

An Insight into Organizational Team Ambidexterity

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Abstract

The purpose of the present article is to bring another perspective on the concept of ambidexterity in organizations by emphasizing the main processes through which work teams become ambidextrous. Our analysis is intent upon how apparently are delineated the two sides of ambidexterity, exploration and exploitation, within organizational work teams and whether their characteristics can be separately addressed during the work process. In doing so, we propose a succinct framework by which team ambidexterity can be more easily comprehend and realized.

Key words: work team, exploration, exploitation, ambidexterity, learning

J.E.L. classification: D23, D83, L29, M12, O30

1. Introduction

Organizations are increasingly relying on teams to manage the complexity of modern work. This continuous shift from organizing the work units around individuals toward organizing the work in teams has been determined, in part, by factors such as the rate of change in task requirements and the generally pervasive nature of change in business environments. In addition, the same factors that accelerate an enhancement of team-based organizations’ creativity impose teams, once formed, a quickly and continuously adaptation of their performance processes (Rosen et al., 2011). As previously suggested (Zoltan, Vancea, 2015a), we call *work team* a special group, sometimes an entire organizational unit (Zoltan, 2012a), which has to accomplish a complex task that requires common effort and different expertise on behalf of the members, whereas *team work* is a style of working in organizational context, regardless of organizational structural configuration.

To capture this ability of organizations and teams to adapt to the external environment while standardizing their processes, the concept of *ambidexterity* has been proposed in literature. However, what is less apparent is how teams became ambidextrous and to what extent they need to be ambidextrous. “Entire multibusiness organizations, single divisions, departments, work teams, and even individuals all face this need for both exploration and exploitation” (Boumgarden, Nickerson, Zenger, 2012), but are the two sides of ambidexterity equally important at team level? Are they easily separable? And afterward, how can we define team members’ ambidexterity in work team process? We try to answer these questions in the following paragraphs.

2. The concept of ambidexterity in literature

2.1. Organizational ambidexterity

Research in areas such as management, organization theory and strategic management has relatively recently adopted the human characteristic of being ambidextrous (i.e., an individual’s ability to use both hands with the same skill) as a metaphor to describe competent organizations (Lubatkin *et al*, 2006; Carmeli, Halevi, 2009). In general, *exploration* involves company behavior characterized by increased diversity of activities, research, discovery, experimentation, risk-taking

and innovation, while *exploitation* is characterized by decreased diversity, disciplined problem solving, improvement, implementation, efficiency, production and selection (Carmeli, Halevi, 2009).

Other definitions and approaches to ambidexterity place emphasis on competencies (Kwak, Lee, Lee, 2020), on learning processes (Jansen *et al*, 2016; Simsek, 2009; Revilla, Rodríguez-Prado, 2018) or refers to strategies to be followed by organizations (Schmitt, Probst, Tushman, 2010; O'Reilly, Tushman, 2013) or stresses behaviors (O'Reilly, Tushman, 2004; Rodríguez, Hechanova, 2014) and so on.

We agree that exploration is associated with the search for new competencies and concerns taking risks, creativity, problem solving, adaptation and flexibility while exploitation is referring to the use of existing competencies and is dealing with efficiency, systematization, outcome, conformation with existing rules and methods (Rodríguez, Hechanova, 2014; Kwak, Lee, Lee, 2020), and both exploration and exploitation are abilities that can be exerted by individuals, leaders and teams (Rodríguez, Hechanova, 2014). From this tackling we already notice that the two sides of ambidexterity concurrently imply both learning and actual work processes.

2.2. Ambidexterity at individual and team level

The vast majority of research places the burden of ambidexterity on managers (Lubatkin *et al*, 2006; O'Reilly, Tushman, 2013; Heavey, Simsek, 2014; Li, Cui, 2018; Knight, Cuganesan, 2020), although they admit that it is not clear what is happening at the individual and business units level (Raisch *et al*, 2009) and even that the use of ambidexterity by companies is a "basic unresolved problem" (Levinthal, March, 1993).

