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## Digitalization and language games in business planning: the case of IKEA Italia

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#### 1 Introduction

In the current competitive environment, firms need to reshape their strategies, redesigning their business models in a very flexible manner. This requires the adoption of planning and budgeting procedures able to seize new market opportunities in line with the resources and capabilities developed in the organization. To do so, planning and budgeting procedures need to be conceived as communication practices which involve the most relevant organizational areas and hierarchical levels in defining the main strategic and operational objectives and consistently allocate financial resources. Both formal and informal interactions amongst organizational actors need to be promoted to make possible mutual adjustments and know how sharing.

In this context, the contribution of management accounting systems and practices is not limited to the provision of accounting information, whose content, frequency, and timeliness depend on the decisions to be supported. This informational perspective, which informs the mainstream of management accounting research, assumes information as a commodity which, being standardized, does not consider the needs and meanings that emerge during its different uses in the specific organizational practices. A linguistic turn for accounting research has been called for by Macintosh, (2000; 2004), who explained: "Instead of treating accounting reports and information as commodities, it [a linguistic turn] means treating them as texts, narratives, discourse, and discursive formations. (...) A linguistic turn, following poststructural semiotics and Wittgenstein's language game theory, could be a way of overturning the informational perspectives hegemonic grip on accounting research" (Macintosh, 2004, pp. 538, 539).

Wittgenstein's language game theory can contribute to our understanding of how accounting texts, narratives, discourse, and discursive formations are functional or non-functional to the construction of valid planning and budgeting procedures. However, the centrality of digitalization nowadays seems to compromise the relevance of local, specific practices, entailing the risk of de-contextualization of data. If so, digitalized management accounting practices, such as planning and budgeting procedures, risk neglecting the relevance of language games in the functioning of planning and budgeting procedures, and this has no clear implications on the validity of these procedures. Therefore, the

rising question is: how does digitalization influence/modify the language games in the organization and, consequently, the validity of planning and budgeting as a strategic learning process?

The paper addresses the above question drawing on pragmatic constructivism in examining the validity of planning and budgeting procedures and whether the language game behind them is functional or non-functional.

The theoretical lens outlined above is adopted to interpret the use of a digital tool within the planning process at IKEA Italia, the Swedish multinational retailer operating in the industry of furniture. The choice of the Company is due to the philosophy of management control it adopts. Management control is named "Business navigation" as it follows a holistic approach where the business navigator (the controller) engages the other managers and himself in defining and pursuing both strategic and operational objectives, translating them from the corporate to the country and the store levels, in monitoring their achievement, and furthermore, in exploring emergent strategic options that can create new business possibilities.

We find that the Business Navigation language game is strongly supported by digitalization. Moreover, digitalized interactions support, and are supported by, face-to-face communications which maintain the relevance of local practices at the store level in the process of meaning construction.

The paper contributes to the management accounting literature fostering the linguistic perspective as a useful lens to understand the use of management accounting documents as texts, narratives, discourse, and discursive formations. In doing so, Wittgenstein's language game theory is combined with the PC framework as the theoretical lens used to examine the validity of planning and budgeting procedures. A second contribution of the paper is related to the phenomenon of digitalization and its impact on management accounting and control practices. Reporting the empirical evidence of management accounting and control practice at IKEA Italia, the study has demonstrated how the philosophy of "Business Navigation" developed in IKEA Italia is based on the factual possibilities offered by digitalized tools such as collaborative platforms, showing the positive impact of digitalization on management accounting practices.

The rest of the paper unfolds as follows. Section two and three offers the theoretical arguments that guide the case setting, which is developed in section four, after outlining the research method. Section five and six develop the findings of the study and last section traces some main conclusions and prospects for future research.

#### 2 Language game in digitalized settings

The mainstream research on management accounting has relied on the concept of information in line with the influence from the economic theory. Information is a scientific concept, treatable in general arguments and also in formal analytical and statistical models. This has been called by Macintosh "informational perspective". It sees accounting information as a commodity (Machinotsh, 2004) and analyses it using methodologies from economic theory.

Considering accounting as the language of business, a literary or linguistic turn in accounting research has been called by Belkaoui (1978) who suggested that accounting lexical characteristics and grammatical rules would affect the linguistic and nonlinguistic behavior of users.

In financial accounting research the development of this literary turn has followed different steps which differed between North American and European scholars. Based in the informational perspective, the concept of information disclosure, spread in North America accounting literature, finds in the narrative of financial reports its European correspondents (Beattie, 2014). Even if the linguistic turn has captured the interest of North American scholars, American and European studies on accounting as language differ in their philosophical assumptions, which are positivistic, in North American studies, and interpretive and critical, in the European ones.

