognition culture and career development perspective	To have career prospects, even if it's "I want to retire". We have to realize that we have different career prospects at different ages. (B7) Moments of recognition are important (...) (B2)

To raise all the components identified above as engagement enhancers, the company surveyed is currently developing an internal coaching program for its leadership. The idea is to equip the leadership with coaching tools and skills in emotional management and conflict management. In the company's vision, this is essential for there to be a progression of good practices throughout the hierarchical chain. The organization's Plant Manager (B7) assumes "At my initiative a person who was from communication, and who invested personally and also through support from the organization in coaching training, was displaced from communication to do full-time coaching. It is an area that we have to invest in. I have 1000 people that I lead, and I don't go around knowing the personal and professional life of each one, because that would be impossible, but I hope that my people do that, in a hierarchical perspective."

A technological tool to promote engagement - the concept

Pulse surveys module. Currently, the only valid way to assess engagement is through previously validated scales, i.e. questionnaires. In this module, it is intended that the system launches a daily question to the employee (the Gallup 12-question questionnaire will be used, as well as others that intend to assess engagement predictors, such as the authenticzotic climate). This functionality is based on a virtual recognition system, in which, after answering the challenge displayed by the system, the person wins points. The answers given by the respondents determined that there would be two major audiences, indirect area staff of a younger age group that would probably have a greater engagement and see a benefit in using the tool. On the other hand, people who have been in the company longer and production people (shop floor) may find it strange, making the process more difficult. The idea that the points

system, like the podium (inherent to the virtual recognition system) should be calibrated was highlighted so that people's motivation is to want to participate, and not just for receiving points. The idea that it is necessary to align the entire digital strategy of this tool with the organization's managers was another perspective that was put forward since reality is exposed in a very direct way. One of the interviewees (B2) mentioned that previously they implemented a kind of kiosk where people could express how they felt and that at the time the managers did not like the idea and abolished the system.

From my experience, I think you'll get different audiences. Indirect area staff of a younger age group would probably have a greater engagement and see a benefit from it. People who have been with the company longer and production people might feel it's more of a company ploy. (B10)

I think it could work yes. But we must be careful about exaggerating the points. I need a new appliance and I want points...we had instituted that for each suggestion submission the person already has 5 points. And we got to the point of having suggestions without much-added value. So, it's necessary to calibrate this aspect. People's motivation needs to be to want to participate and not because of points. (B7)

We had a kiosk where people would post feedback and say how they felt. But the managers didn't like it very much, so it's very important that this application already considers the managers' wishes. Such an application will bring reality and maybe some problems, so sometimes it's easier to put under the rug. (B2)

Social collaboration module. This module was first architected according to requirements extracted from the literature review and then checked against the interviews conducted. Initially, two major objectives were considered for this module: 1- Creation of discussion forums (sort of communities) where employees can pose questions to experts in the domain in question with assigned response priorities; 2- Submission of suggestions for improvement using a strategy of Neuro-linguistic Programming, called Disney⁴, to better prepare the suggestion to be developed. Also in the second objective, the planning was to create an evaluation committee that, through rounds, reaches a conclusion on the implementation or not of the presented suggestion. Again, these systems would be associated with the virtual recognition system, using gamification. As the interviews went on, the research team found it necessary not only to apply an autonomous virtual recognition system based on interactions with the technological tool, but also to introduce a user-triggered recognition system. This second functionality intends to offer employees the possibility of recognizing their colleagues for actions that they have developed and in which they have excelled. Regarding the insights of the employees interviewed concerning the discussion forum feature where employees can pose questions to domain experts, the following findings were presented (Table 3):

Table 3. Discussion forum findings

Findings	Quotations from interviews
1. Fear that experts do not have enough time to answer questions, as their time is counted.	(...) the only difficulty I see is that the experts are very busy. (B2)
2. It is essential to have a search engine in the repository, so that the search afterward can be carried out as quickly as possible.	I like the idea but have some doubts about the implementation. And the way I search for the information is also very important, as a search engine, so it can be very efficient. (B2)
3. The need for a prior and periodic evaluation of the questions and answers was identified, as well as a ceiling for those who ask and those who answer, to avoid that it is always the same niche of people who use the technology.	It is possible to adjust to my context, but it needs periodic evaluation of the questions and answers. (B4) The capping issue can work well and creates a system with some control. (B9) I think this can become a wall of lamentation, but it can also hurt the company culture because there are people who are very happy and there are people who are very unhappy. (...) My suggestion would be to put the question anonymous to the pool of people who can answer and after it is answered, there would be a questionnaire to see if the person wants it to be visible and the management of the company would also find out