As Pertusa-Ortega *et al* (2020) suggested, we must differentiate ambidexterity: at the individual, team, and organizational level. To evaluate individual ambidexterity, Vicentini *et al* (2019) highlighted that cognition, orientation, and background of individuals must be considered. Simply put, it must be assessed individuals' *know-how*, what they want to do and learn, and what competencies and skills they have acquired.

Practically, for example, Fang, Lee and Schilling (2010) argue that exploration and exploitation can be achieved by "parallel semiautonomous subunits with a small fraction of cross-group links", using "practices like personnel rotation or interdivisional task forces". On similar terms, Meijer (2017) addresses the issue of team and individual ambidexterity in the case of new product development teams by determining "the potential and actual ambidexterity" of team members. The author shows that it is not necessary for a member of a new product development team to act ambidextrous and advises managers to make sure that the potential ambidexterity ("personal disposition") of their team members is fitted with task demands (Meijer, 2017).

3. Research methodology

In order to investigate and in an attempt to explain the concept of ambidexterity at organizational team level, we analyzed in depth the two components of organizational ambidexterity, exploration and exploitation, to highlight the difficulty of separating them. To achieve this goal, we drew upon critical appraisal of the literature, deductive reasoning and comparative analysis as suitable methods to correlate the theoretical meanings of the concept of organizational ambidexterity with the practical realities of work team processes.

Thus, we first examined the denotation of exploration and exploitation in organizational context and discussed the discrepancies found in literature when it comes to its applicability in work team context. Then, starting from the premises that work team is a special organizational unit and has particular processes through which accomplishes complex tasks, we brought forward the main processes through which work teams explore and exploit, and we underlined the porpoises and conditions for each component of ambidexterity. Thirdly, we linked and connected our observations into a brief framework meant for a better understanding of team ambidexterity and its distinctive issues and challenges.

Finally, we pointed out some conclusions that emerge from our approach, with a focus on learning and working particularities in organizational teams, implications for organizations management and suggestions for future research on team ambidexterity.

4. Findings

4.1. A refinement on work teams' exploration and exploitation in organizations

Reviewing some of the most cited definitions of ambidexterity (Revilla, Rodríguez-Prado, 2018; Jansen et al., 2016; O'Reilly, Tushman, 2013; Lubatkin *et al*, 2006) one may remain with the impression that exploration and exploitation are completely different in time and space and further away, oversimplifying, that teams and organizations can be of two main kinds: exploitative and explorative. But given that only individuals explore and exploit, whether they are members of a team of workers or they lead multinational companies, thus both at the team and at the organizational level, the two sides of ambidexterity intertwine as long as new activities are carried out alongside old ones, it is necessary both short and long term orientation (Rodríguez, Hechanova, 2014), work processes requires organizational rules and standards, but also individuals and teams must have a certain degree of autonomy in order to unfold both conception and execution activities.

Nonetheless, each type of work (largely divided into conception and execution) has a specific end, a distinctive result that is broadly measured in terms of efficacy (fulfilling the goals without holding on to costs) and/or efficiency (accomplishing the goal at the lowest possible costs). So that, in carrying out any type of activity team members will either exploit what they know from experience with the resources at hand, or they will look for new possibilities, in other words, any work-related activity will fall into either the exploitation or exploration category at any given time.

Concurrently, we must take into account the fact that in the extremely competitive environment in which companies operate today, it is difficult to separate, in certain sectors, the entirely exploratory activities from the strictly exploitative operations. *In extremis*, on the one hand, we would consider geniuses (like Albert Einstein), which generates absolute novelty and revolutionizes the world, and on the other hand, executing robots and nothing in between: this would mean seeing exploration and exploitation as discontinuous, orthogonal (Jansen *et al*, 2016; Boumgarden, Nickerson, Zenger, 2012), i.e. unrelated. But in a social environment we cannot say that there are unique and separate learning and working styles that are mutually exclusive. Furthermore, the separation itself is artificial: the recombination and refinement of existing knowledge is framed for exploitation (Levinthal, March, 1993; Jansen *et al*, 2016), which confirms our previous exaggeration if we follow this line of thinking: exploration is a given of geniuses that changes the world forever. In reality, many innovations that have reached the stage of successful product have been achieved by recombining existing knowledge, ideas, processes, which involves creativity, which, by definition, means exploration, and therefore in no case simple exploitation. In other words, no one creates in a vacuum with no previous information. Finally, all kinds of different people work in organizations, with various backgrounds and motivations (Zoltan, Vancea, 2020), diverse relationships with other members, depending on their place in communication networks (Zoltan, Vancea, 2018). You cannot assume that the members of an organization learn in one way and not in another and conversely and this is simply because there is no unique learning style (Zoltan, Bordeianu, Vancea, 2013).

