EMMA - Enriching Market solutions for content Management and publishing with state of the art multimedia Analysis techniques

Call identifier: H2020-ICT-2016-1

Topic: ICT-21-2016 - Support technology transfer to the creative industries

Grant Agreement Number: 732665

WP2 - WP Reach-out - Requirements Analysis and Outreach

Deliverable number	2.1
Title	Initial application scenarios and requirements
Version	1.0
Dissemination level	Public
Contractual deliverable date	31/05/2017
Actual Delivery Date	06/06/2017
Status	Final

EC Distribution

Project Partners	All project partners
Contributors	Alexandru Stan (IN2), Konstantina Geramani (IN2), George Ioannidis (IN2), Marzia Cerrai (FST), Sacha Alberti (FST), Ines Bachor (FBF), Nina Klein (FBF), Menno Liauw (VDJ), David Crombie (VDJ)

Table of contents

Disclaimer **4**

Executive Summary **5**

List of Abbreviations **6**

1. Introduction **8**

2. Stakeholder segmentation **8**

2.1 Methodology for stakeholder segmentation 8

2.2 Tourism vertical 9

2.3 Event organiser vertical 17

2.4 Publisher vertical 23

3. Activities towards the elicitation of user requirements **31**

3.1 Methodology 31

3.1 Initial Workshop 31

3.1.1 Approach 32

3.1.2 Outcomes 32

3.2 Internal consultation 36

3.2.1 Target group: Tourism 36

3.2.2 Target group: Events 37

3.3 Stakeholder interviews 38

3.3.1 Methodology 38

3.3.2 Outcomes of interviews with tourism stakeholders 39

3.3.3 Outcomes of interviews with event organisers 42

3.3.4 Outcomes of interviews with publishing stakeholders 44

4. Usage scenarios and EMMA platform **46**

4.1 EMMA Target Groups and Needs 46

4.2 EMMA Usage Scenarios 47

4.3 EMMA Platform 52

5. Conclusions **56**

Annex 1 - Stakeholder Interview Question Schedule **58**

Digital communication strategy of the organization 58

Online Content use for communication activities 58

Content management and social media management 59

© EMMA Consortium 2017-2018

Closing questions 60

Annex 2 - EMMA Informed Consent Form 61

List of Figures

Figure 1: Outbound tourism market size
Figure 2: Prevalence of 1-1 Social response in 2016 for airlines and hotels
Figure 3: Planned used of technology for events in 2017
Figure 4: Ranking of event marketing channels
Figure 5: Book publishing industry turnover in Europe
Figure 6: Turnover of the European publishing industry per country
Figure 7: Relative sizes of sectors within the publishing industry (in terms of net turnover)
Figure 8: Number of publishers
Figure 9: General methodology for conducting user requirements
Figure 10: Workshop snapshot: mapping exercise
Figure 11: Photo from the board during the workshop in Frankfurt

List of tables

Table 1: Arrivals and overnight stays for Tuscany regions
Table 2: High-level user requirements identified from the EMMA user studies
Table 3: EMMA Use Cases
Table 4: Initial set of system requirements
Table 5: EMMA stakeholders

Disclaimer

This document contains material, which is the copyright of certain EMMA consortium parties, and may not be reproduced or copied without permission.

All EMMA consortium parties have agreed to full publication of this document.

The commercial use of any information contained in this document may require a license from the proprietor of that information.

Neither the EMMA consortium as a whole, nor a certain party of the EMMA consortium warrant that the information contained in this document is capable of use, or that use of the information is free from risk, and accept no liability for loss or damage suffered by any person using this information.

Full Project Title:	Enriching Market solutions for content Management and publishing with state of the art multimedia Analysis techniques
Short Project Title	EMMA
Number and Title of Work Package:	WP2 - Reach-out - Requirements Analysis and Outreach
Document Title:	D2.1 Initial application scenarios and requirements
Editors (Name, Affiliation):	Alexandru Stan (IN2), George Ioannidis (IN2)
Work Package Leader (Name, Affiliation):	Alexandru Stan, IN2

Copyright Notice

© 2017-2018 Participants in the project EMMA

Executive Summary

This deliverable reports on the activities carried out in T2.1 and T2.2 and presents the initial outcomes of T2.3, i.e. the first identified usage scenarios for the EMMA verticals and their respective requirements.

The EMMA project conducted a three phased approach to gather user requirements that consisted of a project internal workshop, a project internal stakeholder consultation and carrying out structured interviews with external stakeholders. To this end, we first segmented the possible application domains of EMMA into tourism, events, and publishing. For each of these application domains, we conducted a thorough analysis of the current market situation and tested our assumptions first internally and then externally. We have carried out 61 interviews in total, of which 26 were with stakeholders from tourism, 13 with event organisers and 22 with publishing stakeholders.

The work led to a sound and externally verified priority list of user needs and requirements for the EMMA platform. Those include the need to:

- Understand and better promote what is happening around the core stakeholder activities
- Closer interaction and networking with core stakeholders
- Differentiate between user-generated content and content produced by the core stakeholders themselves
- Target the message more efficiently, to both user profiles and media available
- Organise content in a more effective way
- Integrate tightly with websites and blogs
- Support more creative, visual and engaging storytelling
- Publish more efficiently and become more time effective
- Have better ways to filter out the noise of social media
- Aggregate conversations around events, places and topics
- Provide highly specialised dashboards and analytics

Based on the above user needs and requirements we elaborated functional requirements of the EMMA platform.

© EMMA Consortium 2017-2018

List of Abbreviations

Abbreviation	Description
AIE	Associazione Italiana Editori (Italian Publishers Association)
B2B	Business to Business
B2C	Business to Consumer
CMS	Content Management System
DIY	Do it yourself *(travellers)*
DMO	Destination Management Organisation
Dx.x	Deliverable x.x
FEP	Federation of European Publishers
EMO	Event/Festival Management Organisations
EPO	Event/Festival Promotion Organisations
EV	Event/Festival venues and locations
IBA	Interest-Based Audiences
ISTAT	Italian National Statistical Institute
IT	Information Technology
MICE	Meetings, Incentives, Conferences and Events
MSG	Marketing Strategy Grid
PR	Public Relations
SME	Small and Medium-sized Enterprise
SP	Service providers (security, logistics, catering, technical, ICT, cleaning)
SPA	Sponsors & Advertisers
SM	Related blogs and social media hubs
Tx.x	Task x.x
UCx	Use Case x

© EMMA Consortium 2017-2018

UGC	User Generated Content
UNWTO	(United Nations) World Tourism Organization
VIP	Very Important Person
WPx	Work Package x

1. Introduction

This deliverable reports on the activities carried out in T2.1 and T2.2 and presents the initial outcomes of T2.3, i.e. the first identified usage scenarios for the EMMA verticals and their respective requirements.

The main aim of the document is to present the work of the project in reaching out and engaging with stakeholders to elicit user requirements and update the EMMA platform architecture.

In this respect EMMA performed an initial market segmentation (primarily activities within T2.1) which is described in chapter 2 to identify groups of stakeholders and their project-related needs.

Chapter 3 presents the activities that the EMMA project carried out to derive user requirements (T.2.2), while chapter 4 the resulting initial usage scenarios and requirements (T2.3).

2. Stakeholder segmentation

Stakeholders from the verticals of tourism and event organisers are the main identified target groups, and publishing has been explored as another vertical sector of potential interest.

The stakeholder canvas of the tourism, event and publishing sectors is quite complex, and there are a high number of potential stakeholders that should be part of EMMA's target group.

Each vertical was subjected to an initial and general market survey, while in a second round, the project team adopted a segmentation strategy in order to better specify market size and market needs.
For conducting a deep segmentation of the stakeholders canvas the strategy of a grid approach, was chosen.

2.1 Methodology for stakeholder segmentation

One of the first tasks has been the identification of a common methodology to segment stakeholders in tourism, event management and publishing sectors, being aware of the specificities that characterise each sector.

The chosen methodology consisted in creating a **Marketing Strategy Grid (MSG)**, *ad hoc* for each vertical sector (tourism, event management and publishing), where potential stakeholders were inserted, organised and divided into further market subsets or categories.

The subsets of each MSG were identified using given criteria and determined parameters:

- Needs
- Type of activity
- Interests
- role played in the vertical sector
- purposes

The MSG has represented the first tool to categorize stakeholders and identify their main features. Each stakeholder inserted in MSG was attended by a short description of activities and a list of websites and social channels.

MSG has allowed the project team to identify and choose the most significant stakeholders, that have been interviewed during the testing assumptions with feasibility studies phase (T.2.2), prioritising subjects in order to have the data as reliable as possible and representative of each category.

The next sections describe these verticals and the results from the MSGs in detail.

2.2 Tourism vertical

Global travel and tourism demand has grown consistently over the past two decades and shows very little signs of slowing, having doubled in size.

The elasticity of tourism demand seems to be inelastic to economic downturns (since the financial crisis in 2009, global overnight tourist flows have rebounded, growing at 16.5% in the three years to 2012[1]) and geopolitics, whether terrorism or political uncertainty have led to a veritable roller coaster ride for some of the various areas (North Africa, Middle East) and types of tourism (sun and sea)[2].

On worldwide scale the driving factor is definitely the role played by China in outbound tourism expenditure[3].

[1] http://www.amadeus.com/(...)/lse-report-travel-distribution-the-end-of-the-world-as-we-know-it.pdf
[2] http://blog.euromonitor.com/2016/08/travel-industry-faces-terror-challenges-threats(...).html
[3] UNWTO World Tourism Barometer and Statistical Annex, Volume 15, March 2017 (http://cf.cdn.unwto.org/sites/all/files/pdf/unwto_barom17_02_mar_excerpt_.pdf)

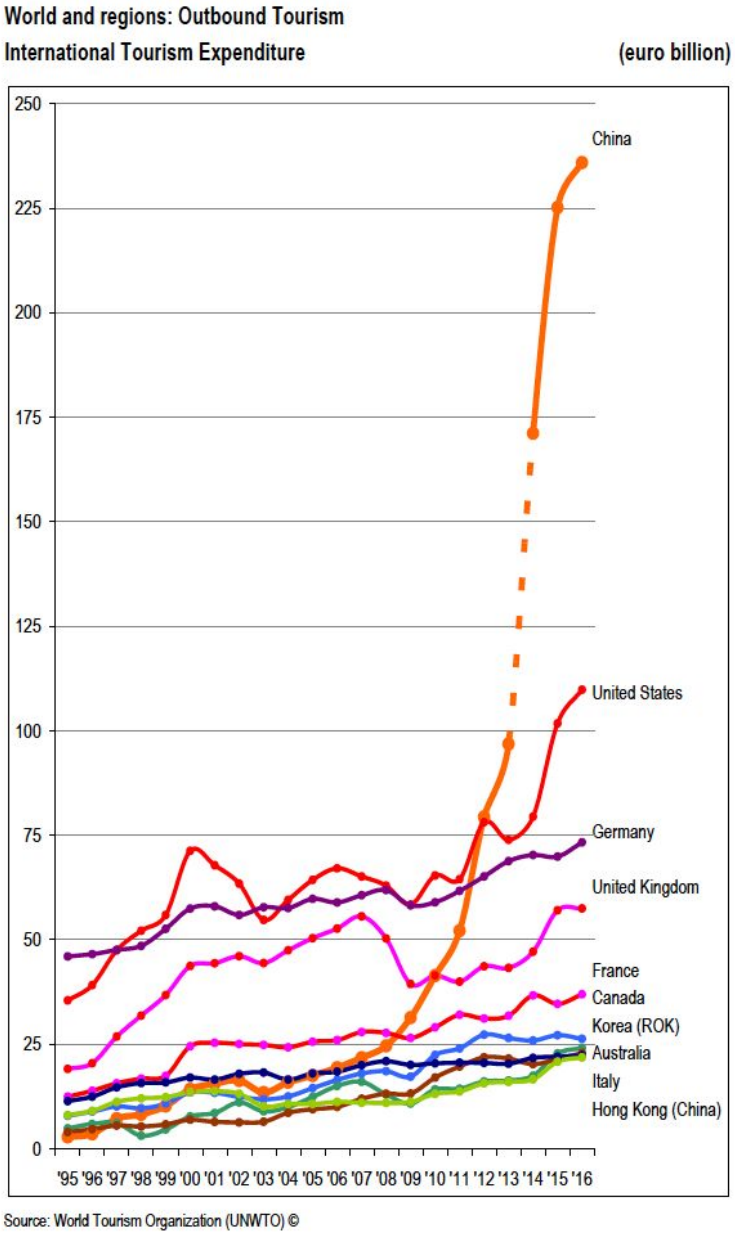

Figure 1: Outbound tourism market size[4]

This growth does not concern only tourism expenditure but the number of arrivals as well. Destinations around the world are likely to have welcomed one billion tourists last year, since the first nine months of 2016 they got 956 millions, 34 millions more than in same period of 2015 (a 4% increase)[5]. By 2020, it is expected that 1.5 billion international trips will be taken[6].

