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Employment background influence on social media usage in the field of European project management and communication



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ABSTRACT

Social Media is playing an important role in project work. Social Media Tools enable communication to and with stakeholders and support dissemination, thus adding to the sustainability of the project's results. The presented study was conducted with the aim to analyze the personal social media preferences and opinions, as well as social media features and their usage within projects. With a sample size of 137 answers from across Europe, all the respondents were employed people who are actively involved and participating in EU projects. The survey questionnaire had two parts: Part 1. Social media preferences and opinions. Part 2. Social media usage for project purposes. The results indicate the importance of social media for project related work and communication. The analysis shows gender differences when using Facebook for project work, but no gender differences were found when using other social media. In addition, we found statistically significant differences of social media usage and opinion in relation to the employment sector of the respondents.

1. Introduction

When using social media tools for project management, formal and informal communication can be carried out. For example, we can communicate project progress and corresponding milestones, project results and intellectual outputs, best practice examples, or the activities of project members at different conferences, project meetings and other similar aspects of the project. Dissemination is viewed as making the project results and products visible to end-users and other interested groups (Ašanin Gole, 1999, Kirchgasser, 2007–2013). Antunes (2011) further outlines that besides well-planned strategy and shared participation of all the partners in dissemination activities, other critical factors for successful dissemination are the appropriate selection of tools and channels, taking into consideration the target groups and their characteristics.

How and When to Communicate, What and to Whom, are the main questions tackled in the Communication and Visibility Manual (2010) and other similar publications (Antunes, 2011; Ašanin Gole, 1998; Kirschgasser, 2007–2013) that are meant to provide guidance for project managers on how best to communicate about projects and their results. The information used must be accurate and interesting for the target audience, activities need to be timely, and the right audience(s) should be targeted. It is important to reach a broad audience therefore the communication type and channels must be appropriate to the target groups. Social media communication channels, for example a project Facebook account, YouTube channel, a project blog, a Twitter or Instagram account, are recommended for communication, especially when communicating with younger target groups that can be more easily reached via those social media channels (Manasseh, 2009, pp. 18.). Only with adequate information are researchers able to make an informed decision about using social media and selecting from the different available tools to have the desired impact (Cann, Dimitriou, & Hooley, 2011). A tailored communication strategy with a project specific blend of tools, incorporating originality and creative communication strategies are suggested to increase the impact (Antunes, 2011).

The objective of this paper is to analyze personal social media preferences and opinions, as well as social media usage for projects. After the literature review, the authors prepared the empirical part of the study that was developed by obtaining primary data. The primary data was collected from a questionnaire with 27 questions that was filled out by employed people that are actively involved and participating in EU projects. Section 2 provides theory with a literature review, research questions and introduces two hypotheses that the statistical analysis is based upon. After outlining the methodology and sample in Section 3, Section 4 discusses the results of the empirical analysis. Section 5 draws conclusions from this study and suggests recommendations.

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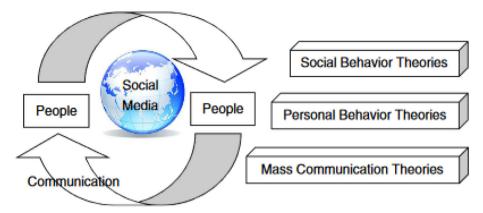


Fig. 1. Groups of theoretical models of social media Source: Ngai, Ka-leung, Lam, Chin, & Tao, 2015.

2. Theory and research hypothesis

Social media is having a global impact on communication. It is not only changing the way we communicate, but also affecting the processes involved with information services that are supporting project management (Ihejirika, 2014). According to Bryan, Matson, and Weiss (2007), "Social networks, both within and outside of companies, increase the value of collaboration by reducing the search and coordination costs of connecting parties who have related knowledge and interests." Furthermore, social media is also helpful for creating networks and good relationships with project partners.

There are several studies showing the development, characteristics, opportunities, and the role of social media in personal and professional lives. Since social media services like Facebook, Twitter and other social networks are part of our daily private lives (Stocker & Muller, 2013), their implementation as a business support tool has spread with amazing rapidity (Koch & Richter, 2009). With the development of Web 2.0 tools the relationship between a message sender and receiver started to change, as customers could respond to the message and a new kind of word of mouth developed (Quesenberry, 2016, p. 21). However, Nach (2016) points out that although there is currently a high growth of Web 2.0 tools that support collaboration and communication, the use of social media in project management is still limited and has difficulty in keeping pace with the development of such tools (Nach, 2016, p.1). Furthermore, it is outlined that despite the opportunities that social media provides for team and project management, the availability of documented experiences and "best practices" of the use of social media in projects is still limited (Silvius, 2016, p. XVI).

