

1 **The role of frames and cultural toolkits in establishing new connections**
2 **for social media innovation**

3

4 ABSTRACT

5 It has been suggested that social media foster innovative outcomes by
6 facilitating communication with a vast network of new connections. In this paper
7 we argue that forming new social connections on social media is a crucial first
8 step in the innovation process that is not straightforward to achieve. We report
9 on the findings of a qualitative study of 31 owner-managers in the UK who were
10 attempting to make new connections in order to inspire innovation in their firms.
11 The findings suggest that a lack of available social cues on social media creates
12 a sense of uncertainty that can stifle the innovation process. In our case, the
13 respondents addressed these difficulties by using frames as proxies for missing
14 social stimuli. We argue that such framings guide the selection of well-
15 established cultural tools needed to turn mental maps into action. A key
16 implication of our findings is that social media is not necessarily an equitable
17 space for innovation since the process still relies upon established networks
18 and styles of behaviour, which are not readily accessible to all.

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20 KEYWORDS: Social media; innovation; new connections; frames; cultural
21 toolkits.

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34 INTRODUCTION

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36 The higher the number of social contacts an individual maintains, the more
37 likely she is to generate new ideas (Bjork & Magnusson, 2009) by discovering,
38 combining and expanding upon new information. This is one way that social
39 media promises to bolster innovation. Social media facilitate the expansion of
40 an individual's social network to a previously unimaginable scale (Kane et al.,
41 2014). By extension, individuals who enlarge their social networks using social
42 media are exposed to new ideas and information that were previously
43 inaccessible (Treem & Leonardi, 2012; Leonardi, 2014). To make the most of
44 their social media accounts individuals attempt to expand their networks to
45 include as many new connections as possible (Kane et al., 2014). As people
46 associate with other social media users they can find themselves engaging with
47 different viewpoints, experiences and expertise (Kane et al., 2014). When these
48 new connections bring together previously separate information resources
49 opportunities for the discovery, recombination and expansion of ideas are
50 believed to increase significantly (Mount & Martinez, 2014; Dahlander &
51 Piezunka, 2014).

52

53 There are several recent anecdotal illustrations showing how new connections
54 on social media can fuel innovation. For example, Dr Jeffrey Davis, Head of the
55 Human Health and Performance Directorate for NASA realized in the face of
56 budget cuts that he would need to access ideas and information beyond what
57 was available internally (Knowledge@Wharton, 2013). He used several online
58 platforms to make new connections, which provided many unexpected and
59 helpful insights. Individuals from diverse backgrounds suggested innovative
60 ideas that were taken up by NASA, such as the use of flexible graphite as a
61 solution for preserving food and a new algorithm for predicting solar flares.
62 Illustrations such as these highlight the fundamental role that new connections
63 play in providing novel information that fuels the innovation process.

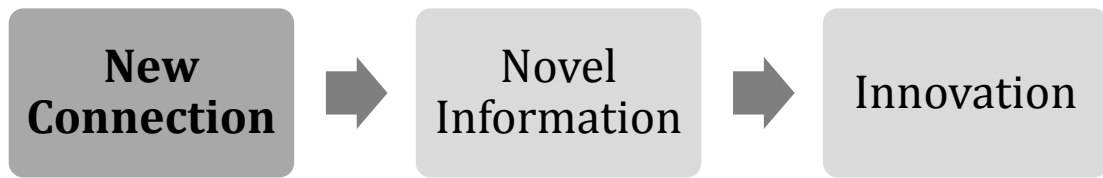
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65 Recent studies have suggested that social media can play an increasingly
66 prominent role in such open innovation efforts of firms (Mount & Martinez, 2014;
67 West & Bogers, 2013). Here, the term open innovation refers to the opening up
68 of the innovation process to include ideas that are generated externally (West

69 & Bogers, 2013). Social media have dramatically improved the ability of firms
70 to seek external suggestions, ideas and opinions by forging new connections
71 (Mount & Martinez, 2014; Dahlander & Piezunka, 2014; Leonardi, 2014). The
72 material features of the platforms enable a markedly different way of
73 communicating (Treem & Leonardi, 2012; Leonardi, 2014) leading to claims of
74 a new wave of open innovation for firms (Mount & Martinez, 2014). Interaction
75 with a diverse array of external connections can provide quick, cheap access
76 to a rich source of ideas, expertise and opinions (Mount & Martinez, 2014;
77 Leonardi, 2014). For this reason social media platforms have been thought to
78 provide significant advantages in situations where resources to innovate can
79 be scarce, such as in small and medium sized firms (Harris et al., 2012). We
80 use the term social media innovation hereafter to refer to novel improvements
81 in products or processes that originate from social media connections.

82

83 We argue that social media innovation is not straightforward to achieve.
84 Dahlander and Piezunka (2014) suggest that studies of open innovation often
85 underplay or overlook the challenges of engaging with external connections.
86 The features of social media platforms can complicate the establishment of new
87 connections (Richey et al., 2016). The vast scale of interactions taking place
88 on social media require users to frequently scan the environment in order to
89 make sense of the volume of information being produced (Leonardi, 2014).
90 Further, because new acquaintances are not physically co-present during
91 social media encounters individuals can become uncertain about how to
92 communicate effectively (Richey et al., 2016). Social media communication
93 strips away traditionally available social cues (Richey *et al.*, 2016; French &
94 Read, 2013) making it more challenging to establish mutual understanding.
95 Where a rich array of social cues are available, they support the construction
96 of new relationships and effective communication (Rettie, 2009; Goffman,
97 1959). The innovation process relies on interaction and communication at every
98 stage (Mount & Martinez, 2014), but there has been little focus on the important
99 preliminary step of establishing new social connections for initiating social
100 media innovation. Although social media appear to offer unlimited access to
101 new connections there is currently scant understanding about how these
102 relationships are initiated and developed.



103

104 **Figure 1:** Overview of the social media innovation process

105

106 We use Figure 1 to locate the focus of our study in the social media innovation
107 process. This paper focuses specifically on the first box in the figure, which
108 refers to the potential of social media for initiating new social connections that
109 can provide access to novel information and ideas. This paper shows how
110 individuals attempting to make new social media connections are challenged
111 by the lack of available social cues and how they use frames (Goffman, 1974)
112 and cultural tools (Swidler, 1986) to establish a foundation for social media
113 innovation. We present findings from a qualitative study of 31 UK-based owner-
114 managers, who were attempting to access novel insights by extending their
115 social media networks. We offer two major contributions based on our analysis
116 of their accounts. First, we elaborate upon how individuals respond to the
117 uncertainty associated with making new social media connections by
118 experimenting with different frames (Goffman, 1974) which serve as a proxy for
119 conventional social cues. In doing this we contribute to the innovation literature
120 by unpacking the micro-processes that underpin the fundamental step of
121 initiating new social connections on social media. Second, we show that
122 although the innovation process is traditionally associated with new ways of
123 thinking and acting, individuals are better able to navigate the early stages of
124 social media innovation if they draw upon an already existing cultural toolkit
125 (Swidler, 1986) of well-established competencies. We develop these

126 arguments by drawing on the sociological foundations of new relationships
127 (Goffman, 1959; Swidler, 1986).

