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### Towards a Differentiation Perspective on Social Media Platforms' Affordances and Use Cultures – An Organizing Literature Review

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# **Towards a Differentiation Perspective on Social Media Platforms' Affordances and Use Cultures – An organizing Literature Review**

**Full research paper**

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## **Abstract**

Since social media transformed the way how people communicate and consume content, companies explore how to effectively build relationships with users. Anecdotal reports of practical case experiences indicate that a key managerial challenge for companies lies in effectively coping with the individual requirements and the full range of options of the various different social media platforms as well as adapting to the target groups' platform-specific use cultures. Current theoretical conceptualizations of generalized social media 'per se' appear too broad for addressing and differentiating the affordances and their appropriation by networked users in the popular platforms Facebook, Instagram and Twitter. Based on a comprehensive organizing literature review that seeks to link the affordance and the use culture perspective in information systems research, we contribute to a better understanding of differences between social media platforms.

**Keywords** Social media platform affordances, use culture, Facebook, Instagram, Twitter

## 1 Introduction

With the increasing popularity of social media platforms (SMPs) that enable users to share and discover content (Kaplan and Haenlein 2010), firms react by increasingly utilizing SMPs as a part of their marketing and brand building campaigns to address users online (Gallaughner and Ransbotham 2010). Although social media seem to be similar in their main functionalities at a first glance, a closer look on the design of SMP user interfaces shows that the functionalities' details subtly vary across platforms (O' Riordan et al. 2012). Further, interacting users with different demographics create platform specific user behaviors influenced by affordances, perceptions or user experience. Besides, SMPs have different purposes of engagement (Ngai et al. 2015) such as supporting family and friends or enabling socio-commercial activities. Academic and anecdotal evidence of corporate cases corroborates the practical challenge of a deeper understanding of SMPs to derive corporate results. This leads to a demand for guidance about how to specifically interact within a platform such as Facebook (Influencer Marketing Hub 2020). Example challenges include which platform to adopt for a certain objective, how to engage with audiences in order to effectively develop customer relations or how to use the specific technical repertoire of a SMP (e.g., marketing features). Against this backdrop, we suggest that there is an organizational need for managing social media efficiently across a variety of SMPs. In this regard, social media management refers to the collaborative process of using Web 2.0 platforms and tools to reach the business goals (Montalvo 2011).

To understand *SMP differences* from the perspective of customer-oriented managers, researchers need to go beyond a limited comparison of SMP functionalities and identify differences from the perspective of interdependent users and their use patterns. A suitable point of departure for this objective is the concept of *affordance* (Treem and Leonardi 2012). In the information systems (IS) literature, the term *affordance* is used to describe use properties of an object given by a defined technology and as a consequence thereof, how an object should be used by an individual to conduct a potential action (Majchrzak et al. 2013). In the SMP context, such actions are related to the creation of personal information profiles or using tools for connecting, interacting and exchanging content in social media environments (O' Riordan et al. 2012). The theoretical *affordance lens* enables us to focus on the relation between the SMPs' technical objects and individuals. It represents one of the most fundamental concepts in interaction design and human computer interaction (Kaptelinin and Nardi 2012). Previous research offers several explanations of specific contributions and benefits of social media based on the *affordance perspective*, improving the understanding of technology design and social media in social and organizational contexts (Arslan 2021 [6]; Bucher and Helmond 2018 [1]; Fromm et al. 2020 [58]; Leidner et al. 2018 [79]; O' Riordan et al. 2012 [43]; Treem and Leonardi 2012 [47]). For example, O' Riordan et al. (2012) [43] illustrate platform affordances of Facebook, Twitter and YouTube. However, theorized affordances remain very abstract and with their focus on user interpretations of one particular platform do not compare relevant specifics across SMPs. For example, the visibility of content elements such as hashtags or links can differ drastically across platforms. The rare studies that explicitly compare affordances across different platforms (O' Riordan et al. 2012) still aim at identifying shared key categories rather than carving out cross-platform differences and their effect on actual use practices. Most social media research is so far tending to generalize across all platforms at the risk of overlooking important internal differences that actually may be of relevance for managerial decision making or explain the market developments for leading social network service offerings which actually compete based via differentiation strategies, such as Facebook, Instagram and Twitter (Kircova et al. 2018).

The *affordance lens* has further been criticized for contexts where multiple interdependent users are involved or institutional logics impact organizational users (Leonardi 2013; Oostervink et al. 2016). In these social contexts, SMPs can differ in their level of engagement (Ahmed 2017) or in their social norms, such as the appropriate use of irony by a certain community. Considering such aspects of a social use culture was noted as a key aspect by scholars of user interface design (Clemmensen and Goyal 2005). Kotler et al. (2017) support the importance of socio-cultural aspects by stressing that companies need to gain access to customer communities and act as 'friends'. A prerequisite for this is understanding particular community cultures evolving on their SMPs and align the brands accordingly. In the field of IS, only few papers address use culture with a narrow focus on SMPs (e.g., Alhabash and Ma 2017). Other contributions study the use of certain content elements such as photos (Huang and Su 2018) without systematically contrasting user behavior between different platforms. Despite the comprehensive literature on social media, to the best of our knowledge, IS researchers are not yet linking social media affordances and use cultures in SMPs on a deeper level and apply this lens to systematically contrast the popular SMPs such as Facebook, Instagram and Twitter.