In the study by Delerue and Sicotte (2017) on the role of social media in organizing collaboration in project teams, findings show that social media as tools for collaboration increase coordination and enable access to information at any time, but can limit individual autonomy of team members and has the potential of having a negative effect on project performance. However, in further discussion, they conclude that although research shows that individual autonomy is necessary for the ability for a team to function well, results show that social media does not wield a direct effect on project performance (Delerue & Sicotte, 2017, p.104).

Agichtein, Castillo, Donato, Gionis, and Mishne (2008) presented a general classification framework for quality estimation in social media. They developed a comprehensive graph-based model of contributor relationships and combined it with content- and usage- based features. According to Kietzmann, Hermkens, McCarthy, & Silvestre, 2011 social media introduces substantial and pervasive changes to the communication between organizations, communities, and individuals. In their article, the authors present a number of recommendations on how firms should develop strategies for monitoring, understanding, and responding to different social media activities. Treem and Leonardi

(2013) observed that social media is an important consequence to the organizational communication processes because it allows for the combination of behaviors that were difficult or impossible to achieve in combination before these new technologies entered the workplace. In their article, the authors theorized several ways through which four social media affordances (visibility, persistence, editability, and association) may alter socialization, knowledge sharing, and power processes in organizations. Results from Lorenz's (2015) study on communication and tools in European Projects show that project managers estimate the importance of investing in marketing and social media as very important (70,36%) or as lightly important (22,73%). The main communication of their project results was carried out by means of a web site, followed by a project newsletter and a project Facebook account (Lorenz, 2015, p.59). When being asked what kind of marketing/ social media tools they used for the exploitation and sustainability of their projects, Facebook (65,91%) was the leading response, followed by LinkedIn (34%) and Twitter (25%) (Lorenz, 2015, p.54).

For this article, the authors utilized a combination of theories and models to study the socio-psychological behavior of social media users and different stakeholders, especially professionals being included in EU projects. Fig. 1 shows the theoretical models proposed in the social media.

While personal behavior theories focus on explaining the behavior of individuals displayed in response to certain internal and external stimuli, social behavior theories focus on group behavior, from which, group dynamics are found to directly affect user behavior and their involvement in social activities.

For our research, Digman's Personality traits theory (1990) that explains how personal characteristics affect one's subsequent behavior, Bourdieu's (1986) social capital theory that analyzes the socio-psychological and volitional behavior of social media users, and Tajfel's (1974) social identity theory that examines the effect of categorizing people (including oneself) into ingroups or outgroups based on one's perceptions, attitudes, and behavior were used.

Based on the above mentioned theories, we formed the following research questions:

Research Question 1: What are personal social media preferences, opinions and perceptions about social media?

Research Question 2: Due to the rapid development and change of social media tools, what are current digital media and social media tools used for EU projects?

Research Question 3: What features of social media tools would be beneficial for EU project work and the communication of its results?

Based on mentioned theories and according to the literature (e.g.: Korkut (2005), Thelwall (2008); Lenhart and Madden (2007); Mazman and Usluel (2011)) we stated the following hypothesis:

Hypothesis 1. There exist statistically significant differences in

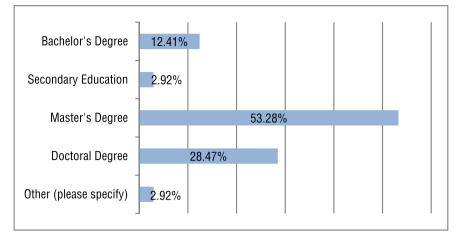


Fig. 2. Level of formal education

Source: Generated by the authors based on survey data.

preferences, opinions and usage of social media between men and female.

Hypothesis 2. There exist statistically significant differences in judging the importance of social media according to the sector of employment of our respondents.

3. Methodology

Bearing in mind that social media is of great importance in today's project management world; our aim was to analyze personal social media preferences, opinions, perceptions, and social media usage for projects. An important focus was to also compare the results between professionals employed in different sectors.

The research study on the perceptions towards social media was conducted in the beginning of 2017 by means of a survey. The survey went on-line on 09. 01. 2017 for 5 weeks and was closed on 13. 02. 2017. The sample that has been collected consists of 137 answers from all over Europe (Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Check Republic, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Macedonia, Montenegro, Netherlands, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Switzerland, Turkey, UK, and also outside Europe e.g. Malaysia and USA). The snow-ball technique was used for collecting answers. For the sample we chose employed people that are actively involved and are participating in EU projects.