The linguistic perspective is explicitly advocated by Macintosh and Baker (2002), who justified this perspective arguing: "Since accounting is frequently referred to as the "language of business" and since both preparers and users must rely on language as much as numbers to construct and to interpret accounting reports (...), it seems reasonable to investigate accounting reports for their narrative qualities" (Macintosh and Baker, 2002, p. 185). Macintosh (2004) is also sympathetic with this perspective. He explained the linguistic turn clarifying: "Instead of treating accounting reports and information as commodities, it means treating them as texts, narratives, discourse, and discursive formations" (Macintosh (2004, p. 538).

In management accounting research, the mainstream informational perspective, which sees information as a commodity abstracted from the managerial work, causes a loss of relevance of the management accounting discipline as the how and why managers use management accounting information in their work is underexplored. Jonsson (1998) suggests embedding the role of management accounting information in the managerial work. According to the author, this requires: first exploring the managerial work in its specific context, second, examining the use of management accounting information in managers' conversations. Conceptually, Jonsson argues that managers interact in their work environment by following a cooperative game, and it is in playing such a game that they use management accounting as a language.

Following Jonsson (1998), Hall (2010) has developed a conceptual examination on the role of accounting information in managerial work deriving propositions on how managers use accounting information in their work environment. Besides this theoretical development, what still needs further investigation is the communicative meaning of accounting which refers to how an actor gives a reason (an account or an explanation) for an action. From this sense, accounting is seen as the language used in managerial communications. In using accounting language, a manager binds himself or herself to do in the future something consistent with the previous act he or she has been accounted for. The accountability comes from accounting used as a language.

In this perspective, the Wittgenstein's conceptualization of "language games" can contribute to our understanding of how accounting language may constitute or not a valid construction to realize the organizational goals. In Wittgenstein's philosophical thought (Wittgenstein, 1953), language assumes a factual role in determining and understanding human behavior in the contexts in which humans live and operate. He believed that a word could be used as a name, but it could also be used in a variety of other ways and that words mean different things in different contexts, in which different "language games" occur. These are not trivial games but expressions of a people's form of life. Thus, language is not separated from our lifeworlds, but is an integrated and constitutive part of such lifeworlds. What makes words interesting and enables them to produce communication is the meaning they convey in the situation they are used: meaning is use (Wittgenstein 1953 § 43).

The technological changes related to digitalization have affected the production and use of accounting information and the accounting language. Several studies have recently highlighted the implications of digitalization for research and approaches in management accounting, as a consequence of the change in the nature of data produced by digital technologies (Bhimani, 2020, 2021; Bhimani & Willcocks, 2014). A literature review by Knudsen (2020) has suggested that digitalization influences accounting practice in three particularly significant ways: first, it makes the boundaries of accounting increasingly elusive with respect to the accounting role and the accounting profession, second, it is driving new forms of power relations between the accountants and extra-organizational actors, third, digitalization raises new issues related to the production of knowledge for decision making. Further, Quattrone (2016) warns that a digital move in decision making results in less space for valuable human discussions and the exercise of judgement and points out that "the effects of the digital revolution on management accounting and decision-making are still unclear" (Quattrone, 2016, p. 1).

In addition to these considerations, we argue that the centrality of digitalization nowadays seems to compromise the relevance of local, specific practices, entailing the risk of de-contextualization of data. Digitalization is opened to different uses and thereby to different meanings of validity of the data and figures it produces. As Kalthoff (2005) reported from a case evidence on financial risk management practice: "right figures are legitimized through the methods of their production because these methods are framed by (Western) economics and thus assumed to be reliable and valid" (ibidem, p. 78). As a consequence, digitalized communication practices, legitimized through the most acknowledged method, risk neglecting the meanings of accounting language constructed in the daily practice within organizational communities. If so, digitalized management accounting practices, such as planning and budgeting procedures, risk neglecting the relevance of language games in the functioning of those procedures, and this has implications on the validity of these procedures.

In view of the above, the rising question at the core of this paper is: how does digitalization influence/modify the language games in the organization and, specifically, the validity of planning and budgeting as a strategic learning process?

#### 3 Conceptual framework

The paper addresses the above question drawing on pragmatic constructivism in examining the validity of planning and budgeting procedures and whether the language games behind them are functional or non-functional.