128

129 LITERATURE REVIEW

130

131 Face-to-face relationships and the availability of cues.

132

133 For cooperation and intelligible communication to occur between new
134 acquaintances there must first be some level of shared understanding
135 (Goffman, 1981). Co-communicants begin to establish communal
136 understandings in the earliest moments of interaction by making use of
137 commonly understood social cues (Goffman, 1959, 1981). Social cues can
138 include that which is subjectively described, such as tone of voice (Goffman,
139 1959), gesture (Cornelissen et al., 2014), common stories (Beech et al., 2009)
140 and humour (Robert & Wilbanks, 2012); and that which is objectively described
141 such as architectural lay out, logos, artwork and dress code (Schein, 1991).
142 These cues work together to communicate an unambiguous and consistent
143 meaning to those involved in an encounter (Goffman, 1959). In face-to-face
144 settings social cues are clearly accessible to everyone involved as all share the
145 same space and time. This enables them to “share a joint focus of attention,
146 perceive that they do so, and perceive this perceiving” (Goffman, 1983: 3). As
147 individuals draw on available cues they are able to frame (Goffman, 1974;
148 Werner & Cornelissen, 2014) their situation in specific ways. Frames (Goffman,
149 1974) are the schemata of interpretation that guide an individual’s thinking and
150 action in relation to a phenomenon. Individuals may frame the same situation
151 differently depending on their various social realities and mental models
152 (Leonardi, 2011). For example, within the same firm, some people may frame
153 social media as a threat whilst others frame it as an opportunity (Koch et al.,
154 2013).

155

156 Social media relationships and interactions

157

158 The electronically mediated nature of social media platforms creates a
159 markedly different context for establishing new social connections. Social
160 media users do not necessarily share the same space or time making their
161 communications largely asynchronous (Walther, 2007). Communication is
162 achieved via social media posts composed of textual and multimedia content
163 (Kaplan & Haenlein, 2010). Posts make otherwise fleeting communications
164 visible (Leonardi, 2014), not only to those interacting, but to third parties as well
165 (Kane et al., 2014; Treem & Leonardi, 2012). Furthermore, social media also
166 capture information that was previously invisible, such as an individual's
167 network of contacts (Kane et al., 2014) and his/her knowledge and expertise
168 (Leonardi, 2014). As social media users communicating with posts are not in
169 each other's physical presence some of the subtleties of face-to-face
170 communication can be lost (French & Read, 2013). Where social cues are
171 unavailable to support communication, miscommunications and mistakes can
172 occur (Richey et al., 2016) challenging understanding and damaging
173 relationships.

174

175 Another fundamental social shift with social media has been its facilitation of
176 many-to-many communications (Kaplan & Haenlein, 2010). Instead of sharing
177 a single focus of attention, as is the norm during face-to-face interaction
178 (Goffman, 1983), users are part of an on-going knowledge conversation in
179 which there are potentially unlimited contributors and posts (Kane *et al.* 2014).
180 Under these circumstances the established roles of seeing, listening and
181 speaking are significantly challenged. Users looking for insights and ideas in
182 such a "conversation" are required to be logged in to their accounts frequently,
183 to keep up with new developments (Leonardi, 2014). Social media platform
184 developers have offered technological solutions to the human difficulties of
185 participating on this massive scale. For example, social media aggregators
186 scan platforms for the use of keywords and alert users if there is a conversation
187 that they need to check. Although these technical tools notify individuals that
188 specific keywords are being used, they do not always assist users to make new
189 connections on social media (Kane et al., 2014; Michelidou et al., 2011). There
190 still remains the more fundamental problem of making new connections in the
191 absence of conventional social cues.

192

193 Frames and cultural toolkits

194

195 In line with the preceding review, social media can be understood as a
196 dramatically different context for making new connections and sharing novel
197 information. The paucity of social cues and demands of many-to-many
198 communication present significant challenges for those trying to initiate any
199 form of innovation through social media. According to sociologist Ann Swidler
200 (1986), encounters with an unfamiliar situation prompts individuals to assess
201 how well equipped they are to cope with the new context, understand the
202 communications of others, and to be understood (Swidler, 1986). This process
203 begins as the uncertainty related to a new situation stimulates the selection of
204 a frame (Goffman, 1974; Ravishankar, 2015). Frames provide a mechanism for
205 interpreting an unfamiliar context (in this case, social media) but must be
206 accompanied by action if it has to lead to innovation.

207

208 Swidler (1986) introduces the metaphor of a cultural 'toolkit' to illuminate the
209 types of resources that are brought into play following framings. The toolkit is
210 comprised of the skills, habits and styles, available at a broader societal level,
211 but practiced and brought to bear at an individual level, as people interact and
212 address challenges. Cultural tools are conceptualized as existing separately
213 but are drawn together in different assemblages for use in a wide variety of
214 situations (Swidler, 1986). Indeed, one cultural tool may be reused in a number
215 of different circumstances, while another may be left mostly dormant. Taken
216 together, frames and tools comprise the strategies of action used to deal with
217 uncertain circumstances. Thus, the cultural toolkit framework (Swidler, 1986)
218 provides a useful vocabulary to explore the extent to which the challenges of
219 new social situations in general and social media connections in particular may
220 be addressed by a conscious and purposeful drawing together of knowledge,
221 habits, skills, styles and other culturally constituted capacities. The framework
222 underscores the agency of individuals proactively combining and recombining
223 their competencies in order to cope with new situations.

224

225 Implications for innovation

226

227 Innovation scholars have suggested that well-established and intimate social
228 settings characterized by effective social norms (Coleman, 1988, 1990) support
229 the innovation process by enabling the value of novel information to be
230 recognized and realized (Rost, 2011). At the same time, individuals also find
231 utility in looking beyond their close relationships, to their less well known
232 acquaintances and new connections for novel information (Dahlander &
233 Piezunka, 2014). Social media offers users the opportunity to traverse vast
234 networks of new connections (Kane et al., 2014) developing their meta-
235 knowledge (Leonardi, 2014) about what others are interested in, who they know
236 and what they know. This information can be observed at an individual level, or
237 can be aggregated together, providing an overview of the mood of a population
238 (Cogburn & Espinoza-Vasquez, 2011) or the preferences of a group of
239 consumers (Mount & Martinez, 2014).

240

241 However, as noted earlier social media offers a comparatively sparse context
242 for the establishment of new connections due to the paucity of available social
243 cues (Richey et al., 2016). When individuals use social media to make new
244 connections within established boundaries (i.e. within the same organization)
245 they are able to fill in some of the perceptual gaps associated with social media
246 by using other shared referents as heuristic guides (Treem & Leonardi, 2012;
247 Huang et al., 2013). This enables them to maintain a sense of social context
248 that aids information sharing (Huang et al., 2013). On the other hand, when
249 users are attempting to communicate and share ideas with an entirely new
250 contact there are often no shared referents available. The social media and
251 innovation literatures tend to overlook or underplay these challenges
252 (Dahlander & Piezunka, 2014; Richey et al., 2016) resulting in a scant
253 understanding of how the new connections supporting social media innovation
254 are achieved. In the next empirical sections of the paper, we describe and
255 analyse how individuals use specific frames (Goffman, 1974) and cultural tools
256 (Swidler, 1986) to overcome the challenges of establishing new connections for
257 social media innovation.

258

259 METHODS

260

261 Our aim was to gather new insights into how individuals were using social
262 media to establish new connections with an ultimate aim to foster innovation.
263 Our methodology was underpinned by an interpretivist philosophy (Walsham,
264 1993; Mayasandra et al., 2006) in which human action and interaction
265 constitutes social realities (Ravishankar, 2013). In line with this view, we
266 employed qualitative methods that enabled us to gather data about the lived
267 experiences of individuals (Ravishankar et al., 2010) attempting to initiate social
268 media innovation.