The questionnaire for the study consisted of 27 questions. It was created with the Survey Monkey tool, and distributed via Facebook, LinkedIn (personal accounts as well as directed postings to different groups with several thousand members), Twitter and a series of personal emails, or emails to existing research networks.

The Survey contained an introductory page explaining the purpose of the survey and the estimated time needed to complete it. Questions (Q) were grouped to gather demographic data (Q1–Q6), personal social media preferences and opinions (Q7–Q17) and social media usage for projects (Q18–Q26). Question 27 was a free field at the end of the questionnaire provided to gather any other information, share opinion or provide additional comments.

For the analysis of the results, the SPSS program was used. To get a first impression about general perceptions towards the usage of social media the results were first analyzed by means of basic descriptive statistics. Inferential statistics were subsequently used to explore any statistically significant differences in the results of the sub-samples. To assess significant differences in the mean ranks (bivariate comparison of ordinal variable against nominal variable) a nonparametric Mann-Whitney U independent samples test was used. To assess for significant differences on a continuous dependent variable by a categorical independent variable with more groups, a nonparametric Kruskal-Wallis test was used.

The results between professionals employed in different sectors might be questionable due to the fact that each of the sectors includes "subsectors" with distinct characteristics/experiences (e.g. financial, marketing, health, etc.). Therefore, generalizations from the sample regarding whole sectors should be made with caution. In this respect the results of this study could serve as a valuable insight into the potential differences between different sectors, while additional research would be required to establish more solid and reliable conclusions regarding actual differences in perceptions towards usage of social media within different sectors.

Another limitation of the study could be the focus only on EU projects. We focused on the specific EU project sample as the majority of our sample represents European countries, where EU projects are the main public funds for financing development projects.

4. Results and discussion

4.1. Demographic data

In our sample, 89 respondents (65,44%) were females and 47 (34,56%) were males, and 1 respondent did not provide information on gender. 53 respondents (40,88%) belonged to the age group 25–40, and 61 respondents (44,53%) were of the age 40–55, with 20 participants (14,60%) over 55 years. 2 respondents were less than 25 years old and 1 respondent did not provide information on age.

As seen in the Fig. 2, 73 respondents (53,28%) had a Master's Degree. The second biggest group with 39 people (28,47%) had a Doctoral Degree, followed by a Bachelor's Degree with 17 people (12,41%). 4 people (2,92%) had Secondary Education, and 4 people had other education, where they listed in the provided free field vocational education, University College, MBA and Diploma degree (4 Years at university).

Based on the assumption that the respondents' previous experience within project management could have an influence on the use of social media we were also interested in their experience in the field of project work and project management and we asked for the period of time that they had been working in projects and EU projects as a project member or project manager. 1 respondent (0,73%) had 25 years of experiences in EU projects, 41 people, (29,93%) had more than 10 years of experience, 34 people (24,82%) had 6–10 years of experience, 44 people (32,12%) had been involved in projects between 1 and 5 years, 15 people (10,95%) had been working less than 1 year as project managers or project members, and 2 respondents (1,46%) did not provide

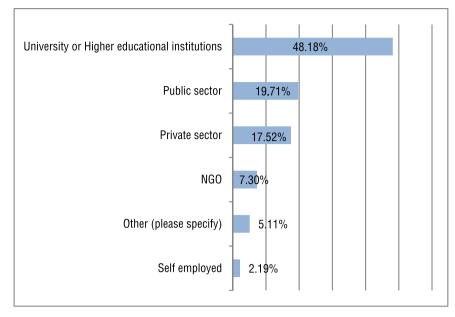


Fig. 3. Sector of employment

Source: Generated by the authors based on survey data.

information about their experiences in EU projects.

As it can be seen from Fig. 3, 66 respondents (48,18%) worked in the University and Higher Educational sector, while 27 respondents (19,71%) worked in the Public sector, 24 respondents (17,52%) in the Private sector, 10 respondents (7,30%) worked in NGOs and 3 respondents (2,19%) were self-employed. In Fig. 2 there is a more detailed grouping of different sectors of employment of all hundred thirty-seven respondents.

Under the *Other* sector of their employment, participants listed private or public research organizations: 2 respondents (1,46%), research institute: 2 respondents (1,46%), intergovernmental agency: 1 respondent (0,73%), a combination of different sectors: 1 respondent (0,73%) and secondary vocational and technical education: 1 respondent (0,73%).

4.2. Personal social media preferences, opinions and perceptions

In this chapter we will table and depict gathered data providing answers and more detailed insight regarding Research question 1: What are personal social media preferences, opinions and perceptions about social media?