In view of the managerial need to understand particularities of SMPs and the current lack of a related academic conceptualization, we aim to develop an organizing literature review (Leidner 2018) that

addresses the following research question: *From a management perspective, what are SMP differences with regard to (a) existing design-oriented aspects of SMP affordances and (b) user-oriented aspects of SMP use cultures?* To shed light on this question, we conduct a systematic literature review as a first step to organize the key categories that mark social media affordances and social media use cultures and investigate the current integration of these two strands as well as the academic discussion of SMP differences.

The remainder of this paper is structured as follows: In the next section, we briefly provide an understanding of key theoretical concepts. Section 3 describes our methodological approach. In section 4 we provide an overview on related research and present our findings, which will be discussed in the following section. Last, we derive a conclusion and state directions for future research.

## 2 Theoretical Background

### 2.1 Social Media

Social media are internet-based technologies enabling users to create, edit, evaluate and link to content or to other users (Kaplan and Haenlein 2010). Different available technologies suggest that companies engaging with users often have to decide on the selection of the most suitable media. From a practitioner perspective, SMPs offer novel ways of connecting with customers, collaborating and innovating (Wilson et al. 2011) through enhanced audiovisual brand presentations, user experiences and more attractive and sophisticated forms of digital advertising (Pashkevich et al. 2012). While the large platforms such as the social networking site (SNS) Facebook, Instagram and the microblogging site Twitter dominate the market of social network services for many years now (StatCounter 2021), there is a strong market dynamic and new platforms appear to take over market share from other platforms (Eghtesadi and Florea 2020). Social media managers need to understand the SMP landscape thoroughly to derive business benefits through building brand awareness or appropriately responding to customer requests (Montalvo 2011) across different platforms. Understanding and contrasting the specifics of these platforms is thus a relevant research objective (Alhabash and Ma 2017).

### 2.2 Affordances

To investigate the different interactions between technological functionalities such as posting a picture or story, liking or connecting and human engagement in social media environments, we adopt the affordance perspective as a key topic of our review. An affordance is the design aspect of an object which suggests how the system should be used (McGrenere and Ho 2000) and refers to an action potential (Majchrzak et al. 2013). The term was originally proposed by Gibson (1986) and became one of the most fundamental concepts in human computer interaction and interaction design (Kaptelinin and Nardi 2012). If we apply this approach to social media environments, affordances refer to potential actions that can be taken by users given by a defined functionality. Treem and Leonardi (2012) identified 'visibility, persistence, editability and association' as four general affordances of social media content elements that can help to understand how social media affect organizational practices. O' Riordan et al. (2012) contrast social and content-related affordances of different SMPs.

More recent research criticizes that contexts of interconnected users are not sufficiently addressed by the classic affordance conceptualization. The ultimate effects that technologies have on social structures is not only dependent on the capabilities of the technology but also on individuals' choices how to use those capabilities (Leonardi 2013) in a social context. Accordingly, Leonardi (2013) differs between 'collective affordances', which represent pooled individualized affordances, e.g., different uses of affordances by all individuals with specialized non-interdependent tasks that are aggregated due to pooled interdependencies and 'shared affordances', which represent affordances shared by all individuals of a group. Leonardi and Vaast (2017) use this extended concept of affordances to provide a theoretical framework for potential implications of social media use from an organizational perspective. However, the SMPs' differences and similarities in affording specific actions as well as emerging use cultures do not become entire comparable, e.g., to inform managerial social media channel selection. Vaast et al. (2017) extend research on affordance by the notion 'connective affordances' pointing out that the interdependence types among users have effects on what users can do with the technology. However, there is no further comparison among platforms and some of the presented key microblogging features of Twitter appear outdated. Nagy and Neff (2015) use the notion 'imagined affordances' that "emerge between users' perceptions, attitudes and expectations; between the materiality and functionality of technologies; and between the intentions and perceptions of designers" (p. 5). Volkoff and Strong (2017) state that affordances are actualized in a social context, as individuals of a group affect, "how, how well, or even whether any affordance will be actualized" (p.7) but they use a very design-oriented approach,

which could be further extended by the social context. Similarly, Khan et al. (2019) stress that SMP software features afford social user behavior among interdependent users, suggesting the emerging cultural differences between user groups as a relevant addition to the affordance lens that is not fully addressing the complexities of social interaction among users.

### 2.3 Use Culture

Building on the above calls to extend the affordance perspective to social settings, we argue that use culture provides an important complementary concept to understand SMP differences. Leidner and Kayworth (2006) suggest that a successful implementation and use of information technologies requires a thorough understanding of a particular culture, e.g., at national, organizational and group levels. Adding it as a key subject to our organizing literature review helps us to address how action possibilities, afforded by artifact design, depend on the context of use, which shapes user's behavior (Markus and Silver 2008; Seidel and Berente 2013). This view is further in line with Fromm et al. (2020) who also argue that contextual factors such as individual competencies, skills and attitudes are inhibiting or enabling affordance actualization. If we consider SMPs and their interdependent users who engage in social user behaviors (Khan et al. 2019), the contextual factors thus link to cultural aspects, which have been identified as an important element of user interface design (Clemmensen and Goyal 2005).