269

270 We gathered data from the membership of two UK based, government affiliated
271 support agencies that were providing social media seminars. We assumed that
272 the membership of these support agencies represented a 'purposive sample'
273 (Padgett, 1998) that would be experiencing varying degrees of success on
274 social media, and would have been exposed to similar opportunities and
275 resources by virtue of their membership. We contacted the local offices of both
276 agencies, offering consultancy services in exchange for participation in the
277 study. A formal note detailing the offer was circulated by email among local
278 members of both organizations. The firms that took part in the interviews were
279 representative of the variety of industries that made up the wider membership
280 of the support agencies (see Table 1).

281

Organizational Identifier	Industry Sector	Number of Employees	Number of Interviewees
Org 1	Charity	10	1
Org 2	Charity	10	1
Org 3	Fashion	3	2
Org 4	Fashion	2	1
Org 5	Food and Drink	10	1
Org 6	Food and Drink	3	1
Org 7	Commodity e-Retailer	3	1
Org 8	Design Consultancy	3	2
Org 9	Internet Security	10	1
Org 10	Media Production	9	1
Org 11	Public Relations	2	1
Org 12	Arts and Crafts	5	2

Org 13	Corporate Finance	3	1
Org 14	Charity	6	3
Org 15	Chemical Engineering	3	1
Org 16	Domestic Installations	3	1
Org 17	Electrical Engineering	4	2
Org 18	Engineering	2	2
Org 19	Engineering	3	1
Org 20	Engineering	8	1
Org 21	Film Production	5	2
Org 22	Food and Drink	9	1
Org 23	Food and Drink	5	2
Org 24	Health and Beauty	10	1
Org 25	Health and Fitness	7	1
Org 26	Accountancy	9	2
Org 27	Performing Arts	2	2
Org 28	Property Management	7	1
Org 29	Research and Development	3	1
Org 30	Telecomms	10	1
Org 31	Telecomms	8	2

282

283

Table 1: Participating organizations

284 All the respondents were using the four most popular, free, publically available
 285 social media platforms; Facebook, Twitter, LinkedIn and YouTube. They were
 286 using social media in order to make new connections, which they hoped would
 287 lead to some form of innovation. The main source of data was open-ended
 288 interviews. The interviews included questions about how and why the firms
 289 were using social media to accomplish innovation. Table 2 is an illustration of
 290 some of the innovative outcomes expected by the respondents.

291

Organizational identifier	Industry	Illustrative quote	Innovation expectations
Org 21	Film production	"We are constantly looking for ideas that will spark a new project. That impetus can come from anything, so seeing what people are sharing on social media is very useful"	Idea generation
Org 28	Property Management	"I look at what other managers are doing on social media and	Recombinant innovation

		sometimes I'll hash those things together."	
Org 12	Arts & Crafts	"I love the idea of a mash-up, taking ideas from really different places to create new designs. Social media is literally global so those sources of inspiration can be so different!"	Recombinant innovation
Org 30	Telecomms	"I enjoy getting in to it with other techie types about how to make stuff better. I hope that one day something innovative will come of it!"	Innovative collaborations
Org 6	Food & Drink	"I've developed a great social media community that adds so much value to my business. Always someone with a new idea or perspective."	Idea generation

292

293 **Table 2:** Examples of anticipated social media innovation outcomes

294

295 The main group of respondents were the owner-managers, but other
 296 employees involved in social media implementation were also interviewed
 297 where available. The interviews lasted between 30 and 90 minutes. They were
 298 recorded and transcribed with the permission of the respondents.

299

300 The data was analysed (around 500 pages of interview transcripts) in multiple
 301 rounds of coding, summarized in Table 3. Initially, each interview transcript was
 302 read and summarized in order to establish the key themes underpinning them.
 303 The respondents shared accounts about (a) how they developed an
 304 understanding of social media use and (b) how they engaged in new
 305 interactions on social media. The data was organized according to these two
 306 meta-themes and a first round of coding was undertaken in which each coding

307 unit was a complete sentence or series of complete sentences that constituted
 308 a single semantic unit. During the first round of coding, interpretive codes were
 309 assigned to the data. Once this process was complete any codes that reflected
 310 the same idea were combined until a stable set of interpretive codes had been
 311 established.

312

313 The respondents shared many examples about how communication on social
 314 media was distinctly different from their face-to-face encounters with new
 315 acquaintances. They found it difficult to establish a dialogue on social media
 316 because the people they directed their posts to did not always respond
 317 immediately, or at all (*conversation*). They felt that this was in part because they
 318 were not in the physical presence of those they were contacting,

Interpretive codes	Abstract categories	Associated theoretical concepts
Communicating <ul style="list-style-type: none"> • <i>Conversation</i> • <i>Seeing</i> • <i>Listening</i> • <i>Relationships</i> 	CHALLENGES CREATING UNCERTAINTY	The nature of social encounters (Goffman, 1959, 1979)
Sense-making tools <ul style="list-style-type: none"> • <i>Metaphors</i> • <i>Ideas and beliefs</i> 		
Practical tools <ul style="list-style-type: none"> • <i>Observation and imitation</i> • <i>Leverage connections</i> • <i>Social feedback</i> 	ADDRESSING CHALLENGES	Cultural toolkits (Swidler, 1986)

319

Table 3: Summary of the coding process

320

321 therefore eye contact and a shared focus of attention could not be established
 322 (*seeing*). They found that it was normal on social media for users to split their
 323 attention and dip in and out of different conversations. Thus, they never felt that
 324 they had anyone’s full attention. They also found it difficult to keep up with and

325 be part of the larger conversations going on, because of the scale involved
326 (*listening*). They found that during the fleeting interactions they were part of it
327 was difficult to build a sense of rapport or trust in the same way that they might
328 do during a face-to-face meeting (*relationships*).

329

330 Since their usual means of communicating was less effective the respondents
331 were uncertain about how to make new connections on social media. In the
332 wake of this uncertainty they framed social media using a range of *metaphors*,
333 *ideas* and *beliefs* that enabled them to understand, approach and come to
334 terms with it. In turning the frames into action the respondents drew on
335 combinations of *practical tools*. These included *observation and imitation* of
336 other social media users' behaviour, *leveraging connections* they had with
337 larger organisations and collecting informal *social feedback* regarding the posts
338 they were making.

339

340 In the analysis that follows, we draw upon Goffman's work on frames and the
341 nature of social encounters (1959, 1979) and Swidler's (1986) cultural toolkit
342 framework to interpret respondents' accounts. Using Goffman's vocabulary we
343 highlight how the respondents became uncertain during their social media use.
344 Their uncertainty prompted them to draw upon three different social media
345 frames (Goffman, 1983) which are considered in detail in the analysis section.
346 We use Swidler's (1986) cultural toolkit framework to show how respondents
347 turned frames into strategies of action using a variety of cultural tools. The
348 theoretical and practical implications of this pattern of behaviour are expounded
349 in the discussion section.

350

351 ANALYSIS

352

353 All the respondents were interested in using social media platforms to foster
354 innovation. They were particularly keen to initiate conversations that could lead
355 to the discovery, recombination and expansion of new ideas. They hoped that
356 social media would start the process by providing a simple, unobtrusive means
357 of connecting with new people.