We asked the following 7 questions to establish the social media preferences, opinion and perceptions of professionals working in EU projects:

- Most of the information relevant for my work I get from the social media.
- How much time per day do you spend on social networks?
- I find information on social media reliable.
- Security of social media is adequate.
- Social media apps (like Snap Chat, WhatsApp or similar) are replacing "traditional "social media networks (like Twitter, Facebook, LinkedIn).
- The company I work for uses a combination of social media to present their product portfolio.
- The company I work for uses social media to communicate with stakeholders and customers.

Each question was answered using a range of "1. Strongly disagree", "2. Disagree", "3. Neutral", "4. Agree", and "5. Strongly agree" with the

exception being the 2nd question that was graded from 1: 15–30 min, 2: 0,5–1 h, 3: 1,5–2 h, 4: More than two hours, 5: Other. The purpose of the chosen questions is to evaluate general professionals' opinion about social media. Results are shown in the Table 1.

The results showed that the average score of the opinion regarding the use of social media for finding information relevant for their work is 3183. In detail, 15 respondents (11,36%) strongly disagree with the statement that they get most of the information that is relevant for their work from the social media, 37 respondents (28,03%) disagree, 39 respondents (29,55%) are neutral, 37 respondents (28,03%) agree, and 4 respondents (3,03%) strongly agree with this statement. 38 respondents (28,79%) spend 15-30 min on social networks, 40 respondents (30,30%) spend 0,5-1 h, 25 respondents (18,94%) spend 1,5-2 h, 20 respondents (15,15%) spend 2 or more hours, and 9 respondents (6,82%) choose the answer "other" and specified that they spend less than 15 min per day on social networks. When judging the reliability of information obtained from social media the average score of the answers is 2901. 7 respondents (5,30%) strongly disagree with the statement that information on social media is reliable, 21 respondents (15,91%) disagree with this statement, 56 respondents (42,42%) are neutral, 45 respondents (34,09%) agree with the statement and 3 respondents (2,27%) strongly agree with this statement. Respondents were also asked about the security of social media. 5 respondents (3,82%) strongly disagree with the statement that security of social media is adequate, 42 respondents (32,06%) disagree, 49 respondents (37,40%) are neutral, 30 respondents agree, and 5 respondents (3,82%) strongly agree with the statement.

We also checked, whether the respondents think that social media apps (like Snap Chat, WhatsApp or similar) are replacing "traditional" social media networks (like Twitter, Facebook, LinkedIn). Only 1 respondent (0,77%) strongly disagrees with the statement that social

Table 1
The average assessment of the opinions about social media.

Question	I	1	2	3	4	5	6	7
Total Gender	Male Female	3.183 3.295 3.126		3.114	3.100 3.045 3.128	2.612 2.442 2.698	2.460 2.439 2.472	2.325 2.268 2.356

Source: Generated by the authors based on survey data.

media apps (like Snap Chat, WhatsApp or similar) are replacing "traditional" social media networks (like Twitter, Facebook, LinkedIn), 28 respondents (21,54%) disagree with this statement, 36 respondents (27,69%) are neutral, while 48 respondents (36,92%) agree, and 17 respondents (13,08%) strongly agree with this statement. Companies in which respondents are employed often use a combination of social media to present their product portfolio and to communicate with stakeholders and customers.

3 respondents (2,65%) strongly disagree with the statement: the company I work for uses a combination of social media to present their product portfolio. 14 respondents (12,39%) disagree with this statement, 31 respondents (27,43%) are neutral, 49 respondents (43,36%) agree with this statement and 16 respondents (14,16%) strongly agree with this statement.

Regarding the statement: The company I work for uses social media to communicate with stakeholders and customers, 6 respondents (5,31%) strongly disagree with the statement, 9 respondents (7,96%) disagree with this statement, 25 respondents (22,12%) are neutral, 58 respondents (51,33%) agree with this statement and 15 respondents (13,27%) strongly agree with this statement.

Apart from evaluating the assessment of the professional workers of the 7 questions, U Mann Whitney and Kruskal-Wallis tests were performed to check the existence of any differences among the socio-demographical variables (gender) and employability related variables (economic sector). Results are presented in Table 2.

When evaluating gender differences in the perception of social media, we found no statistically significant differences. With these results we could not support Hypothesis 1. Although we found several studies that show statistically significant differences between gender regarding the use or judgment of social media (e.g. Lenhart & Madden, 2007; Mazman & Usluel, 2011; Thelwall, 2008), we did not expect to find this within our results. Our respondents are involved daily in project management work and because of the project work, they are actively involved in cooperation with people from other countries. Therefore it is understandable that they are strongly involved in different communication media regardless of gender.