Culture, as the underlying theoretical concept is a complex phenomenon that is not very consistently operationalized in the SMP context. It is discussed by many scholars across various research fields – in fact, Kroeber and Kluckhohn (1952) identified 164 definitions of culture. An early definition of culture was provided by Tylor (1871) as “the complex whole which includes knowledge, belief, art, morals, custom and any other capabilities and habit acquired by man as a member of society” (p. 97). This also implies that certain personal traits (e.g., risk attitudes, age group, education level) may influence such beliefs and capabilities. On the conceptual level, Minkov (2013) differentiates “culture as a system of behaviors” (p. 14), representing a pattern of activity and “culture as a set of meanings” (p.14), representing shared meanings that are encoded into perceived norms. Waterloo (2018) states that these social norms refer to rules that inform individuals on what is socially agreed upon in a given social context. From such a shared set of norms and behaviors a distinctive social (group) identity emerges. Tajfel (1972) defines these actors' social identity as “the individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of this group membership” (p. 292).

On SMPs, culture of user groups is expressed in the various ways in which normative expectations are considered, values and attitudes are expressed in behaviors or meanings are assigned when using the platform for the different purposes, such as updating on a user's experiences, thoughts or feelings (Waterloo 2018) and through the SMPs effort to tailor for different target groups (Ngai et al. 2015). In IS research, use cultures have not yet comprehensively been theorized, but related notions can be found, such as the very aggregated notion of ‘institutional logics’ (Oostervink et al. 2016) where individuals draw on shared “institutional logics, i.e., sets of goals, values and prescriptions” (Seidel and Berente 2013, p. 5). The notion of use culture is further related to the research discourse on the character and norms of user communities (Muniz and O'Guinn 2001), understood as “collections of actors whose membership in the collective provides social and cultural resources that shape their action” (Almandoz et al. 2016, p. 192). Almandoz et al. (2016) contrast geographical (i.e., offline) and affiliation-based (i.e., online) communities and state the importance of cultural elements in especially affiliation-based online communities, e.g., their conscious belonging and belief in specific values, goals, interests, products etc. because in comparison to geographical communities they lack place-bound elements. If SMPs use cultures are related to the underlying personal traits of online users, managers typically consider certain target group properties, e.g., age. Such demographics are also frequently reported by SMPs and utilized by companies to characterize and address selected target groups (Khan et al. 2019). Especially, when it comes to social media marketing as a key concern of organizations, recent research shows, that research only focusses partially on use cultures of selected SMPs without systematically contrasting user behaviors between different platforms from that perspective in more detail (Table 1).

In conclusion, we consider the following conceptual perspective as the starting point of our literature review on SMP differences: Technological platform differences afford varying user interpretations. In the social setting of the SMP, these interpretations are framed by an established use culture, which is expressed in users' habits, beliefs and preferences, articulated and negotiated in their conversations or activity patterns and is influenced by a target groups' personal traits.

In the next sections, we will now report in more detail to what extent affordance and use culture concepts can be found in the literature and how affordances and use cultures differ across the platforms Facebook, Instagram and Twitter.

### 3 Research Method

Our research method was grounded in guidelines that have been presented for conducting literature reviews in the field of IS (Rowe 2014; Schryen et al. 2020; Templier and Paré 2018; vom Brocke et al. 2015; Webster and Watson 2002). After defining the scope of the review, we included criteria and keywords, that were being in line with the purpose of our study. Inclusion criteria were based on (1) the relevance and context of the papers (2) a clear description of the background paradigm and research method and (3) publication outlets (refereed journals and conferences, i.e., with a review process). Papers, missing these criteria or having a technical focus were excluded. We used Google Scholar as a source to search for relevant literature rather than focusing on a specified database because of a high accessibility of papers and the interdisciplinarity of our research topic, e.g., social media and culture are found in IS, marketing and psychology research. We also used Google to search for recent social media statistics and social media user behavior. We started our search with the keyword “social media management” to basically retrieve generic papers and extended our search to the user perspective to focus on the notion of affordances and use cultures. To frame our literature review, we initialized our search with the concepts of Oostervink et al. (2016) and Almandoz et al. (2016) as they refer to institutional logics and community logics. We used the keywords “social media management”, “social media campaign management”, “social media marketing”, “social media marketing challenges”, “social media statistics”, “social media”, “social media platforms”, “social media channels”, “social networking sites”, “Facebook”, “Instagram”, “Twitter”, “affordances”, “social media choice”, “social media use culture”, “social media user perceptions”, “social media motives”, “cultural dimensions”. Basically, we selected the time period between 2010-2020 (Rowe 2014), to find recent papers but we also used the method of citation chaining in order to systematically develop and extend our keyword set by searching both backward and forward in the literature without limiting the time period (Schryen et al. 2020, p. 136; Webster and Watson 2002, p. xvi.). We investigated up to 10 pages per searched keyword and examined the results by title, keywords, abstract and publication and then by full-text. The literature search was conducted in a continuous and repeated process until we noted that no further relevant papers were listed (saturation principle). To conduct an efficient qualitative data analysis, the first author categorized the papers into groups of articles that focused on the SMPs Facebook, Instagram and Twitter and/or affordances and/or use culture and discussed the categorizations with the second author. The selection process resulted in a final pool of 102 papers (between 1986-2021) on affordances and use cultures, whereas 12 of these papers were focusing (among others) on at least two of our focused SMPs Facebook, Instagram or Twitter (Table 1), which was another inclusion criterion. Papers just naming these elements without a deeper investigation were not categorized and any additional SMPs were not explicitly documented. We chose those papers, focusing on these three SMPs because most papers focus on one or more of these SMPs– being popular platforms. In reviewing the literature, we could attain initial insights on the differences of the key affordances and use cultural elements in the regarding SMPs, which will be presented in the next sections.