358

359 *Social media should be a more natural way of linking to new people, less*
360 *forced than Googling somebody and trying to make a completely*
361 *unsolicited approach. It facilitates new conversations. It's then about*
362 *applying that, furthering it and making good, hopefully generating some*
363 *opportunities on both sides. (Owner manager, design agency, Org 8).*

364

365 The respondents expected social media to 'facilitate' the type of interactions
366 they typically expected when meeting a new person. Those initial, 'getting to
367 know' you conversations could then potentially be taken further and become a
368 catalyst for innovation. The respondents had all initially been convinced that
369 social media connections could develop in this way. As a result they hoped to
370 increase their social media connections to include as many new people as
371 possible.

372

373 However, as they began using social media to reach out and initiate contact
374 they ran into significant difficulties. Many of these related to the perceptual gaps
375 created by social media. Not being in the physical presence of other social
376 media users, it was difficult to understand who they were communicating with.
377 They struggled to know what level they should pitch their conversation at, what
378 the other person was interested in and whether it was relevant to have a
379 conversation at all. They tried a number of different tactics, such as initiating
380 interest groups and responding to hash tags on popular subjects. Still, most of
381 them were unable to initiate conversations that could lead to some form of
382 innovation. When they reflected upon their experiences, they felt that in
383 comparison to building relationships in face-to-face settings social media
384 exchanges did not include enough social cues to enable them to develop a
385 sense of who they were communicating with.

386

387 *If you're not out there on social media you are potentially missing out on*
388 *new opportunities, but I think there are other stronger ways of networking*
389 *and building relationships. We have to build close personal relationships*
390 *with new partners; they trust us implicitly. They want us to think like one*
391 *of them. Do social media allow that depth of interaction? It seems to me*
392 *that it's very difficult to have a genuine interaction on there when you*

393 *can't get a sense of who you're dealing with. (Founder, research and*
394 *development firm, Org 29)*

395

396 Respondents referred to the absence of the other party as a major barrier,
397 particularly when a relationship was first initiated on a social media platform.
398 They talked about feeling less able to use their intuition about their new
399 connections if they couldn't see and interact with them in person. Many
400 respondents were frustrated that social media inhibited their ability to interact
401 as they would in a normal face-to-face setting. They felt that this problem limited
402 the opportunities for finding new innovation partners on social media.

403

404 *We haven't had much of a response so far and we want to talk about*
405 *what the rules of engagement are – how do you start a conversation on*
406 *social media? How do you get people interested? How do they notice*
407 *you? It's a different ball game and one that I can't seem to figure out.*
408 *(Owner Manager, charity, Org 14)*

409

410 Their perception that there were different 'rules of engagement' that they did
411 not grasp created a sense of uncertainty about how and why to use social
412 media. They were uncertain about how to replicate in a social media setting the
413 social conventions they normally followed. In managing this uncertainty
414 respondents drew on three different, but easily accessible frames of reference.

415

416 *Framing social media*

417

418 The respondents framed their efforts on social media in three ways by using
419 metaphors that acted as their interpretive schemata. These three initial
420 framings guided their subsequent strategies of action, influencing the types of
421 tools they used and the kinds of people they asked for help. Interestingly, the
422 frames they used were not fixed; they evolved with the accumulation of
423 additional experiences and incorporation of others' opinions.

424

425 In the first frame, social media was perceived by some respondents as a
426 *competitive game*. Those employing this frame used competitive language and

427 frequently compared their performance in establishing connections to their
428 competitors.

429

430 *I have a barometer of how well I'm doing on social media because I look*
431 *at another business that's like mine. The owner has an advantage on*
432 *me in terms of his staff and his location. But I'm absolutely wiping the*
433 *floor with him as far as likes and followers are concerned. I get to see*
434 *what he's doing and he gets to see what I'm doing and I'm way ahead of*
435 *him. It's down to the effort I put in to social media. (Founder, food and*
436 *drinks brand, Org 5)*

437

438 The framing of social media as a competitive game led respondents to pay
439 attention to the features of the platforms that reflected this metaphor (the
440 numbers of followers and likes) and to focus on the quantity of new connections
441 rather than the quality of their interactions. They talked about actively pitting
442 themselves against those they saw as competitors. They indicated that
443 competition required intensive effort, including work on social media out of
444 office hours. They were focused on trying to accumulate the most followers,
445 trying to be the first to comment on topical conversations in their industries and
446 trying to create content that others would like and share. They hoped that such
447 proactive efforts would create an impression that they were at the forefront of
448 their industries and that this would attract the attention of potential
449 collaborators. Their intensive efforts to compete and stay ahead of others on
450 social media can be seen as a proactive approach to establishing new
451 connections and fostering innovation, in which creating an impression of
452 leading the pack is anticipated to lead to innovative opportunities.

453

454 The second frame used by the respondents was particularly apparent in the
455 accounts of those who felt slightly unenthusiastic about social media use.
456 Although they were aware that social media could give them access to new
457 opportunities for innovation they felt the platforms held little personal appeal for
458 them. They dealt with this dichotomy by framing social media as a *box ticking*
459 *exercise*.

460

461 *Initially we were aware of it, but reluctant to use it because we knew how*
462 *much time it would take. It was a box that needed ticking because new*
463 *potential partners expected us to know about it, but we're not of a*
464 *generation that wants to be constantly connected all the time so we did*
465 *the bare minimum. (Owner-manager, design agency, Org 8)*

466

467 These respondents who framed social media as a box ticking exercise talked
468 about other preferred ways of meeting new innovation partners. There was an
469 apparent tension in their accounts because they also recognized that it was
470 possible to innovate using social media and they did not want to miss out. They
471 used the box ticking frame as a way of dealing with the cognitive dissonance
472 they associated with social media use. The metaphor suggests that they were
473 following what they perceived to be the rules for developing new connections.
474 They picked up these so-called rules as they observed and imitated the social
475 media use of others. By jumping on the 'social media bandwagon' and following
476 others they could access already existing templates and therefore regarded
477 social media to be less effortful. Rather than attempting to formulate original
478 and independent approaches to using the platforms they simply replicated what
479 appeared to be popular practice. Thus, by taking what can be understood as a
480 bandwagon approach to innovation they felt they were not missing out on the
481 inherent opportunities of social media.

482

483 The third frame used by the respondents could be termed the *informal frame*.
484 Although their ultimate goal was to make connections that would trigger
485 innovation they understood social media to be a space where socialization
486 would lead to business opportunities. When describing their approach they
487 drew upon imagery that conjured a sense of an informal place where people
488 were motivated to have fun and socialize.

489

490 *I was very informal in my approach to it at first. I didn't take it particularly*
491 *seriously. I treated it like a beach where I was dipping my toe in the*
492 *water. I would go in gradually and just have fun with it. (Founder-*
493 *manager, food & drinks brand, Org 6)*

494

495 Many of the respondents using this frame were influenced by their own personal
496 social media accounts wherein they interacted with friends and family and the
497 content of most conversations typically had a familiar tone. They presumed that
498 informality was the accepted social norm for interacting and building new
499 connections on social media. Even though they were representing their
500 business they did not want to appear to overtly push a work related agenda in
501 their social media posts. Those who made use of this frame tried to make new
502 connections by adopting a more casual style of communication. They were not
503 deliberately trying to force new innovative partnerships to occur. As new social
504 media connections were made they remained alert to emergent opportunities
505 but did not go out of their way looking for new business. In this sense they were
506 taking an emergent approach to innovation, by waiting for innovative
507 circumstances to arise through socialization.