However, we did find the following differences regarding the sector of employment of respondents that are of statistical significance.

Question 1: "Most of the information relevant for my work I get from social media". Here respondents employed at Universities or higher education institutions most strongly agree with this statement (mean value = 3.5), while respondents employed in the private sector and others mostly disagree (mean value = 2.75) with this statement. A Kruskal-Wallis H test showed that there was a statistically significant difference in evaluating this sentence between the respondents employed in different sectors, $\chi 2(4) = 9.659$, p = 0.047, with a mean rank score of 74.55 for those employed at Universities or HEI, 65.55 for those employed in the public sector, 57.65 for those employed in NGOs,

Table 2

Testing statistically significant differences.

and 50.63 for those employed in the private sector.

Question 3: "I find information on social media reliable". Whereas respondents employed at Universities or Higher Education Institutions and in NGOs in comparison with employed in other sectors are neutral or even disagree with this statement (mean value = 3.15 and 3.10), respondents employed in the private sector mostly agree (mean value = 2.54) with this statement. A Kruskal-Wallis H test showed that there was a statistically significant difference in evaluating this sentence between the respondents employed in sectors, $\chi^2(4) = 12.741$, p = 0.013, with a mean rank score of 76.65 for those employed at NGOs, 74.65 for those employed at Universities or HEI, 67.31 for self-employed, 54.70 for those employed in the public sector, and 49.23 for those employed in the private sector.

Question 4: "Security of social media is adequate". This showed that those employed in NGOs and the private sector trust social media the most. A Kruskal-Wallis H test showed a statistically significant difference in evaluating this sentence between the respondents employed in sectors, $\chi 2(4) = 21.409$, p = 0.000, with a mean rank score of 95.06 for self-employed, 73.10 for those employed at Universities or HEI, 64.77 for those employed in the public sector, 44.67 for those employed in the private sector, and 40.95 employed in NGOs.

Question 7: "The company I work for uses social media to communicate with stakeholders and customers". Answers showed that the private sector and NGOs most frequently are using social media for communication. A Kruskal-Wallis H test showed a statistically significant difference in evaluating this sentence between the respondents employed in sectors, $\chi 2(4) = 21.409$, p = 0.000, with a mean rank score of 78.93 for self-employed, 72.55 for those employed in the public sector, 55.63 for those employed at Universities or HEI, 41.76 for those employed in the private sector, and 36.38 for those employed in NGOs.

With these results, we can support Hypothesis 2, as there are differences with statistical significance in judging the importance and use of social media according to the sector of employment of our respondents. This shows that besides personal preferences and habits, the work environment also shapes our perception, opinion and usage of social media.

The three research questions in the following section are more strongly related to their usage of social media within EU projects.

4.3. Evaluation of social media usage for projects

First we checked the following research question:

Research Question 2: Due to the fast development and change of social media tools, what are current digital media and social media tools used for EU projects?

We asked the following 5 questions to check what are current digital media and social media tools used for the EU projects:

Question		1	2	3	4	5	6	7
Statistical test	U Mann-Whitney							
Significance		0.460	0.476	0.107	0.721	0.213	0.980	0.845
Sector of employment	Public sector	3.148	2.481	2.630	3.077	2.461	2.952	2.864
	Private sector	2.750	2.417	2.542	2.583	2.391	2.167	1.842
	U or HEI	3.459	2.229	3.147	3.328	2.738	2.446	2.291
	NGO	2.900	2.700	3.100	2.500	2.900	2.111	1.667
	Other	2.750	3.250	2.875	3.875	2.250	2.285	3.000
Total		3.177	2.415	2.908	3.108	2.602	2.459	2.321
Statistical test	Kruskal Wallis test							
Chi-square		9.659	4.329	12.741	21.409	4.698	9.034	11.066
Df		4	4	4	4	4	4	4
Asymp. sig.		0.047	0.363	0.013	0.000	0.320	0.060	0.001

Source: Generated by the authors based on survey data.

- The company I work for uses a combination of social media to present their product portfolio.
- The company I work for uses social media to communicate with stakeholders and customers.
- Which social media do you often use for project management and project related communication?
- In the recent project you communicated about the project to stakeholders by means of different digital media?
- Rank the following social media (Facebook, Twitter, Google+, SlideShare, LinkedIn, Instagram, Tumblr, Pinterest) for private communication in order of your preference, with 1 being your most preferred media.

Each question was answered using a range of "1. Strongly disagree", "2. Disagree", "3. Neutral", "4. Agree", and "5. Strongly agree" with the exception of the 5th question that was graded from 1: being the most preferred media; 8: being the less preferred media.