## 4 Findings

### 4.1 Literature Review

Due to the space restrictions of this paper, we provide an overview about all 102 references of our literature review dataset separately in an online supplement (cf. [tinyurl.com/565cbzn7](https://tinyurl.com/565cbzn7)) and mark them with their data entry number (e.g., ID [1]). Using our literature review process (a table of the literature categorization is provided in the online supplement, cf. [tinyurl.com/565cbzn7](https://tinyurl.com/565cbzn7)) we could identify 4 papers that address three SMPs from an affordance and use culture perspective ([1]; [2]; [3]; [4]). Further 18 papers were focusing on three SMPs but only discussed either affordances or use cultures ([5]; [6]; [7]; [8]; [9]; [10]; [11]; [12]; [13]; [14]; [15]; [16]; [17]; [18]; [19]; [20]; [21]; [22]). 8 papers were considering affordances as well as use cultures of two SMPs ([23]; [24]; [25]; [26]; [27]; [28]; [29]; [30]), whereas 17 studies were focusing on two SMPs from either the affordances or the use cultures perspective ([31]; [32]; [33]; [34]; [35]; [36]; [37]; [38]; [39]; [40]; [41]; [42]; [43]; [44]; [45]; [46]; [47]). There were further 55 papers that either just discussed one SMP from an affordance and a use culture perspective or only considered one of our two perspectives (for brevity, details are provided in a separate online supplement, cf. [tinyurl.com/565cbzn7](https://tinyurl.com/565cbzn7)). We included these articles to attain insights into the general conceptualizations of affordances and use culture.

In the next step, we studied the core papers that systematically investigated at least two of the respective SMPs (Facebook, Instagram and Twitter) using a combination of affordances and use culture elements. These article categories show that the literature also frequently mentions use culture, but our closer reading reveals that it is so far insufficiently connected to the affordance concept. For example, there are

papers that present selective but incomplete comparisons (e.g., Jennewein et al. 2020 [3]) and conflate the discussion of use culture elements and affordances without a systematic conceptualization. In sum, we note a need for more theoretical work to integrate the two aspects theoretically in actual empirical analyses of multiple SMPs. Table 1 presents our starting point for a more nuanced practical understanding of the differences between affordances and use cultures on the SMPs Facebook, Instagram and Twitter (Table 2).

F	I	T	Explanation of the Conceptual Elements	A	U	ID
x	x	x	Affordances classified as relational, perceived, technological, social, communicative and imagined. Technological affordances are further related to email culture	x	x	[1]
x	x	x	Imagined affordances exist between, e.g., perceptions, attitudes and expectations and posting in positive contexts	x	x	[2]
x	x	x	Instagram users' personality traits are related to different usage patterns	x	x	[3]
x	x	x	User characteristics, e.g., gender, age, site affordances and privacy concerns influence social media preferences	x	x	[4]
x		x	Social computing tools support social interactions, social relations, communities and their hedonic versus utilitarian focus	x	x	[23]
x	x		Advertising effectiveness perspectives, e.g., Instagram stories are perceived as intrusive but also enhance consumer attitude toward ads	x	x	[24]
x		x	Uses and gratifications are related to the need to connect with others	x	x	[25]
x	x		Users gratify in information seeking, entertainment, social interaction, self-expression and impression management	x	x	[26]
x		x	Key differences of SMPs are based on profile management, network transparency, e.g., public profile, users' search and privacy concerns	x	x	[27]
x	x		Users perceive gratifications, e.g., entertainment or self-enhancement	x	x	[28]
x		x	Users' motivational factors are, e.g., perceived mobility, security, connectedness, system and service quality, usefulness, attitude and flow experience	x	x	[29]
x	x		Individual and platform differences in selfie taking and sharing behavior	x	x	[30]

Table 1. Literature Review on Affordances (A) vs. Use Cultures (U) in Multiple Social Media Platforms (SMPs) Facebook (F), Instagram (I) and Twitter (T) (x=Investigated in the Paper)

## 4.2 A Detailed Look from an Affordance and Use Culture Perspective

Our literature review revealed a very elaborate discussion of *affordances* of SMPs, i.e., affordances have been used as the primary lens. While the affordance types differ across papers, the most common affordances identified in the literature referred to profile management, connectivity and interactivity (e.g., Chouikh et al. 2016 [8]; O' Riordan et al. 2012 [43]; compare Table 2). We noted that some design elements appear outdated (e.g., tweet character limits). We further noted that novel affordances are missing partially in the literature which are of dynamic interest from an organizational perspective, e.g., live broadcasting from a page in Facebook or Reels in Instagram (Chen 2021). Table 2 presents the most common affordances of the SMPs Facebook, Instagram and Twitter identified in the literature (columns).

