

**TO SHARE OR NOT TO SHARE A SCREEN?
A QUESTION OF PERCEIVED COMPETENCE**

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PARTAGER OU NE PAS PARTAGER UN ECRAN? UNE QUESTION DE COMPETENCE PERCUE

Résumé: Cet article vise à identifier les motivations conduisant un individu à échanger avec autrui autour d'un écran lors d'un achat. L'analyse exploratoire qualitative a identifié différentes motivations de partage d'écran, associées à «la tâche», à «l'activité» et à des besoins de «contrôle». Elle révèle également que la "*disposition motivationnelle*" du consommateur et la compétence relative perçue du partenaire, déterminent la propension à partager un écran. La compréhension de ces motivations, d'ailleurs conformes à la "*théorie des besoins*" de McClelland(1988), permet de mieux apprécier l'intérêt d'un usage commun de l'écran entre clients et vendeurs au sein d'un espace physique de vente.

Mots-clés : «Partage d'écran», «Technique de vente», «Compagnon d'achat», «Omni-canal», «Compétences des vendeurs», «Shopping digital co-localisé», «Phygital ».

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Abstract: This article aims to identify the motivations leading an individual to discuss with another the purchase of a product around a same screen. The qualitative exploratory analysis allows identifying different motivations to share a screen, qualified as «task-related», «activity-related» and «control-related». It also reveals that the consumer's "*motivational disposition*" and perception of the partner's relative competence determine his propensity to share a screen. The understanding of these motivations, which appears to be in line with McClelland's (1988) "*needs theory*", provides a better appreciation of the interest to foster a common screen sharing between shop-assistants and customers in physical commercial spaces.

Keywords: «Screen sharing» «Personal Selling» «Joint shopping» «Omni-channel» «Seller's competence» «Connected store shopping», «Phygital »

Executive Summary

Surfing on the web with somebody else has become a usual activity. Whereas multiple studies analyzed the motivation of a consumer to surf on the web, few attention has been granted to understand the motivation to navigate with somebody else on the same screen.

The purpose of this research is to understand what leads a person to surf with another person on the same screen while shopping. It attempts to understand the psychological process leading a consumer to accept to share a screen (or not); as this activity was usually considered as an individual one.

This paper identifies the motivations of consumers to share a screen (being together at the same screen), and the factors affecting them in the private (between family members) and commercial sphere (between customers and shop assistants).

In physical stores, shopping with another person has been recognized mainly as having a positive impact on purchases both in terms of volume and sales (Granbois, 1968; Mangleburg et al., 2004; Sommer et al., 1992; Woodside and Sims, 1976). However, other authors (Borges et al., 2010) suggested that the positive valence of a joint shopping experience may depend on the motivation of the consumer as well as on the identity of the partner. Thus, it is possible to anticipate that shopping together at the same screen stem also from distinct motives and yield different results while sharing a screen with a friend, a relative or a store representative.

This paper may benefit retailers, leading them to ponder providing digital devices to the sales staffs of their physical stores (“phygital¹ strategy”). Moreover, by clarifying the mechanism underlying this practice, it might encourage shop assistants to use it appropriately during their interaction with customers. This research also contributes to clarify the question of “*with whom and when*” the shop assistant might propose a common surfing on the screen. Our findings point out that contextual factors such as the perception of the partner's relative competence in three domains (product, web and relational perceived competence), trigger distinct motivations to share a screen. Additional contextual factors which also have been identified in the entire study will not be presented in this paper.

Consequently, recognizing the customer's specific motivations when sharing a screen, and additional factors moderating them, might lead to sensible seller's training programs.

In view of the current lack of professional knowledge in the field, this article brings new insights to retailers considering digitalization investment decisions in stores.

¹ Physical and digital at the same place and at the same time

Introduction

Whether in homes, public or commercial spaces, the number of screens has increased considerably in recent years. The omnipresence of screens in daily life² leads to new forms of interactions between people while shopping. They offer an opportunity to shop not only alone but also with other people. Thanks to the various surfing devices customers can use (computer, tablet, smartphone, digital table, etc.), sharing a screen for shopping (same place, same time, same screen) can take place with different persons (family members, friends, shop assistants, etc.) at different places (at home, in a store, in a public space, etc.). Whereas numerous researches have been conducted on the motivations of consumer to use a digital device, very little research has been carried out on the motivations of consumers to surf on a screen with another person (Durand-Megret et al. 2013; Vanheems, 2013). Although retailers made large investments in order to introduce digital screens in their "brick and mortar" stores (Filser, 2001); the deployment of such screens in stores does not guarantee their utilization (Belghiti et al. 2016), and particularly their "joint utilization" by shop assistants and customers.

