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## **NEW FORMS OF CONNECTED CUSTOMER/CONNECTED SALESPERSON COMMUNICATION**

### **EXPLORATION OF THE EFFECTS ON THE DIMENSIONS OF THE CUSTOMER EXPERIENCE**

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#### **Summary:**

Connected stores are not a new subject and many researches have been made on that topic. However, many of them are focused on the impact of technology on customer experience but few examines the impact on the customer/salesperson dyad. This work attempts to give an answer by analyzing the technological instrument, not on a dyadic vision, but on a triadic or tripolar vision. This means that we focus on the communication mediated by the use of the technological instrument by both salesperson and customer. Moreover, we would like to go beyond the technocentric vision and to take a stakeholder-centric approach to better analyze the use of technology. That means that we will consider the user of technology, i.e the salesperson, but also the receiver, i.e the customer. By using the triad of activity situations (Rabardel, 1995), we wish to focus on activity situations mediated by the use of the instrument. To do this, we suggest to adapt the TTF model (task-fit technology, Goodhue & Thompson, 1995), which highlights the importance of the fit between technologies and the tasks performed by users, and the impact on performance. Finally, we choose to go beyond the cognitive paradigm in which many works focused on technology and information systems are embedded to move more towards a holistic and experiential paradigm.

**Keywords:** communication – communication mediated by the use of technology - connected customer - connected seller - IAS model - instrumented activity situation - customer/seller interactions – retail – fit task/technology.

In an article titled "Touch Versus Tech: when technology functions as a barrier or a benefit to service encounters," Giebelhausen (2014) describes business strategies aimed at both an infusion of technology in stores and the desire to engage touch staff in building relationships with customers as "fundamentally incompatible." Technology can then represent a barrier in the service encounter since it can create a kind of psychological discomfort for the customer (Wilson & O'Gorman, 2003). By mobilizing role and script theory (Solomon et al, 1985), the author demonstrates that the use of technology interrupts service encounter scripts and affects future customers assessments.

While the traditional service encounter, i.e., marked by human/human or customer/salesperson interactions remains, especially in small convenience stores, a big place is made for the 2.0 service encounter as described by Larivière & al (2017). From an exclusively dyadic service encounter, we evolve towards a triadic or tripolar service encounter (Rabardel, 1995) where the digital instrument appears as a third pole. The human/human interaction, then, gives way to a human/digital instrument/human interaction. What Kenyon & Leigh (2011) call "human enhanced technology" (HET).

There is a large body of work in the literature focused on the stores digitalization (Parasuraman, 2000; Bitner & al. 2000; Pantano & Naccarato, 2010; Goudey, 2013; Willems & al. 2017; Grewal & al, 2020; Bézès, 2019; El Abed & Lemoine, 2020; Pantano & Laria, 2012; Pantano & Timmermans, 2014, Collin-Lachaud & Vanheems, 2016). However, the impact of technology on the customer experience suffers from a lack of research (Roy & al, 2017) and the work conducted is quite often focused on SST (Self-Service Technology) (Mencarelli & Rivière, 2014; Boudkouss & Djelassi, 2020; Lapassousse-Madrid & Vlad, 2016) or on the degree of technology perceived in the store (Goudey, 2013). Less frequently, customer or salesperson specific tool are studied. Grewal & al (2018) deplore the lack of research dedicated to the customer's use of smartphones and their impact on buying behavior. The same is true for the tools used by the salesperson in the store. We are on in the early stages concerning the work on the use of the MSA (Mobile Sales Assistant) by the salesperson. The few papers are mainly focused on the impact of the MSA on technostress, resistance, and performance of the salesperson (Christ-Brendemühl & Schaarschmidt, 2020, Spreer & Rauschnabel, 2016, Dianoux & Mouline, 2019). A first exploratory study identifies the potential effects of the seller's use of MSA on the customer's shopping experience, through an approach based on value creation and destruction (Bendjaballah & Dianoux, 2020).

Furthermore, research on the use of technology in store often focuses on the connected salesperson or the connected customer. Rarely does research go in the direction of a dyadic customer/salesperson analysis. We would like to follow the approach of the Palo Alto School (Bateson, 1988) and more particularly the approach of Watzlawick (1972) who advocates a dyadic frame of reference. The individual is no longer analyzed alone but in a system of interactions.