The discussion of *cultural elements* is less pronounced and lacks a systematic foundation in the literature. Various unconnected concepts are studied, including identity, norms and behaviors related to information seeking and sharing, expectations related to privacy or gratifications as well as the attitudinal preferences about whom to follow, how to use media modalities to present oneself or how to balance hedonic vs. utilitarian behaviors. Further, papers investigated demographic properties that likely influence behaviors of the audience members such as gender or education. The related concept of target groups is most frequently used in the use culture perspective to broadly categorize user groups for the purpose of contrasting them, yet a deeper consideration of cultural aspects is rare and some differences in user properties remain unclear. We noted that use culture and target group specifications,

e.g., age or gender were not always considered together. Shane-Simpson et al. (2018) [4] address user properties, e.g., age and gender differences in the SMPs Facebook, Instagram and Twitter. However, the results are limited to the constraint of 18-25-year-old participants and the research is limited to Facebook preference, privacy concerns as well as trust and disclosure. Jennewein et al. (2020) [3] investigate the relationship between users' personality traits and Instagram usage, however the contextual factors of the users are not considered and the target group is not defined from an organizational perspective.

When looking at the *integration of affordances and use culture*, regarding the most comprehensive literature category (3 SMPs + A + U), Bucher and Helmond (2018) [1] differentiate between relational, perceived, technological, social, communicative and imagined affordances, however the authors' affordance comparisons, e.g., imagined affordances and use cultural examples remain abstract in the sense of disconnected from actual user behaviors. We noted two separate streams of research that are mostly not connected: cultural elements were not considered explicitly in papers regarding the combination of 2 SMPs + A, e.g., Kietzmann et al. (2011) [39] identify seven functional building blocks of social media, such as identity, conversations, sharing, presence, relationships, reputation and groups. However, the aspect of technology affordances and the influence of cultural elements are not conceptually related or discussed. In comparison, Duffy et al. (2017) [2] address the concept of imagined affordances more systematically, but results are based on contrasting professionals versus the simple user. Use culture is thus just very broadly assessed by referring to different target groups. Papers combining 2 SMPs + U are limited, e.g., Huang and Su (2018) [37] provide an approach to analyze motives for Instagram use and topics of interests among young adults, focusing on gender, education, amount of use without further differentiating their actualization of SMP affordances. Some papers in the category 1 SMP + U emphasize the target group. For example, McCorkindale et al. (2013) [85] investigate the target group in Facebook but only focus on the millennial generation and their use of Facebook and how to build relationships with companies. Kim and Kim (2019) [28] address differences in use culture between Facebook and Twitter by referring to different perceived gratifications (as the users' sense of satisfaction) across SMPs. Other papers of the category 0 SMP + A + U provide a perspective on affordances and use culture but without focusing the SMPs Facebook, Instagram or Twitter. For instance, Leidner et al. (2018) [79] investigate affordances in an organizational context. Although important outcomes with regard to use culture (e.g., building relationships and cultural understanding) are provided, the paper is focusing on enterprise social media, meaning that the target group differs from the typical user (target group) in public SMPs. We conclude that the interdependences of affordance and use culture are not yet considered or theorized in an integrated approach despite their relevance to organizational managers of public SMP appearances such as campaigns.

		Most Common SMP Affordances			ID
		Profile Management	Connectivity	Interactivity	
Use Culture in the SMPs	Facebook	- Public vs. private	- Bidirectional connections: users accept (or reject) friend requests	- Users mostly upload a variety of content, e.g., link, text, picture	[1];
		- Mostly preferred by users with privacy concerns	- Users prefer to connect with mostly friends and family	- User gratification by seeking for information, updates about others, entertainment and communication	[2]; [3]; [4];
	Instagram	- Public vs. private	- Unidirectional connections: users often follow without being followed	- Users mostly upload visual-based content, e.g., picture	[23]; [24];
		- Mostly preferred by users with narcissistic traits	- Users prefer to connect with mostly influencers and brands	- User gratification by social interaction, information sharing, self-presentation and being updated about others	[25]; [26]; [27]; [28];
	Twitter	- Public vs. private	- Unidirectional connections: users often follow without being followed	- Users are mostly individualistic in self-expression and have greater trust in strangers	[29]; [30];
		- Mostly preferred by users seeking intellectual stimulation			

Table 2. *Exploratory Analysis of the Affordances and Use Culture in the Social Media Platforms (SMPs) Facebook, Instagram and Twitter*

Albeit no explicit links between affordances and use culture was conceptualized in the literature on public SMP, we could link the two domains logically as shown in Table 2, This overview enables us to identify how the design-oriented affordances are actually utilized based on the different use culture aspects in the SMPs Facebook, Instagram and Twitter.