[4] Source: UNWTO World Tourism Barometer and Statistical Annex, Volume 15, March 2017
[5] UNWTO World Tourism Barometer and Statistical Annex, Volume 14, November 2016 (http://cf.cdn.unwto.org/sites/all/files/pdf/unwto_barom16_06_november_excerpt.pdf)
[6] http://blog.euromonitor.com/2016/08/travel-industry-faces-terror-challenges-threats(...).html

Italy confirmed these trends for its internal market: +2,3% foreign expenditure in Italy and +3,7% international arrivals[7]. Tuscany as well confirms its lead position, as in the following scheme:

Table 1: Arrivals and overnight stays for Tuscany regions

	2014		2015		% variation		Absolute numbers	
Regions	**Arrivals**	**Overnight stays**	**Arrivals**	**Overnight stays**	**Arrivals**	**Overnight stays**	**Arrivals**	**Overnight stays**
Veneto	10.597.803	41.306.004	11.213.267	42.213.738	5,8	2,2	615.464	907.734
Trentino Alto Adige	5.479.355	26.242.808	5.682.800	26.763.957	3,7	2,0	203.445	521.149
Tuscany	**6.821.947**	**23.154.147**	**7.062.693**	**23.947.505**	**3,5**	**3,4**	**240.746**	**793.358**
Lombardy[8]	7.297.664	19.677.303	8.129.895	21.733.272	11,4	10,4	832.231	2.055.969
Latium	6.758.348	20.675.157	7.053.862	19.655.212	4,4	-4,9	295.514	-1.019.945
Emilia - Romagna	2.524.689	9.822.981	2.619.025	9.612.200	3,7	-2,1	94.336	-210.781
Campania	1.949.634	8.176.727	2.318.535	8.672.439	18,9	6,1	368.901	495.712
Sicily	2.042.506	7.107.368	2.007.547	6.967.871	-1,7	-2,0	-34.959	-139.497
Piedmont	1.570.864	5.151.959	1.883.866	5.994.857	19,9	16,4	313.002	842.898
Sardinia	1.095.489	5.316.299	1.208.724	5.838.536	10,3	9,8	113.235	522.237
Liguria	1.808.941	5.321.684	1.967.660	5.737.319	8,8	7,8	158.719	415.635
Friuli-Venezia Giulia	1.049.572	4.132.771	1.104.118	4.304.970	5,2	4,2	54.546	172.199
Apulia	663.713	2.547.305	730.122	2.675.795	10,0	5,0	66.409	128.490
Marche	399.459	2.065.448	405.249	2.292.704	1,4	11,0	5.790	227.256
Umbria	687.215	2.136.726	709.031	2.177.649	3,2	1,9	21.816	40.923
Calabria	241.268	1.618.710	247.205	1.646.288	2,5	1,7	5.937	27.578
Val d'Aosta	377.245	1.211.654	409.652	1.283.293	8,6	5,9	32.407	71.639
Abruzzo	174.171	870.288	171.265	814.265	-1,7	-6,4	-2.906	-56.023
Basilicata	81.576	215.011	95.797	228.961	17,4	6,5	14.221	13.950
Molise	14.041	42.157	13.369	47.099	-4,8	11,7	-672	4.942

[7] *Turismo in Cifre* n°2, 2017 (http://www.ontit.it/(...)/Turismo_in_cifre_02_2017)
[8] Please consider here EXPO 2015.

ITALY	51.635.500	186.792.507	55.033.682	192.607.930	6,6	3,1	3.398.182	5.815.423

Source: Istat[9]

In this important scenario new technologies have represented a disrupting factor that changed tourist habits and tourism players approach in their branding and marketing activity.

Consumer expectations are changing radically. The combination of mobile devices, big data and artificial intelligence are revolutionising consumer expectations, leading to major disruptions in the travel industry[10].

In the digital age, tourists are DIY travellers (*Do It Yourself*), who plan, manage and book their travel online[11]. As travel is inherently mobile, travellers expect to use their mobile devices to enrich their travel experiences: being inspired by a destination, booking hotel, personalising their stay, interacting with social media conversations, sharing their experience with friends and family, suggesting locations to visit and products to buy.

«Social media has altered society in ways we could have never imagined[12]». Social networking sites have shaped the way travellers (especially Millennials) interact with friends and family, allowing to share personal experiences (in the form of visual contents) including while on vacation. New technologies not only change how people travel, but also how people view and think about travelling, influencing how we spend our leisure time.

Social media marketing influences destination image and expectations of trip experiences. «Given the fact that engagement with social media can take place at any point during the travel experience (pre-trip phase, during the trip, and post-trip phase), *tourism marketers can no longer ignore the role of social media without risking to become irrelevant*[13]».

This forces tourism and travel businesses to get smarter and adapt themselves as consumers expectations rise, in every aspect of a trip: from the promotion of a destination to how tourism industry stays in contact with customers in a 24/7 relationship.

[9] By http://www.enit.it/it/studi.html
[10] http://www.amadeus.com/(...)/lse-report-travel-distribution-the-end-of-the-world-as-we-know-it.pdf
[11] https://www.theguardian.com/(...)/2016/feb/29/technology-internet-transformed-travel-industry-airbnb
[12] Katherine Ann Fowler, #tourism: The Influence of Social Media on Visitor Experiences in Churchill, Manitoba http://scholarworks.umass.edu/cgi/(...)ttracanada_2016_conference
[13] Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. Tourism Management, 31(2), 179–188. http://doi.org/10.1016/j.tourman.2009.02.016 (p. 186);
Katherine Ann Fowler, #tourism: The Influence of Social Media on Visitor Experiences in Churchill, Manitoba http://scholarworks.umass.edu/cgi/(...)ttracanada_2016_conference

Travel and hospitality industry is nowadays aware that social media have created new approaches for sharing travel experiences, democratizing image creation and dissemination processes.

Content creation activity for travel and hospitality brands is radically changed because social media has created new influencers, able to inspire new potential tourists[14]. Travel influencers are changing the content curation activity and tourism players have to let their audience see themselves in the scene.

Social media channels are «increasingly used by consumers to ask for help, advice and troubleshooting, all without having to pick up a phone[15]» and customer expectations for a quick social response are on the rise. The increase in one-to-one social communication between brands and consumers is a response to this. «It's becoming clear that a well-planned social customer care strategy is a necessity for all modern brands[16]».

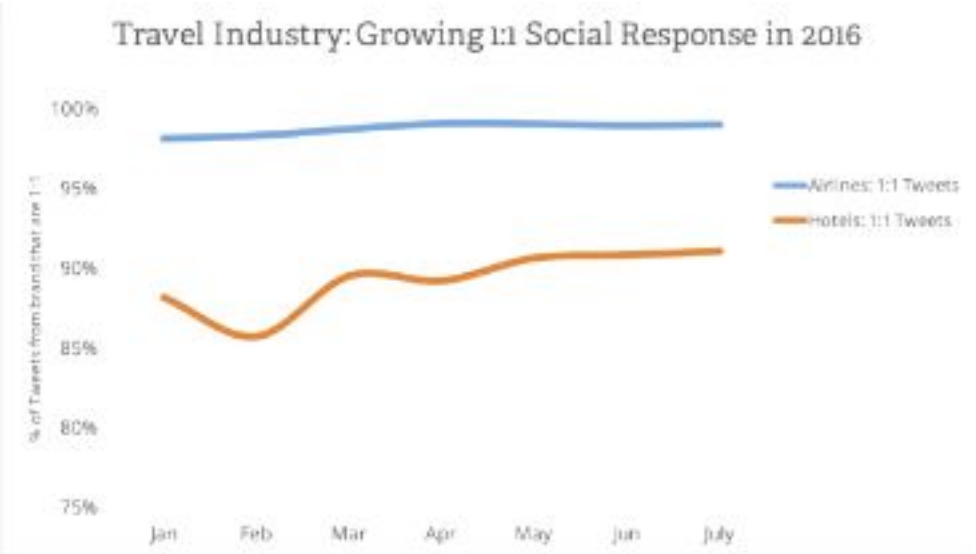

Figure 2: Prevalence of 1-1 Social response in 2016 for airlines and hotels[17]

Moreover, dedicated staff and a strong data-driven strategy can bring to desired outcome in terms of brand advocate and lead generation strategy.

Tuscany is part of the international and national trend in which DIY travellers increase and all the tourism players have to adapt to technological and social changes.

[14] http://marketingland.com/social-revealing-new-world-travel-industry-189980
[15] *Ibidem.*
[16] *Ibidem.*
[17] Source: Chris Kerns, How social is revealing a new world for the travel industry http://marketingland.com/

Indeed, recently on May 2017, Tuscany Region presented some previews of its Tourism Strategy Plan and the new tourism portal. This demonstrates how destinations are being involved in several efforts to increase their positioning, in an attempt to respond to new tendencies.

Among the most interesting research data it is well worth highlighting those related to sales channels. Tourists who come to Tuscany are increasingly booking their online vacations, soon leading to the digital booking overtaking the offline ones. In fact, these two channels already split right the market. It's noteworthy to see that from the 50% of online bookings, the largest portion (34%) come from commercial portals while only the 16% directly from the website[18].

In order to give insights of this complex and evolving scenario, where EMMA potential stakeholders operate, we have identified seven categories for the tourism vertical[19]. The following categories represent the complex canvas of players which have an important and strategic role in promoting tourism destinations:

- Destination Management Organisations (DMOs)
- Web marketing agencies and consultants
- Corporate companies
- Cultural chains
- Research centers
- Travel blogs
- Local communities

Destination Management Organisations

DMOs are public or private organizations that play a key role in tourism promotion, managing marketing and branding of a territory in order to increase the numbers of visitors and develop their travel experience.