To our knowledge, few studies analyze the way technology interferes with customer/seller interactions (Grewal & al, 2020, Bitner & al, 2000). But these works are an excellent starting point for our study. The article of Bitner & al (2000) focuses primarily on the beneficial effects of technology and is not anchored in an omnichannel approach. The work of Grewal & al (2020), on the other hand, provides a number of answers regarding the impact of the connected salesperson, described as "frontline cyborgs", i.e. employees equipped with human enhancement technologies (HET), on the customer experience. The authors note an improvement in the effectiveness and efficiency of salespeople, but also point to the potential dehumanization generated by the use of technology in the service encounter. At the same time, the use of technology by the salesperson can create an increased perception by the customer on the salesperson's skills. In other words, there may be a mismatch between the customer's expectations and experience. What the authors call the phenomenon of "overhumanization" (Grewal & al, 2020). If the article of Grewal & al (2020) offers a real reflection, it

is at first a conceptual article highlighting several research proposals. Moreover, the authors suggest extending the reflection and thinking about the impact of frontline cyborgs and customer cyborgs. This is clearly where our work fits in.

## **1. Conceptual approach**

### **1.1 Towards a systemic and interactionist approach of communication.**

If communication can be understood as an intentional act, directed from a sender to one or more receivers (Shannon & Weaver, 1949), the approach of the Palo Alto School breaks away from this, since it considers communication as a social fact. This means that all human behavior has a communicative value: "Activity or inactivity, speech or silence, everything has a message value. It follows that one cannot not communicate, whether one wants to or not" (free translation, Watzlawick & al, 1972, p.46). It is in this interactionist and systemic approach of communication that we choose to place ourselves. The systemic vision is, moreover, central since we consider interpersonal communication, both through its actors and the context in which they evolve. Bateson & Ruesh evoke the concept of " social matrix ", " when we speak of a social matrix in which interpersonal events are inserted, we refer to the repetitive and regular bombardment of stimuli to which human beings are exposed " (free translation, 1988, p.20). This implies, within the framework of our research, to take into account all these stimuli. This also implies for us to consider the social situation in which the customer and the salesman are involved.

### **1.2 Focus on customer/seller communication mediated by the use of the instrument.**

In order to better understand the impact of the use of these new forms of communication, we would like the digital tool not to be analyzed as an "in-itself" (free translation, Rabardel, 1995, p.69), i.e. only technocentric, but as a "means of action" (Rabardel, 1995, p.237) at the service of the customer or the salesperson. Rabardel (1995), offers a very fine analysis of the integration of the digital tool in the subject/object relationship. In this sense, the works resulting from the Sciences of Information and Communication are important in our approach since they highlight the importance or the impact of the instrument in the human/human relationship. The digital tool, thus, appears as a "third pole between the subject and the object" (Rabardel, 1995, p.237). From a purely dyadic salesperson/customer relationship, we are thus evolving towards a triadic or tripolar relationship (Rabardel, 1995), salesperson/digital instrument/customer.

The IAS model (Triad of instrumented activity situations, Rabardel & Vérillon, 1985 in Rabardel, 1995), highlights the different interactions that must be considered once the instrument is integrated: the interactions between the subject and the instrument (S-I), the interactions between the instrument and the object on which it allows us to act (I-O) and finally the interactions between the subject and the object mediated by the instrument (S-Om). Here, the object can be another subject, either the customer or the salesperson. The choice of this theoretical model seems to be extremely interesting for us because it allows to approach the tool as a means of action for the customer or the salesperson. Given the orientation of our work, we choose, at this stage, to focus on the situations of customer/salesperson communication mediated by the use of the digital instrument. We identify one main situation and two additional ones: the connected salesperson facing a connected customer - the connected salesperson facing a connected customer with corporate access - the connected

salesperson facing a connected customer with third party access. It may, indeed, be interesting to distinguish the situations of activities for which the customer uses his digital instrument in the case of a corporate access, i.e. focused exclusively on the use of the company's website, and the situations of activities for which the customer uses his digital instrument in the case of a third party access, i.e. during interactions with individuals who are not physically present in the store but who can influence the customer's overall experience.

A number of questions then arise: What are the activity situations for which the salesperson/customer uses the digital instrument? At what point in the shopping journey does the customer use the digital instrument and for what kind of actions? What impact does this communication mediated by the use of the digital instrument have on the customer experience?