## 5 Discussion

Our findings shed light on the importance of use cultures and show that there is a relationship between affordances and use cultures which is not sufficiently addressed in the literature. With our literature study, we contribute a first organizing review of IS research (Leidner 2018) as an initial step to better address the need of social media managers for a more nuanced and comparative understanding of SMPs and their key differences. The current broad analyses are often not considering the necessary level of detail. For example, academic comparisons show that all the three SMPs Facebook, Instagram and Twitter offer their users to share and gather information (Shane-Simpson et al. 2018 [4]), but even when platforms afford the same types of interactivity, e.g., to like, to comment or to use hashtags, the actual use of the platforms is different and thus, perceived affordances or enjoyment of postings can vary considerably among users. Other research shows (e.g., Kim and Kim 2019 [28]) that visual images, in comparison to texts, may provoke feelings of closeness with others, e.g., demonstrating happiness or satisfaction, yet such research was not linked to comparisons of platforms.

Despite the various shortcomings of current literature to systematically contrast SMPs from the perspective of managers, we were also able to link affordances and cultural elements in a systematic overview (cf. Table 2), revealing their relationships. We find that specific target groups of interacting users actualize affordances to express and evolve particular cultural-based preferences and norms. At the intersection of technical variations of affordances and social agreement about certain user behavioral norms and values, differences between SMPs evolve, such as for example a different utilization of hashtags or visual styles. The use-cultural elements found in our review relate to the theorized sub-elements of use culture, i.e., expectations, attitudinal preferences and behaviors that express underlying values. We can also note that there is a link to the target audience, which is currently investigated separately without explicitly considering it as an influence on use culture or affordance actualization in SMPs. First approaches to better contextualize affordance actualization are found in the literature on enterprise social media, but proposed concepts such as organizational context and institutional logics are not directly applicable to public SMPs that have a more unbounded context. The context that we propose is not yet explicitly mentioned for public SMPs in the papers. We thus conclude that while many individual elements are discussed in the literature and they can be logically linked, more research efforts are needed to study and conceptualize the systematic integration of cultural elements and affordances. Our study is subject to some limitations. A typical issue for literature reviews is that they rely on the initial search concepts and on available studies. It may thus be subject to the literature's blind spots. In our investigation we addressed this caveat by additionally considering practical literature and its more detailed level of analysis. The actual management demand has been deduced from the academic discourse but for a more thorough investigation, an actual empirical analysis of this perspective is required. A final shortcoming can be the dynamics of SMPs where user interface details are frequently subject to smaller changes.

## 6 Conclusion

Social media have changed the way how people communicate and consume content. Companies need to understand the potential of using functionalities such as story-based marketing within a SMP. In this context, it is important to consider the different purposes, affordances and uses of Facebook, Instagram and Twitter. Our research aimed to extend the available analysis of social media affordances by not only focusing on the design aspect of SMPs but also recognizing the established use cultures. A better theoretical link between affordances and use culture yields a systematic and more complete comparative approach to identify smaller differences in the actualization of affordances, rather than finding commonalities. This shift is needed to help practitioners as well as social media users who are rather unfamiliar with social media to go beyond the limited copy-paste brand campaigns that ignore SMP differences and thus may fail to connect with users. Instead, a deeper understanding of the differences between the affordances and use cultures of the SMPs Facebook, Instagram and Twitter may lead to better decisions on which platform to choose and how to use it more efficiently. For companies, the integrated consideration of affordances and use cultures can mitigate strategical uncertainties and help to perform a customer-oriented platform-specific approach, where the specifics of different platforms can be better utilized (e.g., in a portfolio of mutually supportive social media channels). Even though the literature has already examples where the two dimensions are observed next to each other, there is a

lack of conceptualization of this link. While we only contribute the initial step of organizing current literature and assessing its fit to a conceptual framework, we also want to address this in our future research by attending this theoretical conceptualization in more detail and extending the key differentiators of the SMPs.

