

What does digitalization mean for selling: Activity Theory perspective on the buying process

INTRODUCTION

Digitalization has affected the way customers interact with providers of products and services. With regards to buying and sales processes, digitalization has had a great impact on both by making a customer more empowered and independent of direct contact with the seller. Digitalization made the product/service information a commodity, which can be easily accessed by the customer at any convenient point in time. The commoditization of information, which previously could be obtained via direct interaction with the seller, has changed the buyer-seller interaction and the role of the sales person (Marshall et al. 2012). This transformation is even more crucial in the B2B context, where up to 60% of the buying decision can now be made prior the direct contact with the supplier (Adamson, Dixon, and Toman 2012).

When it comes to precise understanding of how exactly digitalization has affected the buying process, the knowledge is scattered. Although current academic and practitioner-oriented literature mentions how digitalization has affected certain aspects of the buying activity, the available information does not form a well-rounded understanding. This study applies Activity Theory and looks at the buying activity from different hierarchical levels of analysis: activity, actions and operations levels. The study offers a more detailed understanding of how different levels of a buying activity have been affected by digitalization and what this means for a seller organization. The study answers the following research questions:

RQ1: How exactly has digitalization affected levels of buying activity?

RQ2: What does impact of digitalization on the buying activity mean for the seller?

LITERATURE REVIEW: IMPACT OF DIGITALIZATION ON BUYING BEHAVIOR

According to recent CSO Insights study on buyer preferences among 500 B2B buyers, only 23% of respondents see sales people among their top 3 resources for solving business problems (CSO Insights 2018). The study shows that on average, turning for help to a sales person is less popular than turning to web sources like vendor websites, industry/professional online communities/social networks and web searching. Contacting a salesperson also turned out to be less popular than turning to independent opinions of industry experts, personal network or attending industry events. Moreover, when it comes to involvement of a salesperson, it usually happens at later stages of the buying process. About 70% of respondents prefer to identify and clarify their needs without consulting a salesperson and almost a half of respondents (about 44%) tend to also identify solutions independently and only engage a salesperson on solutions evaluation stage (CSO Insights 2018). CSO Insights study illustrates well the shift of customer preferences caused by digitalization towards pull marketing over push marketing. For the sales organization such change in preferences means that it should be able to provide the buyer with relevant and timely digital content which will meet its information needs (Holliman and Rowley 2014; Järvinen and Taiminen 2016).

From existent academic and practitioner-oriented literature, we can see that digitalization has impacted the buying process in a way that customers prefer to involve salespeople at later stages in their buying process (CSO Insights 2018), the buying team got bigger and more diverse (Garrido, Gutierrez, & San Jose 2008; Adamson, 2018), and that there are overall changes in information behavior of industrial buyers (Müller, Pommeranz, Weisser, & Voigt 2018) and that in certain purchase situations customer prefers looking for more information online (Garrido Samaniego, Gutiérrez Arranz, & San José Cabezudo 2006; Garrido, Gutiérrez, & San José 2011). Although current academic and practitioner-oriented literature offers some insights into impact of digitalization, it is still quite hard to form a profound understanding beyond general knowledge of which purchase stages are impacted most in particular situations. Current literature could benefit from a deeper and more systematic understanding of buying activity as a whole by looking at particular activities in which members of the buying team are involved. A more systematic understanding of the buying activity could be reached by taking a hierarchical, multi-level perspective with a focus on internal processes and conditions around buying activity. Application of Activity Theory can offer such a perspective. In the next part we explain Activity Theory in a greater detail and attempt to show how application of Activity Theory can contribute to more systematic understanding of buying activity and the impact of digitalization on it.

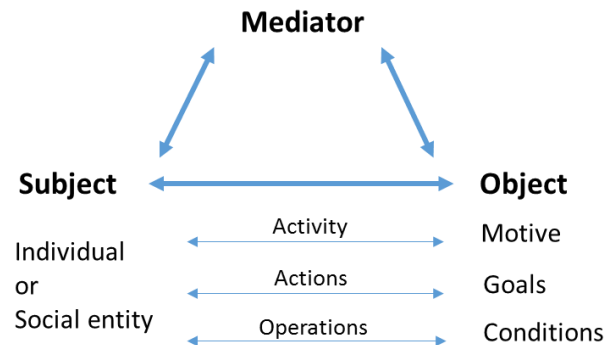
ACTIVITY THEORY: CONSTRUCTS

Activity theory is rather a descriptive than predictive theory. A comprehensive summary on the main ideas, concepts and principles of Activity Theory is presented by Kaptelinin and Nardi (2006) as one of the chapters in their book on using Activity Theory as an approach to explore human use of information technologies. According to the authors, Activity Theory mainly aims to provide an understanding of behavior of a human or a social entity embedded in its own environment. The theory aims to offer a structure for looking at the activity: it makes a distinction between the subject, object, subject-object interaction and mediators. The theory also offers a hierarchical analysis of activity by delineating 3 levels of objects (motive, goals and conditions) and corresponding hierarchy of subject-object interactions: activity, actions and operations.