DMOs category includes subjects that work on three geographical level: region, province or wide area (consortium) and single-municipality. It collects stakeholders that could be identified as DMOs in traditional sense and organizations whose work consists of territory promotion for a more specific market (e.g.: Convention Bureau for meetings) and for a more specific aim (e.g.: Natural Parks for environmental conservation).

[18] http://www.toscanapromozione.it/magazine/toscana-previsioni-turismo-estate-2017/

[19] With regards to what described in the Communication Plan (D5.1: chapter 2.3 - Assessment of Target Group) categories were reduced from 8 to 7, including start-ups subjects into web agency and corporate because of more homogeneous features and a coherent clustering.

Since 2001, in Italy, tourism promotion was usually attributed to provinces (ex-APT, acronym for Tourism Promotion Agency). Recently, the re-organisation of local governments and attributions, with the remotion of province entities (not fully completed yet), determined another transfer from provinces to regions.

In the light of above, the most active and dynamic DMOs are the regional ones and it is well worth considering a relevant distinction between public/private nature (a public-private mixture, as abroad, has not completely developed yet).

Each geographical level presents different needs due to different skills and resources. The three geographical levels are very different in terms of specialization, competence and stability.

Usually regional level corresponds to the highest complexity with a wide area integrated vision including different assets and stakeholders. It has more opportunities to funding, high-skilled staff, long-term perspectives and ability to influence tourism policies.

Web Marketing Agencies and Consultants

Web Marketing Agencies and Consultants are private companies or freelance experts that work on behalf of third parties for digital communication commitments.

This category includes subjects that are able to affect tourism operators and to combine tourism and IT skills.

As necessary identification criteria were considered: competence in destination marketing, portfolio related to tourism (DMOs and public entities, tourist accommodation, etc.), and experience on (at least) regional level.

Market needs can be mainly addressed to clients requests, and secondarily for own corporate purposes. Web marketing agencies and Consultants represent peculiar stakeholders, as they could not have direct needs but at the same time they possess an in-depth knowledge of market needs.

Corporate

The corporate category consists of private (for profit) companies including the “classical” operators of tourism as Tourist Accommodation, Travel Agencies, Tour Operators, Meeting Industries and Magazines. It collects an extended range of stakeholders, that represent a different type of activities on a regional distribution.

Since this category represents the core activity of tourism sectors, it could include numerous and diverse subjects. For this reason we have inserted only subjects with strong digital activity, awareness and marketing activities that concern territory and destinations.

Their market needs vary from type of activities but the focus is on sales and disintermediation.

Cultural Chains

Cultural Chains are public or private organizations that are involved with the promotion of cultural heritage of the territory.

This category includes Museums, Foundations and Art-Gardens concerning several fields of culture (history, arts, science, etc.).

The main purpose of these organizations is the conservation and promotion of cultural heritage, so their activities have relevant tourism impacts both as cultural attractions and as storyteller of the territories identity.

In regards to museums, it is important to specify that different properties (on public side: state, universities', municipal; otherwise ecclesiastical or private) have relevant impacts on their digital marketing activity. For instance, government museums (MIBACT- Ministry of Cultural Heritage and Activities and Tourism Ministry) have centralized functions and IT providers (CMS for website).

Only recently, due to a change of cultural paradigm from conservation to enhancement, then fostered by a ministerial reform in 2014, the major museums were granted greater autonomy.

Where possible, it was preferred to insert museum networks because of aggregate data and above all common marketing activities that some members might not afford individually.

Research Centres

This category includes universities and advanced studies (postgraduate diplomas) research centres.

This sector is not directly involved into destination promotion, but DMOs and the other subjects might be influenced by these studies results. In addition, their competences in such field offer insights and perspectives of tourism.

Social media are often the object of study and this may give a different point of view from users’.

In this sense their market needs could be related to analysis tool and functionalities.

Travel Blogs

This category includes travel blogs that frequently write about Tuscany (Tuscan authors or not) selected for different target audience (e.g. couples, families, sportive people, etc.).
They might be also involved in destination promotion contributing to storytelling campaigns as influencers.

Blogs are most commonly managed individually by a blogger, whose needs are particularly focused in terms of content and copywriting.

Local Communities

Local Communities are not institutional subjects, nor for-profit companies that arise from bottom-up initiatives.

The category includes subjects from the so called third-sector and voluntary sector with specific aims for the promotion of a specific point of interest (e.g.: town, local products, attractions, activities).

The motivation of including this category was its ability to involve and engage with locals. Given the wide dissemination of these subjects, it was necessary to set as minimum requirements: the ability to affect a wide area, their digital activity, and the relationship (even the non-direct) to tourism.

The main criteria was to have a sample concerning different fields: culture, environment, products…

Their needs, often due to limited resources, concern all fundamental activities (e.g.: how to boost their visibility, how to build and nurture an engaged community of brand advocates).

2.3 Event organiser vertical

The International Association of Professional Congress Organisers (IAPCO)[20] defines MICE as:

- Meetings
- Incentives
- Conferences
- Exhibitions

[20] See https://www.cbi.eu/market-information/tourism/mice-tourism/

The main purpose of MICE trips is business and they bring large groups together for a specific purpose. Other common terms are 'Meetings industry' or 'Events industry' and MICE can be considered a sub-segment of business travel, yet it can also involve a leisure component.

Developing MICE can significantly contribute to the development of a tourism destination, such as:

- stimulating the tourism economy, especially in low season,
- developing of better tourism infrastructure,
- increasing tourism expenditure, MICE travellers generally spend more money than leisure travellers, in less time,
- converting MICE travellers to leisure travellers. MICE travellers can extend their stay, which can be accompanied by their partner, or even return with their family or friends on a different trip.

In recent years, the MICE (Meetings, Incentives, Conferences, and Events) market has been growing constantly and the events' industry is now one of the core drivers of growth[21] in tourism. Event and exhibition organisers are aware of the vital function of technology and social media in communication and marketing. Europe is the world leader in the exhibition sector, with 48% of the world capacity of exhibition venues and with 44% of the annual exhibitions taking place globally. In total 1.4 million exhibiting companies welcome 260 million visitors per year[22] in Europe.

Europe is a large source market for MICE. Germany, the United Kingdom and France are especially interesting markets for MICE suppliers. Great potential lies in collaboration and cooperation between event organisers, tourism and destination management stakeholders allowing joint initiatives that are mutually compatible in terms of capacity building, but also in terms of marketing and branding, an overlap of significance for the EMMA platform. An emerging trend for MICE buyers is to be more demanding in terms of digital connectivity and content personalisation with tailored and flexible packages. This move towards a more proactive approach appears to be gaining momentum, as with other sectors in their deployment of hyper-personalised content.

Emerging Trends

In order for the events and exhibitions to be successful in their marketing and PR campaigns,

[21] See World Tourism Organisation Report, p. 4, http://www.imexexhibitions.com/media/350548/UNWTO_meetingsindustry_am_report%20%282%29.pdf

[22] European Exhibition Industry Alliance, website, http://exhibitionalliance.eu/europeanexhibitionindustry/worldleader

social media campaigns as part of their overall PR and marketing campaigns have proven to be vital. These campaigns are used in all phases of an event:

- **Before the event**, as part of overall marketing & PR campaigns. The goal here is to target specific target groups who cannot be reached by other, more traditional marketing forms such as advertising or the printed press. Top influencers and early adopters in most vertical sectors tend to be heavy social media users, and these target groups are vital for the success of marketing campaigns. This is why social media takes up an increasingly large budget in marketing departments mostly in the form of human resources, but also in the form of ICT/software for multimedia analysis deployed. Social Media is also becoming the preferred channel of communication for clients and customers regarding all sorts of different motivations: a question regarding the sales team may be placed on Facebook or Twitter, and so might be a complaint or a warning. Very different content thus need to be managed and dealt with by social media managers.
- **During the event**, as part of overall marketing and PR campaigns. The goal here is to animate a lively exchange between target groups, and to project the image of a lively event to persons who do not attend the event, but who are potential customers. Social media campaigns target specific topics and target groups, e.g. a fashion fair might organize a competition for the best outfit on the visually oriented platform Instagram, or an event like Re:Publica in Berlin might search for the most influential tweets. The outcomes of such campaigns are then usually displayed at the events on large screens and made public on their website and social media channels.
- **After the event**, as a part of the overall PR and marketing campaign. The goal is here to follow-up the event, to provide participants with additional material (photos, blogs, conference reports, participant's lists, outcomes of competitions etc.) and to engage them for a future participation. Social Media is also an important part of the event's internal evaluation, in the form of a qualitative survey of the most influential or successful campaigns, or in the form of a quantitative evaluation where key factors such as clicks, views, follower, likes etc. are measured and compared to the years before.

We believe that this trend will continue and that event organisers will start offering event coverage and engagement features themselves in order to keep the audience on their own web sites and not dilute revenues from advertising and sponsoring. By way of example, we have focused on the emerging trends regarding tools and ICT in the UK event industry sector as this illustrates some relevant issues.

Most of the information is taken from the recent Eventbrite industry 2017 report.[23] The average investment in tools and technology per event across all organisers in the Eventbrite study was £4,431, a 25% increase on last year's average of £3,535. While professional event organisers had the highest average spend on technology at £8,536, SMEs weren't far behind with average budgets of £7,623. Freelancers spent the least on tools and technology, with an average budget of £984, while charities averaged £1,332 and larger businesses spent £3,679 per event. 23% of all organisers thought their budget for tools and technology would increase next year, with professional organisers most bullish (36%) and larger business least likely to invest more. This is further reinforced in a recent report on the Conference and Incentive sectors, where 61% of corporates said that they plan to use more apps for events, while 26% of agencies are investing in mobile app development[24].

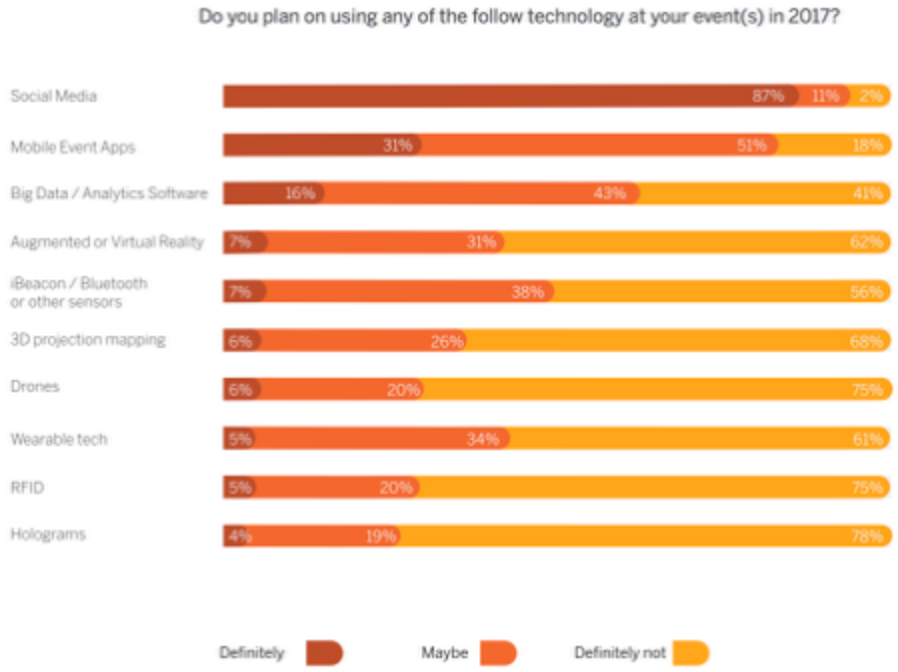

Figure 3: Planned used of technology for events in 2017

It can be seen that social media has become almost ubiquitous for this sector. Mobile event apps hold their position as the second technology most likely to be used by event organisers, with a slight increase in those considering it. 'Big Data and Analytics' saw another gain this year in terms of organisers actively evaluating it (up from 37% to 43%), but despite a lot of interest, this hasn't

[23] Eventbrite (2017) 3rd Annual Pulse Report: Event Industry Report 2017, UK
[24] C&IT (2016) State of the Industry Report 2016, Conference & Incentive Travel, UK

translated into adoption, with it holding steady at 16%. These findings are particularly interesting for the EMMA platform.