⁴Creativity is a process that involves the coordination of three sub-processes: dreamer (one assumes the role of visionary of the "big picture", in which one imagines what one wants without imposing limitations), realist (focuses on formulating a set of actions to achieve the dreamer's dream) and critic (it is about having a "second look" to what was elaborated in the two previous sub-processes, to avoid problems and ensure quality by applying criteria and experimenting if the stipulated holds up in various "what if" scenarios) (Dilts and DeLozier 2000)

if it maintains the stability of the company. (B10)

4. The existence of a public ranking for the tool can make it more likely to be used, fostering interaction based on internal competition.

I think that having a public ranking of the use of the tool can help people stay engaged with the tool. (B7)

When it comes to the system of submitting suggestions for improvement using the Disney strategy of Neuro-Linguistic Programming, the respondents received the idea favorably. There were those who assumed the enormous variability of the world of suggestions and who thought of the adoption of the Disney strategy as a way to bridge ideas submitted without value, since there is a first filter with more than one person. Still connected with this aspect, there is the indication that the role of realist and the role of critic should be randomly selected. In addition, contributors would be allowed to view each other's submitted suggestions (as well as their status) and comment in order to criticize and improve what has already been submitted.

The Disney strategy part ends up being a joint decision and it ends up being an interesting jury. (...) There are, however, suggestions submitted that are similar and that mess with compensation, but perhaps the initial three-person game diminishes this aspect. (B5)

I think it is preferable that the selection is random for realist and critic roles. (B6)

(...) I think it's a way of not letting the suggestion get lost in limbo and the suggestion passes through a sieve.

There is one person who is dedicated to building and another who is dedicated to deconstructing, to then be shown to the organization. It also gives room for the suggestion to evolve in time, by being visible. I'm curious to see how it will be implemented. (B10)

During the interviews, the research group became aware of a tool used by the company that promotes interpersonal recognition, through the awarding of medals. In this context, anyone can award merit medals to others, considering events in which there was a performance distinction. Thus, this functionality will also be available in the technological platform, working similarly to the Mirro® app that already exists in the market, with some biases. In the Mirro® App, it is possible to offer Kudos, which are nothing more than pre-defined medals, and it is possible to add a comment of appreciation. The LinkedIn® platform presents a similar approach when it comes to endorsements applied to users' skills. Since the platform will already adopt a skills management module (digital passport - discussed below) we intend to adopt a mix of strategies from the Mirro® application and the LinkedIn® platform. In this way, the company will be able to create medals according to what is most essential at the moment, so that these "labels" will be promoted and internal competition will be created and, at the same time, employees will be able to address endorsements to their colleagues' competencies. These two functionalities are intended to foster individual development in focal skills (at a specific moment in time, with the possibility of changing medals) and internal competition, creating rankings and individual and team recognition.

In WOW!, specifically in those more outside profiles, I not only want to receive WOWs, but I also want the organization to know that I received it and that part is not secured. This is for those profiles that are more recognition oriented. I think having a public ranking of the use of the tool can help people stay engaged with the tool. (B7)

We already have a virtual recognition tool that is called WOW!. (B1)

Regarding the last module, called Digital Passport in the platform, the aim is that employees have access to their skills and can monitor them over time. In addition, the goal is to have a functionality to compare the employee's current skills and those required by the existing functions in the organization, to create a future development perspective. This way, another sub-module of this Digital Passport arises, which is the creation of development plans through the Jour Fixed strategy. This procedure aims to get the employee to discuss with their leader their successes, challenges, development goals, and resources and tasks to achieve these goals. It should be noted that with these features, the employee will be able to, at the same time as he or she looks at the competencies to be developed (through comparison with others required to perform a particular function), create and monitor his or her individual professional development. After the interviews, where insights were gathered on the application of coaching tools by leadership, it was decided to include the GROW (Goal, Reality, Options, Will) model (*Performance Consultants*, n.d.) in the scope of the description of objectives to be met.

