How Digital Role Play Can Enhance Performance Leveraging Corporate Capabilities

Practice Behaviors that Matter

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Abstract—Performance management isn't just a matter of defining and following a process. Instead, it's above all a lively and intense interaction between the managers and their reports. Skills and technique underlying an effective and satisfying relationship is essential to ensure sustainable results with involved and motivated teams. We propose a role-play game based on Artificial Intelligence that allows to put capabilities into actionable, measurable behaviors, throughout communication. This method makes it possible to practice critical conversations in working environment, with different characters based on personality psychology and neuroscientific findings. The training method can be used to practice key skills in the processes of performance management, such as: setting goals, monitoring results, give feedback, and reward. The method allows to improve performance leveraging corporate capabilities. In this statement the architecture of the method will be illustrated, to specifically explain how capabilities have been directly related to skills, behaviors and then conversations. The specific performance management training will be explored.

Keywords—performance management, corporate capabilities, soft skills, corporate learning, adult learning, training soft skills, behavioral change

1 Performance management

1.1 The problems with performance management

Performance management (PM) is a complex, multifaceted, and multilevel process, requiring an always increased investment of time, costs, and especially eliciting many complaints [1]. Its historical main purpose was to find the better solution to evaluate the performance, obtaining accurate ratings of individual's. PM practitioners tried to offer rating schemes and evaluation strategies that they believe will drive higher performance, trying to make it more effective and less biased [1]. Eventually, it has been realized that social, political, and practical factors carry so much weight in managers' ranting accuracy that it can't be relevant drivers for rantings [2], and it evolved into more comprehensive PM processes that include a set of different activities [3]. Culbert

and Rout [4] describes it as a "pretentious, bogus practice" that should be better to end. A *Washington Post* study [5] pointed out that almost "every single person hates performance reviews." Furthermore, it's concerning that a few studies report that the evaluation of PM processes on performance and business outcomes have shown no positive impacts. Based on CEB [6] business units with highly rated employees were not more profitable than those with low-rated employees. PM is universally disliked by both managers and employees [1]. The negative affect is reflected in the representative statistics made by Corporate Leadership Council [6, 7] in which: among managers 95% are dissatisfied with their PM systems, the 59% of employees feel PM reviews aren't worth the time invested and the 56% of them report they don't receive feedback on what to improve. Almost 90% of human resources (HR) heads report that their PM systems don't yield accurate information.

1.2 Performance management and behavioral change

Despite all of this, the methodology might be wrong, but experienced managers understand that employees want to be praised and recognized. It is part of the manager's job to be able to get the highest performance out of the team, and a key part of that job is using all available levers to keep the collective group engaged, productive, and performing [3].

Indeed, those behaviors are important drivers of engagement and performance. Important, relevant part of activities driving performance are cascading goals, expectation settings, interim feedback reviews [8, 9]. So, what's the next step for the research and practice of PM? Actually, an effective PM process is the result of interactions between people, both parties need to be engaged and have joint responsibilities. According to Polakos [1], a fundamental shift in orientation and daily behaviors is essential for the establishment of a new PM process. She claims that the change of behavior should involve both parts, since managers behavior is essential, but they can't engage in effective PM alone [1, 10]. Nowadays, the characteristic of PM includes formal goal settings at the beginning the annual cycle, and developmental discussions often just ending in formal training programs, feedback occurs infrequently and on a schedule. According to Polakos, the future of PM process should include daily behavioral changes such as real-time expectations and goals changes based on situations, development as part of the daily work, real time constant feedback and employees well prepared to be engaged in effective PM behaviors. In summary, she suggests incorporating fundamental changes, redirecting attention to critical, day-to-day PM behavior. Those behavioral changes in PM processes can be driven using competency models as basis. In a PM context, ratings can be also made on competencies that are relevant for each employee's role. However, competency-based rating formats have been shown to be no more accurate or unbiased than other rating formats [1].