However, shop assistants are increasingly encouraged by their superiors to share screens with their customers. But such a behavior will only be efficient if the customer is actually willing to share a screen with the shop assistant. Furthermore, the shop assistant must be able to identify when such common surfing could help him to better answer the customer's need and satisfy him. The objective of this paper is to understand the consumer's willingness to surf on a screen with another person while shopping. Recognizing the "why, with whom and when" of this general psychological process is unavoidable for understanding whether retailers need to invest in digital devices in stores. It might also encourage sales teams to evaluate how to surf appropriately with their customers on these devices. This paper is structured as follows. Firstly, due to the lack of research on the motives driving people to shop together on the web, the literature review mainly presents the reasons for "joint shopping". Secondly, the research methodology is presented. Finally, the paper presents the main results of the research, discusses them and explains their implications and contributions.

2. Conceptual framework

2.1 Why do people shop together at stores?

Some decades ago, Tauber (1972) conducted a qualitative research to answer the following question "Why do people shop?". Several motivations to shop were identified and classified into personal and social motivations. More than twenty years later, Babin et al. (1994) showed

² 48% increase in the number of smartphone users worldwide since 2014 - reference: statistica.com

that shopping can be motivated by utilitarian and hedonic factors. “Joint shopping” in store may be considered as a particular case of shopping, composed of utilitarian motives *"a manner to cope with anxiety and stress in a meaningful decision process"* (Hartman and Kiecker, 1991) and emotional motives (Matzler et al., 2005). Actually, the shopping companion may impact the experience the customer lives (Borges et al., 2010). In a context of couples' joint shopping, the decision to shop together in store appears to be motivated by hedonic (expected shopping pleasure), utilitarian (purchase relevance, financial risk), situational (time availability), and personal/relational (gender, relation length) motives (Lim and Beatty, 2011).

2.2 How people select a companion for shopping?

If the willingness to shop jointly can be classified into utilitarian, hedonic, emotional and social motives; do consumers have preferences about who accompanies them during their shopping activity? Some research show that consumers prefer to select sources perceived as having sufficient knowledge³ and from whom they can get trustworthy information and credible advice⁴ (Gershoff et al., 2001; Gershoff and Johar, 2006). The companion selection preference depends of which primary need is leading the customer (Kicker and Harman, 1994). A *"strong ties companion"*⁵ is usually preferred by a buyer when he needs moral or psychological support. On the contrary, *"weak ties interactions"*⁶ (Granovetter, 1973) are mostly generated by the expectation of a functional generalized role. Additionally, a customer may also shop with another person for social hedonic motives. Shopping with others (relatives, friends) in physical stores can be perceived as an agreeable time for some consumers (Arnold and Reynolds, 2003; Lim and Beatty, 2011). Gentina (2013) showed that going together to stores can be an exciting time for adolescents. As a matter of fact, a shopping pal might be selected also according to the pleasant time expected when shopping with him. (Borges et al., 2010)⁷

2.3 Shopping together at a same screen: Why, with whom and in which situations?

Sharing a screen may be considered as a new form of “shopping together”. However this activity, giving birth to new forms of interactions between people, didn't give rise at our knowledge to specific researches focusing on its various motivations, processes and values.

³ The evaluation is commonly based on the perceived relative expertise and experience of the partner regarding the product (Alba and Hutchinson, 1987, Furse, Punj, and Staelin, 1984).

⁴ Despite the fact that the relative credibility perception of the buyer may not be totally accurate (Bertrandias & Vernette, (2012), it will shape his purchase fellow selection. The partner's relative expertise issue has been largely discussed in the context of "joint decision-making" (Jungermann and Fischer, 2005; Berrada, 2014). These studies have built their theoretical framework on resource and social power theory (Belch and Willis, 2002).

⁵ I.e. somebody knowing him at an emotional and psychological level

⁶ E.g. as in the case of buyers' acquaintances or shop assistant for instance

⁷ For a review of joint shopping motivation themes, see Appendix 1

2.3.1 Why do people share a screen for shopping?

Combining successively and/or simultaneously human and digital channels may be expected to form a more effective way to reduce perceived risks. While striving to collect more information, a customer surfing on the web with a person he perceived as credible, will feel more secure in his decisional process. Moreover, sharing a screen may also stem from social motives. Indeed, the very act of integrating screens into "*face to face interactions*" (Welman and Rainie, 2013) appears to build affinity in small groups as it has been shown in a sociological research (Oren, 2011). Likewise a sharing experience in a commercial context seems to foster "*complicity and connivance*"⁸ between customers and shop assistants (Vanheems, 2013).

2.3.2 In which cases are customers more likely to surf on the Web?

Kennedy and Wellman (2007) indicate that the more the Internet is used in the household, the more time the partners spend together online. In the family context, Durand-Mégret et al. (2016) show that teenagers' decision to help and surf with their parents on the web depends on the way they evaluate their parent's relative competence both on the product and on the web. When they feel themselves as more competent (on the product and/or on the web), they will intervene in the purchase process in order to avoid from their parents to make a bad choice.