Pragmatic constructivism (H. Nørreklit, 2017) considers human beings as creative, reflective actors who construct and organise their practises around the use of a relatively complex set of language games towards creating intentional results. In these language games, actors' communications are interwoven with other action forms (Wittgenstein, 1953, §7). The specific type of language used in the actors' communication speaks to the specific field of practice and how it is organised and controlled. Although language conventions dictate the use of words, the specific meaning of language is associated with the local practices within which it is learned, used, and developed. People in local practices produce experiences and understandings through which knowledge and skills accumulate around the creation of functioning language games that might become more advanced over time (L. Nørreklit, Jack, & Nørreklit, 2019).

To construct reality successfully, however, language games must develop and integrate the following four dimensions in their actor—world relationships—values, facts, possibilities, and communication (Nørreklit L., 2017). First, the participating actors' values motivate them to guide their choices among action possibilities. If the actors experience their values as fulfilled, the actors are intrinsically motivated to be creative and responsible problem solvers.

In addition, institutions are driven by values. Sound reasoning should set the criteria for what is true or false and right or wrong.

Furthermore, for actors to achieve their intentional values, factual possibilities within the actors' value ranges are required. Facts are not simply the things. The term fact is used to signal that proposed informational claims are considered trustworthy because they are based on evidence. Facts are a necessary basis for successful actions, but alone they are insufficient as actions cannot occur if actors have no possibilities among which they can choose.

According to pragmatic constructivism, a language game is functional to the extent it supports/enables actors to integrate the facts observed, the future possibilities and the values motivating the actors. Therefore, it is valid a plan or a budget that comes from a process whose participants have integrated the business facts they have observed with their values and developed future possibilities communicated through a functional accounting language game. Where valid, the planning and budgeting process represents a step of a larger process of strategic learning. For this process to be successful, "the conduction of the authoring process should balance contributions from participating actors" (Nørreklit, 2017, p. 28) leading to an orchestrated authorship where organizational individuals are not only actors but also coauthors of the narratives and causalities produced.

To understand the meanings of accounting measures, e.g. performance measures, we need to know the meaning of the numbers in relation to their use in the language games of specific practices (H. Nørreklit & Trenca, 2021). Properly measures reflect and predict special factual aspects but at the same time disregard other important aspects of reality constructions. Therefore, the measures function only if they become meaningfully integrated into the language game of the specific practice considering all four dimensions of reality through the actor's reflective reasoning and judgment.

IT machine language is based on a digital language, consisting of binary codes with instructions to control computers, and also the live thinking and understanding is translated into truth positions (i.e., true or false) through binary code (i.e., zero or one); this is the digital logic that permits IT to calculate and make measures. However, in human practices, everyday language is replete with concepts with vague borders and many layers of understanding and meaning. These nuances cannot be captured by the clear-cut truth positions of elementary statements (Nørreklit et al., 2019).

In view of PC, creating a meaningful conceptual understanding of the digitised measures performance requires that managers engage in a dialogical and reflective interaction with the actors to understand the reality construction behind the measures (Nørreklit, L., 2017; Nørreklit and Trenca, 2021). Differently, an authoritative and mechanical management language game does not question statements presented as facts and possibilities and does not integrate the values and knowledge of the other, but it might integrate factual possibilities that strongly constrain the other's actions (Nørreklit and Trenca, 2021). Accordingly, the language games of performance measurement might support or constrain actors' factual possibilities for creating intentional values, and in so doing, they might sustain or transform the actors' language games. Thus, in the perspective of management accounting, namely the planning and budgeting process, it is crucial how the digitalization is used and has an impact with respect to the evolvement of language games in the organization.

#### 4 Research method and setting: IKEA Italia and the business navigator

The perspective undertaken in this research is interpretive. It is not based on the establishment of a-priori hypotheses. It is based on the researchers' observations grounded in their contact with the interviewees and the triangulation of this evidence with primary sources (Ryan et al., 2002).

In order to achieve the main purpose of the research a qualitative approach has been preferred (Ahrens and Chapman, 2007). The richness and depth of data collectable with a case study through interviews was therefore preferred to the narrowness of quantitative methods.

The case study is represented by IKEA Italia, the Swedish multinational retailer operating in the industry of furniture. Data are drawn from two main organizational levels, namely the country and the store levels. The country level refers to the Italian headquarter of the Company, whereas the store level refers to the Sicilian store located in Catania and the Tuscany store located in Pisa.

The study is based on semi-structured interviews. The interview introduction covers the interviewee's function within the company. Then the company's approach to the role of business navigator is investigated together with the values and the language adopted in the case company. Five interviews were conducted involving six employees covering different roles: the Italian Chief Financial Officer (CFO), the Sales Manager of Catania store, the Pisa Store Manager, the Human Resource Manager of Pisa store, the Business Navigator of Catania Store and the Business Navigator of Pisa Store. Each interview took on average one hour and half. They were tape-recorded and then transcribed in order to facilitate the analysis of the data. Archival data (documents and reports) supplements the analysis.