The results for the first two questions have already been presented within the first research question. In short, more than half of the companies our respondents work for use some sort of combination of social media to present their product portfolio and to communicate with the stakeholders and customers.

With the question: "Which social media do you often use for project management and project related communication?" more than one answer was possible. 118 people (86,13%) replied and 19 (13,87%) skipped this question.

As it can be seen from Fig. 4, Facebook as a tool for project management and project related communication was mentioned 62 times (52,54%), LinkedIn was mentioned 49 times (41,53%), Twitter: 34 times (28,81%), Google+: 33 times (27,97%), SlideShare was mentioned 17 times (14,41%), YouTube was mentioned 16 times (13,56%), and Instagram 2 times (1,69%). Other tools listed included Skype, Trello, Asana, Slack, Yammer and shared folders. None of the respondents listed Tumblr or Pinterest as being used for project related communication, and 27 respondents (22,88%) mentioned they don't use social media. Results from the question, "In the recent project did you communicate about the project to stakeholders by means of different digital media?" are presented in Fig. 5.

More than one answer was possible. 117 people (85,40%) replied and 20 (14,60%) skipped this question. The answer "Other" was chosen by 13 respondents (11,11%). Here respondents indicated: Google Drive, TwinSpace; open access publications, pdf brochures, Skype, and ResearchGate.

As it can be seen in Fig. 5, a project web site (mentioned 79 times, 67,52%), Facebook (mentioned 56 times; 47,86%), Newsletter (mentioned 54 times; 46,15%), and Publication (mentioned 53 times; 45,30%) were the most used channels for communication. Instagram (mentioned 4 times; 3,42%) and SlideShare (mentioned 6 times; 5,13%) were used the least frequently.

Here we checked if there are statistically significant differences between genders. Results show that there exist statistically significant differences between males and females who use Facebook. Results show that women use Facebook for communication within the projects more frequently than men (U = 1654.500; p = 0.020). These results are in line with Korkut's (2005) study, where it is proven that females' communication skills are more positive than males' and where he explained that females are more social than males.

The last question with which we checked research question 2 was related to the ranking of social media for communication for private communication. 80 respondents (66,12%) used Facebook as the predominant media, 16 respondents (16,16%) used LinkedIn the most frequently, 11 respondents (14,86%) used Twitter, 10 respondents used Google +, 7 respondents used Instagram, 2 respondents used Tumblr, and 1 respondent used SlideShare the most frequently. When asked if they would consider to start using other social media for project needs, 40% replied they would not consider use of other social media, and some were considering more intense usage of social media.

However, although many would prefer to utilize a familiar social network for project management communication, traditional methods such as publications and websites are still used. Furthermore, 37%–42% did not find Instagram, Pinterest and Tumblr adequate for business use

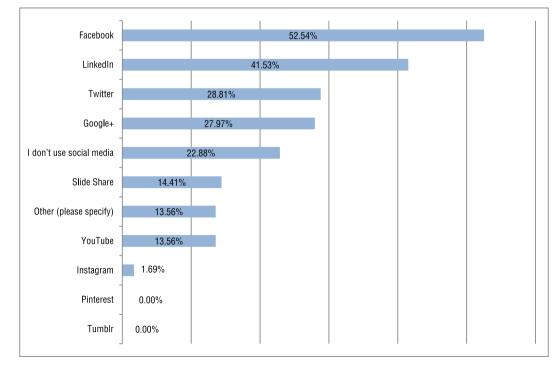


Fig. 4. Type of social media for project related communication Source: Generated by the authors based on survey data.

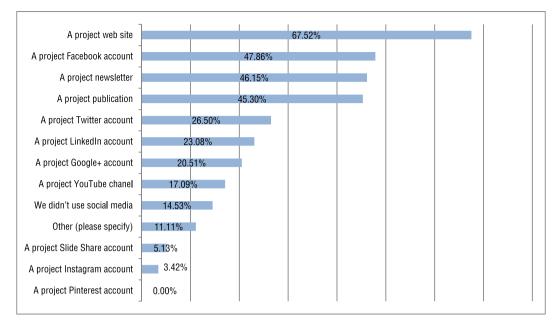


Fig. 5. Used channels for communication to project stakeholders in the past Source: Generated by the authors based on survey data.

and 28,57% also did not find Facebook adequate for that purpose.

With the next research question, we analyzed the features of social media tools that would be beneficial for EU project work and the communication of its results.

Research Question 3: What features of social media tools would be beneficial for EU project work and the communication of its results?

We asked the following 2 questions to answer this research question:

- Which current features for project management of social media do you find important for use for your work?
- If you were designing new social media features for project management, what features would you add?