1.3 Competency model

In reviewing the literature about this topic, two points immediately pop out: a significant amount of literature and a wide range of meanings are attributed to these terms. Even though "competence" and "competency" concepts dominated the management

strategy literature of the 1990s, the actual meanings are still a bit confusing. Despite the generally accepted distinction in the meaning of competence and competency, the terms can sometimes be interchangeably used, and they can have different meanings depending on who is using them [11]. In Boyatzis's book, The Competent Manager: A Model for Effective Performance [12], the concept of competency was a central theme, and it has been defined as "an underlying characteristic of someone which results in effective and/or superior performance in a job." The word is also strictly related to behavioral outcomes as a sequence of actions taking place in a system. Since an epistemological and historical debate about this topic is not the main purpose of the present statement, we will focus on the key concepts of our training method. The key concept of the present purpose is that competencies are characteristics related to skills and behavior in the workplace environment. A competency model is a behavioral job description that must be defined by each occupational function and each job [13]. Competency models have many advantages, including that they help organizations take a unified and coordinated approach. According to the SIES Journal of Management [11], there are various advantages to using a competency model. It helps to enhance the recruiting process, employee development, and PM as well as identify training needs. It is very useful in the unification of corporate culture across business units, establishing connectivity through integration of HR processes, and establishing clear expectations for success [11]. It is agreed upon worldwide that utilizing competency models helps with the strategic management of talent and leads to a profitable and successful organization [11].

1.4 The SkillGym training method

How do you practice behaviors that matter? How is it possible to implement generic, theoretical competency models and soft skills? Despite the large body of literature regarding behavioral competencies, only generically actionable behaviors have been defined [14]. No standards of behavioral approaches are currently available to help in differentiating a superior performance from an average one [14]. The literature review doesn't provide conclusive and exhaustive answers to bridge this gap. We argue that a methodology able to provide these kinds of practical insights has the potential to enable participants to practice competency models directly in real-life, everyday situations—not just as a theoretical framework to aim toward.

The SkillGym training method is an Artificial Intelligence-driven role play game where the users can freely and safely interact with characters, in different scenarios, having critically conversations related to common hard topics. It enables participants to practice a wide range of crucial skills strictly connected to the real world by simulating conversations in a working environment. This method aims to enhance performance by training people in critical conversations. Effectively practicing skills and behaviors enables individuals to contribute to the improvement of their organizations (Figure 1). The architecture of the present method has been developed to specifically bridge the gap between theories about competencies and skills, and specific daily behaviors to associate with these skills. We, in fact, argue that a well-designed competency model can be the starting point, but then other triggers are needed to turn practice-based learning into solid experience. We claim that the main purpose is to put the explicit knowledge about competency model into people's daily behaviors, throughout daily conversation.

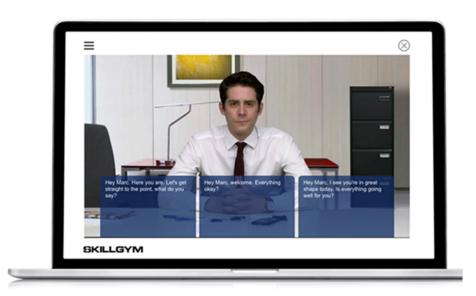


Fig. 1. An example of display of SkillGym digital role play game, during a conversation with a character

We claim that SkillGym training method allows employers and employees to put into daily practice actionable behaviors, directly reflecting organizational competency model. It allows to achieve those change of behaviors necessary to efficient and effective PM processes.

2 The architecture of the method

2.1 Behavioral competencies model to meet everyone's needs

To meet needs on a global scale, the method has been based on the holistic framework considering knowledge, skills, and behaviors as dimensions of the same out-come. The approach allows operation on each different level. It has been made by taking into consideration both well-known theories and more than 20 years of expertise in developing effective strategies for learning and development in companies. The result is a model that, over the years, has proven to match most of the competency models adopted or developed by the organizations in everyday reality. Designed to deliver an actionable approach for efficient and measurable training, much effort was dedicated to establishing a very clear interpretation and definition of each element of its structure. For instance, different areas of empowerment have been selected. In each of these areas, changes in behaviors can efficiently affect mutual interactions among individuals, which enhances the organization's results. Therefore, a key founding pillar of the present model's structure answers the question, "What areas of influence can be covered?" The areas of empowerment have been classified according to the role in the organization, and, most often, they overlap the traditional roles' competencies as designed in many corporate competency models. Built upon this initial four-area

structure, we propose a complete model of eight key capabilities that blend perfectly within the four areas of engagement that inspire the design of our simulation scenarios (Figure 2). For each area, the two capabilities balance the fulfillment of the need to improve oneself (Get) and support the improvement of others (Give).



Fig. 2. Competencies model: areas of empowerment and capabilities

Given this framework, an inner layer has been developed to define and structure the way those competencies are detailed in more day-to-day actionable and specific skills and relevant behaviors.