508

509 Overall, the three frames were suggestive of three distinct approaches to
510 establishing new connections and fostering innovation (i.e. proactive,
511 bandwagon and emergent approaches). The respondents used these frames
512 to facilitate a comprehensible interpretation of social media grounded in
513 everyday language. However, extant theory suggests that the mental effort of
514 framing alone is not sufficient to accomplish innovative outcomes. Individuals
515 also need to act upon their multiple framings. Goffman (1974:340) calls
516 attention to the necessity for socially constructed evidence (i.e. the various
517 social media frames in our case) to be fully mentally applied to a context if
518 innovative outcomes are to be achieved. In acting out the already invoked social
519 media frames our respondents turned to their wider experience, or what Swidler
520 (1986) refers to as cultural tools. According to Swidler (1986) these toolkits,
521 made up of skills, habits and styles, equip individuals to form diverse strategies
522 of action in everyday life. Figure 2 illustrates the relationship between two
523 respondent frames (*informal* and *competitive game*) and their manifestation as
524 action via specific tools.

525

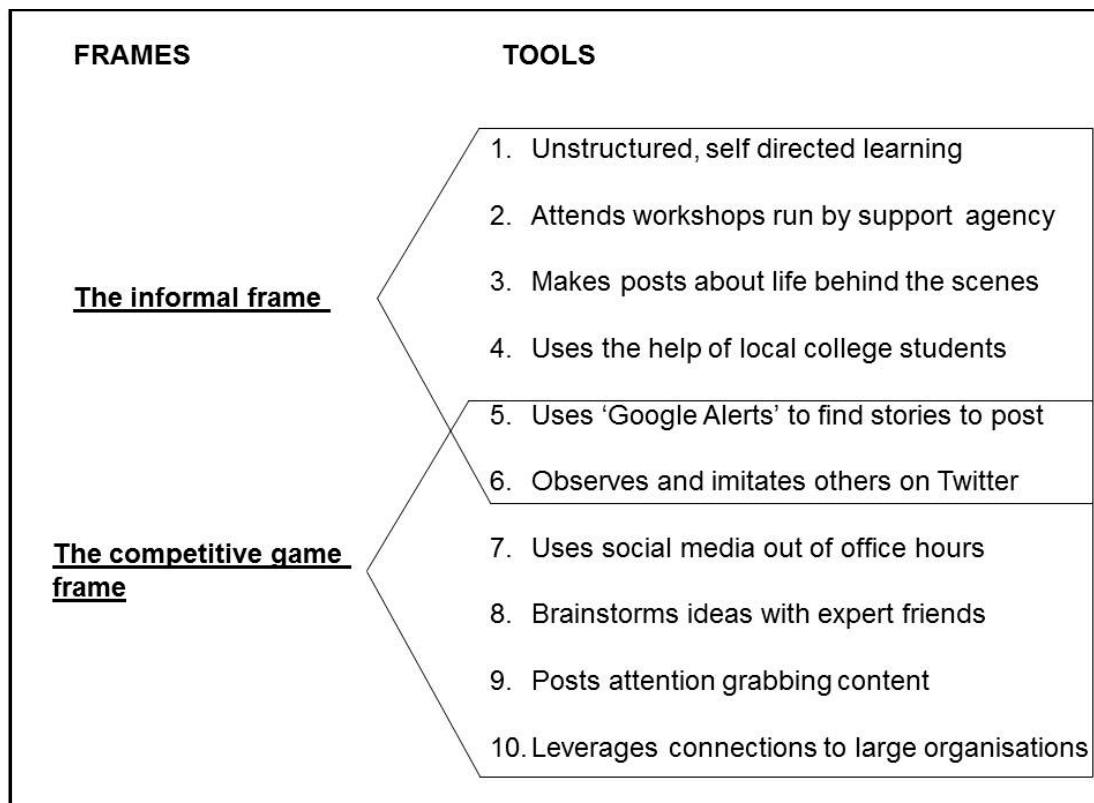


Figure 2: The formation of social media strategies of action

526

527

528 Creating strategies of action

529

530 Guided by their evolving understanding of social media, the respondents drew
 531 on a wide variety of tools to aid them in achieving their innovative goals. In
 532 many instances, they found that they had practical competencies that were
 533 useful for attracting and interacting with new social media connections. They
 534 talked about how these familiar skills helped them when they were unable to
 535 introduce themselves as they would in a face-to-face setting.

536

537 *Most people I know are quite conscious of linking up to new businesses*
 538 *on social media because you just don't know who it is on the other end!*
 539 *My background is in marketing. I enjoy setting up a brand, coming up*
 540 *with the ideas, writing copy and doing the designs. So that's been useful*
 541 *for our social media work. I think we come across as a good business to*
 542 *be linked to thanks to our creative content. (Founder, Drinks brand, Org*
 543 *5)*

544

545 Many respondents were concerned with creating a good first impression. The
546 manager in the above quote focused on the impression created by the aesthetic
547 appearance of his profile page and posts. He felt he was able to really appeal
548 to new connections by using his creative flair to present a well-considered style.
549 He explained that by using the skills he had established as a creative marketer
550 he was trying to compensate for the difficulties inherent in communicating with
551 others who were not physically present. Similarly, other respondents crafted
552 strategies drawing on their current skillsets.

553

554 *We needed to think about how to stand out and gain people's trust. I was*
555 *looking at a lot of the waffle and jargon that other people were posting to*
556 *make them look like experts. We decided to use plain, straight-talking*
557 *English for our posts. That's how our profiles read. I'd attended a short*
558 *course when the 'Plain English' campaign was around years ago, and I*
559 *always thought it was the best way to communicate. (Founder, Design*
560 *agency, Org 8)*

561

562 Drawing on a style of communication that he had long been familiar with, this
563 manager felt able to tackle the difficulties of establishing trust on social media.
564 Despite the lack of flair associated with using simplified English, he felt that this
565 style of post gave the impression that he had nothing to hide. Many respondents
566 noted that they used styles of communication they were most familiar with and
567 hoped that this would create a good impression and compensate for missing
568 information.

569

570 In other instances, respondents drew on their long established social
571 connections in the offline world for gaining insights into interacting and building
572 relationships on social media.

573

574 *I have a friend who works for a large multi-national. He gets me their*
575 *annual marketing report. There's a big section in there on social media.*
576 *I always take on board suggestions from that report; I take them*

577 *seriously and try them out to see what works for me. (Founder, Drinks*
578 *brand, Org 7)*

579

580 This manager needed to access technical knowledge that he didn't possess
581 himself. He achieved this by turning to a friend who he trusted and whom he
582 had gathered intelligence from on previous occasions. Some respondents
583 explained that their connections to larger organizations helped them. They felt
584 their difficulties in establishing new innovative relationships were caused by a
585 lack of legitimacy linked to their small size. When they connected with large
586 organizations on social media, they began to get noticed by others.

587

588 *Forming partnerships with a major university and a Royal Society makes*
589 *a huge difference. We've connected with them on social media as well*
590 *and now rather than being a lone entity that no one's heard of people*
591 *seem more willing to connect, they see me as being more established.*
592 *I've now got access to a huge group of people on social media to*
593 *collaborate with. (Founder, Chemistry Lab, Org 15)*

594

595 This respondent's partnerships with the University and the Royal Society were
596 already established, but he had not previously articulated his connection with
597 them on his social media account. Once he did this, he received a much more
598 positive response when initiating new contacts. He was also able to access and
599 traverse the established networks of his partners, opening a much broader
600 network of potential partners to communicate with.