Across almost every category, professional event organisers were the most likely to be using tech in their events this year, while charities remain the least likely to adopt technology. But having noted this, the use of event-based fundraising is also increasing and could represent a niche focus. A recent UK report[25] surveyed 600 organisations and noted that an overwhelming majority of organisations (87.11%) have seen income from events rising or staying the same. The biggest proportion saw income rising (56.03%) with 11.94% saying that income has risen significantly. Similarly, the majority of charities (67.33%) are planning to do more events in future with nearly half planning to run more different types of events in future.

A key recommendation was the need to assess whether you need to invest in your technology and data. As one respondent noted:

> *"Know your audiences and have the data you need in order to personalise your communications. With diverse means now of contacting people and having to send your brand out in so many different ways, you need to get on top of people's preferences rather than using a 'one size fits all' approach. But at a more basic level, make sure you make an ask after the event – sometimes people just need to be asked."*

Figure 4: Ranking of event marketing channels

[25] Fluskey, D. (2015) Closing The Loop: A research report into events fundraising in 2015 and the importance of communications in creating active and engaged life-long supporters, Institute of Fundraising, UK

From the Eventbrite 2017 study, email is seen as the most effective marketing channel by organisers for the third year in a row, with the second most effective channel being free social media with 24% of the vote, and 'word of mouth or referrals' being voted the third most effective channel.

In terms of where organisers are looking to invest more time (or money), social media remains the most popular channel, with 65% planning on using it more again in 2017, though this is down slightly on the previous year. Partnerships is the channel next most likely to be used more by organises over the next 12 months, bumping referrals / word of mouth down from 2nd spot last year to 3rd.

PR and Media has seen a big jump in interest, with over half of organisers looking to utilise it more in their promotional campaigns in 2017, compared to 42% the previous year.

As you can see, the majority (53%) of organisers use 3-4 channels - most likely email, social, and word of mouth. This is a slight decrease on last year, where 54% were using 3-4 channels. However there has been an increase in the number of organisers using 5-6 channels, from 22% to 25%. Digging a little deeper into the data, we see that unsurprisingly professional event organisers were more than twice as likely as any other organisers to utilise 7 or more marketing channels.

In order to give insights into the market potential of EMMA stakeholders, we identified six categories for the events vertical. The following target segments and users were identified as the most relevant stakeholders within the events vertical:

- EMO: Event / Festival Management Organisations
- EPO: Event/Festival Promotion Organisations
- IBA: Interest-Based Audiences
- EV: Event/Festival venues and locations
- SP: Service providers (security, logistics, catering, technical, ICT, cleaning)
- SPA: Sponsors & Advertisers
- SM: Related blogs and social media hubs

EMO: Event / Festival Management Organisations

Some of these organisations are large but they are mostly SMEs. They are usually theme or sector oriented. A key characteristic of these organisations is the dynamic corporate culture, where there is often an extremely high peak load in the last weeks prior to the event or festival. During this period, the size of the team is often also exponentially increased.

EPO: Event/Festival Promotion Organisations

These are public or private organisations that promote a festival to increase the number of visitors. In this category we specifically look at marketing organisations with experience in the festival sector and with significant digital skills. These organisations often work on behalf of the EMO. They also often use tools and third party digital services. In addition to marketing organisations, there are also DMOs dedicated to the promotion of events. They also belong to this category.

IBA: Interest-Based Audiences

One central characteristic of events and festivals is that in most cases they attract people who have a strong common interest. Depending on the size and significance of the event or festival, this group of people can move around the world. This group also often includes people who feel connected to the event or festival, but are not physically present themselves.

EV: Event/Festival venues and locations

These are specialised event venues such as trade fairs, but also buildings that are used flexibly, such as co-workplaces with spaces rented outside, stadiums, etc. In addition, owners of sites also belong to the group. Often these are municipalities.

SP: Service providers (security, logistics, catering, technical, ICT, cleaning)

Often these organisations work with multi-annual framework contracts between suppliers and venues. These parties have the need to anticipate the size and movement of visitor flow.

SPA: Sponsors & Advertisers

These are public and private parties that commit themselves to a festival to approach the target audience and / or to associate their brand values with the brand values of the event or festival. There is often a strong dependency on the EMO from the sponsor.

SM: Related blogs and social media hubs

Events and festivals are almost always theme-specific. Each theme has an online community with associated blogs and social media hubs. They are the agenda determinants and opinion leaders within the theme and thus an important stakeholder for EMOs.

2.4 Publisher vertical

The Federation of European Publishers has recently published statistics on the European book sector which count amongst the most valid data in a market where valid data is rare[26]. In the

[26]The book sector in Europe: Facts and figures, Federation of European Publishers (FEP), 2017, p.2, website: URL: https://www.fep-fee.eu/The-Federation-of-European-844, accessed May 2017

foreword to the brochure, Henrique Mota, president of the FEP, says: "Book publishing generates a turnover of €22 to 24 billion (US$23.5 to 25.6 billion) per year in the European Union and European Economic Area alone, for a total market value of €36 to 40 billion (US$38.4 to – US$42.7 billion) — another testament to the fact that the majority of the world's top publishing groups are European-owned: six to eight of the top 10 publishing groups, according to the annual Global Ranking of the Publishing Industry)."

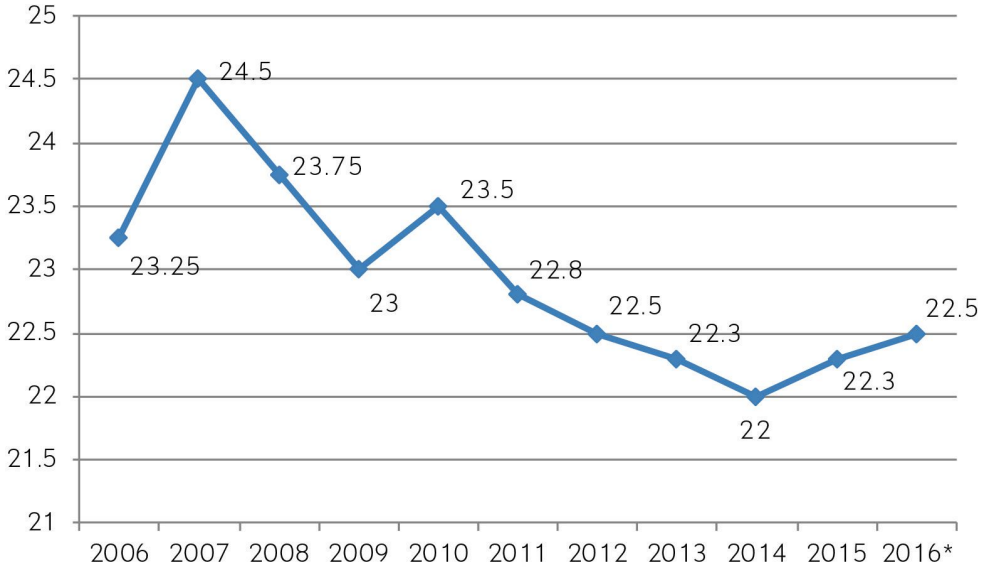

Figure 5: Book publishing industry turnover in Europe[27]

The following map shows the turnover of the publishing industry per country; it highlights of course a wide range of relative sizes and positions, from the largest markets (Germany, UK, France, Spain, Italy) to the smallest – but nonetheless relevant for local cultures and languages. Data refer to net publishers' revenues from book sales, including exports.

[27] Source: FEP Survey, in: Federation of European Publishers: Facts and figures, Federation of European Publishers (FEP), 2017 URL: https://www.fep-fee.eu/The-Federation-of-European-844, accessed May 2017

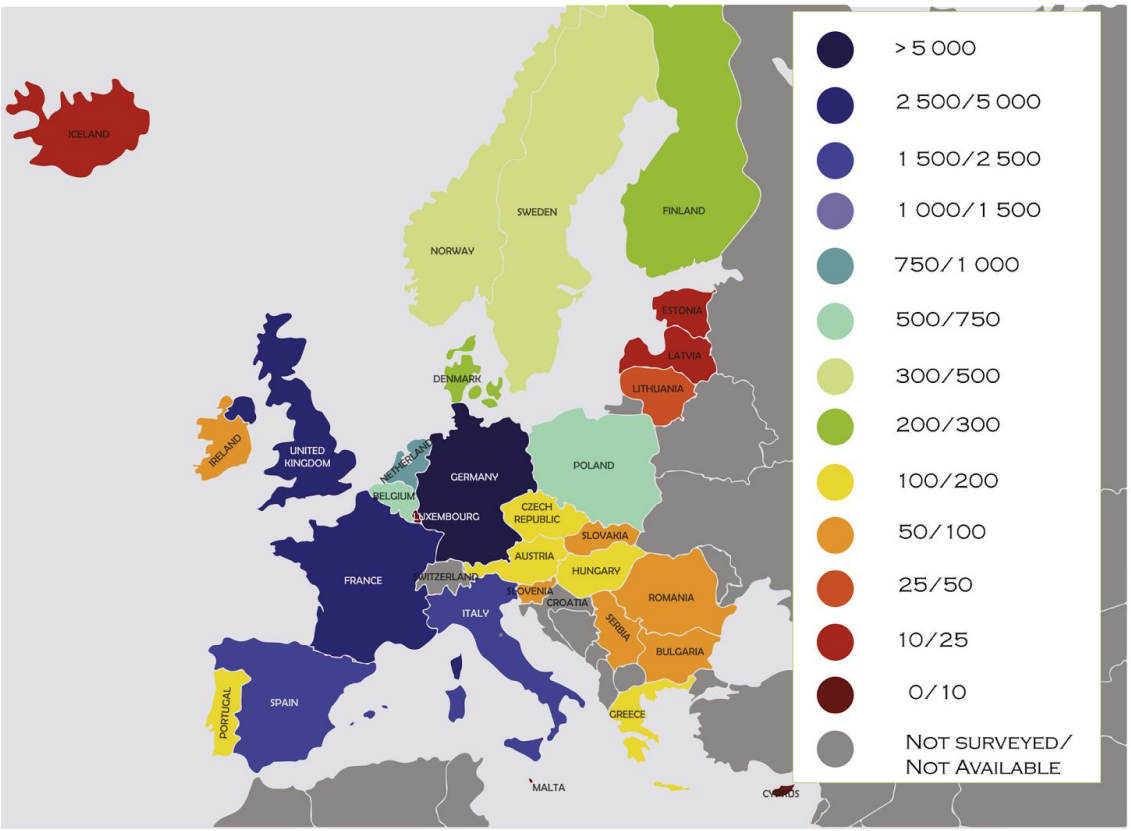

Figure 6: Turnover of the European publishing industry per country[28]

Among the FEP report's most interesting charts is one that runs from 2006 to 2015, revealing the relative sizes of sectors within the industry in terms of net turnover.