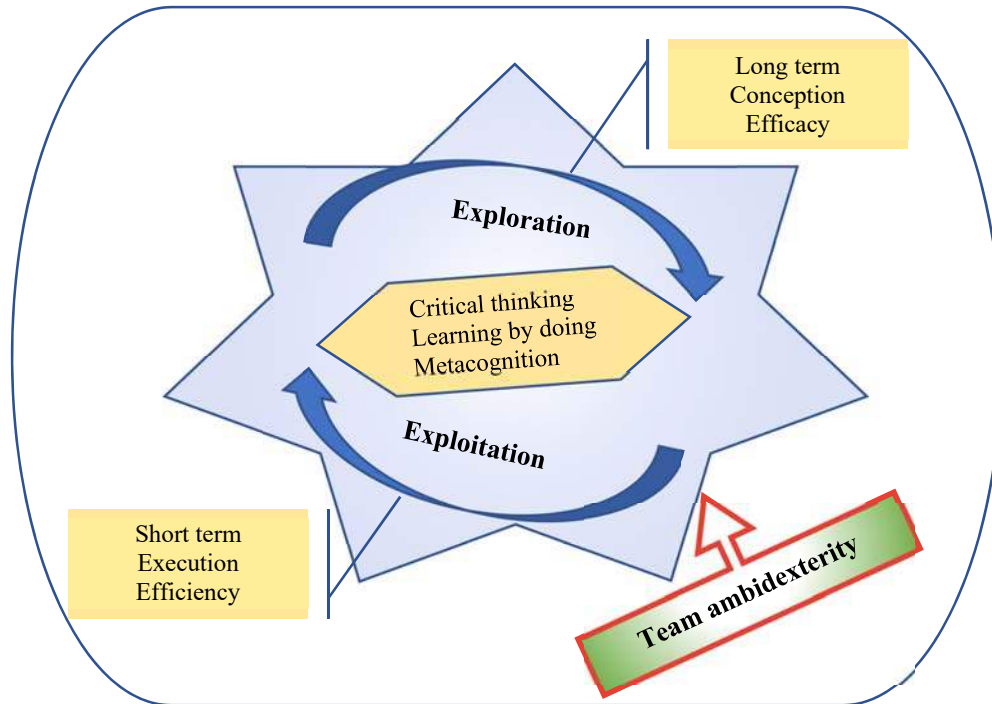
4.2. A framework to perceive team ambidexterity

Given the inconsistencies aforesaid, we consider that some reference points are needed in order to obtain the potential benefits of ambidexterity concept. One of them, probably the most important, concerns the team processes, and first of all, the manner in which information is processed and decisions are made.

There are four categories of processes related to how the team is gaining its knowledge and skills: recapitulation (in which the team seeks to understand its previous performance), reflection (in which the team detects errors and evaluates its performance), integration (in which the team transforms the initial understanding of team performance into a new, common model by incorporating previously identified successes and failures) and action planning (in which the team intentionally develops lessons learned from past performance evaluation and develops a plan for integrating these lessons into the team new processes) (Rosen et al., 2011). All these four categories can be seen in a dualistic manner: recapitulation and reflection would mean exploiting past results, while integration and

planning would be about exploring future possibilities for team performance. But pragmatically speaking, at the team level we cannot always clearly delineate when the exploration ends and the exploitation begins because the task that the organizational team has to perform is always complex (unlike work groups) (Zoltan, Vancea, 2015a) and therefore requires a permanent communication between members, a regular reappraisal of options and alternatives and a certain level of self-management to decide what changes need to be made.