2.2 Behavioral model of competence

Behavioral models of competence are powerful because they are part of the actual context in which behaviors are manifested [14]. Reviewing management literature, it's easy to infer the increasing interest in people skills and associated dimensions of behaviors underpinning proficient performance. Different studies and research have been conducted to provide insights about specific skills and associated behaviors for managers to adopt [14, 15] as suggested by Blackburn [16], Huemann [17], Dainty et al. [14], and Moore et al. [18]. Numerous methods were available to assess these competencies through behavioral event interviews [12, 19, 20], simulations, and assessment centers. There is general agreement about some fundamental skills required for an individual and (consequently) a company to function. McGregor [21] linked some methodologies for changing organizations to basic concepts of behavioral sciences, pointing out how an individual can grow and realize the basic goals for himself or herself, and at the same time, for the organization. Blake and Mouton [22] said that human needs are indispensable for mature and healthy relationships, so when managerial concerns for people are integrated into the team, the best long-term production is achieved and sustained. Likert and Hayes [23] also applied behavioral research to operating organizations, finding that an effective manager needs to show concern for people, involving trust and sympathy and people's emotions, for example, in solving problems. We find the work of Honey very relevant for this, who back in 1988 suggested that interpersonal skills—especially face-to-face skills—are particularly important for managers on different occasions, both formal and less formal. The author offered a way for people to make behaviors (verbal and non-verbal) a conscious process, being aware of their impact on others instead of simply applying them because that "comes naturally." Peters and Waterman [24] suggested that an effective people manager should be able to communicate well. The people manager should inspire, lead, show empathy toward and respect employees in a people-centered working environment. In more recent years [15], it appears that the behaviors that underpin competencies are being increasingly recognized as the driving forces that influence the effective management of people. Kets de Vries [25] suggests that in order to have healthy, properly functioning individuals in "vibrant companies," managers need to show a genuine interest in human nature and build an understanding of what is psychologically important to others. He refers to this as "authentizotic behavior."

Fisher [26], after a combination of literature review, face-to-face interviews, and focus group meetings, completed a search to objectively consider the skills and behaviors of an effective people project manager. The suggestions considered by his paper are not limited to application in any specific industries, such as for-profit and non-profit organizations and construction, or types of projects such as infrastructure and software development. Six different skills and related behaviors have been found. Skills on their own, including their applications, do not make an effective people project manager. Behaviors drive outcomes. For each skill, specific behaviors need to be applied to make these skills truly effective. It is the application of these behaviors that is preponderant and moves the needle for effective people project managers [26]. Essentially, the skills are related in order to understand the behaviors of others, be able to lead, support, influence, and inspire with visions and charisma, properly manage conflicts and be aware of cultural differences. Specific, appropriate behaviors are also explained, and the author also suggests that acquaintance and skills without associated behaviors are perhaps not as effective as previously thought [26].

2.3 Integration of competencies, skills, and behaviors

Behavioral competencies help to define a path for behaviors following the latest findings. After the competency model has been defined, there is the need to integrate it into measurable, observable behavior. We argue that the model is totally consistent with the latest findings in the field (Figure 3). For each capability, specific skills are then associated. For example, for the capability "Deliver Value" one of the underlying skills might be "Ask questions." The comprehensive model includes 78 skills. All of the skills are related to the essential skills required for employers and employees to function, based on literature research as previously described. Each skill is then described as a grade of observable behaviors made of four different levels of efficiency: Talented, Skilled, Overused, and Unskilled. Each skill and its underlying behavior can be practiced with different scenarios; however, of course, each scenario provides training only for a specific set of different skills. Practicing more scenarios together allows the user to practice a comprehensive set of skills to develop the competencies/capabilities for which the specific training was needed.



Fig. 3. The method: explaining how different grades of observable behaviors directly represent measurable expressions of selected skills

2.4 Skill-behavior-conversation association

A skill can be demonstrated through observable behaviors. According to the expertise level of the individual, different levels of observable behaviors can be attached to the same skill. Afterward, different behaviors can be embedded in the conversations during the daily business activity (Figure 4).