While consumer books (including children's books) represent around 60% of the market, another 40% of the revenues are generated by educational and academic books. Moreover, there are significant differences at national level: in some countries, especially in small linguistic areas or areas that share their language with much larger markets, educational publishing is often the backbone that supports most of the publishing industry, representing anywhere between one- and two-thirds of the whole publishers' turnover.

[28] Source: *FEP Survey, in: Federation of European Publishers: Facts and figures, Federation of European Publishers (FEP), 2017*

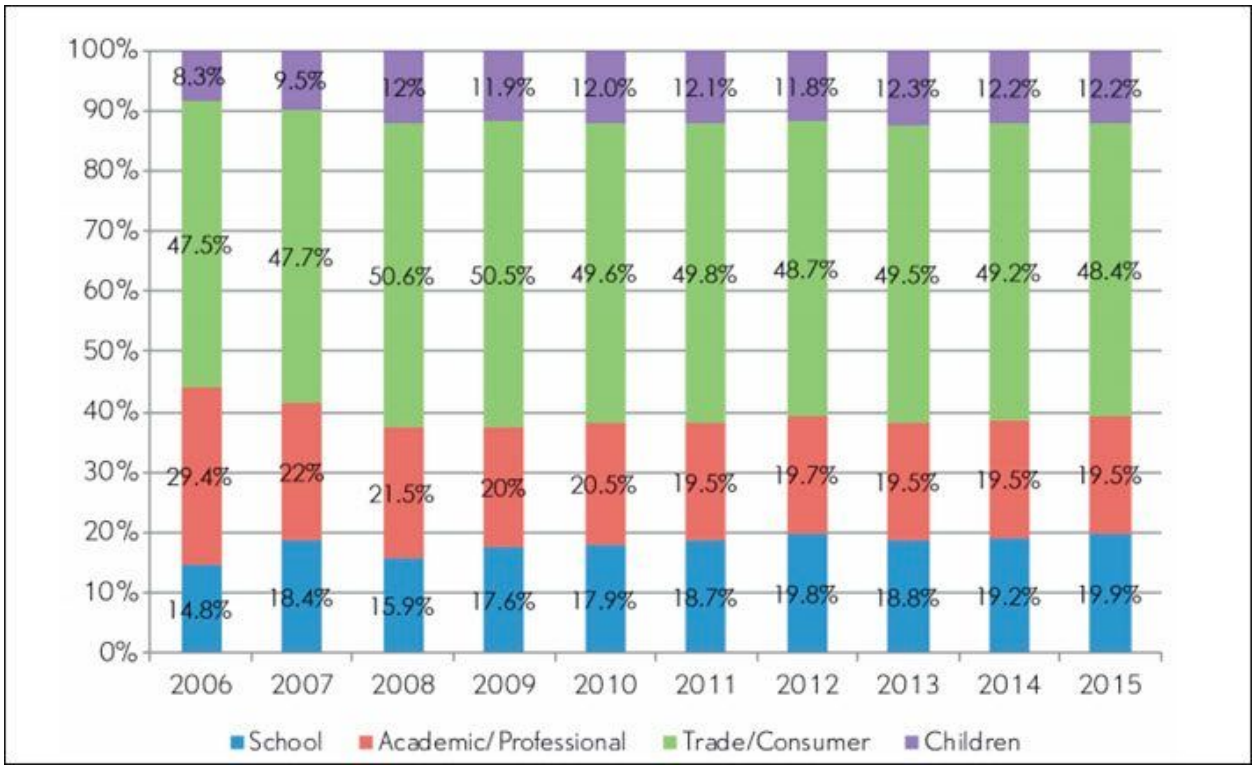

Figure 7: Relative sizes of sectors within the publishing industry (in terms of net turnover)[29]

According to Eurostat, a total of approximately 150,000 people were employed full time in book publishing in 2014, basically the same level as one year earlier. However, this is an area where it is more difficult to gather reliable data. The survey of FEP members also reveals stability in employment, including for 2015, and a longer term downwards trend along the crisis years. The entire book value chain (including authors – the European Writers' Council represents some 150,000 of them, booksellers – some 125,000 people work in specialised bookstores according to Eurostat, printers, designers, etc.) is estimated to employ, directly and indirectly, more than half a million people.

There are several national definitions of publishers, and criteria vary, also according to the size of markets. We have therefore decided to use Eurostat data as an attempt to provide a harmonised picture. The main message here is that the sector is made of a huge number of mostly small and very small players, and it is in constant evolution. FEP, through its members, represents more than 6,000 individual publishers, covering 75 to 90% of the respective national markets.

[29] Source: FEP Survey, in: Federation of European Publishers: Facts and figures, Federation of European Publishers (FEP), 2017

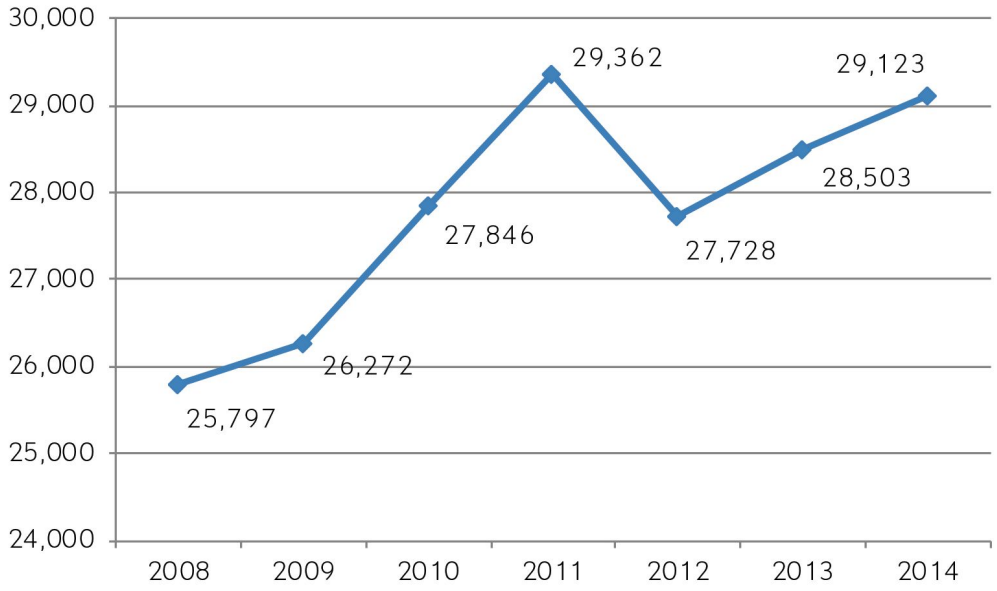

Figure 8: Number of publishers[30]

In order to give insights into the market potential of EMMA stakeholders, we have identified six categories for the publishing vertical. The following target segments and users were identified as the most relevant stakeholders within the publishing vertical:

- Publishers (small and medium-sized, but also large companies)
- PR and communication agencies and consultants specialised in promoting literary products and events
- Trade associations
- Trade magazines
- Cultural institutions
- Event organizers for B2B and B2C events (conferences and literary festivals)

Publishers

Publishing houses with in-house communication departments managing their digital communication and social media activities themselves were identified as one potential target group.

Publishers use digital communication to achieve various goals: for instance, to promote products, authors and events, and to reach out to target groups, e.g. by creating dedicated websites and

[30] Source:. Eurostat: Publishing activities, website: URL http://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Publishing_activities_statistics_-_NACE_Rev._2, accessed May 2017

apps for selected target groups. Often, PR departments organise a huge amount of events per year such as readings and discussions with their authors, mostly in cooperation with bookshops or literary centres.

Social media is very important to promote these events and is more and more becoming a normal part of the PR and marketing activity of publishing houses, and is also applied in sales departments. This is the case, because social media allows publishers to get into direct contact with their customers - the readers. In some countries, direct sales from publishing houses are becoming more and more the norm, also thanks to social media. This is not the case in countries like Germany and Austria, where a strong bookselling sector exists. Social media use thus varies from country to country.

In general, one can say that especially larger publishing houses could have an interest in investing into a tool like EMMA, as the budget for PR and marketing in smaller publishing companies is usually too low to allow for an investment. Yet, also SMEs in publishing might be potential target customers of EMMA, as their need in a cost-cutting and efficient tool is even bigger than in large companies, where resources are in general more ample.

PR and communication agencies and consultants

Another target segment identified consists of agencies specialised in communicating and promoting literary products, authors, prizes and/or events. Their clients include for example publishing houses and organisers of literary prizes.

One main aim of social media use and digital communication activities for these agencies is communicating and spreading the contents of their clients, as well as to present their own company. For agencies, it is important to keep brand consistency of their respective client, i.e. they need to adapt a different tonality and branding to each of their clients, also on social media. Moreover, their own corporate communication needs to be distinct again from that which they do for/ on behalf of their clients.

This is a challenge in which EMMA could certainly help. As applies to publishers, also agencies and consultants often organise events and use social media to accompany them.

Trade associations

Organisations for publishing companies, booksellers and the intermediate book trade shape developments on the book market and the book sector, encouraging companies to cooperate fairly, being committed to achieving adequate general political and economic conditions, and

drawing attention to books and reading[31]. Thus, trade organisations play an important part within the international publishing landscape.

One of the main objectives of a trade organisation's digital communication strategy is enhancing visibility and reaching out to stakeholders. Two stakeholder groups are most important in that: policy stakeholders and internal stakeholders, i.e. members of the associations. On a third level, the broader public also plays a role, when it comes to indirect lobbying activities or to general activities, such as promoting reading.

A good example for the use of social media for reading promotion is the Italian Publishers Association (AIE) with the reading promotion "Io leggo perche"[32]. Trade associations often organise conferences and events in order to rally their stakeholders. A good example isthe "Buchtage"[33] (Book Days) event in Berlin, organized by the German Publishers and Booksellers Organisation (Börsenverein des Deutschen Buchhandels).

Trade magazines

Trade magazines within the publishing sector cover trends, people, and companies shaping the global book industry. Read by different groups and players within the publishing industry, such as publishers, literary agents and scouts, authors, service providers and publishing industry specialists, they serve to provide information on global book publishing[34].

Digital channels are used to communicate with the trade magazines' readers and the network of publishing professionals in general. Trade magazines increasingly understand themselves also as event organisers, or co-organisers, and create a brand around them. A good example of this is the Future Book Conference by the UK magazine Bookseller: see: http://www.thebookseller.com/futurebook-conference.

Cultural institutions

Cultural institutions organise and promote cultural events, including a vast range of literary events, such as readings, workshops and panel discussions. Promoting cultural programs is a main objective of the use of social media by cultural institutions. These institutions include publicly funded institutions, such as literary centres ("Literaturhäuser" in German). The website of

[31] Cf. German Publishers & Booksellers Association, website: URL: https://www.boersenverein.de/de/394814, accessed May 2017
[32] http://www.ioleggoperche.it/it/home/
[33] Buchtage Berlin, URL: https://www.boersenverein.de/buchtage, accessed May 2017
[34] Cf. *Publishing Perspectives*, website: URL: https://publishingperspectives.com/about/ , accessed May 2017

a network of European literary centres, Halma[35], lists more than 26 of these institutions in Europe - most of them rely also on social media for their PR and marketing.