2.3.3 To share a screen, with whom?

Sharing a screen also supposes a physical proximity between the interlocutors⁹. As a matter of fact, the willingness to share a screen is limited by the need for physical privacy, which varies culturally (I.e Proxemics- Hall, 1968). Such a proximity is usually acceptable with some people and in some situations but not in others. Close relatives will be more prone to look together on a screen than strangers. Thus, an exaggerated "togetherness insistence" of a shop assistant in a store may jeopardize hedonic individualist shopping motives that have been recognized in Mooradian and Olver, (1996) work¹⁰. Additionally, it can be expected that the willingness of a person to spend time and have some exchange¹¹ with somebody on a screen will depend on the way they perceived the person (sympathy, relational ability). Indeed, it has been demonstrated in the physical world that the partner's communication skills is a decisive factor to share a shopping stage (Furse, Punj, and Staelin, 1984). The result may all the more

⁸ The terms "complicity and connivance" are used here in a positive way and not about wrong doing

⁹ It can be expected that the size of the device will also impact the willingness of people to share it. The physical proximity will grow as the device is small (computer, tablet, smartphone, digital table in store).

¹⁰ In their works, Mooradian and Olver (1996) demonstrate a correlation between the 11 shopping motives of Tauber's (1972) taxonomy and the Big 5 factors of human personality (Digman, 1990). They also discovered two additional shopping motives, described as "Enjoying being on one's own" and "Freedom to decide" (Guido, 2006)

¹¹ Durand-Mégret et al. (2013) described a "collaborative mode" between parent and teenager, "*with devices that can be used together*" and "*motivated by the desire to exchange, encouraging parents to enter a new relationship through the field of consumption*"

be extrapolated to shopping screen sharing, since it constitutes both a shared physical (to be together in front of the screen) and a shared digital activity (surfing together on the web).

3. Methodology

The first step of this research has been to carry out some anonymous observations of sharing screen activities at home or in public places. It shows that sharing a screen may be done in various physical positions and using different devices. Next, observations and mystery shopping visits were carried out in a few brand stores, advertising themselves as "*digital in store*" shops (where shop assistants use a screen in their selling process). Most of these observations underlined the fact that shop assistants don't intentionally share their screen with the customer. Moreover, it didn't make it possible to appreciate the motivations, preferences and perceived values of the customers. Thus, a qualitative research was conducted. Twenty French customers were interviewed about their shopping journeys through semi-structured interviews (See Appendix 2- Sampling). While all respondents remembered an interaction on the screen with relatives or friends, only eleven of them succeed to recall having sharing a screen (intentionally or not) with a shop assistant. In the latter case, they were asked to describe their supposed attitudes and a possible scenario of action for themselves (See Appendix 3- Interview guide and content analysis procedure). Scenario-based approach procedures have been previously applied in a study about couples' joint shopping likelihood (Lym and Beatty, 2011), and quoted by Bateson and Hui (1992) as "*having advantages over retrospective recall and can provide ecologically valid tests*".

4. Results

4.1 Screen sharing: how to define it and express its motivation?

Due to the non-familiar terms (screen sharing, shared surfing, shared screen browsing, etc.) and/or not remembered situation, the shopping screen sharing situation was not always immediately understood by the interviewees. Moreover, asking respondents to express their motivation for this activity involving personal, physical, interactional, socio-affective and technological dimensions turns out to be a complex task. Sharing a screen appears to be a multifaceted concept underlying sensible and implicit motives. Furthermore, the fact that different disciplines have described this activity in different manners and in different terms didn't contribute to a clear understanding. Therefore, in the perspective of our research, we describe shopping screen sharing activity as "*Any sequences of the shopping journey, during which two persons are looking at the screen of the same device, intentionally or not and for various purposes*".

4.2 Why do people shop together by using the same screen?

- *A task-oriented (utilitarian) motivation*: Sharing a screen appears in our qualitative research primarily as a mean for more efficient shopping. It allows the consumer to get subjective personal assistance *"But it's good to receive people's opinion, because sometimes... you can always buy stuff, and ultimately uh, it's not going to be as in the images"* (L., 16) and objective displayed information simultaneously *"If she has the product in stock, if it is not in stock, etc... if I can take it instantly, or... the precise conditions of sale"* (PJ, 78). The possibility to get a personal opinion and see more functional information at the same time helps to reduce the perceived risk of the purchase. This "double checked procedure" stems from the willingness to be performant in the accomplishment of the shopping activity and successful in its results. These motivations are characterized by a dominant transactional orientation.

- *An activity-oriented (social) motivation*: Our results emphasize that discussions at the screen either with a friend or a shop assistant, as well as sharing a physical artefact reinforce social bonding motives. : *"We look at stuff; I think I'll never get tattooed but sometimes we look at tattoos with friends and we discuss it"* (L., 16). These motivations emerge as a mean to strengthen common values with the partner. They are characterized by a dominant relational orientation.