Figure no. 1. A brief model of work team ambidexterity in organizational context



Source: Authors' contribution

As such, knowledge processing at team level, namely team learning or collective learning, is largely a deliberative process in which a team retrospectively evaluates its past performance (*critical thinking*) in order to incrementally change its processes (*learning by doing*) to lay the groundwork from which they will perform in the future (*metacognition*). All these three essential processes must be harmonized in accordance with team objectives since:

- Predominance of *critical thinking* is an exploratory feature, but excessively used, can be detrimental both for team result and processes;
- *Metacognition* is very useful when activities are routinized and activities nearly automatic, but not when a drastic change must be done;
- The middle way appears to be *learning by doing*, but there are not always available the needed resources.

Therefore, every work team must figure out its own “recipe” because there is no tailor-made prescription in terms of team ambidexterity. All three processes mentioned above are a ground rule for achieving difficult tasks that requires both old and new information, knowledge and abilities, such as complex tasks that work teams has to accomplish in organizational context.

In view of all this, in figure no. 1 we suggest the idea of melting the two sides of ambidexterity at the team level, which not necessarily imply that some of team members are in charge with exploration and others with exploitation (it will depend on task type and other criteria). In our view, exploitation and exploration at individual and team level in organizations are competencies developed through successive loops of learning, practice, experimentation and reevaluation in a back and forth process with no fixed boundaries. It is not a chaotic process, but a flexible, natural way of facing the challenges of modern economies through well-developed sole mechanisms of adaptation.

The main idea that emerges from our succinct model (figure no. 1) is that at least at the team level, exploitation and exploration activities are difficult to separate. First of all, from the very definition of the team, it is mandatory that the team to be composed of individuals who have diverse knowledge, skills and competencies to perform a complex, team-specific task (Zoltan, Vancea, 2015b). Second, these skills and competencies are formed through a continuous process: accumulation of new information (exploration) and experimentation (exploitation). It is not natural to separate them: the individual does not forget everything he or she knows at a time and totally resets to start over. The learning process involves both, in different proportions, at different times, and more often than not is different from individual to individual: accumulation (exploration), sedimentation by selection (critical thinking), use in practice (exploitation), sedimentation by use in practice (learning by doing), then new information is added to the existing experience and knowledge (metacognition), and again refining, selection and accumulation, and so on, in unexpected loops. As we mentioned before, it is a case of flexibility and adaptation in pursuing the team's settled goals and not some random steps.

5. Conclusions

We suggested that, at least at team level, most of the time is nearly impossible to say when the exploring stops and exploitation begins. However, we do not exclude that in some situations the team management can decide to divide the task into subtasks, some more explorative and some more exploitative. Depending on team members education, experience and training, some individuals can perform both types of activities, exploring and exploiting, but Meijer (2017) found that those team members who excel in one of them will not excel in other one. In this case, team ambidexterity will be contingent upon team task requirements since members' subtasks must eventually be rolled into one single team outcome. Future research could consider the well-known Steiner's (1972) classification of groups tasks, as well as specific categories of organizational work groups and work teams (Vancea, 2015) in order to determine which collective tasks of team or group require, and to what extent, exploration and/or exploitation. Also, concerning ambidexterity at team level, future research that will particularly address teams-specific constructs such as shared mental models and transactive memory (Zoltan, 2012b; Heavey, Simsek, 2014) could be especially fruitful.

Afterwards, rather than assuming opportunity costs and an inherent tension between exploration and exploitation (Fourné, 2014), we can analyze to what extent both are needed depending on what goals organization pursues. We must take into account that the result of the exploration gives the measure of the team efficacy (aimed at the outcome quality), and the exploitation, its efficiency (aimed at the outcome quantity), and the co-appearance of efficacy and efficiency denote the performance of the ambidextrous team. At the same time, both at individual and team level, any productive, energy consuming activity unfolded in the process of accomplishing work tasks will fall more or less into the category of exploration or exploitation, or seldom equally in both (e.g. research activity with the view of writing a scientific paper in a foreign language).