601

602 In order to alleviate their uncertainty about how to approach social media use
603 and build new connections some respondents sought advice from those they
604 considered to be experts.

605

606 *I was getting nowhere so I approached some of my programmers for*
607 *advice. Now I'm making a real effort to generate conversations on social*
608 *media and to do that you really have to join in quite frequently or you*
609 *miss out on things. I commute in every morning, it takes about an hour*
610 *on the train, and I take that hour to read and decide what I'm going to*

611 *tweet about. I try and get through my three tweets in that hour. (Founder-*
612 *owner, Internet security firm, Org 9)*

613

614 Having been advised of a new rule to follow (make posts often) the respondent
615 formed a new habit (posting three tweets on his daily commute) that girded his
616 efforts to find innovation opportunities on social media. His approach helped
617 him to generate ideas about new things to talk about and it made use of some
618 otherwise 'dead time' where he would be doing little else.

619

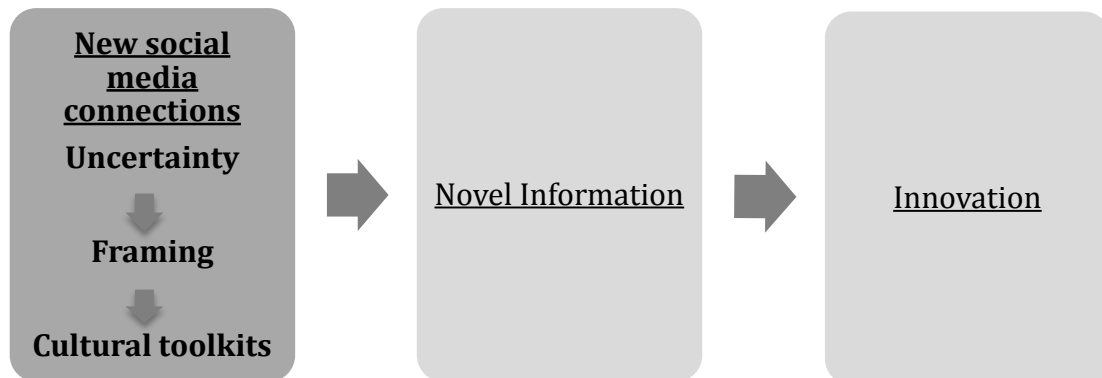
620 In summary, the above accounts show how respondents drew upon three
621 contrasting frames and a diverse set of practical tools to establish new
622 connections on social media. Drawing on this analysis, we discuss below the
623 potential of frames and cultural toolkits to establish new connections on social
624 media.

625

626 DISCUSSION

627

628 The analysis above unpacks the social processes underpinning the first stage
629 of social media innovation. Our specific focus on the attempts of individuals to
630 initiate new connections highlight the tremendous cognitive and practical efforts
631 required to achieve innovative outcomes via social media. When the usual
632 social cues associated with making new connections were found to be
633 ineffective on social media our respondents experienced a sense of uncertainty
634 about how to carry on. This uncertainty prompted them to frame social media
635 in what appeared to be three distinct approaches (i.e., proactive, bandwagon
636 and emergent) to making new connections and to innovation. In converting
637 frames into action, they drew upon what Swidler (1986) refers to as diverse
638 cultural toolkits of skills, habits and styles. The process is summarized in the
639 first box of Figure 3 below. In unpacking this important initial step we argue that
640 social media innovation is a complex cognitive achievement that relies upon
641 extensive psychological and social resources at each and every stage.



642

643 **Figure 3:** The impact of social media new connections on social media
644 innovation

645

646 Uncertainty and frames

647

648 The uncertainty experienced by the individuals in this study related to the
649 paucity of recognizable social cues on social media. Goffman (1979) dismissed
650 interactions mediated by technology as being “merely attenuated” and
651 “situation-like” (Goffman, 1979; Rettie, 2009; Richey et al., 2016). His assertion
652 was that interactions that rely upon technology do not provide sufficiently rich
653 social cues to constitute a full social interaction. Indeed, the literature suggests
654 that innovation requires such a complete social setting, rich in social cues (Rost,
655 2011) in order for collaboration and understanding to be achieved. These
656 assertions make our respondents’ reaction to the uncertainty they experienced
657 particularly interesting. Rather than withdrawing from the socially unfamiliar and
658 sparse environment of social media, they invoked different frames in their
659 ultimate quest for innovative outcomes. This persistence may be partly
660 attributed to prevailing social norms. The widespread proliferation of social
661 media platforms may somewhat compel today’s firms to stay active on social
662 media (Michelidou et al., 2011). Evidently, frames play an important part in this
663 process. In our case, framings and the associated mental simulations preceded

664 action and provided proxies for the social cues that would normally be used to
665 establish a strong context for interaction.

666

667 The frames for social media were invoked using everyday language that related
668 to three possible approaches to developing new connections and to innovation:
669 the proactive approach, the bandwagon approach and the emergent approach.
670 An important function of the frames was to create a perceptual link between
671 social media and these different ideas about innovation. While the lack of social
672 context initially hindered the launch of a potential innovation activity, frames
673 reignited the process since they were suggestive of ways of acting. In doing
674 this the frames effectively filled the void in contextual information left by missing
675 social cues. These findings indicate the important role frames play in reducing
676 the uncertainty associated with the initial stages of social media innovation.
677 Frames can serve as proxies for missing information, suggesting particular
678 approaches to innovation in the mind of individuals. By providing a mental
679 approximation of context they increase the individual's capacity for action.

680

681 Social media strategies of action

682

683 In acting upon framings of social media innovation, our respondents turned to
684 their established cultural toolkits (Swidler, 1986) of skills, habits and styles. In
685 this sense, frames and tools are mutually interdependent and may constitute
686 the fundamental components of social media strategies of action as depicted
687 in Figure 2 earlier. Rather than attempting to learn how to use new tools for this
688 unfamiliar activity (Molinsky, 2013) there was a clear tendency on the part of
689 our respondents to turn to lines of action well-established in their offline world.
690 Swidler (1986) suggests that individuals prefer making use of their practised
691 tools in all situations since the cost of learning entirely new styles of behaviour
692 is often perceived to be too steep. The use of familiar tools by our respondents
693 counterbalanced their feelings of uncertainty about social media innovation.
694 This grounding of actions in entrenched toolkits can be understood as an
695 attempt to make the unfamiliar, familiar. The tendency to turn to established
696 courses of action may seem counter-intuitive, given that the innovation process
697 is traditionally associated with attempts to break with convention (Mount &

698 Martinez, 2014; Leonardi, 2014). While later stages of the social media
699 innovation process may still rely upon integrating novel ways of thinking and
700 acting (Mount & Martinez, 2014), our findings suggest that the initial step of
701 making new connections appears to depend upon established styles and
702 behaviours.