The theoretical lens outlined above are adopted to interpret the use of a digital tool within the planning process at IKEA Italia. The choice of the Company is due to its values and the philosophy of management control it adopts.

IKEA Italia clearly bases its mission and culture on eight values, representing a sort of compass guiding every employee in his/her own everyday choice. The values are, as listed in the IKEA Italia website:

- 1) *Togetherness*: Togetherness is at the heart of the IKEA culture. We are strongest when we trust each other, pull in the same direction and have fun together.
- 2) Caring for people and planet: We want to be a force for positive change. We have the possibility to make a significant and lasting impact today and for the generations to come.
- 3) Cost-consciousness: As many people as possible should be able to afford a beautiful and functional home. We constantly challenge ourselves and others to make more from less without compromising on quality.
- 4) Simplicity: A simple, straightforward and down-to-earth way of being is part of our Smålandic heritage. It is about being ourselves and staying close to reality. We are informal, pragmatic and see bureaucracy as our biggest enemy.
- 5) Renew and improve: We are constantly looking for new and better ways forward. Whatever we are doing today, we can do better tomorrow. Finding solutions to almost impossible challenges is part of our success and a source of inspiration to move on to the next challenge.
- 6) Different with a meaning: We are not like other companies and we don't want to be. We like to question existing solutions, think in unconventional ways, experiment and dare to make mistakes always for a good reason.
- 7) Give and take responsibility: We believe in empowering people. Giving and taking responsibility are ways to grow and develop as individuals. Trusting each other, being positive and forward-looking inspires everyone to contribute to development.
- 8) Lead by example: We see leadership as an action, not a position. We look for people's values before competence and experience. People who 'walk the talk' and lead by example. It is about being our best self and bringing out the best in each other.

As the key mission for IKEA Italia is to produce high design furniture at a low cost, the planning and control management is critical in the company. Management control in IKEA Italia is named "Business navigation" as it follows a holistic approach where the business navigator (the controller) engages the other managers and himself in defining and pursuing both strategic and operational objectives, translating them from the corporate to the country and the store levels, in monitoring their achievement, and furthermore, in exploring emergent strategic options that can create new business possibilities.

The role played by the business navigator (controller) in IKEA Italia is totally different from the traditional approach as it implies the ability to identify business opportunities. In fact, while the controller usually provides data and analyses to other colleagues or managers, in IKEA Italia the business navigator is an internal partner of the company who participates in the positive or negative result of the management and collaborates with the other players to use the data generated by the system to propose and implement new solutions. It is for this reason that the approach used by the business navigator is no longer merely analytical but is an exploratory and entrepreneurial approach.

The search for opportunities implies that the business navigator must have an all-round knowledge of the local market in which he or she operates and can no longer stop only at the analytical activities of understanding and disseminating KPIs, but must have a full understanding of the housing and furnishing needs of the local consumer. IKEA Italia's business navigation vision perfectly embodies the evolution of the management control vision and the new approach to management controlling and accounting. Business facts are analysed to explore for further possibilities and development.

The process of constructing the business plan begins in April, when IKEA headquarters in Sweden sends the group's global targets to all countries. Each individual country takes these global indexes and transforms them into country indexes, i.e. interprets and materializes them with respect to the macroeconomic, social, political and environmental conditions of the country. When the single store receives the country indexes, one of the most important phases for the business navigator begins, as they are necessary to interpret and maximize the business opportunities based on the area and market in which the store operates. At this stage the business plan process involves the business navigation area as well as all business functions. The elaboration of the plan, in fact, is a collective process in which all business functions cooperate and share priorities. The communication among them is critical in these phases. The negotiation process involves the business navigators and the store managers interacting across corporate, country and store levels. This leads them to articulate the business plan into three main goals: 1) mandatory goals, related to business and organizational problems already observed and to be solved; 2) recommended goals, related to potential problems that may occur if something is not put in practice. This is the case of maintenance activities, whose relevance depends on the local characteristics of each store; 3) optional goals, which are identified and proposed at the store level,

where specific strategic options can be caught. The latter kind of objectives entails some criticalities as they are identified not from the observation of the business facts but through exploring the local business environment and selecting the opportunities that have potentials to become factual possibilities. During the goal setting phase, the identification of objectives also takes place by using the division of shops into certain clusters, which is carried out by the company on a global level. Exploring its specific local market and social environment, each store identifies optional objectives and how to pursue them, so defining a specific local strategy of business development. Therefore, a double line of coherence shapes the strategic planning: company coherence, which relates strategic objectives with company's values, and local coherence, where the single store relates strategic goals to local specificities. This leads to the specific research question: how can the business plan be valid given the various objectives defined at different levels? Using pragmatic constructivist words: what kind of language game and how can such a language match the local with the corporate coherence?