## 7 References

- Ahmed, T. 2017. "Instagram Engagement Rate is 70% Higher Than Facebook's." ([locowise.com/blog/instagram-engagement-rate-is-higher-than-facebook](https://locowise.com/blog/instagram-engagement-rate-is-higher-than-facebook/), accessed May 1, 2021).
- Alhabash, S., and Ma, M. 2017. "A Tale of Four Platforms: Motivations and Uses of Facebook, Twitter, Instagram, and Snapchat Among College Students?," *Social Media and Society* (3:1).
- Almandoz, J., Marquis, C., and Cheely, M. 2016. *Drivers of Community Strength: An Institutional Logics Perspective on Geographical and Affiliation-Based Communities*. The SAGE Handbook of Organizational Institutionalism, London: SAGE Publications Ltd., pp. 190-213.
- Arslan, K. 2021. "A Review on Social Media Channel Choice Determinants in Organizations," *ECIS 2021 - Proceedings of the 29th European Conference on Information Systems. Association for Information Systems*.
- Bucher, T., and Helmond, A. 2018. *The Affordances of Social Media Platforms*. The SAGE Handbook of Social Media, London: SAGE Publications Ltd., pp. 233-253.
- Chen, J. 2021. "36 Essential social media marketing statistics to know for 2021." ([sproutsocial.com/insights/social-media-statistics](https://sproutsocial.com/insights/social-media-statistics), accessed May 1, 2021).
- Chouikh, A., Ojo, A., and Driss, O. B. 2016. "Exploring the affordances of social media platforms in supporting emerging public service paradigms," *ACM International Conference Proceeding Series*, pp. 177-186.
- Clemmensen, T., and Goyal, S. 2005. "Cross cultural usability testing: The relationship between evaluator and test user," *Working Paper, Copenhagen Business School*.
- Duffy, B.E., Pruchniewska, U., and Scolere, L., 2017. "Platform-specific self-branding: Imagined affordances of the social media ecology," *ACM International Conference Proceeding Series. Association for Computing Machinery*.
- Eghtesadi, M., and Florea, A. 2020. "Facebook, Instagram, Reddit and TikTok: a proposal for health authorities to integrate popular social media platforms in contingency planning amid a global pandemic outbreak," *Canadian Journal of Public Health* (111), pp. 389-391.
- Fromm, J., Stieglitz, S., and Mirbabaie, M. 2020. "A Systematic Review of Empirical Affordance Studies: Recommendations for Affordance Research in Information Systems," *European Conference on Information Systems*, pp. 1-11.
- Gallaugh, J., and Ransbotham, S. 2010. "Social media and customer dialog management at Starbucks," *MIS Quarterly Executive* (9:4), pp. 197-212.
- Gibson, J. J. 1986. *The ecological approach to visual perception*. Mahwah, New Jersey: Erlbaum.
- Huang, Y., and Su, S. 2018. "Motives for Instagram Use and Topics of Interest among Young Adults," *Future Internet*, (10:8).
- Influencer Marketing Hub, 2020. "5 of the Biggest Social Media Marketing Challenges." ([influencermarketinghub.com/social-media-marketing-challenges/](https://influencermarketinghub.com/social-media-marketing-challenges/), accessed May 1, 2021).
- Jennewein, C., Baumann, A., and Lessmann, S. 2020. "To use or not to use: The relationship between personality traits and Instagram usage," *WI 2020 Zentrale Tracks*, pp. 1561-1576.
- Kaplan, A. M., Haenlein, M. 2010: "Users of the world, unite! The challenges and opportunities of social media," *Business Horizons* (53:1), pp. 59-68.
- Kaptelinin, V., and Nardi, B. 2012. "Affordances in HCI: Toward a mediated action perspective," *Conference on Human Factors in Computing Systems – Proceedings*, pp. 967-976.
- Khan, G., Mohaisen, M., and Trier, M. 2019. "The network ROI: Concept, metrics, and measurement of social media returns (a Facebook experiment)," *Internet Research* (30), pp. 631-652.

- Kietzmann, J., Hermkens, K., McCarthy, I., and Silvestre, B. S. 2011. "Social media? Get serious! Understanding the functional building blocks of social media," *Business Horizons* (54) pp. 241-251.
- Kim, B., and Kim, Y. 2019. "Facebook versus Instagram: How perceived gratifications and technological attributes are related to the change in social media usage," *Social Science Journal* (56:2), pp. 156-167.
- Kircova, Y., Yaman, S., and Köse, G. 2018. "Instagram, Facebook or Twitter: Which Engages Best? A Comparative Study of Consumer Brand Engagement and Social Commerce Purchase Intention," *European Journal of Economics and Business Studies* (10), pp. 268-278.
- Kotler, P., Kartajaya, H., and Setiawan, I. 2017. *Marketing 4.0. Moving from Traditional to Digital*. New Jersey: Wiley.
- Kroeber, A. L., and Kluckhohn, C. 1952. *Culture: A Critical Review of Concepts and Definitions*. Cambridge: The Museum.
- Leidner, D. E. 2018. "Review and theory symbiosis: An introspective retrospective," *Journal of the Association for Information Systems* (19:6), pp. 552-567.
- Leidner, D. E., Gonzalez, E., and Koch, H. 2018. "An Affordance Perspective of Enterprise Social Media and Organizational Socialization," *The Journal of Strategic Information Systems* (27:2), pp. 117-138.
- Leidner, D. E., and Kayworth, T. 2006. "Review: A review of culture in information systems research: Toward a theory of information technology culture conflict," *MIS Quarterly: Management Information Systems* (30) pp. 357-399.
- Leonardi, P. M. 2013. "When does technology use enable network change in organizations? A comparative study of feature use and shared affordances," *MIS Quarterly: Management Information Systems* (37:3), pp. 749-776.
- Leonardi, P. M., and Vaast, E. 2017. "Social media and their affordances for organizing: A review and agenda for research," *Academy of Management Annals* (11), pp. 150-188.
- Majchrzak, A., Faraj, S., Kane, G. C., and Azad, B. 2013. "The contradictory influence of social media affordances on online communal knowledge sharing," *Journal of Computer-Mediated Communication* (19:1), pp. 38-55.
- Markus, M. L., and Silver, M. 2008. "A Foundation for the Study of IT Effects: A New Look at DeSanctis and Poole's Concepts of Structural Features and Spirit," *Journal of the Association for Information Systems* (9:10), pp. 609-632.
- McGrenere, J., and Ho, W. 2000. "Affordances: Clarifying and Evolving a Concept," in *Graphics Interface*, pp. 1-8.
- Minkov, M. 2013. *Cross-Cultural Analysis: The Science and Art of Comparing the World's Modern Societies and Their Cultures*. London: SAGE Publications, Inc.
- Montalvo, R. E. 2011. "Social Media Management," *International Journal of Management & Information Systems* (15:3), pp. 91-96.
- Muniz, A. M., and O'Guinn, T. C. 2001. "Brand community," *Journal of Consumer Research* (27:4), pp. 412-432.
- Nagy, P., and Neff, G. 2015. "Imagined Affordance: Reconstructing a Keyword for Communication Theory," *Social Media and Society* (1:2).
- Ngai, E. W. T., Tao, S. S. C., and Moon, K. K. L. 2015. "Social media research: Theories, constructs, and conceptual frameworks," *International Journal of Information Management* (35:1), pp. 33-44.
- O'Riordan, S., Feller, J., and Nagle, T. 2012. "Exploring the Affordances of Social Networking Sites: An Analysis of Three Networks," *ECIS 2012 - Proceedings of the 20th European Conference on Information Systems. Association for Information Systems*.
- Oostervink, N., Agterberg, M., and Huysman, M. 2016. "Knowledge Sharing on Enterprise Social Media: Practices to Cope with Institutional Complexity," *Journal of Computer-Mediated Communication*, (21:2), pp. 156-176.