- *A control-oriented (personal) motivation*: Our content analysis has also identified the need to have an impact and/or control the influence of the interlocutor as a motivation to share a screen. This has been shown in interviews as an either active or reactive motivation to a given situation. When a consumer is trying to watch the screen of the shop assistant, this might express also a reaction to a potential fear of losing control of the process. *"It's a little less mysterious, we know what's going on, we know what the seller or the person does on the screen"*(D., 34). This behavior is characterized by a dominant reactance orientation, motivating consumers to try following and supervising the activity on the screen. Furthermore, our findings also highlight an active control dimension that appears as a personal need to influence or lead the shared surfing process. *Well, if it's for me, I'd rather to be in charge of it* "(M., 40) ". Limiting the sharing partner's control and action on the screen and ending it quickly, similarly aim to get an active control over the activity on the screen. *You want to share quickly...you do it quickly as a gesture*" (D., 55). This motive illustrates a personal 'agency' orientation (Bandura, 2009a).

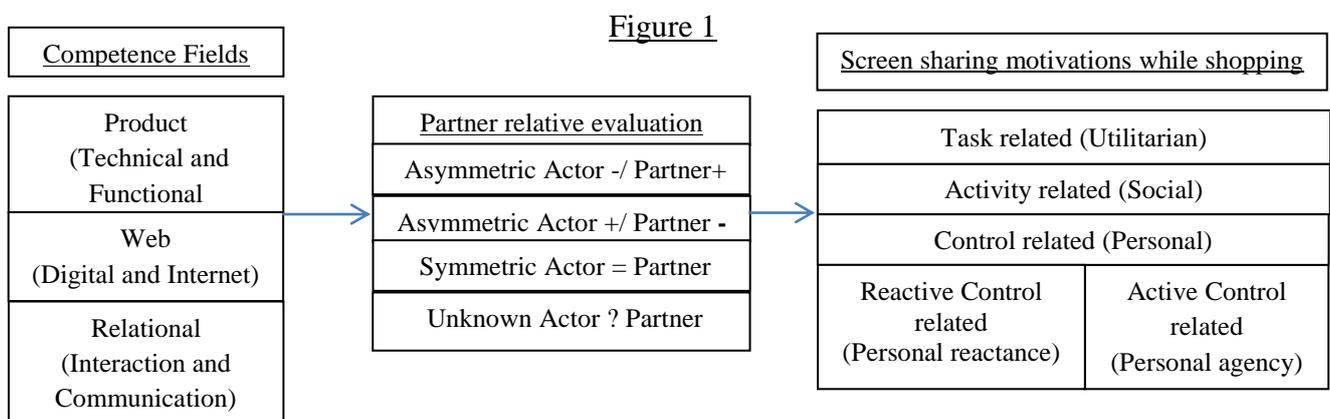
4.3 Does the screen amplify distinct motives in various social context and decisional stages?

As a matter of fact, screen sharing various motivations seem to be intensified when people share the same screen. Can the screen be considered as responsible for their magnification? "Active control" motives appear to be especially boosted in a screen sharing situation. *"We do*

not read at the same speed, we do not want to do the same things (...) on the Internet, we do not want to click at the same place ..." (M., 40). Furthermore, "reactive control" motivations of the interviewees appear much frequently in sharing screen interactions with shop assistants than with friends. Screen sharing activity-related social motives, for their part, are present mostly and logically in the private sphere. As for task-related screen sharing utilitarian motivations, they seem to show up equally in the two spheres. Nonetheless, these motivations appear to be based on a dynamic continuum of the three different motives. They form a unique combination of utilitarian, social and personal motivation at a specific moment "We always did that. In front of the computer... exactly as if we go in store, it is the same thing, before we buy, we discuss it first. (P. J., 78). Their intensity constantly varies and evolves according to perceived contextual cues. However, one of them is dominant at each given moment. Therefore a motive may be dominant only for specific decisional phases "Afterwards we can put our research together to see what we found, to compare our results (...) also after, perhaps a small common surfing" M.(18) or appears in the overall decision process "Yes, to specify, choose and finalize the purchase" C.(60)

4.4 How perceived relative competence affects the desire to share a screen?

The content analysis reports that various factors influence the motivation to share a screen. We focused here on a single significant variable, the perception of the partner competence. Three principal assessments of relative competence in distinct fields (partner relative product, web and relational competence) have been identified as affecting distinctly the different motivations to share a screen (See Figure 1 below). In the private sphere, this motivation is usually anchored in previous evaluation of the family member's relative competence¹². It allowed them to know what to expect from the partner in the shopping screen sharing. However, a first direct oral interaction is needed in the commercial sphere to evaluate the shop representative's competence "To check together on the screen, yes it can be something positive but at first I would prefer that the shop assistant speaks to me without, without it"(L. 48).