Activity theory has its roots in cultural-historical school of Soviet psychology and works by Lev Vygotsky. The main ideas of activity theory were introduced by Leontiev (1978) and were developed further by Engeström (1999). The main difference between Leontiev and Engeström's approaches is that Engeström have taken the idea of embeddedness further and added additional construct of community and new mediators into his model of activity system.

In this paper, we are more interested in hierarchical understanding of the activity rather than focusing on the embeddedness in the social environment. Therefore, we would focus on the "simplified" understanding of activity as in works of Leontiev (Figure 1). We would rather focus on what is common in both models, which is centrality of the object, notion of mediation, and hierarchical understanding of activity.

Figure 1 Hierarchical structure of activity



Adapted from Kaptelinin & Nardi (2006) and Engeström (1999)

APPLICATION OF ACTIVITY THEORY IN THE CONTEXT OF BUYING ACTIVITY AND DIGITALIZATION

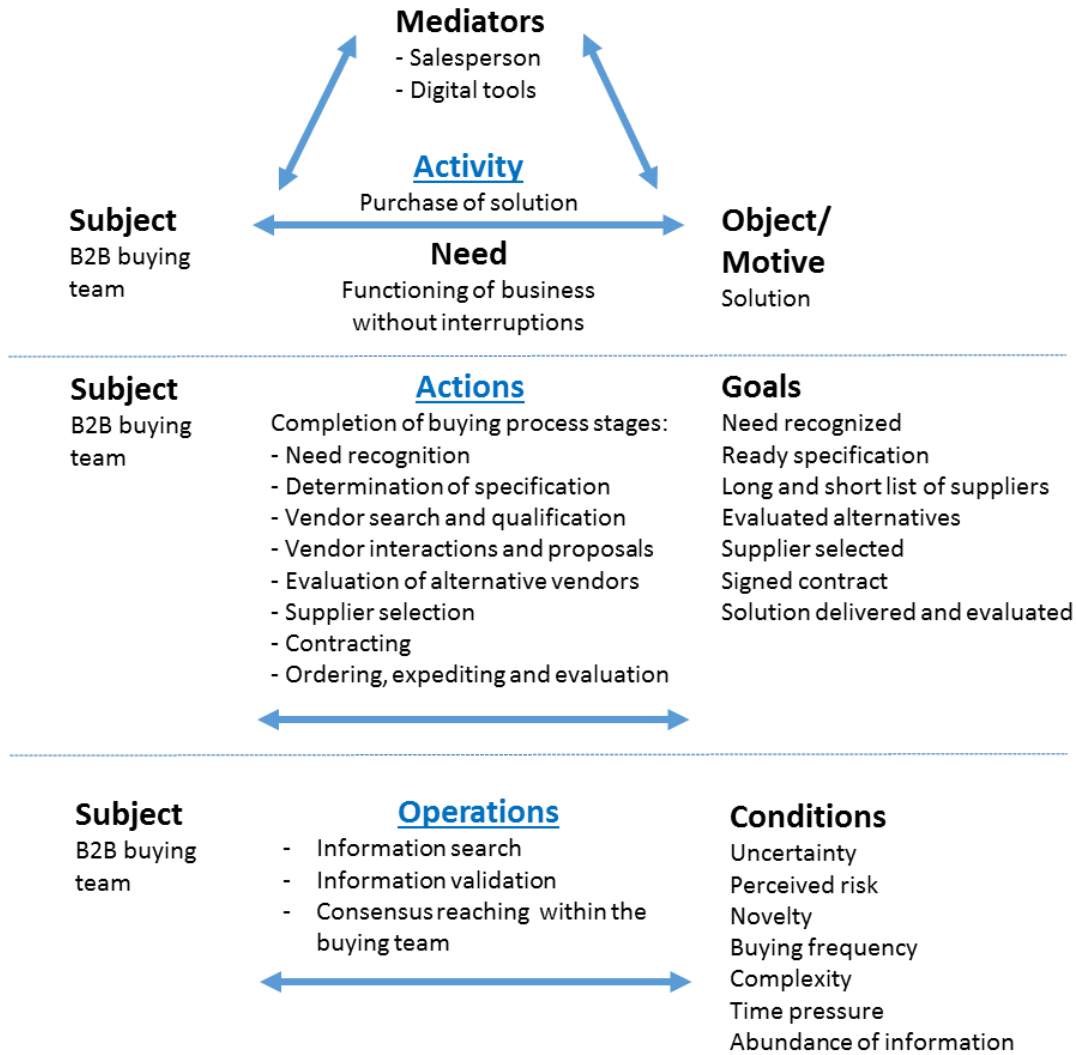
In Activity Theory, activity is suggested as the main unit of analysis. Kaptelinin and Nardi (2006) have summarized what activity means based on the work of Leontiev (1978) and suggested their definition of activity: “*Activity in general, not only human activity, but activity of any subject, is understood as a purposeful interaction of the subject with the world, a process in which mutual transformations between the poles of “subject-object” are accomplished*” (Kaptelinin & Nardi 2006, p. 30).