703

704 Implications for social media innovation

705

706 Social media have been regarded as providing favourable circumstances for
707 innovation, particularly by overcoming some of the difficulties usually
708 associated with making new connections and sharing novel information
709 (Leonardi, 2014, 2015; Mount & Martinez, 2015). It has been suggested that
710 those that have traditionally struggled to access sufficient resources to
711 innovate, such as small and medium sized firms can particularly benefit from
712 these technologies (Harris et al., 2012). However, our findings imply that social
713 media is not necessarily an egalitarian space for innovation. From our
714 respondents' perspective, although it was theoretically possible to develop
715 different approaches to innovation using social media, in practice, access to a
716 pre-existing, broader cultural toolkit was required to turn their initial framings
717 into action. As we can tell from our data, these toolkits seemed to
718 simultaneously enable a sense of competence and familiarity as well as restrict
719 the set of available actions. This experience of our respondents suggest that
720 social positions and experiences may have a bigger say in the types of tools
721 that are familiar and accessible (Anthias, 2008; Swidler, 1986). In other words,
722 cultural tools are developed in everyday settings that social media cannot
723 entirely circumvent. We would therefore argue that social media appears to
724 reproduce social structures (Martinez Dy et al., 2016) in that those with access
725 to the broadest and the most sophisticated cultural toolkits are most likely to
726 succeed at social media innovation. Inevitably, before attempting to make
727 radical jumps in their social media use, individuals may spend considerable
728 time working with what they can access and know well (Swidler, 1986; Anthias,
729 2008).

730

731 We would therefore argue that the ability of individuals to draw upon a rich array
732 of frames and cultural tools is an important antecedent of social media
733 innovation. This is because social media innovation is likely to involve the
734 initiation of new connections without the guidance of a full set of traditional
735 social cues. Previous studies have suggested that it is possible to develop a
736 sense of virtual co-presence (Huang et al., 2013) but these studies have
737 focused on communication *within* organizations. When using social media to
738 tune into the outside world uncertainty related to the absence of traditional social
739 cues (Goffman, 1959) was the major difficulty mentioned by our respondents.
740 Put differently, a sense of social context is necessary but likely to be missing
741 from the earliest stages of the innovation process due to the unavailability of
742 rich social cues. Our analysis suggests that in these early stages frames can
743 be used as proxies for missing social cues and thus may help better manage
744 the uncertainty. In this sense, they provide an approximation of context to guide
745 interactions with new connections during the initiation of the social media
746 innovation process.

747

748 Engagement with new connections has been recognized as increasingly
749 important to firms attempting to undertake open innovation activities (West &
750 Bogers, 2013). The process of forging these new connections involves two
751 distinct groups. The first group are the internal contributors, or those
752 collaborating within the firm to initiate the innovation process. The second group
753 are external parties that the firm would like to involve in their innovative efforts.
754 Some attention has been given to motivating external parties to participate in
755 the early stages of innovation (Dahlander & Piezunka, 2014). We contribute to
756 this strand of the innovation literature by unpacking the psychological micro-
757 processes underpinning the initiation of new social media connections.
758 Dahlander and Piezunka (2014) point out that much of the research in this
759 domain ignores or underplays the challenges of engaging with a broad array of
760 external contributors. Our study highlights the complex cognitive work required
761 to overcome the uncertainty associated with establishing new connections in
762 the initial stages of social media innovation. Additional work is needed to
763 provide a fuller picture of the role framings and interpretations have on the open
764 innovation process. For example, we have unpacked the role of frames at an

765 individual level, but further research is needed to establish whether frames can
766 be used to create a shared context for innovation between those internal and
767 external to a firm.

768

769 CONCLUDING REMARKS

770

771 In this paper, we have argued that forming new social connections is a crucial
772 first step in the social media innovation process. There have been several
773 positive claims about the role of social media in facilitating new connections
774 and fostering innovation (Mount & Martinez, 2014; Leonardi, 2014). While our
775 study does not contradict these claims, it shows that the initiation of new
776 connections on social media is not always straightforward. The process
777 involves complex cognitive effort as frames (Goffman, 1974) are used in lieu of
778 missing social cues. While frames help to overcome the uncertainty inherent in
779 the early stages of social media innovation they do not address the challenge
780 of accessing other types of resource characterized herein as cultural tools
781 (Swidler, 1986) that are necessary to turn framings in to action. Cultural tools
782 are not accessed via social media, but are nested in existing social structures.
783 Thus, those who are unable to access appropriate cultural tools may be less
784 able to act upon their intentions to innovate using social media.

785

786 This study places emphasis on the role of uncertainty in triggering the creative
787 use of frames and cultural tools. It is, of course, very likely that individuals will
788 become more familiar with social media over time. Our study has not captured
789 whether such a process of familiarization could reduce uncertainty about social
790 media technologies and thus reduce the creative use of frames and tools.
791 However, we would argue that the mediated nature of social media platforms
792 makes uncertainty an intrinsic feature of making new connections on social
793 media. While we anticipate that making social media connections to achieve
794 innovation will always involve a degree of uncertainty, more research is needed
795 to nuance this argument.

796

797 We also demonstrate how frames can be used as proxies for social cues in
798 order to help approximate a context for social media innovation. We

799 acknowledge that the scope of our analysis is limited to the perceptions of
800 individuals and the role of frames in initiating the social media innovation
801 process. In other words, the empirical material presented here relates to an
802 early step and does not relate to the later stages of the innovation process that
803 may rely even more heavily on communication and social cues. However, we
804 would argue that without this vital first step the social media innovation process
805 may not get started at all. Future research could focus on the potential and
806 relevance of frames in the later stages of social media innovation. For example,
807 it is worth investigating how co-communicants can work towards establishing a
808 shared sense of social context using frames and tools.

809

810 Finally, this study also provides some useful practical insights for managers
811 attempting to use social media to extend their social networks. By highlighting
812 the challenges inherent in establishing new useful connections on social media,
813 managers can prepare themselves by assessing their own 'cultural toolkits'.
814 The vocabulary offered in this paper offers a useful metaphor for managers as
815 they attempt to use frames and cultural tools as proxies for traditional social
816 cues available during face-to-face encounters.

817

818

819

820

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824 REFERENCES

825 Anthias, F. 2008. Thinking through the lens of translocational positionality: An
826 intersectionality frame for understanding identity and belonging. *Translocations:
827 Migration and Social Change* 4(1): 5–20. Available at:
828 [http://www.dcu.ie/imrstr/volume_4_issue_1/Vol_4_
829 Issue_1_Floya_Anthias.pdf](http://www.dcu.ie/imrstr/volume_4_issue_1/Vol_4_Issue_1_Floya_Anthias.pdf) (accessed 1 September 2016).