¹² E.g. Parents are prone to share a screen with their teens evaluating them as more "web-competent" than them

5. Discussion and Theoretical Implications

The content analysis identified three main motives stimulating interlocutors to share a screen. These motivations regarding performance and control as well as social aspect are coherent with McClelland's (1988) "*Three Big Needs*" theory, claiming that every human behavior may be addressed within three basic needs described as "*achievement, affiliation and power*" (Sokolowski et al., 2000). The work of McClelland has been developed in a managerial perspective and implemented in personality aptitude diagnostics and organizational psychology studies (Sandalgaard et al, 2011; Rijavec et al.,2002). Similarly, a personal shopping dominant orientation has been identified as a psychological antecedent factor of the motivation to share. Designated in motivational psychology as "*motivational dispositions*" (Heckhausen and Heckhausen, 2008), they are characterized as non-conscious, early acquired, individually varying, stable motives (Schneider and Schmalz, 2000). Furthermore, our results indicate that shared screen mediation in a co-located interaction, emphasizes the motivations intensity and stresses personal dependency issues¹³. These findings represent a first theoretical approach, highlighting domination issues, that haven't been acknowledged in joint shopping literature.

6. Conclusion, Managerial Contributions and Limitations.

Sharing a physical artefact with somebody in a shopping process looks as a sensitive task that requires conforming to the dominant needs motivating the partner in the context¹⁴. Moreover, a specific motivation may evolve according to the variation of the actor's dominant need, and to the evaluation of the partner's competences. Motivating customers to share a screen may be a two-edged knife. In order to avoid the problematic trap of power game at the screen, a clear understanding of the distinct customer's needs to share a screen must be a mandatory step. Although others contextual variables¹⁵ have also been identified as affecting screen sharing motivations, this paper focuses only on the "competence perception" factor. However, the findings constitute a first understructure to the actual lack of academic and professional knowledge in this field. Future work will describe distinct consumers' modes and experiential values of sharing as well as infer the links between motivations, processes and consequences. This study limited to an actor's monocular perspective¹⁶ for practical reasons, can be enlarged within a dyad experimental interdependence perspective¹⁷ and a multiple interaction design¹⁸.

¹³ Stemming from the individual's motivational disposition and perception of the partner's relative competence

¹⁴ Various sharing context (private/ commercial sphere) will trigger the intensity of specific motives components

¹⁵ The actor and partner's perceived availability, their relative involvement toward the products, their role definition and relational situation (from spouses to shop assistants) as well as the purchase finality and the characteristics of the connected touch point are not discussed in this paper

¹⁶ While not considering the partner's insight

Bibliography

- Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of consumer research*, 13(4), 411-454.
- Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of retailing*, 79(2), 77-95.
- Ashtiani, P. G., & Aghaziarati, Z. (2012). A survey of motivational factors associated with couples' likelihood of joint shopping: The case of Iranian couples. *African Journal of Business Management*, 6(9), 3267.
- Babin BJ, Darden WR, Griffin M.(1994). Work and/or fun: measuring hedonic and utilitarian shopping. *Journal of consumer research* 20(4):644–56.
- Bandura, A. (2009). Cultivate self-efficacy for personal and organizational effectiveness. *Handbook of principles of organization behavior*, 2, 179-200.
- Bardin, L. (1977). Content analysis. *São Paulo: Livraria Martins Fontes*.
- Bateson, J. E., & Hui, M. K. (1992). The ecological validity of photographic slides and videotapes in simulating the service setting. *Journal of consumer research*, 19(2), 271-281.
- Belch, M. A., & Willis, L. A. (2002). Family decision at the turn of the century: Has the changing structure of households impacted the family decision-making process?. *Journal of Consumer Behaviour*, 2(2), 111-124.
- Belghiti, Ochs and Badot (2016) - *L'expérience de magasinage phygitale : tentative de conceptualisation et investigation empirique-Proceedings of Marketing Digital conference*
- Berrada, A. M.(2014) *Achat en ligne en couple: à qui le dernier mot?. Proceedings of marketing trends congress*.
- Bertrandias, L., & Vernet, É. (2012). What is interpersonal communication worth? Interpersonal calibration of knowledge and selection of recommendation sources. *Recherche et Applications en Marketing (English Edition)*, 27(1), 33-56.
- Beatty, S. E., & Talpade, S. (1994). Adolescent influence in family decision making: a replication with extension. *Journal of Consumer Research*, 21(2), 332-341.
- Borges, A., Chebat, J. C., & Babin, B. J. (2010). Does a companion always enhance the shopping experience? *Journal of Retailing and Consumer Services*, 17(4), 294-299.
- Cook, W. L., & Kenny, D. A. (2005). The actor-partner interdependence model: A model of bidirectional effects in developmental studies. *International Journal of Behavioral Development*, 29(2), 101-109.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual review of psychology*, 41(1), 417-440.
- Durand-Mégret, B., Ezan, P., & Vanheems, R. (2013). Quand le cross-canal devient familial... l'adolescent: consommateur-collaborateur au sein de la famille. *Colla E (éd.) Recherches sur la distribution. Management & Avenir*, 52, 3-49.