With both questions more than one answer was possible. 111

respondents (81,02%) answered both questions. Opinions about the importance of current features for project management are presented in Fig. 6 below.

As it can be seen from Fig. 6, building a target community – closed and open (selected 95 times; 85,59%), is the most important feature of social media for project management for use for work. Others are, build targeted contact lists (selected 54 times; 48,65%), create awareness and visibility (selected 46 times; 41,44%), delivering real time updates (selected 45 times; 40,54%), host webinars (selected 43 times; 38,74%), and crowd source requirements (selected 39 times; 35,14%).

With the next question we checked the respondents' suggestions for features they would add if they were designing new social media features for project management.

Within the suggestions for new social media features, better defined collaboration tools prevailed (selected 67 times; 60,36%), followed by

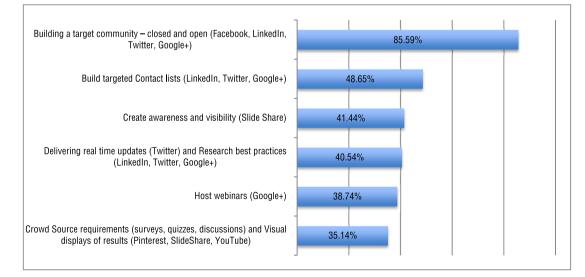


Fig. 6. Current features for project management of social media that respondents find important for use for their work Source: Generated by the authors based on survey data.

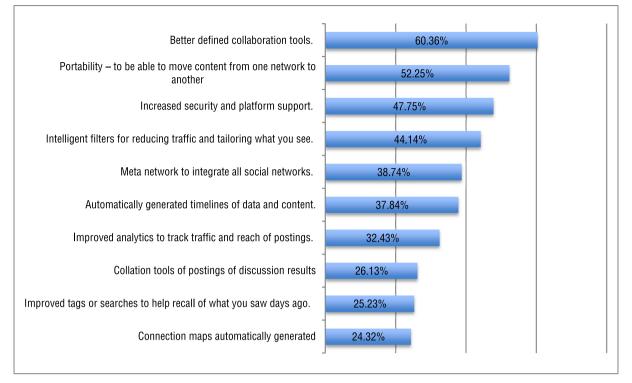


Fig. 7. Suggestions for new social media features for project management Source: Generated by the authors based on survey data.

portability (selected 58 times; 52,25%), increased security and platform support (selected 52 times; 47,25%), intelligent filters for reducing traffic and tailoring what you see (selected 49 times; 44,14%), meta network to integrate all social networks (selected 43 times; 38,74%), and others (see Fig. 7).

5. Conclusions

The results obtained from the first part of the questionnaire showed that respondents are very familiar with social media, and that they have a positive perception of social media.

The results showed that 41 respondents (29,93%) use social media for finding relevant information for their work. Approximately half of the respondents find information on social media reliable, and half of them believe that the security of social media is adequate. The companies where respondents are employed often use a combination of social media to present their product portfolio and to communicate with stakeholders and customers. This practice goes hand in hand with available guidelines and recommendation from the EU manuals and supports the aim to reach and inform as many people as possible. We also found that social media tools are still perceived as being extensions of more traditional digital and analogue tools such as web pages, flyers in digital and printed form and project final publications.

The most frequent use of current digital media and social media tools for EU projects are Facebook, Newsletter, Publications and LinkedIn.

Respondents first suggested better defined collaboration tools, followed by the portability, increased security and platform support, intelligent filters for reducing traffic and tailoring what you see, meta network to integrate all social networks are social media tools that would be beneficial for EU project work and the communication of results in the future.

When analyzing the statistical significance of the differences between genders we found no differences between males and females. These results were not expected, but can be the results of the fact that respondents from our sample are actively involved in EU projects and therefore social media tools are crucial for their cooperation and work. With these results we could not accept the Hypothesis 1.

When testing the statistically significant differences between those employed in different sectors, we found some differences. Of statistical significance were the results from question 1: "Most of the information relevant for my work I get from social media", question 3: "I find information on social media reliable", question 4: "Security of social media is adequate" and question 7: "The company I work for uses social media to communicate with stakeholders and customers". Answers from these questions were significant according to the sector of employment of the respondents. Such results support Hypothesis 2.

As some social media tools have innovative features, as well as an increasing numbers of users, we suggest that more research is required on the demographics and customer base of these tools, and especially on documented user cases to determine how to best use them in the framework of European Projects. This would result in an increased acceptance of emerging tools to facilitate and optimize the communication, as well as the work process, when using social media tools as a communication channel for European Projects. Furthermore, future investigations could identify which features professional users/Project management teams need, or would like to have available for their work, while identifying potential others features that do not yet exist and could be relevant.