We addressed the specific research questions examining the use of a new digital corporate tool through which the various stores collect and report financial and nonfinancial information and share the performance of their practices and allow the language game of the company business planning to occur functionally. The levels of the store's performance are comparable being the stores positioned into clusters characterized by homogeneous strategies of local business development. For the stores in the same cluster this tool makes it possible to make a benchmark analysis which allows each store to verify the feasibility of their optional objectives and to monitor their achievement.

"Business Navigation" has become the language game in the Company. It consists in the use of IKEA Italia digital tools which is functional as it facilitates the integration of the facts observed, the future possibilities and the motivating values amongst the different organizational levels, articulated into the corporate, the country and the store levels as well as the integration amongst facts, possibilities and values of the stores within the same strategic cluster and of the stores across the clusters. Thus, digitalization in IKEA Italia is embedded in the language game and strengthen business planning validity.

We find that the Business Navigation language game is strongly supported by digitalization. Moreover, digitalized interactions support, and are supported by, face-to-face communications which maintain the relevance of local practices at the store level in the process of meaning construction.

Finally, digital tools used at IKEA Italia allow to share a common language within the different levels of the company. The common use of benchmarking activity, as a result of the digitalized process for instance, represents a mean for facilitating the communication: "...this is absolutely positive [the benchmarking]... because it really allows you to open up communication, whether formal or informal, to find out what they are doing differently and thus also weigh up whether what they are doing is feasible in your unit and thus also at country level" (Store Manager Pisa).

### 5 Embedding digitalization in the Language Game: the construction of Business navigation LG

Business Navigation language game is strongly supported by digitalization. Moreover, digitalized interactions support, and are supported by, face-to-face communications which maintain the relevance of local practices at the store level in the process of meaning construction. To explore the managerial work in its specific context, we try to examine the use of digital tools in managers' interactions in their work environment by following a cooperative game aimed to pursue IKEA Italia's main values. It is in playing such a game that they use information provided by digital tools as a language. On this point, the Business Navigator store argued: "...the synergy with the corporate service office increased a lot [due to ICT] and is stronger now... and also with Finance and Marketing..." (Business Navigator, Pisa). Similarly, the Business Navigator of Catania claimed: "This digitization allows all to share information and to overcome the differences between producers and users of information".

According to Knudsen (2020), in what follows we try to identify how IKEA Italia's digitalization influences accounting practices, paying attention to: (1) how the boundaries of accounting became increasingly elusive; (2) how new forms of power relations between actors emerge; (3) how knowledge for decision making could be differently produced. In doing so, we draw on PC framework to underline how the main IKEA Italia's values guide actors' choices and motivate their actions, leading them to select factual possibilities (Nørreklit L., 2013).

Firstly, digital tools used at IKEA Italia promote specific sharing through which the business navigator and the other functional managers are involved in the planning and budgeting procedures, allowing each of them to actively participate. As argued the Store manager of Pisa: "I'm conscious to be responsible for the store's profit and revenues but I know that I'm not alone and I can rely on others. Each of them has specific competences that they can be easily shared through the digital tools".

Digitalization offers the possibility of spreading information among all co-workers with different accessibility in regard to their organization positions, skills and needs, leading the users to shape their reports on the basis of their information needs. Through digitalization, the IKEA Italia people feel themselves involved into the business and are

encouraged to cooperate each other. Accordingly, digital tools promote the spreading of IKEA Italia's values, engaging all actors and motivating them to be creative and responsible problem solvers.

Secondly, digitalization also stimulates the sharing of informal information among co-workers promoting intra and inter stores interactions. On this issue the Business navigator of Catania referred: "The IKEA Italia workers can exploit a social chat to freely exchange information among them to quickly interact and find the solution for specific store criticalities. For example, store managers usually share pictures of store merchandising choices to informally discuss on a specific store problem".

Promoting the interactions, digital tools spread factual knowledge based on previous experiences that were recognised by actors as good evidence (L. Nørreklit, 2017). The use of information provided by the digital tools worked as a language that lead the managers and the business navigator to "sail" the business, favouring the horizontal interactions between different stores in order to find appropriate solutions. So as the latter are not convincing, the managers use the social chat to informally discuss about the solution.