Event organisers for B2B and B2C events

A range of organisations and companies specialised in organising events for publishing professionals - such as conferences and fairs - and for consumers - such as readings or events revolving around the reading experience.

These companies can be attributed to both categories of event organisers and stakeholders from the publishing industry and are thus considered a relevant target group of the EMMA project. As mentioned above, almost all of the stakeholders in publishing are also active in the field of event organisations, as events are one instrument in the PR and marketing mix, and go hand in hand with the use of social media. Increasingly, these events are not only physical, with an added PR and marketing layer of social media, yet the events turn virtual, or semi-virtual. This can encompass not only webinars, but whole conferences on social media, similar to the example of the "Virtual Conference"[36], organised by the London Book Fair in 2016.

[35] Halma - European Network of Literary Centers, URL: http://www.halma-network.eu/en.html, accessed May 2017

[36] Website: Virtual Conference, London Book Fair, URL: http://www.londonbookfair.co.uk/virtualconference; accessed May 2017

3. Activities towards the elicitation of user requirements

3.1 Methodology

EMMA has followed a targeted approach for conducting user requirements studies that is based on the following three steps (see also Figure below):

- **Internal project workshop** to kick-start activities and gather input from participating user organisations. The main aim of this step is to bring all partners on the same level and compile a first prioritised list of requirements and assumptions about what users might want to be able to do with the EMMA platform
- **Consultation with internal stakeholders** to reflect and extend on the input required with internal stakeholders in the partner organisations e.g. marketing department, destination manager. The main aim of this step is to refine the list of requirements and gather input on what the project team has missed in the first step.
- **Interviews with external stakeholders** to verify and establish the list of requirements to start elaborating system specifications. The main aim of this step is to externally verify the established requirements and extend them before the actual EMMA platform implementation phase.

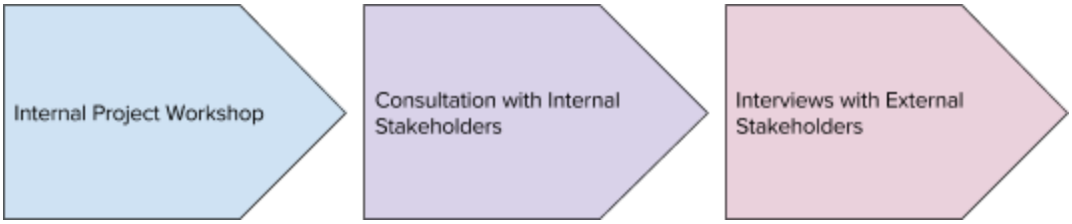

Figure 9: General methodology for conducting user requirements

The next sections describe each of these steps in more detail, presenting the rationale and the outcomes of each of them.

3.1 Initial Workshop

In order to kick-start the technical activities of the project and initial workshop towards the elicitation of user requirements has been carried out during the project kick-off meeting In Frankfurt on 18/01/2017. This workshop leveraged the know how of the end-user organisations that are part of the project (i.e. FBF, FST, VDJ) and the participation of relevant staff in the workshop. We present below the methodology that was used and the outcomes.

3.1.1 Approach

The first part of the workshop addressed stakeholder analysis and stakeholder mapping as regards events and festivals. Participants were asked to describe their main requirements and the perceived needs of themselves as organisers and of the other stakeholders. The second part of the workshop was based on a discussion around which functionalities and services would best meet the needs of their organisation and their related stakeholders. In the final part of the workshop, a mapping exercise showed where the main topics could be merged and thereafter prioritised. A concluding discussion was also held on the feasibility of combining the main prioritised functionalities into a strong EMMA proposition.

Figure 10: Workshop snapshot: mapping exercise

3.1.2 Outcomes

The main outcomes of the workshop is a prioritised list of end-user requirements (wishes and needs) expressed from the perspective of different types of end-users.

Figure 11: Photo from the board during the workshop in Frankfurt

The different types of end-users considered are:

- **Consumers**: individuals that bought at ticket to an event / a tourist
- **Press/Bloggers**: traditional and online media representatives
- **Businesses**: Private stakeholders, such as hotels and shops for tourism, or venue managers and exhibitors for events
- **Main users**: primary users of the system (e.g. FBF, FST)
- **Internal stakeholders**: important stakeholders from within the organisation which is the main user (e.g. specific department of main user)

For each of these types of users we present below the most important needs identified. To be noted that according to the methodology of the exercise, the expressed needs do not take into account the technical feasibility of having such a solution.

Consumers	
Priority	**Need**
☆☆☆	Identify events and places according to personalised interests
☆☆	Standard social media cockpit for events and destinations
	Related information to upcoming events (no old data) and insider information (e.g. where locals go)
	Easy access facilitated by good search; Connection to local attractions
	What other Points of Interest (POIs) are out there besides the very well known ones (i.e. what are the “hidden gems”)
☆	Special offer for me
	Sharing experiences
	Tripadvisor for events

Press/Bloggers	
Priority	**Need**
☆☆☆	Find nice content (for new stories)

Businesses	
Priority	**Need**
☆☆	Figure out new ways to get more people to visit the region
	Hook on to major communication campaigns easily
	Gain more visibility
	Meeting the right people (B2B, B2C)
	Do business
☆	Interactive publisher/exhibitor catalogue
	Interface to booking systems (e.g. ticket booking, etc)

© EMMA Consortium 2017-2018

	Get feedback
	Get media attention

Main users	
Priority	**Need**
☆☆☆	Identify influencers
	Identify and forecast trending topics
☆☆	Attract new visitors
☆	Capture, organise and present the best social media content about my event/destination
	Publish a message to different channels in one click
	Get real-time feedback
	Get media attention

Internal stakeholders	
Priority	**Need**
☆☆☆	Save time spent on social media
☆☆	Crisis management
☆	Post event management
	Be proud of what you are doing

Note that the needs that were identified but did not receive any vote from the workshop participants were not included in the above tables. These needs that did not get any votes, are not necessarily irrelevant, but simply of lower priority.

From the needs identified it can be concluded that EMMA users (i.e. event organisers, DMOs) are first and foremost interested to **become more efficient in how they spend their resources on social media**. To save time, they need a way to **filter out the noise of social media** so that most meaningful conversations and important people can be easily spotted.

The understanding of the needs of the Consumers, Businesses and Press/Bloggers provides a good guideline for the type of value services that the EMMA users would need to offer to their stakeholders. From these we can conclude that an ideal system would be able to **organise in a smart way heterogenous content (which can be user generated and must be up to date)** such that consumers can more easily find the information that is most relevant to their interests, while business stakeholders can gain more visibility at a lower cost and increase their business output.

3.2 Internal consultation

3.2.1 Target group: Tourism

An internal consultation was held by FST on 20/02/2017 with FST Digital Communication Manager, which enabled project team to make a first collection of needs and challenges that DMO daily faces in promoting a destination. The main points raised were:

- **Sentiment analysis** is an important and central tool for tourism: beauty is not a sufficient requisite for a touristic place. It could be useful to know the tourists opinion and experience on services, activities, kindness of venue managers, etc
    - Create relationship between owned contents and rating, opinions and user generated contents
    - Segment social conversation identifying different target of users
- **Video/image analysis technology** is crucial for FST social media activities
    - Video and image analysis could be used to identify venues, attractions, tourist areas that generate a large number of video/photo contents
    - Semantic analysis of visual content is useful in the identification of the effective and high impact topics used by visitors
- **Aggregation** is important
    - Gather different places that belong to the same region (**territorial aggregation**), for example Chianti region includes several towns and places of interest like Castellina in Chianti, Montefioralle, Greve in Chianti. The storytelling of a single place has to be related to a bigger geographical context.
    - Investigation around a point of interest has to be expanded within a 30/40 km radius
    - Aggregated content must also be segmented into **thematic groups**, e.g. gastronomy, mountains, cycling.

Other important aspects to be considered are:

- **Multilinguality:** both italian and english are used in communication
- **Near real-time collection** of the content, experiences, opinions generated by consumers about events/manifestations that will be held in a place
- **Recommendations** to establish relationships between content posted, e.g. "customers who are interested in this venue also is interested in ..."
- Support in **finding the most effective language** to use for specific channels and profiles.
- **Find wrongly-spelled** toponyms and relate them together.

3.2.2 Target group: Events

Professional trade fairs

An Internal Feedback session was held on 24/01/2017 with FBF PR managers. In general there was a preference towards a tool that is **first of all focusing on a single feature that works very well** rather than aiming for an "all-in-one-tool" that might be just average performing. The most important user requirements that were formulated by the PR managers were:

- A "smart" tool to publish posts on all channels (e.g. Twitter, LinkedIn, Facebook, Instagram) with one click:
    - Posts are **automatically optimized for the format of each channel** (text length, photo format, hashtag suggestions etc.)
    - Spelling autocorrection
    - Preview of the posts
    - A "learning" tool that adapts (e.g. regarding the autocorrection)
- A **dashboard with all FBF owned social media channels** (e.g. Facebook, Twitter, Instagram, LinkedIn, Xing)
- **Collecting posts of social media channels** of the company group on the **intranet platform** (Frankfurter Buchmesse, Boersenverein des Deutschen Buchhandels, Marketing und Verlagsservice)
- An **easy-to-handle "semantic tool"** that **monitors social media in near real time** and shows which terms are associated with the Frankfurt Book Fair or certain authors

Festivals

An internal consultation was held on 07/02/2017 at UNSEEN Amsterdam. The main functionalities that would be needed are summarised below:

- **Composing your own calendar of events;** internally around the festival but also for example other external related events in the city/neighbourhood.
- 'What's hot' function: **push information curated by the organiser to different user types**

- **Different user levels and cluster of profiles**, e.g. UNSEEN misses the personal agenda for the visitor; there is a small group of VIP users as well who need extra attention.
- **End-user curation:** when a visitor walks around the fair, they do their own selection eg visitor takes a photo of a photograph and then information of all kinds is sent based on that
- Ability to find out who is interested in what **beforehand**, **during** and also **afterwards** the event of interest.
    - Before the event: make a **selection of their own agenda**
    - Possibly **adapt this agenda during the event** (e.g. user selects and then push info
    - Afterwards: **establish if sales match interest**, which is added value for the fair, since this strengthens the purchase process with **performance feedback/analytics**, and is also good for user attention
- Cluster visitors who have the same preferences, e.g. cluster those who like same pictures.

3.3 Stakeholder interviews

In order to gather a good understanding of the specific end-user requirements for a content management and social media management tool, structured stakeholder interviews with representatives of the target market segments were conducted. For performing these interviews we created a question schedule around the following topics.

- Digital communication strategy of the organisation
- Online Content use for communication activities
- Content management and social media management

The questions for each of these topics are given in Annex 1 of this document. Participants of the interviews were asked to agree and consent to take part using the form shown in Annex 2.

3.3.1 Methodology

The approach adopted was based on a qualitative approach, with interviewees selected from the stakeholder lists formulated by each partner for Tourism, Events and Festivals. Rather than formulating a quantitative questionnaire with a series of tick boxes and Likert scales, it was felt that more detailed and in-depth short interviews with open questions would yield more focused and relevant results. The question schedule was initially piloted within partner organisations and the final version was then used to conduct face-to-face and telephone/skype interviews with the selected participants. These participants were selected on the basis of being representative of the stakeholder category, and also on availability. In total, 61 interviews were conducted, of which

26 were with stakeholders from tourism, 22 with publishing stakeholders and 13 with event organisers.