Appendix A. Survey questionnaire

nographic data . Sex	Less than 1 year.
Sex	
Sex	1-5 years.
Sex	○ 6-10 years.
	O More than 10 years.
female	Other (please specify)
mate	
Country of your origin	6. Sector of my employment.
	Sector of my employment.
	Private sector
Level of formal education	Public sector
Secondary Education	O NGO
Bachelor's Degree Master's Degree	University or Higher educational institutions
Doctoral Degree	Other (please specify)
Other (please specify)	
Ourie (prease specing)	
. Your age group.	
Less than 25 years.	
25-40 years	
40-55	
Over 55 years	
2	
	10. Most of the information relevant for my work I get from printed and traditional media.
al Media in the Toolbox of European Project Management	Strongly agree.

Your social media preferences and opinions
7. Which social media do you use for private communication? (more than one answer is possible)
I don't use social media
Facebook
YouTube
Twitter
Google+
LinkedIn
Slide Share
Tumblr
Instagram
Pinterest
Other (please specify)
8. Have you recently changed which social media you use?
Yes
No
If YES, please specify.
9. Most of the information relevant for my work I get from the social media.
Strongly agree.
Agree.
Neutral.
Disagree.
Strongly disagree.

10. Most of the information relevant for my work I get from printed and traditional media. Strongly ages. Agree. Desagree. Strongly disagree. 11. Rank the following social media for private communication in order of your preference, 1 being your most preferered media. Facebook Fa		
Agree. Neutral. Disagree. Strongly disagree. 11. Rank the following social media for private communication in order of your preference, 1 being your most preferred media. Facebook Facebook Google+ Google+ Side Share Linkedin Instagram Tumbir Pinterest 12. Which device do you mostly use for participating in social media? Using a PC Using a mobile phone Using a tablet		
Neutral. Disagree. Strongly disagree. 11. Rank the following social media for private communication in order of your preference, 1 being your most preferred media. Facebook Twitter Google+ Side Share Linkedin Instagram Tumbir Pinterest 12. Which device do you mostly use for participating in social media? Using a PC Using a mobile phone Using a tablet	Strongly agre	e.
Disagree. Strongly disagree. 11. Rank the following social media for private communication in order of your preference, 1 being your most preference media. Facebook Tutter Google+ Slide Share Linkedin Instagram Tumbir Pinterest 12. Which device do you mostly use for participating in social media? Using a PC Using a mobile phone Using a tablet	Agree.	
Storagy disagree. 11. Rank the following social media for private communication in order of your preference, 1 being your most preferred media. Pracebook Twitter Google+ Stide Share Linkedin Instagram Tumbir Printerest 12. Which device do you mostly use for participating in social media? Using a PC Using a mobile phone Using a tablet	Neutral.	
11. Rank the following social media for private communication in order of your preference, 1 being your most preferred media. Instant preferred media. Pacebook Twitter Google+ Stide Share Unkedin Instagram Tumbir Pinterest 12. Which device do you mostly use for participating in social media? Using a PC Using a mobile phone Using a tablet	Disagree.	
most preferred media.	Strongly disa	aree.
most preferred media.		
	inost preteneu	D
Coogle+ Coogl		Facebook
Silde Share Silde Share Linkedin Instagram Ins		Twitter
Silde Share Silde Share Linkedin Instagram Ins		
Linkedin Linkedin Instagram Tumbir Pinterest Li. Which device do you mostly use for participating in social media? Using a PC Using a noblie phone Using a tablet		Google+
Instagram Insta		Slide Share
Tumbir Tumbir Pinterest Using a PC Using a aptop Using a mobile phone Using a tablet		LinkedIn
Tumbir Tumbir Pinterest Using a PC Using a aptop Using a mobile phone Using a tablet		-
Pinterest Pinterest Which device do you mostly use for participating in social media? Using a PC Using a laptop Using a mobile phone Using a tablet		Instagram
12. Which device do you mostly use for participating in social media? Using a PC Using a laptop Using a mobile phone Using a tablet		Tumbir
Using a PC Using a faptop Using a mobile phone Using a tablet		Pinterest
Using a laptop Using a mobile phone Using a tablet		5
Using a laptop Using a mobile phone Using a tablet	12. Which devi	ce do you mostly use for participating in social media?
Using a laptop Using a mobile phone Using a tablet	Using a PC	
Using a mobile phone Using a tablet	Using a lapto	
Using a tablet	-	
	<u> </u>	
Please specify of comment your preference		
	Please specify or c	omment your preference

5

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