It will certainly be interesting, then, to identify the main areas of tension, i.e. the situations of activities for which the customer uses his digital instrument to complete, verify or contradict the expertise provided by the salesperson.

## **2. The choice of a theoretical model: from the cognitive paradigm to the holistic and experiential paradigm.**

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It is clear that many works on technology or information systems are based on a cognitive paradigm. Technology is thus mainly apprehended from the point of view of its cognitive processing. And it is precisely this aspect that we wish to go beyond in the framework of our doctoral work. It is not a question of breaking with this paradigm, as the informational contribution of technology seems to be essential in salesperson/customer communication, but of considering the impact of technology from a holistic and experiential view. In other words, consider its informational, emotional but also social contribution. In this respect, it seems important to us to analyze the impact of activity situations mediated by the use of the digital instrument on all dimensions of the customer experience.

Furthermore, we wish to follow the approach of Rabardel (1995) who, beyond considering the instrument as a "means of action", advocates the importance of an anthropocentric analysis of the digital instrument. Here again, many works analyze technology from the point of view of its functions, through a technocentric approach. For our part, we wish to conduct our work with an analysis centered on the actors of the action, i.e. the salesperson and the customer. It is therefore not a question of considering communication from a linear point of view, but of considering it from a dynamic and interactionist point of view. If it is important to consider the impact of the use of technology on the user, in this case the salesperson, it is equally important to analyze the impact on the recipient, i.e. the customer.

To do this, we propose to use and adapt the TTF model (task-technology fit, Goodhue & Thompson, 1995). The original model highlights the importance of the fit between technologies and the tasks performed by users, and the impact on performance. The model assumes that the use of a technology does not depend on its acceptance (for the salesperson, the use of the technology may even be compulsory) but on the fit between the tasks performed and the technology. To do this, he considers three essential items to be taken into account to understand the impact on performance: the characteristics of the user, the characteristics of the technology and the characteristics of the tasks performed. We would like to retain all of these items but extend them, both for the salesperson and for the customer, and to consider not the performance generated but the impact of these instrumented activity situations on the customer experience.

### **3. Choice of orientation for the empirical part**

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In order to understand the digital instrument as a "means of action", it is important for us, first of all, through a qualitative study, to identify the situations of instrumented activities (IAS) implemented by the salesperson and by the customer. Conducting semi-directive interviews with customers as well as with salespeople in the store, will allow us to understand the impact on the customer experience. It seems essential to conduct this first qualitative study in several kind of stores, in order to obtain a diversity of IAS. These IAS can indeed be different according to the nature of the product.

In a second stage, a quantitative approach will allow us to evaluate and prioritize the instrumented activity situations identified during the qualitative step, according to their weight in the overall customer experience. It could be interesting, for example, to identify the IAS that generate a positive experience and the IAS that generate a negative experience for the customer.

In conclusion, it is important to specify that the empirical stage has not yet been carried out, but is still being considered. However, the managerial interests that can be derived from this appear quite clearly since our work would allow us to highlight the situations of activities for which it is in the salesperson's interest to use or, on the contrary, to avoid using the digital instrument in his relationship with the customer?

From the point of view of theoretical contributions, by taking an interest in the new forms of communication between the connected customer and the connected salesperson, we are in line with what Grewal & al (2020) describe as cyborg customers and cyborg frontlines. This study would, then, make it possible to identify the forms of interaction in this communication mediated by the use of the instrument and to understand its impact on the customer experience. Finally, it would allow us to complete, confirm or refute the work of Giebelhausen (2014) for whom a strategy combining both an infusion of technology in store and the desire to encourage contact staff to forge links with customers is "fundamentally incompatible". Is technology in opposition with the human in the service encounter? On the contrary, is it possible to consider a human/technology symbiosis in the service encounter?

## Bibliographie

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Abed, M. E. (2020). Understanding the effects of smart in store technology on the shopping experience dimensions: An application to connected stores. 14. *International Marketing Trends Conference*.

Bateson, & Ruesh. (1988). *Communication et Société*, Editions Seuil, ouvrage.

Bendjaballah, M., & Dianoux, C. (2020). La perception du vendeur connecté par le client. *Paper of the Digital Marketing Conference*.

Bèzes, C. (2019). Quel smart retailing en magasin pour quelle expérience omnicanal vécue ? *Recherche et Applications en Marketing* (French Edition), 34(1), 95-118.