Fig. 4. How skills can be expressed through behaviors and then into conversations

The type and quality of behaviors adopted by individuals depend on the chosen strategy of communication and, of course, by their expertise in the specific skill. The method is based on a four-level scale to associate observable behaviors to each skill as a representation of different stages of proficiency:

- **Unskilled**. When a user might not be aware of their lack of proficiency. As an example: for the skill "ask questions," this level is associated with "being aggressive."
- Overused. Typically, this is applicable for users who start understanding the
 direction the conversation should take without the ability to handle it properly. It
 has been noticed that at this stage, the learner tends to over-behave. As an example:
 for the skill "ask questions," this level might be associated with "being confusing."
- **Skilled**. For example: for the skill "ask questions," this level might be associated with "barely open to listening."
- **Talented**. For example: for the skill "ask questions," this level is associated with "being genuinely interested in understanding."

Interestingly, this approach can be somewhat related to similar studies conducted in "The Stages of Competence" model by Thomas Gordon [27], designed to assess the learning process of the new skill. This model was introduced by Noel Burch in the 1970s. As in the Situational Leadership model, learners in the Stages of Competence model fall into one of four stages: unconscious unskilled, conscious unskilled, conscious skilled, or unconscious skilled. Conceptually, the Stages of Competence and the Situational Leadership models are parallel. The Stages of Competence model implies that all learners proceed in a sequential, somewhat predictable order through the four stages. At the unconscious unskilled stage, the individuals don't understand, or they don't know how to do something. They don't necessarily recognize the deficit. Conscious unskilled is when the learners don't understand or they don't know how to do something, but at this point they are aware of the deficit. Conscious Skilled is when the individual understands or knows how to do something; however, demonstrating the knowledge or skill requires a certain effort. At the level of Unconscious Skilled, the individuals have had so much practice with that specific skill that it requires little thought, and it can be performed concurrently with other tasks.

3 SkillGym method to train management performance

The recent revolution of PM allowed to transform what was before considered a burden, into an opportunity to create valuable business practices [28]. Research based on practical and evidence-based has focused on what actually improves performance, showing that providing regular informal feedback and setting agile, shorter-term goals has a positive impact. Goal setting and right action plan is reported to be strongly related to behavioral changes. Simply setting a goal can led to actual change of behavior. It assists individuals to identify specific behaviors and how to go for it [29],[30].

Related to the alignment and to the setting of SMART goals, there is the ability to provide feedback [1]. Formal feedback has been developed a lot in PM history, but informal feedback is less studied. The informal feedback has a strong importance, is about giving natural feedback, in informal situations when opportunities occur, i.e., when there is a misunderstanding, something doesn't go how planned, or where there is a problem to solve. Feedback can strengthen relationships between the recipient and the provider, it has the ability to maximize a positive outcome and to develop the recipient [1, 31, 32, 33].

Consistently with research and literature, SkillGym training specific for PM allows to practice those skills needed for the interaction between the managers and their reports. The "Performance Management Circuit" was created in order to train skills and technique underlaying an effective and satisfying relationship, essential to ensure sustainable results with involved and motivated teams.

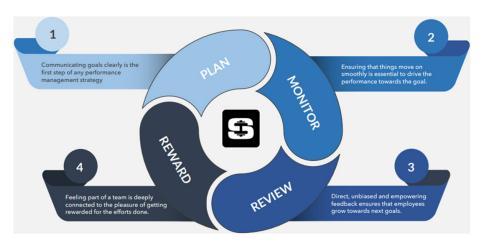


Fig. 5. The circuit specifically designed to train PM processes

The circuit relies on four so-called metrics—i.e., pillars on which the PM model is based (Figure 5). The whole circuit allows to practice 33 behaviors within eight different contexts. It means that there are eight different types of conversations to practice, two conversations for each metric, each one with different purpose:

- 1. To properly set goals and to clearly communicate them;
- 2. To monitor the development, ensuring that things proceed smoothly, being able to motivate, to realign and/or recharge in the event it becomes necessary;
- To review and give the right feedback to make sure employees are able to strive toward the next goal, such as by attaining the ability to encourage to focus on performance or on a particular approach; and
- 4. To reward.

4 Conclusion

PM has become an opportunity to build relationships and to put into action new valuable business practice. The digital role-play game allows to put organizational capabilities into daily actionable behaviors, by practicing critical conversations in working environment. The training method allows to bridge the gap between theoretical competency models and actual behaviors. Given its peculiar ability to reflect corporate competency models and to assist behavioral change, we claim that this training method can surpass the traditional tools. We believe that fostering the ability to leverage fruitful and empowering conversations throughout the entire organization, is a powerful tool to train the processes involved in PM. The method enables behavioral changes drive by organizational competency models. It allows users to train specific metrics and skills that are essential in PM, such as planning and setting goals, monitoring the performance, give informal feedback, and reward.

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