830 Beech, N., MacPhail, S.A. & Coupland, C. 2009. Anti-dialogic positioning in
831 change stories: bank robbers, saviours and peons, *Organization*, 16 (3),
832 pp.335-352.
833

834 Bjork, J. & Magnusson, M. 2009. Where do good innovation ideas come from?
835 Exploring the influence of network connectivity on innovation idea quality.
836 *Journal of product innovation management*, 26 (6) pp. 662-670.
837

838 Cogburn, D.L. and Espinoza-Vasquez, F.K., 2011. From networked nominee to
839 networked nation: Examining the impact of Web 2.0 and social media on
840 political participation and civic engagement in the 2008 Obama campaign.
841 *Journal of Political Marketing*, 10(1-2), pp.189-213.
842

843 Coleman, J.S., 1988. Social capital in the creation of human capital. *American*
844 *journal of sociology*, pp.95-120.
845

846 Coleman, J. S., 1990. *Foundations of Social Theory*. Harvard University Press,
847 Cambridge (1990)
848

849 Cornelissen, J.P., Clarke, J.S. and Cienki, A., 2012. Sensegiving in
850 entrepreneurial contexts: The use of metaphors in speech and gesture to gain
851 and sustain support for novel business ventures. *International Small Business*
852 *Journal*, 30(3), pp.213-241.
853

854 Dahlander, L. & Piezunka, H., 2014. Open to suggestions: How organizations
855 elicit suggestions through proactive and reactive attention. *Research Policy*,
856 43 (2014) pp. 812-827.
857

858 French, A.M. & Read, A. 2013. My mom's on Facebook: an evaluation of
859 information sharing depth in social networking. *Behaviour and Information*
860 *Technology*, 32 (10) pp.1049-1059.
861

862 Goffman, E., 1959. *The Presentation of Self in Everyday Life*, 2nd edn.
863 Harmondsworth: Penguin.

864

865 Goffman, E., 1974. *Frame analysis: An Essay on the Organization of*
866 *Experience*. Harper and Row, New York.

867

868 Goffman, E., 1979. *Gender Advertisements*. New York: Harper and Row.

869

870 Goffman, E., 1981. *Forms of Talk*. Oxford: Blackwell.

871

872 Goffman, E., 1983. The interaction order: American Sociological Association,
873 1982 presidential address. *American Sociological Review*, 48(1), pp.1-17.

874

875 Harris, L., Rae, A. and Misner, I., 2012. Punching above their weight: the
876 changing role of networking in SMEs. *Journal of Small Business and*
877 *Enterprise Development*, 19 (2), pp.335-351.

878

879 Huang, J., Baptista, J., & Galliers, R.D., 2013. Reconceptualizing rhetorical
880 practices in organizations: The impact of social media on internal
881 communications. *Information and Management*, 50, pp.112-124.

882

883 Kane, G.C., Alavi, M., Labianca, G., & Borgatti, S. P., 2014. What's different
884 about social networks? A framework and research agenda, *MIS Quarterly*, 38
885 (1), pp.274-304.

886

887 Kaplan, A.M., & Haenlein, M., 2010. Users of the World, unite! The challenges
888 and opportunities of Social Media. *Business Horizons*, 53 (1) pp.59-68.

889

890 Knowledge@Wharton, 2013. [online] How open innovation is solving some of
891 NASA's trickiest problems. [viewed on 1st March, 2016] available from:
892 [http://knowledge.wharton.upenn.edu/article/how-open-innovation-is-solving-](http://knowledge.wharton.upenn.edu/article/how-open-innovation-is-solving-some-of-nasas-trickiest-problems/)
893 [some-of-nasas-trickiest-problems/](http://knowledge.wharton.upenn.edu/article/how-open-innovation-is-solving-some-of-nasas-trickiest-problems/)

894

895 Koch, H., Leidner, D.E. & Gonzalez, E.S., 2013. Digitally enabling social
896 networks: resolving IT–culture conflict. *Information Systems Journal*, 23 (6),
897 pp.501-523.

898

899 Leonardi, P.M, 2011. Innovation blindness: culture, frames, and cross-
900 boundary problem construction in the development of new technology concepts.
901 *Organization Science*, 22(2) pp.347-369.

902

903 Leonardi, P.M., 2014. Social media, knowledge sharing, and innovation:
904 Toward a theory of communication visibility. *Information systems research*,
905 25(4), pp.796-816.

906

907 Martinez Dy, A., Marlow, S., & Martin, L. 2016. A Web of opportunity or the
908 same old story? Women digital entrepreneurs and intersectionality theory.
909 *Human Relations* (forthcoming) DOI: 10.1177/0018726716650730

910

911 Mayasandra, R., Pan, S.L, & Myers, M.D. 2006. Viewing information
912 technology outsourcing organisations through a postcolonial lens. In: Trauth,
913 E., Howcroft, D., Butler, T., Fitzgerald, B. & De, Gross. *J. Social inclusion,
914 societal and organisational implications for information systems*, Berlin,
915 Springer.

916

917 Michaelidou, N., Siamagka, N., & Chistodoulides, G., 2011. Usage barriers and
918 measurement of social media marketing: An exploratory investigation of B2B
919 brands. *Industrial Marketing Management*, 40 (7) pp.1153-1159.

920

921 Molinsky, A.L. 2013. The psychological process of cultural retooling. *Academy
922 of Management Journal*, 56 (3) pp.683-710.

923

924 Mount, M. and Martinez, M.G., 2014. Social Media: A tool for open innovation.
925 *California Management Review*, 56 (4), pp.124-143.

926

927 Ohly, S., Kase, R. & Skerlavaj, M., 2010. Networks for generating and validating
928 ideas. *Innovation: Management policy and practice*, 12 (1) pp. 50-60.

929 Padgett, D.K. 1998. *Qualitative Methods in Social Work Research: Challenges
930 and Rewards*. Thousand Oaks, CA: Sage Publications.

931 Ravishankar, M.N., 2013. Public ICT Innovations: a strategic ambiguity
932 perspective. *Journal of Information Technology*, 28 (4,) pp. 316-332.

933 Ravishankar, M.N., 2015. The realignment of offshoring frame disputes (OFD):
934 An ethnographic 'cultural' analysis. *European Journal of Information Systems*,
935 24 (3) pp.234-246.

936 Ravishankar, M.N., Cohen, L., & El-Sawad, A. 2010. Examining resistance,
937 accommodation and the pursuit of aspiration in the Indian IT-BPO space:
938 reflections on two case studies. *Industrial Relations Journal*, 41(2), 154–167.

939 Rettie, R., 2009. Mobile Phone Communication: Extending Goffman to
940 mediated interaction. *Sociology*, 43 (3) pp.421-438.

941

942 Richey, M., Ravishankar, M.N. & Coupland, C. (2016) Exploring situationally
943 inappropriate social media posts: An impression management perspective,
944 *Information, Technology & People*, 29 (3) pp. 597-617.

945

946 Robert, C. & Wilbanks, J.E., 2012. The wheel of humor: humor events and
947 affect in organizations. *Human Relations*, 65 (9) pp.1071-1099.

948

949 Rost, K., 2011. The strength of strong ties in the creation of innovation.
950 *Research Policy*, 40(4), pp.588-604.

951

952 Schein E., 1991. What is culture? In P. Frost, L. Moore, M. Louis, C. Lundberg,
953 and J. Martin (eds.), *Reframing Organizational Culture*. Newbury Park, CA:
954 Sage. pp. 243- 53.

955

956 Swidler, A., 1986. Culture in Action: Symbols and Strategies. *American*
957 *Sociological Review*, 51 (2) pp.273 – 286.

958

959 Treem, J.W. & Leonardi, P.M., 2012. Social Media Use in Organizations:
960 Exploring the Affordances of Visibility, Editability, Persistence, and Association.
961 *Communication Yearbook*, 36 (2012) pp.143-189.

962

963 Walsham, G. (1993), *Interpreting information systems in organizations*, Wiley,
964 Chichester.

965

966 Walther, J. B., 2007. Selective self-presentation in computer-mediated
967 communication: Hyperpersonal dimensions of technology, language, and
968 cognition. *Computers in Human Behavior*, 23 (5) pp.2528–2557

969

970 West, J. and Bogers, M., 2014. Leveraging external sources of innovation: a
971 review of research on open innovation. *Journal of Product Innovation*
972 *Management*, 31(4), pp.814-831.

973