- Pashkevich, M., Dorai-Raj, S., Kellar, M., and Zigmond, D. 2012. "Empowering online advertisements by empowering viewers with the right to choose: The relative effectiveness of skippable video advertisements on YouTube," *Journal of Advertising Research* (52:4), pp. 451-457.
- Rowe, F. 2014. "What literature review is not: Diversity, boundaries and recommendations." *European Journal of Information Systems* (23), pp. 241-255.
- Schryen, G., Wagner, G., Benlian, A., and Paré, G. 2020. "A knowledge development perspective on literature reviews: Validation of a new typology in the IS field." *Communications of the Association for Information Systems* (46), pp. 134-186.
- Seidel, S., and Berente, N. 2013. "Toward "third wave" information systems research: Linking sociomaterial practice with broader institutional logics," *International Conference on Information Systems (ICIS 2013): Reshaping Society Through Information Systems Design* (5), pp. 4336-4349.
- Shane-Simpson, C., Manago, A., Gaggi, N., and Gillespie-Lynch, K. 2018. "Why do college students prefer Facebook, Twitter, or Instagram? Site affordances, tensions between privacy and self-expression, and implications for social capital," *Computers in Human Behavior* (86), pp. 276-288.
- StatCounter, 2021. "Social Media Stats Worldwide." (gs.statcounter.com/social-media-stats, accessed May 1, 2021).
- Tajfel, H. 1972. *Social categorization: English Manuscript of "La catégorisation sociale*, in: Moscovici, S. (eds.) *Introduction a la Psychologie Sociale*, Paris: Larousse, pp. 272-302.
- Templier, M., and Paré, G. 2018. "Transparency in literature reviews: an assessment of reporting practices across review types and genres in top IS journals," *European Journal of Information Systems* (27), pp. 503-550.
- Treem, J. W., and Leonardi, P. M. 2012. "Social Media Use in Organizations: Exploring the Affordances of Visibility, Editability, Persistence, and Association." *Communication Yearbook* (36), pp. 143-189.
- Vaast, E., Safadi, H., Lapointe, L., and Negoita, B. 2017. "Social media affordances for connective action: An examination of microblogging use during the Gulf of Mexico oil spill," *MIS Quarterly: Management Information Systems* (41:4), pp. 1179-1206.
- Volkoff, O., and Strong, D. M. 2017. *Affordance theory and how to use it in IS research*, in: Galliers, R. D., and Stein (eds.) *The Routledge Companion to Management Information Systems*, New York: Taylor and Francis, pp. 232-246.
- vom Brocke, J., Simons, A., Riemer, K., Niehaves, B., Plattfaut, R., and Cleven, A. 2015. "Standing on the shoulders of giants: Challenges and recommendations of literature search in information systems research." *Communications of the Association for Information Systems* (37), pp. 205-224.
- Waterloo, S. F., Baumgartner, S. E., Peter, J., and Valkenburg, P. M. 2018. "Norms of online expressions of emotion: Comparing Facebook, Twitter, Instagram, and WhatsApp," *New Media and Society* (20:5), pp. 1813-1831.
- Webster, J., and Watson, R. T. 2002. "Analyzing the Past to Prepare for the Future: Writing a Literature Review," *MIS Quarterly* (26:2), pp. xiii-xxiii.
- Wilson, J. H., Guinan, P. J., Parise, S., and Weinberg, B. D. 2011. "What's your social media strategy?," *Harvard Business Review* (89:7-8), pp. 23-25.

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