Bitner, M. J., Meuter, M. L., Ostrom, A. L., & Roundtree, R. I. (2000). Self-Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters. *Journal of Marketing*, 64(3), 50-64.

Boudkouss, H., & Djelassi, S. (2020). Les technologies interactives en magasin. *Paper of the Digital Marketing Conference*.

Christ-Brendemühl, & Schaarschmidt. (2020) The impact of service employees' technostress on customer satisfaction and delight : A dyadic analysis - *ScienceDirect*.

Collin-Lachaud, I., & Vanheems, R. (2016). Naviguer entre espaces virtuel et réel pour faire ses achats : Exploration de l'expérience de shopping hybride. *Recherche et Applications en Marketing*, 19.

Dianoux, C., & Mouline, J. P. (s.d). La tablette un atout majeur de la relation client.

Giebelhausen, M., Robinson, S. G., Sirianni, N. J., & Brady, M. K. (2014). Touch versus Tech: When Technology Functions as a Barrier or a Benefit to Service Encounters. *Journal of Marketing*, 78(4), 113-124.

Goodhue, D. L., & Thompson, R. L. (1995). Task-Technology Fit and Individual Performance. *MIS Quarterly*, 19(2), 213-236.

Goudey, A. (2013). Exploration des effets du degré de technologie perçue du magasin sur le comportement de magasinage. *Management Avenir*, N° 63(5), 15-32.

Grewal, D. (2020). The future of in-store technology. 18. *Journal of the Academy of Marketing Science*, 96-113

Grewal, D., Kroschke, M., Mende, M., Roggeveen, A. L., & Scott, M. L. (2020). Frontline Cyborgs at Your Service : How Human Enhancement Technologies Affect Customer Experiences in Retail, Sales, and Service Settings. *Journal of Interactive Marketing*, 51, 9-25.

Grewal, D., Ahlbom, C.-P., Beitelspacher, L., & Noble, S. M. (2018). In-Store Mobile Phone Use and Customer Shopping Behavior: Evidence from the Field. 27. *Journal of Marketing*.

Lapassouse-Madrid, C., & Vlad, M. (2016). Courses connectées : Un cas de destruction ou de création de valeur pour les clients et les distributeurs. *Décisions Marketing*, 84, 43-60.

Larivière, B., Bowen, D., Andreassen, T., Kunz, W., Sirianni, N., Voss, C., Wunderlich, N., & De Keyser, A. (2017). "Service Encounter 2.0" : An investigation into the roles of technology, employees and customers. *Journal of Business Research*, 79.

Mencarelli, R., & Rivière, A. (2014). La participation du client dans un contexte de self-service technologies. Une approche par la valeur perçue. *Revue française de gestion*, 40(241), 13-30.

Pantano, E., & Laria, G. (2012). Innovation in Retail Process: From Consumers Experience to Immersive Store Design. *Journal of Technology Management & Innovation*, 7(3), 198-206.

Pantano, E., & Naccarato, G. (2010). Entertainment in retailing: The influences of advanced technologies. *Journal of Retailing and Consumer Services*, 5.

Pantano, E., & Timmermans, H. (2014). What is Smart for Retailing? *Procedia Environmental Sciences*, 22, 101-107.

Parasuraman, A., & Grewal, D. (2000). The Impact of Technology on the Quality-Value-Loyalty Chain. *Journal of the Academy of Marketing Science*, 28, 168-174

Rabardel, P. (1995). Les hommes et les technologies. 103. *Armand Collin*.

Roy, S. K., Balaji, M. S., Sadeque, S., Nguyen, B., & Melewar, T. C. (2017). Constituents and consequences of smart customer experience in retailing. *Technological Forecasting and Social Change*, 124, 257-270.

Shannon, C. E., Weaver, W., Moles, A. A. P., & Cosnier, J. (1975). Théorie mathématique de la communication. *Retz*.

Spreer, P., & Rauschnabel, P. A. (2016). Selling with technology: Understanding the resistance to mobile sales assistant use in retailing. *Journal of Personal Selling & Sales Management*, 36(3), 240-263.

Watzlawick, Helmick-Beavin, & Jackson. (1972). Une logique de la communication - *Seuil*

Willems, K., Smolders, A., Brengman, M., Luyten, K., & Schöning, J. (2016). The path-to-purchase is paved with digital opportunities: An inventory of shopper-oriented retail technologies. *Technological Forecasting and Social Change*, 124, 228-242.