Digital tools also promote vertical interactions such as in the goal setting processes whereas the KPI goals are defined at the country level considering the recommendations coming from the local stores and the peculiarities of the cluster in which the store is included. In particular, the business navigator of Catania said: "The goal setting process is as a tennis table played by the country and the local levels. For example, if the local KPI recommended is lower than the KPI medium of the cluster, the country level manager will ask for a new KPI goal at least at the KPI medium value." On this point, he also added: "Even if the country level manager asked for an alignment of KPI goals with the KPI medium for the cluster, the local store manager can replay how local peculiarities, such as the consumer base, can be a constrain for alignment of the KPI".

Interactions are promoted within the stores between managers of different levels as pointed out the Store manager of Catania: "When digital tools signal KPI dysfunctions in selling activities, I try to discuss that with the coworkers involved in product selling in order to understand the causes and identify the possible solutions. For example, in the last season, the KPI related to the selling of such boxes were misaligned with that of the KPI related to the selling of lids of the boxes. Discussing that problem with my co-workers involved in that selling, we realised that was a problem of communication. While for such boxes we used the same barcode for the box and its lid, in the case under discussion we used two different barcode creating misunderstandings in customer's use of automatic cashiers".

This evidence leads to identify how specific meanings of language are associated with the local practices within which they were learned, used, and developed. People in local practices produce experiences and understandings through which knowledge and skills accumulate around the creation of functioning language games that might become more advanced over time (L. Nørreklit, Jack, & Nørreklit, 2019). In addition, digital tools as a language, engaged managers to recognise possibilities for action, grounded in the facts, that encompass IKEA Italia's values. These possibilities create room for choice involving the actors in the business, but they only function if there is a reason to choose and prefer one possibility to the other (Nørreklit et al., 2010).

Thirdly, digital tools favour learning processes encouraging users' proactive attitude in their daily activities. In particular, such processes between different stores are stimulated by the tools called "good ideas" and "proven solution" which allow to share previous store experiences that were validated at the corporate level, activating also informal interaction among manager from different stores. For example, the tool called "proven solution" offers some case histories organised for key points as a digital library. These case histories stimulate business navigator in defining goals that before seeming unreachable. Similarly, the tool called "good ideas" offers the possibility to share effective solutions promoted by the store sales managers and validated at the corporate level. Stores that recognise in the "good ideas" the same problem can replicate it or modify it in order to reach better results. On this point, the business navigator of Pisa claimed: "Today, thanks to the ICT, we are able to benchmark globally because we have information of all the stores worldwide. Benchmarking is used not for pressure, but as a tool to detect problems in advance, to understand if I have a potential to exploit or a risk to face. It is not an 'OK, this number is bad, pay attention, you have to recover' but 'We are running bad at the moment, let us see if we can turnaround soon to perform better'". Similarly, the human resources manager of Pisa argued: "So there is a process that we call game exchanger which is basically a worldwide benchmarking job among all the stores clustered and divided on the basis of the KPI where the goal is to see the best performer to whom all we must aspire, but first of all we must aspire to what is the median, the average of that cluster". On the same point, the Store manager of Pisa added: "And above all what follows, the exchange with the best performer points of sale to understand what actions and initiatives it has taken. But this is absolutely positive from this point of view [benchmarking] because it really allows you to open up communication, whether formal or informal, to find out what they do differently and therefore also ponder whether what they are doing is feasible in your unit and therefore also at country level".

Learning processes within the same store are stimulated by encouraging business navigation through the "reason why and possibilities analyses" which allow a deeper analyses of store performance. In particular, the business navigator of Catania highlighted: "I can extract a report from a dataset of stores within a strategic cluster that the corporate has predefined according to the values of a set of relevant KPI. I can accomplish a benchmark analysis

thanks to hub reporting which highlights the main financial and non-financial indicators. I can learn on proven solutions and good ideas practised in other stores. The proven solution tool helps us in our goal setting".

Case evidence offers an example of how digital tools could engage managers in dialogical and reflective interactions that favor the understanding of the reality construction behind the measures (Nørreklit, L., 2017; Nørreklit and Trenca, 2021). Digital tools work as communication tool that favour the integration of fact, possibilities and values. Promoting the IKEA Italia's values, the digital tools provide factual knowledge that guide actors in selecting factual possibilities (Tiitola et al., 2022).

Through digitalization, the business navigation language is spread out at global and local organization levels, allowing real time information of facts, and improving reaction time and proactivity of users.