Yes, I agree, and we even think that the one who should do the information storage should be the employee. That also came under lean management. There are functional jour fixeds and then there are development jour fixeds.

The functional jour fixeds are sometimes for group or individual problem-solving. The important thing is to have that moment for people to talk about themselves. (B5)

There are people who follow up after the meeting, but 90-something percent do not. And as the business has dynamism the goals that have been set have to be continually adjusted. I think it's very interesting and I think it's important. This tool helps the follow-up and helps that things are not forgotten. It also helps that the objectives are executed. I think this helps performance, and at the engagement level, it can also serve as a guide for the leader and thus help. (B8)
I think it could help. We have some tools, but they don't allow me to see where I am and what I still have to develop. (B11)

5. Discussion and Final Remarks

By analyzing and reviewing the literature it was possible to arrive at two variables that contribute to the promotion of work engagement (during the digital paradigm) and consequent reduction of voluntary turnover, they are the learning culture and training.

The learning culture may include training, but it goes beyond this, in which knowledge and suggestions are shared. This can be supported by collaborative platforms, where it was found that the gamification process has a positive impact, creating easier interaction with the workforce.

As far as training is concerned, it is closely related to the paradigm's intrinsic need to develop and create new skills, thus determining a whole new curriculum for the employee.

The interviews carried out took into account these two aspects: the determination of the collaboration module promotes a culture of knowledge sharing and learning (discussion forum), of participation on the company's structure (through the submission of suggestions) and of recognition (with interpersonal recognition) and the digital passport module, it involves managing skills and, at the same time, careers, supporting the management of training satisfaction.

Furthermore, by analyzing the interviews and reviewing the literature, Coaching Leadership emerges as a strong tendency for the workforce motivation and empowerment, insofar as it has a straight influence on the psychological state of the employee (concerning psychological capital) and consequently on employee voice behavior.

Figure 2 intends to summarize the influences between all concepts, providing the following insights:

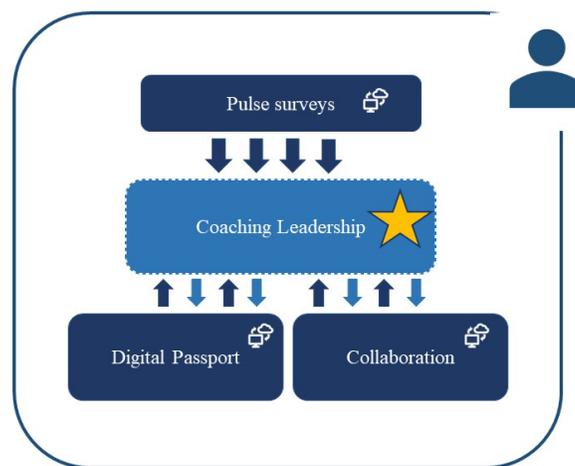


Figure 2. Correlation between the Pulse Surveys, Digital Passport and Collaboration modules and Leadership Coaching

- Coaching Leadership can benefit from the outputs of pulse surveys, in the sense that it has access to indicators of organizational status, thus being able to act on existing concerns;
- The collaboration and digital passport modules allow for the promotion of a learning culture and training satisfaction, contributing to the promotion of open communication, learning and development and progress and results, which are essential characteristics in Coaching Leadership;

- Coaching Leadership, with all its essential strategies/characteristics (open communication, learning and development, working alliance, team approach, accept ambiguity and progress and results) promotes the digital passport and collaboration modules, providing transparency and motivation for managing skills and career planning, as well as creating a whole encouraging environment for collaboration, focusing on sharing knowledge, submitting suggestions and, therefore, participating in the company's strategy and also interpersonal recognition, where everyone recognizes everyone;

- In addition to fostering the learning culture and training satisfaction, the constitution of modules based on the gamification strategy per se directly influences engagement, contributing to greater employee commitment.

To sum up, it is presented a first leadership framework with conceptualized technological support, capable of strongly promoting organizational engagement, contributing to the two areas highlighted in the literature as most influential in this state (learning culture and training satisfaction) combining in coaching and gamification strategies itself.

As future work, a broader investigation into the trend of coaching leadership as a support for digital transformation is planned, highlighting other case studies. In addition, it is intended to carry out the technological tool programming and its validation in a real context.

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