3.3.2 Outcomes of interviews with tourism stakeholders

We conducted 26 interviews with a broad range of stakeholders from the tourism sector (e.g. DMOs, museums, tour operators, travel agencies, accommodation, etc.) both small and large.

Digital communication strategy

The main objectives of the interviewed stakeholders from the tourism sector can be summarized in the following points:

- Promote the destination brand and territory (accommodation, guide, events, etc), especially during off-peak times, for less known destinations and niche sectors while aiming to transform the “touch-and-go tourism” into long-staying tourism. There is a focus on creating a relationship with tourists and prospects and promoting an "emotional tourism" of the territory.
- Make the organisation better known to the general public, improve visibility (corporate communication), which takes place on official accounts by collecting contents from all other communication activities carried out to reach the other goals of the organisation.
- The goal of the stakeholders is not necessarily focused on how to directly increase sales/conversion rates (except for accommodation and tour operators) but rather to keep digital channels active for branding and community management purposes.

The main target of the stakeholders is generally (foreign) tourists, but locals are also acknowledged as an important stakeholder since these can act as ambassadors of the territory (inspiring their world-of-mouth and suggestions to tourists).

Smaller stakeholders often report a more ad hoc process to reaching out, i.e. no communication plan or specific channel being used. For them the social media accounts of staff are the preferred channel (rather than an account of the organisation).

Larger stakeholders generally have several objectives, in some cases managing several fields at the same time, e.g. provide information point services for visitors, destination marketing, convention bureau and even rent of public venues (both B2c and B2B). For each of these there are usually different communication channels used (website, fan-page, social media, blog) and strategy associated with it. It should be noted that larger DMOs might employ agencies for their communication tasks, either just temporarily or for a longer durations.

Online Content use for communication activities

Apart from the website and social media, many stakeholders also use newsletters as a means of communication. However, this does not apply when it comes to reaching out to high-profile tourists (luxury segment); in this case direct contact is preferred (e.g. world-of-mouth, direct messaging, personalized e-mail, or web agency).

Engagement strategies depend on targets' age, for the technological peculiarity of the goal. For the youngest ones through social campaigns, for the upper bands through more traditional means. For the social campaigns the challenge is the continuous evolution of formats / channels.

An important realisation is that for most of the stakeholders in the tourism sector the organisation of events, as a way to differentiate and expand their audiences, is an important and crucial element of their strategy. To this respect, campaigns to motivate actual in-person participation are of high importance.

The stakeholders generally use English and the local language in their communication activities.

There is a need for transferring content through digital storytelling techniques, apply narrative techniques to interactive media and conduct more cross-media activities.

Especially for stakeholders from public sector, the main weakness mentioned is the lack of resources, which leads in some cases to the fact that no dedicated staff, or staff that is trained as a communicator or marketer can be part of their team; moreover websites are sometimes very old or of static content with poor usability (in some cases due to workarounds used to add content).

Tourism stakeholders acknowledge the need to have a single management platform both for content and social media to optimise content production and publishing.

Almost all of the interviewed stakeholders use Facebook because it is considered best for reaching a very wide audience. Only half of them use Twitter, especially in relation to real-time communication (e.g. during events) but also linking it to Facebook (reposting content), or Instagram (for sharing photos). A quarter make use of Youtube, mainly for visual storytelling. Other social media networks are only used marginally.
It should be noted that Twitter is perceived as a declining platform.

In most cases, stakeholders measure the success of the digital communication strategy using (some sort of) analytics, e.g. views, number of event participants, conversion rates, return of clients. In a couple of cases questionnaires and even direct feedback are used.

About social media, internal tools (FB Insights and Youtube Analytics) are largely used with the focus on views and engagement rates: likes, shares and clicks.

It should be mentioned that tourism players are currently in a study phase about how to combine sales and social media, because these channels are not yet perceived by the market as channels from which users can be reached. They are paying attention to these developments, especially focused on how this will evolve on the aspect of fees (will social media help to disintermediate or they will be consider as other distribution channels?). It was also mentioned that it would be very important to have "real" and concrete indicators (e.g. ROI) to understand how effectively social influences sales, as this could influence the future budget.

Digital visual (video) communication and storytelling is the main aspect expected to play a much more important role for the stakeholders in the future.

Almost all of the people interviewed reported that they produce new original content (text, photos, video) daily and that visual content is rated as very important (i.e. 5 on a likert scale of 1-5). In 65% of the cases, an editorial plan is used.

In large organisations between 280 and 400 hours a week is spent on producing original content, in effect having dedicated staff working full time. Smallest organisations do not have dedicated staff for theses tasks and between 1 and 2 hours are spent daily. In a few cases even smaller organisations have one person working full time on the task.

In general from 1 up to 4 people are responsible for social media management (most often less than 25% of total employees). Although the interviewees reported very different objectives for the use of social media, almost all of them fall under the category of branding and promotion in a more informal way. Audience listening, sentiment analysis, lead generation and website traffic increase are also mentioned. Content creation and community management are the most common activities performed on social media and take up about a couple of hours a day.

Over 40% of the interviewees consider user generated content very important while over 25% consider it to be important. Sharing social media content from other stakeholders is seen to be important by 34%, and very important by 19% and is done more often on Twitter and Instagram than on Facebook.

Over 40% of the stakeholders say it is very important for them to be able to use originally created content in more than one place/communication channel, and possibly at different times.

Content management and social media management

Two thirds of the stakeholders currently combine the use of content management and social

media management. The most shared content share on social media from the website or app is news. The most common format is photos, links and text (or a combination of these).

The main challenges faced with regard to managing their organization's content management in social media are about content creation and copywriting (i.e. adapting content for each channel) and about copyright (e.g. finding CC0 photos). Because this is so time consuming it was reported that less posting is done in favor of maintaining a high quality. Finding a solution to these challenges is a priority to two thirds of the interviewees. For the other third, the priorities refer to the website and guaranteeing high quality content.

About 60% of the people use tools to help them manage content and social media. From the tools reported none of them combines the two aspects. Hootsuite stands out as the most popular choice, mainly being used for post planning as this saves time. Some are also familiar with Storify.

The main types of tool features that the interviewees would like to have for supporting digital managers are:

- In the pre-production stage by allowing them to understand "Where and how to talk about it". This could be supported by audience listening, group reporting, trending topic detection, etc.
- Easier channel management by having an unique view/dashboard of data from all of their channels; this will help track contents, avoiding duplications, provide insights for improving performance, collecting user feedback analytics, perform comparative analytics or match analysis
- Ability to collect quotes/mentions separately (for analytical reasons and further contacts)
- More intuitive interface to structure data, perform data analysis and extract sentiment analysis
- Good ROI reports if the tool used has a monthly fee
- Usability, i.e. lean learning curve for getting started with the specialised tool
- Ensuring that the authenticity of the voice/communication is preserved.

3.3.3 Outcomes of interviews with event organisers

We have conducted 13 interviews with small and medium-sized event organisers. The next paragraphs summarise their responses along the main questions asked.

Digital communication strategy

All organisations have a highly targeted communication strategy on how to reach their audience and engage with prospects and participants. The main objectives of their strategy deal with the

outreach to potential clients, increasing awareness and spreading information about activities they are undertaking and content they are producing.

Event organisers interviewed use primarily Facebook and Twitter as a medium, increasingly followed by Instagram, where visual communication is appropriate. They mostly communicate in English but also in the local language of the location of the event.

Success of the communication strategy is measured using a mix of increased traffic on the website of the event, using Facebook/Twitter analytics tools, increase of followers/likes and increase of sales.

The event organisers interviewed expect that visual forms of social media (e.g. Instagram) in combination with being able to personalise the message to potential customers and reaching them outside social media (e.g. via direct messaging using the WhatsApp application or email newsletters) will play an increasing role in the future.

Online Content use for communication activities

All event organisers interviewed spent considerable human resources that range from 20% to 40% of total staff in managing social media channels. The majority of them has an editorial plan and produce new original content at least every day, while some of them also consider this a core activity and create original content continuously.

All events interviewed consider visual content very important for their communications purposes. Content creation is an important aspect of it that is especially time-consuming.

The events interviewed spend the most time in Facebook and Twitter, sharing content, moderating and steering conversations. It is also important for events to keep their own website/blog up-to-date with content and information about activities they are carrying out and to re-use their originally created content in multiple channels.

Event organisers don't consider user-generated content important for their own communication strategy but it is important to share (re-post / re-tweet) content that users and other stakeholders (e.g. exhibitors) create.

Content management and social media management

The challenges event organisers are facing deal with having control over the conversation, understanding which content is best suited for customers, adapting the message to the different channels and aggregating and managing all the content they are producing, sharing and publishing in a more efficient way.

The most important features of a system for events are to be able to provide a unique and well-organized dashboard for every social account and a single system to adapt and publish messages to different channels.

3.3.4 Outcomes of interviews with publishing stakeholders

We conducted 22 interviews with small and medium-sized stakeholders from publishers; the next paragraphs present a summary of their responses.

Digital communication strategy

Publishers have a well-defined digital communication strategy and are active in many channels to reach out to their intended audiences. The main objectives of this strategy lie in Public Relations (PR) and Marketing, i.e. to raise awareness, attract participants to events and generate business. Some publishers also use social media in order to achieve direct sales of books, and thus their sales department also has a social media usage for this. This is especially true for countries which do not have a strong network of booksellers shops and countries and the link between publishers and booksellers is thus weaker (e.g. this does not apply to Germany and Austria).

In order to reach a more general audience they are primarily active in Facebook due to its wide user base. Twitter and Instagram don't play an important role here. Professionals are reached through business-type social networks like LinkedIn and XING. In these channels they communicate both in English and the local language.

Success of the digital communication strategy is measured through website analytics (click through traffic), increase in the number of shares/likes, increase of newsletter subscribers.

Stakeholders expect personalised communications (e.g. direct messages, personalised newsletters) to play an increasing role in achieving the organisations' objectives in addition to professional networks, even with personal platforms that allow interaction of readers and authors.

Online Content use for communication activities

Small publishers spend a considerable amount of resources in managing social media that ranges from 20% to 30% of the full person months of the whole staff. Medium-sized publishers spend less of their own resources but also engage external agencies.

For social media purposes the majority of publishers produces original content at least once per day. Visual content is perceived to be important for this group but this heavily depends on the publishing sector and the main publishing format. The majority of publishers do not have an editorial plan for producing original content, yet follow an agile approach, i.e. posting on-demand

and ad-hoc as requested and as adequate, both reacting to content and actions from other social media users and posting actively.

Content creation together with influencer engagement are the most common activities in social media. Managing Facebook takes most of the time available.

User generated content is not perceived to be important for own communication purposes. Sharing content, however from users and other stakeholders (e.g. authors) is important. Authors are specifically perceived as the best marketers of their own products/ books, and an author active in social media will always be involved in the marketing strategy of the publishing house more than willingly. Equally important is the ability to use originally created content in more than one place/communication channel, and possibly at different times.

Content management and social media management

The challenges that publishers are facing deal with copyright issues of what is being shared, the diversity of channels and message, the availability and discoverability of content that is distributed in many places, and the difficulty to create unique and engaging content.