¹⁷ When "one person's emotion, cognition, or behavior, affects the emotion, cognition, or behavior of a partner" (Cook and Kenny, 2005)

¹⁸ Each person is considered as both subject and object, interacting with multiple partners (Malloy and Kenny, 1986)

- Durand-Mégret, B., Ezan, P., & Vanheems, R. (2016). Vers une nouvelle manière de concevoir la compétence et le risque perçu de l'acheteur à l'ère du numérique. Le cas de l'adolescent au sein de la famille. *Management & Avenir*, (1), 33-49.
- Evrard, Y., Pras, B., Roux, E., Desmet, P., Dussaix, A. M., & Lilien, G. L. (2009). *Market-Fondements et méthodes des recherches en marketing* (No. hal-00490724).
- Filser, M. (2001). Le magasin amiral: de l'atmosphère du point de vente à la stratégie relationnelle de l'enseigne. *Décisions Marketing*, 7-16.
- Furse DH, Punj GN, Stewart DW (1984). A typology of individual search strategies among purchasers of new automobiles. *J. Consum. Res.*,10(4): 417-431.
- Gentina, É., & Chandon, J. L. (2013). Adolescent shopping behaviour: Different assimilation and individuation needs in France and the United States. *Journal of Retailing and Consumer Services*, 20(6), 609-616.
- Gershoff, A. D., Broniarczyk, S. M., & West, P. M. (2001). Recommendation or evaluation? Task sensitivity in information source selection. *Journal of Consumer Research*, 28(3), 418-438.
- Gershoff, A. D., & Johar, G. V. (2006). Do you know me? Consumer calibration of friends' knowledge. *Journal of Consumer Research*, 32(4), 496-503.
- Glaser, B. G., & Strauss, A. (1967). The discovery of ground theory. *Alpine, New York*.
- Granovetter, M. S. (1973). The strength of weak ties. *American journal of sociology*, 78(6), 1360-1380.
- Guido, G. (2006). Shopping motives, big five factors, and the hedonic/utilitarian shopping value: An integration and factorial study. *Innovative Marketing*, 2(2), 57-67.
- Granbois, D. H. (1968). Improving the study of customer in-store behavior. *The Journal of Marketing*, 28-33.
- Hall, E. T., Birdwhistell, R. L., Bock, B., Bohannon, P., Diebold Jr, A. R., Durbin, M., ... & La Barre, W. (1968). Proxemics [and comments and replies]. *Current anthropology*, 9(2/3), 83-108.
- Hartman, C. L., & Kiecker, P. L. (1991). Marketplace influencers at the point of purchase: The role of purchase pals in consumer decision making. *Enhancing knowledge development in marketing*, 461-69.
- Haytko, D. L., & Baker, J. (2004). It's all at the mall: exploring adolescent girls' experiences. *Journal of Retailing*, 80(1), 67-83.
- Heckhausen, J., & Heckhausen, H. (2008). Motivation and action: Introduction and overview.
- Hunter, G. L. (2006). The role of anticipated emotion, desire, and intention in the relationship between image and shopping center visits. *International Journal of Retail & Distribution Management*, 34(10), 709-721.
- Jungermann, H., & Fischer, K. (2005). Using expertise and experience for giving and taking advice. *The routines of decision making*, 157-173.
- Kennedy, T. L., & Wellman, B. (2007). The networked household. *Information, Communication & Society*, 10(5), 645-670.
- Kiecker, P., & Hartman, C. L. (1994). Predicting buyers' selection of interpersonal sources: the role of strong ties and weak ties. *NA-Advances in Consumer Research Volume 21*.

- L'Écuyer, R. (1990). *Méthodologie de l'analyse développementale de contenu: méthode GPS et concept de soi*. PUQ.
- Lim, J., & Beatty, S. E. (2011). Factors affecting couples' decisions to jointly shop. *Journal of Business Research*, 64(7), 774-781.
- Matzler, K., Faullant, R., Renzl, B., & Leiter, V. (2005). The relationship between personality traits (extraversion and neuroticism), emotions and customer self-satisfaction. *Innovative Marketing*, 1(2), 32-39.
- Malloy, T. E., & Kenny, D. A. (1986). The Social Relations Model: An integrative method for personality research. *Journal of Personality*, 54(1), 199-225.
- McClelland, D. (1988) *Human Motivation*, Cambridge University Press.
- Mangleburg, T. F., Doney, P. M., & Bristol, T. (2004). Shopping with friends and teens' susceptibility to peer influence. *Journal of retailing*, 80(2), 101-116.
- Mooradian, T. A., & Olver, J. M. (1996). Shopping motives and the five factor model: an integration and preliminary study. *Psychological Reports*, 78(2), 579-592.
- Oren M. (2011) *Human-computer interaction and sociological insight: A theoretical examination and experiment in building affinity in small groups*, Graduate Theses *Iowa State University*.
- Poupart, J., Deslauriers, J. P., Groulx, L. H., Laperrière, A., & Mayer, R. Pires.(1997). *La recherche qualitative. Enjeux épistémologiques et méthodologiques*, Montréal, Gaëtan Morin éditeur.
- Porcheron, M. (2015, August). Reflecting on the study of mobile collocated interactions: the changing face of wearable devices. In *Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct* (pp. 1163-1167). ACM.
- Rijavec, M., Brdar, I., & Miljković, D. (2002, January). Motive Dispositions of Students and Employed subjects in Relation to Age and Gender. In *6th Alps-Adria Conference of Psychology*.
- Ringard, J. (2011). *Un modèle de conception dédié à l'interaction collaborative colocalisée* (Doctoral dissertation, Université des Sciences et Technologie de Lille-Lille I).
- Sandalgaard, N., Nikolaj Bukh, P., & Stig Poulsen, C. (2011). The interaction between motivational disposition and participative budgeting: Evidence from a bank. *Journal of Human Resource Costing & Accounting*, 15(1), 7-23.
- Schneider, K., & Schmalt, H.-D. (2000). *Motivation [Motivation]*. Stuttgart: Kohlhammer.
- Shahrimin, M. I., & Butterworth, D. M. (2001). Young children's collaborative interactions in a multimedia computer environment. *The Internet and Higher Education*, 4(3), 203-215.
- Sokolowski, Schmalt et al., (2000), Assessing achievement, affiliation and power all at once, The Multi-Motive Grid , *Journal of personality assessment*, 74(1) p 126-145.
- Sommer, Robert, Wynes, Marcia, Brinkley, Garland, 1992. Social facilitation effects in shopping behavior *Environ. Behav.* 24 (3)285–297
- Strømme, T. A., & Furberg, A. (2015). Exploring teacher intervention in the intersection of digital resources, peer collaboration, and instructional design. *Science education*, 99(5), 837-862.

