

**The digitalization of customer learning:  
unintended consequences and task-technology fit challenges**

Thomas Ritter

Department of Strategy and Innovation

Copenhagen Business School

Kilevej 14A, DK-2000 Frederiksberg

Denmark

ritter@cbs.dk

Carsten Lund Pedersen

Department of Business IT

IT University of Copenhagen

Rued Langgaards Vej 7, DK-2300 Copenhagen S

Denmark

calp@itu.dk

## **Abstract**

Based on Li & Calantone (1998), customer knowledge can be defined as organized and structured information about customers. Such knowledge has been identified as a key strategic resource and a source of competitive advantage because such knowledge might be valuable, rare, un-imitable, and non-substitutable (Barney, 1991). The process of developing customer knowledge is a form of organizational learning, which covers “generating and integrating customer information throughout the organization” (Campbell, 2003)—thus customer knowledge processes are meant to result in customer knowledge. The basic input into customer learning is information about customers.

Much customer learning has been digitized and digitalized (see Ritter & Pedersen 2020 for definitions) over the past 20 years. But the learning process itself is also under development as there is high expectations of the usefulness of artificial intelligence for, e.g., identifying sales trends and customer segments. Likewise, real-time alert systems are to inform of customer dialogues turning unpleasant or customers about to leave the supplier.

Yet, against the positive ambitions and potential opportunities, we also see evidence of unintended consequences (Merlon, 1936) and lack of task-technology fit (Goodhue & Thompson, 1995) that hinders the positive impact of digitization and digitalization of customer information, customer learning, and customer knowledge—and ultimately prevent positive business impacts from customer data.

Unintended consequences are not planned or imagined at the initiation of an action. “Unforeseen consequences should not be identified with consequences which are necessarily undesirable (from the standpoint of the actor)” (Merton, 1936, p. 895) – or in other words, “undesired effects are not always undesirable effects” (ibbd). As such, we can distinguish between desired and undesired as well as desirable and undesirable consequences of digitalization and digitalization of customer information, customer learning, and customer knowledge.

Task-technology fit describes the interdependence between an individual (a technology user), technology (data, hardware, software tools and the services they provide) and task (activity carried out by individuals to produce the required output) characteristics (Goodhue & Thompson, 1995; Howard & Rose, 2019). The theory posits that only high fit enables performance and that a misfit has negative impacts. When analyzing digitization and digitalization projects in business-to-business firms, we observe that technology may be focused on other business goals than customer knowledge, and that there is therefore a risk of a high task-technology misfit, i.e., the task of customer learning and, thus, building customer knowledge is merely hindered by technology. Alas, while digitization and digitalization aim at positive business performance outcomes in other areas, the unintended consequence is a low fit for customer learning—with negative business effects as a result of low customer knowledge.

The paper and the conference presentation will detail the arguments and offer illustrative examples from business-to-business firms. Managerial implications and further research questions are developed.

## References

- Barney, Jay (1991): "Firm resources and sustained competitive advantage." *Journal of Management* 17.1: 99-120.
- Campbell, Alexandra J. (2003): "Creating customer knowledge competence: managing customer relationship management programs strategically." *Industrial Marketing Management* 32.5: 375-383.
- Goodhue, Dale L., and Ronald L. Thompson (1995): "Task-technology fit and individual performance." *MIS quarterly* (1995): 213-236.
- Howard, Matt C., and Julia C. Rose (2019): "Refining and extending task–technology fit theory: Creation of two task–technology fit scales and empirical clarification of the construct." *Information & Management* 56.6: 103-134.
- Li, Tiger, and Roger J. Calantone (1998): "The impact of market knowledge competence on new product advantage: conceptualization and empirical examination." *Journal of Marketing* 62.4: 13-29.
- Merton, Robert K. (1936): "The unanticipated consequences of purposive social action." *American Sociological Review* 1.6: 894-904.
- Ritter, Thomas, and Carsten Lund Pedersen (2020): "Digitization capability and the digitalization of business models in business-to-business firms: Past, present, and future." *Industrial Marketing Management* 86: 180-190.