"In the past the corporation manager had the figures at the end of a period. The Business Navigation now works with figures on hourly base, real time! The time of the analysis is completely changed." (Human Resource Manager of Pisa store). "Not only waiting for things to happen but change things in their happening. In doing this IT played a crucial role" (Business Navigator of Pisa)

#### 6 The validity of planning and budgeting as a strategic learning process

According to pragmatic constructivism, the validity comes from a process whose participants have integrated the business facts they have observed with their values and developed future possibilities communicated through a functional accounting language game. Focusing on the planning and budgeting process, its validity requires all organizational actors to balance their contribution through an authoring process in which each actor becomes a coauthor of business facts and results.

Digital tools offering actors the possibility of navigating results favor the balancing of actors' contributions in order to identify functional possibilities. On this point, the Store Manager of Catania argued: "Monthly the digital platform provides the profit and loss report to store managers allowing them to verify or revise goals. For example, through the analysis of ROI determinants, we have the chance of verifying our results. Whereas the budget variance is positive, we have the possibility of increasing investments or saving these results; differently if the budget variance is negative, we try to understand how to manage it or we revise the assigned goals. In doing so, the digital platform offers us the possibility of simulating results coming from various scenarios. We can do that easy!"

Similarly, the Store manager of Pisa referred what follows: "Digital tools offer us the possibility of deeply analysing results of the Store. We do that jointly with the Sales manager and Shop walker in order to understand what happens. For example, discussing the glass (A) selling results, we wonder why we sold lesser glasses than the planned. Were there glasses in stock? Did we sell other type of glasses (B)? Did the increase of glasses (B) selling cover the loss coming from the decrease of glasses (A) sold?"

Participating to this discussion, all organisational actors become co-authors of planning and budgeting process. The digital platform leading actors to navigate results stimulates learning processes that guide actors in selecting factual possibilities. In doing so, actors interact at global and local levels through the language game spread out by the digital platform. As pointed out the Store manager of Catania: "The strategic choices made at global level influence our store policies. For example, when the global level communicates us the purchase of a huge stock of raw materials of glasses, the business navigator can change the price strategy of glasses or their policy of merchandising trying to reach the target ROP".

Evidence highlighted how the digital platform promoting interactions between local and global levels, engaged all organisational actors in a co-authoring process aimed at ensuring the proper ROI for the investment on raw materials.

Digital platform also offers actors the possibility of sharing "good ideas" as effective solutions promoted by one store sales manager and validated at the corporate level. This tool activates local learning processes in stimulating local organisational actors to consider the replication of the good idea in their store. In so doing, they discuss how previous experiences on local practices may be combined with new possibilities coming from the "good ideas". These possibilities function if there is a reason to choose the good ideas to the others (Nørreklit et al., 2010). The same tool shows at global level the overview of the overall effects of the good ideas replication influencing their functionality. On this issue, the Sales manager of Catania said: "Clearly when we think that a good idea could be replicable, we discuss with the global level in order to understand what could happen if other stores decide to follow the same good idea. Could the supply chain be able to support their implementation?"

Case evidence underlines that the validity of the planning and budgeting process can depend on how the use of digital tools stimulates a cooperative language game aimed to pursue IKEA Italia's main values and identify factual possibilities. In doing so, digital tools promote the integration of fact, possibilities and values, allowing the balance of actor contributions in selecting factual possibilities.

#### 7 Discussion and conclusions

The phenomenon of digitalization, which has enhanced its relevance in the business organizations, has called for a growing stream of research aimed at highlighting its impact on managerial practices, understanding whether and how the use of digital tools is functional or non-functional to the aims of the organization. The use of digital tools as functional or non-functional to the construction of valid planning and budgeting procedures, is the focus of the present paper. The study has followed the so called "linguistic turn" of viewing accounting as the "process of informing" (Preston, 1986), which considers accounting reports as texts, narratives, discourse, and discursive formations (Macintosh, 2004), and the language game theory.

From this perspective, the specifics of the daily settings where actors interact and are engaged come to be worthy of attention in understanding how accounting is functional or non-functional to the aims of an organization. Wittgenstein's language game theory can contribute to such understanding as it sees the process of informing as a cooperative game where meanings are formed from interactions. The PC framework has offered the vocabulary to conceptualize people interaction underlying the planning and budgeting procedure both in general and in the specific setting of IKEA Italia company at two Italian stores, where the case study has been conducted.