Although studies sometimes place excessive emphasis on learning processes, it is purposeful to keep in mind that in organizational context, especially in companies, ambidexterity cannot be a goal *per se*, but only a meaning, a way, a variant through which can be achieved organizational objectives such as the production and sale of products and services. In other words, the fact that learning processes are divided into all sorts of categories in the literature is of little use to companies.

Ultimately, since it is hard to specify the optimal mix of exploitation and exploration (Levinthal, March, 1993), managers need to focus on determining the purpose for which the team is formed and what results are expected from its members. Moreover, managers need to know exactly how the team result is to be assessed. This projections for the future, including the path to follow and the destination, will make possible to identify, in addition to the necessary resources and support from management, the extent to which the ambidexterity of the team should or shouldn't be a guided process. As a result, managers will know how much autonomy the team needs so as the team to set its own performance standards and working rules and, depending on these, how it will tip the scales in favor of exploration or exploitation.

6. References

- Boumgarden, P., Nickerson, J., Zenger, T.R., 2012. Sailing into the wind: Exploring the relationships among ambidexterity, vacillation, and organizational performance. *Strategic Management Journal*, Volume 33, Issue 6, pp. 587-610
- Carmeli, A., Halevi, M.Y., 2009. How top management team behavioral integration and behavioral complexity enable organizational ambidexterity: The moderating role of contextual ambidexterity. *The Leadership Quarterly*, Vol. 20, No 2, pp. 207-218
- Fang, C., Lee, J., Schilling, M.A., 2010. Balancing Exploration and Exploitation Through Structural Design: The Isolation of Subgroups and Organizational Learning. *Organization Science*, Vol. 21, No. 3, May-June, pp. 625-642
- Fourné, S.P.L., 2014. *Managing Organizational Tensions. A multi-level perspective on exploration, exploitation, and ambidexterity*. Doctoral thesis at Rotterdam School of Management (RSM) Erasmus University; Available at: <https://repub.eur.nl/pub/76075/>
- Heavey, C., Simsek, Z., 2014. Distributed Cognition in Top Management Teams and Organizational Ambidexterity: The Influence of Transactive Memory Systems. *Journal of Management*, Vol. XX, No. X, Month XXXX 1-27, DOI: 10.1177/0149206314545652
- Jansen, J.J., Kostopoulos, K.C., Mihalache, O.R., Papalexandris, A., 2016. A socio-psychological perspective on team ambidexterity: the contingency role of supportive leadership behaviours. *Journal of Management Studies*, Vol. 53, No. 6, pp. 939-965
- Knight, E., Cuganesan, S., 2020. Enabling organizational ambidexterity: Valuation practices and the senior-leadership team. *Human Relations*, Volume 73, Issue 2, pp. 190-214
- Kwak, C., Lee, J., Lee, H., 2020. Do teams need both hands? An analysis of team process ambidexterity and the enabling role of information technology. *International Journal of Information Management*, Volume 51, Issue C, Apr 2020, Available at: <https://doi.org/10.1016/j.ijinfomgt.2019.11.006>
- Levinthal, D.A., March, J.G., 1993. The myopia of learning. *Strategic Management Journal*, Vol. 14, Issue S2, pp. 95-112
- Li, Y., Cui, L., 2018. The Influence of Top Management Team on Chinese Firms' FDI Ambidexterity. *Management and Organization Review*, Volume 14, Issue 3, pp. 513-542
- Lubatkin, M.H., Simsek, Z., Ling, Y., Veiga, J.F., 2006. Ambidexterity and Performance in Small- to Medium-Sized Firms: The Pivotal Role of Top Management Team Behavioral Integration. *Journal of Management*, Volume 32, Issue 5, pp. 646-672
- Meijer, L. 2017. *A case study linking individual and team ambidexterity*, Master thesis; Available at: <http://essay.utwente.nl/74087/1/171128%20Masterthesis%20L.%20Meijer.pdf>
- O'Reilly, C.A., Tushman, M.L. 2004. The ambidextrous organization. *Harvard Business Review*, Vol. 82, No. 4, pp. 74-81
- O'Reilly, C.A., Tushman, M.L., 2013. Organizational ambidexterity: past, present, and future. *The Academy of Management Perspectives*, Vol. 27, No. 4, pp. 324-338
- Pertusa-Ortega, E.M., Molina-Azorín, J.F., Tari, J.J., Pereira-Moliner, J., López-Gamero, M.D., 2020. *The microfoundations of organizational ambidexterity: A systematic review of individual ambidexterity through a multilevel framework*. *Business Research Quarterly*, Volume 23, pp.1-17
- Raisch, S., Birkinshaw, J., Probst, G., Tushman, M. L., 2009. Organizational ambidexterity: Balancing exploitation and exploration for sustained performance. *Organization Science*, Vol. 20, No. 4, pp. 685-695
- Revilla, E., Rodríguez-Prado, B., 2018. Building ambidexterity through creativity mechanisms: Contextual drivers of innovation success. *Research Policy*, Volume 47, Issue 9, pp. 1611-1625
- Rodriguez, R.P., Hechanova, M.R.M., 2014. A Study of Culture Dimensions, Organizational Ambidexterity, and Perceived Innovation in Teams. *Journal of Technology Management & Innovation*, Volume 9, Issue 3, pp.21-33
- Rosen, M. A., Bedwell, W. L., Wildman, J. L., Fritzsche, B. A., Salas, E., & Burke, S., 2011. Managing adaptive performance in teams: Guiding principles and behavioral markers for measurement. *Human Resource Management Review*, Vol. 21, No. 2, pp. 107-122
- Schmitt, A., Probst, G., Tushman, M., 2010. M@n@gement in Times of Economic Crises: Insights Into Organizational Ambidexterity. *M@n@gement*, Vol. 13, No. 3, pp. 128-150
- Simsek, Z., 2009. Organizational ambidexterity: Towards a multilevel understanding. *Journal of Management Studies*, Volume 46, Issue 4, pp. 597-624
- Steiner, I.D., 1972. *Group processes and productivity*, Academic Press, New York
- Vancea, R., 2015. Groups and teams from a managerial perspective. *Ecoforum*, Volume 4, Issue 2(7), pp. 159-163