- Tauber, E. M. (1972). Why do people shop? *The Journal of Marketing*, 46-49.
- Vanheems, R. (2013). La distribution à l'heure du multi-canal: une redéfinition du rôle du vendeur. *Décisions marketing*, 43-59.
- Wagner, T. (2007). Shopping motivation revised: a means-end chain analytical perspective. *International Journal of Retail & Distribution Management*, 35(7), 569-582.
- Ward, C. B. (2007). Spouse's Joint Decision-Making: Is Level of Initial Disagreement Important?. *Academy of Marketing Studies Journal*, 11(1), 113.
- Wellman, B., & Rainie, L. (2013). If Romeo and Juliet had mobile phones. *Mobile Media & Communication*, 1(1), 166-171.
- Woodside, A. G., & Sims, J. T. (1976). Retail sales transactions and customer purchase pal effects on buying behavior. *Journal of Retailing*, 52(3), 57-64.

Appendix 1: Joint shopping motivation themes

Authors	Article Name	Year	Main identified motivation theme
Borges, Chebat and Babin	Does a companion always enhance the shopping experience?	2010	Shopping companion effect and level of identification with the shopping environment
Beatty and Talpade	Adolescent influence in family decision making: a replication with extension	1994	Joint purchase decisions with family members or others (strong preferences, involvement or product importance)
Hunter GL.	The role of anticipated emotion, desire, and intention in the relationship between image and shopping center visits.	2006	Anticipated emotions and motivation to shop, according perceptions of the shopping center's image
P.G.Ashtiani and Z. Aghaziarti	A survey of motivational factors associated with couples' likelihood of joint shopping: The case of Iranian couples	2012	- Utilitarian motives (product purchase relevance and perceived financial risk) - Hedonic motive (expected shopping pleasure) - Situational motive (time availability)
Haytko and Baker	It's all at the mall: exploring adolescent girls' experiences.	2004	Teenagers social shopping
Arnold and Reynolds	Hedonic shopping motivations.	2003	Recreational and hedonic joint shopping
Babin , Darden and Griffin	Work and/or fun: measuring hedonic and utilitarian shopping	1994	Utilitarian and hedonic motives
Lim and Beatty	Factors affecting couples' decisions to jointly shop	2011	- Utilitarian motives (product purchase relevance and perceived financial risk) - Hedonic motives (expected shopping pleasure with one's partner) - Situational motive (time availability). - Moderators (gender and relationship)
Wagner	Shopping motivation revised: a means-end chain analytical perspective	2007	Personal product involvement of the shopping dyad members
Furse et al.	A typology of individual search strategies among purchasers of new automobiles.	1984	Individual's perceived risk is a primary factor to seek advice seeking and to pal shopping
Kiecker and Hartman	Predicting buyers' selection of interpersonal sources: the role of strong ties and weak ties.	1994	Pal relationship and informational /psychosocial support.
Ward and Cheryl	Spouse's joint decision-making: is level of initial disagreement important?	2007	Purchase decisions in light of: - product category - differing individual preference - history of disagreement level

Appendix 2: Sampling

Our sampling choice, based on diversification (Glaser and Strauss, 1967: 50-63, Michelat, 1975: 236) aims to achieve theoretical saturation threshold (Glaser and Strauss, 1967).

External diversification has been achieved by interviewing men and women from distinct socio-economic level and familial situation. Internal diversification (Poupart et al., 1997) focused into respondents, leaving with a partner or/and with grown up children, which have experienced more numerous and various situations of screen sharing interaction with their family.