This definition suggests that to be able to understand activity, it is not enough just to understand subject and object separately, and that one should look at the activity, which is interaction between the subject and object, and through this interaction better understand both, the subject and object.

The authors also mention “purposeful interaction of the subject”, meaning that there is a reason behind subject’s activities and it can be described as subject’s need. It is the need of the subject that sets activity in motion. Since the subject is the initiator of interaction with the object, the relationship between the subject and the object is not symmetrical, as the subject dominates over object. Thus, when applying activity theory in the context of buying activity (Figure 2), let us first focus on defining the subject and its need. Then, let us have a look at the object and subject-object interaction and mediators.

Figure 2

B2B buying activity



Activity Theory allows to understand activities of both individuals and social entities consisting of individuals (Leontiev 1978; Kaptelinin & Nardi 2006). This means that B2B buying team, consisting of different buying roles, can be seen as a *subject* in B2B buying activity. B2B buying teams could be involved in buying products, services or solutions to satisfy certain needs of the organization they are working for.

When it comes to *object*, towards which activity of the subject is targeted, then the object would be the product, service or solution. According to Activity Theory, objects can be physical as well as intangible, meaning that any purchase situation can be viewed through Activity Theory, be it purchase of a tangible product or intangible services or solutions. For the purposes of the study we would choose a solution as an object for our study. Thus *activity*, or interaction between the

subject, the B2B buying team, and the object, the solution, would be purchase of the solution. The *need* for this interaction would, satisfaction of a certain organization need, being, for example, securing functioning of business without interruptions. So, purchase of the solution would be an activity under consideration.

However, activities are rarely directly targeted at the object itself. Subject at the same time can interact with different objects, meaning that subject-object interaction happens at different hierarchical levels. The object serves as the *motive* for carrying out an activity, and there are more “intermediary steps” on the way to obtaining the object and satisfying the need. Usually, the subject is involved in other smaller-scale activities, which can be seen as steps eventually leading to achieving the motive. These smaller-scale steps can be seen as *goals* and their sequence can be seen as a particular process. Thus, activity consists of *actions*, other smaller-scale activities taken by the subject towards the goals. In the context of B2B buying activity, stages of the buying process (any of the interpretations by Robinson, Faris, & Wind (1967), Webster & Wind (1972); Ghingold & Wilson (1998); Axelsson & Wynstra (2002), Tuli, Kohli, & Bharadwaj (2007) or Töllner, Blut, & Holzmüller (2011)) can be seen as goals and the buying process can be seen as actions leading to purchase of solution and attainment of the motive.

Actions can also be understood as a set of other smaller-scale steps, which help to attain a goal under certain *conditions*. These steps are called *operations*. So, actors engage in operations when they are trying to address certain conditions. This engagement can take a form of improvisation if a subject has to address a new condition on the go, or can happen unconsciously, if the actor has addressed the same conditions before. In the context of B2B buying activity, an example of conditions under which steps of the buying process need to be completed, could be time pressure, increased complexity of purchase situation, increased uncertainty of solution implementation outcomes or information abundance (Garrido, Gutiérrez, & San José 2011; Alejandro et al. 2011; Müller, Pommeranz, Weisser, & Voigt 2018). Operations which buying team could take to address these conditions could be information search, information validation and consensus reaching within the buying team (Adamson 2018).

When it comes to *mediators*, or tools which are used by the subject in interaction with the object, Activity Theory recognizes that subject-object interactions can be mediated by psychological (tools internal to the subjects) and physical (tools external to the subjects) artifacts. Previous buying experience and knowledge can serve as an example of an internal mediator in the context of B2B buying activity. Members of the buying team indeed rely on their knowledge and experience when buying a solution. An example of external mediating tools would be interacting with a salesperson, professional network or digital tools. Since the focus of this paper is the impact of digitalization on the buying process and what this impact means for the sales organization, we would further consider and discuss the following external mediators: interaction with a salesperson and digital tools. So if we have a look at Figure 2, then it becomes clear that the role of mediators in the buying activity is to help the subject cope with conditions and give guidance and directions on how to achieve goals in a more efficient and effective way. Thus, sales people and digital tools should help the buying team cope with uncertainty, complexity,

time pressure, abundance of information and different opinions within the team and moreover and should also help the buying team navigate through the buying process stages.

EXPECTED¹ CONTRIBUTIONS AND IMPLICATIONS

Application of Activity Theory shows that buying activity is broader than buying process and that it involves a range of operations aimed at buying conditions. Moreover, under application of Activity Theory mediators in buying activity receive greater attention and it becomes evident that salesperson and digital tools are competing mediators in the buying activity.

As for practical implications, greater attention to operations levels and a more thorough understanding of buying conditions can help sales managers guide their customers through the buying process stages and reduce the time it takes the customer move through these stages.

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This paper is work in progress. At this stage, the paper has been developed conceptually. The paper will be developed further empirically with data collection scheduled for April 2019. Semi-structured interviews with key informants representing different roles in buying teams in B2B context will be conducted.

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