- Vicentini, F., E. Peruffo, D. Meissner and J. Mueller, 2019. *Unpacking Entrepreneurial Intensity and Individual Ambidexterity in Small Project-Based Enterprises: A New Perspective for the TV Drama Industry*, in IEEE Transactions on Engineering Management, DOI: 10.1109/TEM.2019.2914662
- Zoltan, R., 2012a. The Role of Teams as Organizational Structures in a Global Organizational Context. “Ovidius” University Annals, Economic Sciences Series, Volume XII, Issue 1, pp.1249-1253
- Zoltan, R., 2012b. A conceptual framework for team social capital as basis for organizational team synergy. *Annals of „Dunărea de Jos” University of Galați, Fascicle I – Economics and Applied Informatics*, No 2, Years XIII, ISSN 1584-0409, pp. 123-132
- Zoltan, R., Bordeianu, O., Vancea, R., 2013. Groups and teams as building blocks for organizational learning. *The USV Annals of Economics and Public Administration*, Volume 13, Issue 1(17), pp.119-126
- Zoltan, R., Vancea, R., 2015a. Informal Groups in Global Work Environment: Group Work or Team Work?. *Ovidius University Annals, Economic Sciences Series*, Volume XV, Issue 1, pp. 648-653
- Zoltan, R., Vancea, R., 2015b. Organizational work groups and work teams – approaches and differences. *Ecoforum*, Volume 4, Issue 1(6), pp. 94-98
- Zoltan, R., Vancea, R., 2018. Group Communication, Performance and Satisfaction in Organizations. “Ovidius” University Annals, Economic Sciences Series, Volume XVIII, Issue 1, pp. 428-433
- Zoltan, R., Vancea, R., 2020. Individual Motivation in Work Team Context – An Empirical Research on Romanian Consulting SMEs. “Ovidius” University Annals, Economic Sciences Series, Volume XX, Issue 1, pp. 819-827