The IKEA Italia case illustrated in this paper shows how the digitalization can effectively be used in the perspective of management accounting, namely in the planning and budgeting process, and have an impact with respect to the evolvement of language games in the organization. The case showed how managers' interactions are ruled and made possible by the digital tools and the collaborative platform implemented in the whole IKEA Italia organization, which contributes to make the IKEA Italia strategic planning a valid procedure. Specifically, the strategic planning process is ruled identifying the organizational actors and levels that are supposed to interact, the timing of interaction, the data to be collected and used in the planning negotiation between the top and the local organizational levels. The digital tools and platform make such interactions possible supporting data collection and sharing, and thereby favouring strategic learning at different organizational levels. This is the communication layer, where meanings are constructed after the most relevant business facts have been selected and future possibilities and opportunities identified in line with the set of values shared at the company level, and at a more local level as well, such as the country and the specific store, where the daily interactions and arrangements occur.

The understanding of how managers interact during the planning procedure and whether digital tools are functional to such interactions needs to move a step behind the communication layer, investigating the IKEA Italia management controlling and accounting and language game, which is expressed through the role of Business Navigation. The possibility of "navigating results", offered by digital tools and the collaborative platform, is exploited as a collective activity where the Business Navigation and the other co-workers treat accounting texts as narratives and discourse around the relevant business facts. Navigating together accounting results, thanks to the collaborative platform, highlights the different points of view of the various organizational roles involved in the procedure.

The contribution of Business Navigation works also with respect to the integration of the different organizational actors: from the different stores which belongs to distinct strategic clusters, to the hierarchical levels involved in the planning negotiation, which are both global and local. The IKEA Italia organizational culture and philosophy is the ground that ensures the presence of company values, common to all the organizational areas. It is on this common ground of values that future possibilities are selected and developed from the business facts that the different actors involved in the planning procedure consider relevant and share through the digital platform. Strategy setting, indeed, comes from an agreed coherence between the past business facts and the future possibilities for the business. The factual possibilities are constructed through such strategic learning process, which contributes to additionally reinforce the common ground of company values. As the layer where the different organizational actors integrate their values to construct factual possibilities, the IKEA Italia language game of Business Navigation is based on the potentials allowed by digitalization, which makes possible adjustments and revisions based on real time figures. This entails a strategic planning that does not need to wait for things to happen, as it was the case in the past, but things can be changed in their happenings. Figure 1 summarize the role of the language game of Business Navigation in the co-authorship of factual possibilities.

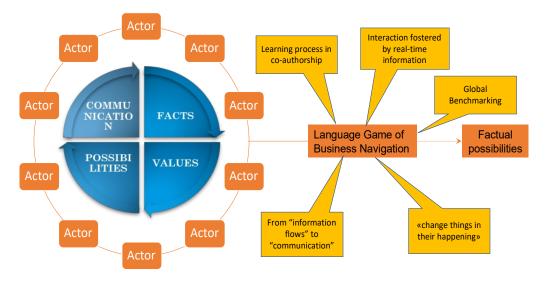


Figure 1 The role of the language game of Business Navigation in the co-authorship of factual possibilities

The digitalization in use at IKEA Italia refers to a case where the use of digital tools has enabled a management controlling and language game where all the relevant actors, from different organizational positions, become co-authors of the planning and budgeting process; it can, therefore, ensure a performance target that meet the various expectations. This happens by creating a meaningful conceptual understanding of the digitized performance measures by an engagement of managers in a dialogical and reflective interaction with the actors to understand the reality construction behind the measures. The Business Navigation is the language game which allows to realize this process.

The paper contribution is twofold. A first contribution is directed to the management accounting literature. The paper highlights the relevance of the linguistic perspective as a useful approach to understand the use of management accounting documents as texts, narratives, discourse, and discursive formations. In doing so, Wittgenstein's language game theory is combined with the PC framework as the theoretical lens used to examine how the management controlling and accounting language game developed in the company enables the different organizational actors to become co-authors of the planning and budgeting procedure. A second contribution of the paper relates specifically to the phenomenon of digitalization and its impact on management control and accounting practices. Reporting the empirical evidence from the IKEA Italia case, the study has demonstrated how the philosophy of "Business Navigation" developed in IKEA Italia strongly depends on the use of digital tools and a collaborative platform that has enabled the actors to co-author the factual possibilities, showing how digitalization has been functional to the planning and budgeting procedure in use in the company.

Further research is needed, following this approach, to deepen the dimension of validity of management accounting and control process starting from this case study, according to the theory of pragmatic and pro-active truth, to deeply understand the potential role of digitalization in fostering a successful design and use of accounting information and tools and production of language games. Also, the extension of research to other cases having different experiences of digitalization and their comparison could contribute to address good and bad practices.b

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