	Age	Birth place	Home town	Profession	Living situation	Gender
R1	48	Togo- Africa	Paris	Psychologist	Married + children	F
R2	18	Surenne	La Rochelle	Student	Bachelor, living with his parents	H
R3	60	Surenne	Anthony	Architect	Married + children	H
R4	39	La Rochelle	Bois Colombe (92)	Journalist	Divorced + children	F
R5	38	Joinville Manche	Bois Colombe (92)	Journalist	Divorced	H
R6	60	St Jean d'Angely	La Rochelle	Ludothecary	Married + children	F
R7	23	Luxembourg	Saint Cloud(92)	Student	Bachelor - living alone	H
R8	55	Paris	La Rochelle	Producer	Married + children	H
R9	55	Luxembourg	Paris	Cartoonist	Divorced	F
R10	60	Strasbourg	Paris	Teacher	Married	F
R11	34	Strasbourg	Paris	Journalist	Married + children	H
R12	27	Nice	Messe	Speech Therapist	Bachelor - living alone	F
R13	56	Paris	Paris	Accountant	Married + children	H
R14	48	Alger Algeria	Neuilly sur Seine	Surgeon	Living with his partner	H
R15	56	Marseille	Courbevoie	Building keeper	Divorced + children	H
R16	16	Paris	Palaiseau	School girl	Bachelor, living with his parents	F
R17	78	Reaux - Charente Maritime	La Rochelle	Retired	Married + children	H
R18	79	Déllys - Algeria	La Rochelle	Retired	Married + children	F
R19	59	Casablanca Marroco	Issy-les-Moulineaux	Accountant assistant	Married + children	F
R20	39	Strasbourg	Issy-les-Moulineaux.	Communication / Education	Married + children	H

Average age	Men	Women	Bachelor	Married + children	Divorced + children	Divorced	Retired
47.4	11	9	4	5	5	4	2
Percentage	55%	45%	20%	25%	25%	20%	10%

Appendix 3: Interview guide and content analysis procedure

First, the respondents were required to describe a recent shopping experience in store in order to understand their store shopping orientation. Then using a funnel methodology, they were asked about their shopping digital habits, before, during or after visiting a store. Finally they were queried about their attitude toward shop assistants and “*joint shopping experience*” while facing the same screen in the private or/and in the commercial sphere.

1. Presentation and Method

2. Part One - Open Interview - Non-directive and narrative (Store purchase experience)

3. Part Two - Semi-structured

Theme A: Preliminary information search before purchase / consumption

Theme B: The seller in store

Theme C: The use of a digital device in store (From narrative to projective)

Theme D: Stories of shopping screen sharing with friends and family members. (From narrative to projective)

Theme E: Stories of shopping screen sharing with shop assistants at the point of sale (From narrative to projective)

4. Remarks, conclusion and thanks

The interviews has been recorded and fully transcribed. A content analysis has been carried out according to the methodological recommendations of Evrard et al., (2009)¹⁹. A pre-analysis consisting in selecting the corpus to be analyzed (interviews) and its meticulous reading has been performed following the instructions of Bardin, (1977). Then an encoding step was carried by choosing and defining the presence of sequence of phrases having "a complete meaning in themselves" (The Squire, 1990), as "units of meaning" (Unrung, 1974) A categorization, organization phase and classification process of the corpus was performed when a set of significant units of record (the codes); were grouping by analogy of meaning and sorting based on the criteria of the entire encoded material. Finally, a process of reorganization of classifications and interpretation by inferential process led us to an open model.

¹⁹ The content analysis has been based on qualities of completeness, consistency, homogeneity and relevance of categories, when they are clearly defined, objectified and productive (L'écuyer, 1990). The classification process has been mutually exclusive only in terms of meaning, and not in terms of the sentence.

Appendix 4: Screen sharing terms

Screen sharing terms	Discipline	Authors	Approach and focus
<i>Purchase online with relatives (in a couple/ with teens, etc.)</i>	Marketing	Berrada, 2014 Jungermann and Fischer, 2005	Joint shopping decision making and influence.
<i>Sharing Online Experiences with Partners</i>	Communication	Kennedy and Wellman, 2007	Family new communication mediums
<i>Collaborative Collocated Interactions</i>	Human Computer Interaction	Ringard, 2011; Porcheron, 2015	Collaborative interaction via a common communication tool for a shared mission
<i>Tools and Mediation Computer Based Learning Collaborative Educational Computer Environment</i>	Educational research	Stromme and Furberg, 2015 Shahrimin 2001	Competition, dominance or collaboration between peer in the learning activity

When the "joint decision-making" marketing definition focuses only on specific partner and seeks to understand the role and influence game on a mutual decision about a purchase, the HCI approach is based on a collaborative use of the device for a shared mission. They addressed also the characteristics of the shared screen (Horizontal touch tables or touch screens) Educational researches have generally more focused on the competition /dominance aspect in the learning dyad (The leading of the learning process- who control the mouse/ the screen/ the process?)