Publishers don't yet use any specific tools to combine content and social media management, mainly because they have not yet encountered a tool that would be useful for their own purposes and within their available budget. Furthermore, legal considerations (e.g. re-using a photo from a third party when sharing) pose an obstacle to overcome. Additionally some believe that their audience is not yet active enough in social media to make the use of such a tool worthwhile.

The features that they would like to see from such tools are dealing with aggregation of social media messages, and emails into a dashboard, easy (but targeted) publishing to various channels, identification of prospects for posts, generation of ideas for new original content to produce.

4. Usage scenarios and EMMA platform

4.1 EMMA Target Groups and Needs

In this section we describe what are the main outcomes from the work performed till now and derive a prioritised list of requirements for the EMMA platform. All three verticals (events, publishing, tourism) we have analysed have their very specific requirements but they share common underlying patterns that the EMMA platform can facilitate to support their digital communication activities. In the following paragraphs we describe what those are.

From the elaboration in the previous sections it becomes clear that there is a need to **understand and promote better what is happening around the core stakeholder activities**. e.g. what exhibitors/participants of events are saying, what touristic actors, hotels, restaurants are offering, what stakeholders in the publishing sector are focusing on.

Furthermore, there is a need to **closer interact and network with core stakeholders**. Exhibitors/participants for events, hotels/restaurants and cultural actors for tourism form part of the “raison d'être” for the sectors we have analysed. Thus, it is important to keep them informed and engage with them in a authentic fashion.

Additionally, we see that not all content created is equal and that there is a need to **differentiate between user-generated content and content produced by the core stakeholders themselves**. A lot of user-generated content is ephemeral and not particularly relevant to the communication strategy of the sectors analysed. It is important to identify high-quality user-generated content that can be integrated into the communication activities.

Moreover, there is a need to **better target the message to both user profiles and media available**. Many stakeholders in the sectors analysed struggle with effective copywriting and how to take advantage of the specificities of the media channels available. It is seen that broadcasting the same message to all social networks does not provide any added value but rather has the opposite effect. For this reason we also see that actors are focusing their efforts primarily in one or two media channels that they find more appropriate for their user base.

Additionally, there is a need to **organise content in a more effective way** to more efficiently produce new original content but also re-use content from other channels e.g. websites/blogs. The amount of content people are dealing with is ever increasing and tools to support categorisation, search and finding of what is needed are crucial.

Own outlets, e.g. websites/blogs are an important aspect for the communication activities, although these are perceived in many cases as being one of the weaker points of their communication mix (because they tend to be outdated). Original content is primarily produced for the own website/blog and then shared to third party channels. Thus there is a need to **integrate tightly with websites and blogs**.

Social interactions and conversations are often seen as a mean to convert followers to subscribers to own newsletter and email campaigns. There is a need to employ methods for creating more engaging content. This ranges from simple posts to stories and newsletter for all the different channels (e.g. websites, social networks and email campaigns). Part of this requires tools to **support more creative, visual and engaging storytelling**.

Due to the many channel options available, all actors need tools to **publish more efficiently and become more time effective.** To save time, they need **better ways to filter out the noise of social media** so that most meaningful conversations and important people can be easily spotted.

Last but not least, there is a need to **aggregate conversations around events, places and topics** of interest and provide **highly specialised dashboards and analytics** (e.g. around users, around keywords/topics, around media channels).

4.2 EMMA Usage Scenarios

Use case - Promoting a destination

Davide is working in a public consortium that promotes a Tuscan tourism destination, that is geographically limited, but at the same time is an attractive destination for Italian and foreign tourists, offering an integrated wide range of attractions such as sea, mountains, nature, religious paths, food and cultural heritage.

Davide is dealing with multi channels communication. His activity consists of managing a blog, a monthly newsletter, as well as content from different social platforms (Facebook, Instagram, Twitter and Youtube). His digital communication is addressed to different targets: Italian, German, French and English tourists, as well as inhabitants and scholars too. For this reason all social media channels are managed bilingually (Italian and English).

Davide applies storytelling techniques especially via blog and manages social media channels, paying attention to diversify objectives and contents of his communication for each social media platform. He uses Facebook for reaching a wide general audience; Twitter for a real-time communication; Instagram and Youtube to share visual contents (photos and videos).

The most important challenge that Davide faces in his daily social/content management regards his capacity to **profile tourists and their needs** so as to **create customized and more attractive content**, created *ad hoc* for each channel. To diversify digital communication formats for every different channel represents a challenge for him, too.

Currently, Davide is using various tools helping him to manage content and social media management. Unfortunately, Davide does not have a unique tool that combines the analysis of different content formats (texts, photos and videos) and that answers his needs (e.g. social media monitoring, filtering, highlighting and channeling user feedbacks) at the same time.

By using EMMA, Davide will be able to gain insights into how destination is perceived through different social media platforms, monitoring the engagement and channeling different user feedback which appears on all social media channels. Analysing the most trending recipes through different social platform, Davide will be able to create content for his blog and to run successful social media campaigns, diversifying the objectives and contents of his communication for each social media platform.

Use case - Hotel promotion

Giovanna is the communication manager of an hotel chain in Florence. The associated hotel locations are differentiated by target (e.g. leisure, MICE) but all really focus on destination, strongly related to Florence and Tuscany history, handcrafts, lifestyle ecc.

Due to different audience, the communication is multi-language (Italian and English) and multi-channel with a dedicated blog and an active social media presence (Facebook, Twitter, Instagram, Youtube).

Giovanna's department has a small number of staff who manage all the tourist phases (pre, during and post visit/stay). Due to fixed office times and different market time zones, it is not always possible to provide timely and relevant feedback.

Social media are used to approach tourists as an informal communication channel, mainly for community management (and customer care) purposes: how to build and nurture an engaged community in order to increase call-to-action and to prevent complaints. This requires lot of effort and there is no much time to pay attention in **filtering and channeling the user feedback** which appears on all the social media channels, especially to identify feedback on Twitter account (mostly used by US market as direct channel).

Content proliferation from social media platforms and especially visual content add to the time she needs to invest in order to identify what is important. Being able to **identify high quality (visual) content** and trending topics, would help and speed her daily activities.

By using the EMMA tool, Giovanna will be able to reduce the time spent on approving/selecting contents manually. Through an appropriate editorial workflow, it will be possible to manage sources and enrich the contents displayed not only in terms of copywriting for specific sections of the blogs, but also how to analyze travel experience and its feedback.

Use case - Promoting a new book via digital communication

A PR and communication agency specialised in promoting publishing houses, books and book-related events wants to run a campaign to promote a newly-released title by one of their clients with the aim to elevate sales.

The main digital communication channels used by the agency are the own website and Facebook, as well as Twitter and Instagram. Hereby, the agency website serves as the major communication hub. The communication with their target audience is in the local language. The team invests about two hours daily in social media activities.

To promote the product the agency produces original content for the social media channels, such as texts (e.g. portrait of the author), visuals and photos (e.g. with the book cover), and from time to time also videos.

Part of the communication strategy is also sharing user-generated content on their own website. This is done in a curated way – a special section has been created in order to point out book reviews by book bloggers (via links to the blog), for instance.

One major challenge concerning the publishing of original content in social media is that different communication channels have different standards for example image sizes, text length. Various tools to **facilitate publishing** similar content in different channels, such as Hootsuite for instance, have been tested. However, none of the tools have been proven to fit the agency's needs. It is important that not identical contents are published in each channel, but to make sure that each post fits the requirements and characteristics of the respective communication channel.

Using the EMMA tool the agency is able to quickly organize the visual content that they can use for copywriting the social messages so that high quality and different content can be shared on each channel. The system also supports them with quickly curating the user generated reviews that they want to include on their website, which can now be updated with just a couple of clicks.

© EMMA Consortium 2017-2018

Use case - Reading promotion via digital communication

A trade association for book publishing wants to do a campaign to promote reading via social media, together with a set of almost 10 partners, both national and international. The reading promotion campaign is to be centered around a hashtag #ioleggoperche, yet is to be played out on different social media channels, mainly instagram, twitter and facebook. The main idea of the campaign is to have people take a selfie, and say why they read, at the same time "branding" the photo with a "L" formed by their hand for "leggo" (read in Italian). The aim of the campaign is to promote reading, but also to promote the publishers association amongst its network of stakeholders (i.e. its members, publishers, but also policy stakeholders).

To kickstart the campaign, a number of influencers are actively approached to take part in the campaign, and support making the campaign viral. All social media channels of all partners are involved in sharing and boosting the campaign.

The main challenge is to **collect all campaign posts across all channels** and relate them to the campaign, the hashtag used and the organisation carrying out the activity i.e. the publishers association. An additional challenge is to **find best examples of user generated content** (UGC) and display them on a central page, while at the same time making sure that no offensive/ unwanted content is collected.

Using EMMA, the campaign manager is able to aggregate the relevant user generated content that is shared with the campaign hashtag on all the different channels. Thanks to EMMA, the received photos are grouped in several cluster that have a similar look and feel. In order to find the best photos to share on the website, the campaign manager sorts the received photos based on their quality, and then he quickly picks up the few which she finds most appealing. Once this selection is made, these photos appear on the website immediately. In this way, what would have taken several several hours in past can now be accomplished in a fraction of that time.

Use case - Content-centric promotion for festivals

Alice is the Communications Manager for an annual international Photo Festival. The Festival attracts around 25,000 international visitors. She is responsible for multi-channel communication and currently uses Hootsuite and Tagthelove to promote the Festival and other social media tools but she does not feel that they are very useful. She feels there is a need for linking the before, during and after communication in a more coherent and personalised way for users.

Alice is also responsible for producing new visual content and this involves making short videos, collating photographs and writing related editorial content and descriptions of both the artists and the artworks themselves (with initial input from the photographers or their agencies). She

would also like to find a way to include other related information about what is going on around the Festival and to improve the amount and type of information around the content of the event.

Alice has been active in keeping up with recent development on the social media field, as she knows that her visitor base consist of well-educated and technologically literate and dynamic people. She is also interested in how she could make better use of location-based services and check-in rewards and also on how to build up the visitor community, including those from earlier editions of the Festival.

One of the main issues that she faces is that the sheer volume of content available at the Festival can be overwhelming, with insufficient time during the event itself to visit all the different agencies and photographers. People may be disappointed if they feel they have not experienced enough or have not found the most suitable parts of the festival, as there are always many competing sessions and events. This is likely equally relevant for music festivals, to which Alice looks for new ideas and initiatives as these festivals are growing exponentially.

Alice feels that using the EMMA platform for **providing more context beforehand** can be a solution to this issue, with better descriptions and information about the artists and their works. Visitors could for example receive relevant updates and information about individual artists, providing a cumulative build-up of information. In this way, Alice could **support visitors in making better choices** by providing greater context and thus providing more meaning for the visitors. Similarly, she would like to make what the crowd is doing more transparent. By filtering and screening social media channels, users could gain insight into popular trends.

In addition, users could share their choices with others and on that basis perhaps even join shared meetings and side-events, either on-site or elsewhere. Furthermore, by providing this enhanced content long before the festival, and by constantly updating it, the interaction with the user is more intensive and would provide a much **higher level of engagement and motivation**. And during the Festival, this could be the basis for push notifications and perhaps some fun live polling.

Alice feels that the EMMA platform could really benefit the Festival as kit would be deployable within the existing brand environment and would significantly improve customer satisfaction and visitor engagement, and ultimately sales.

4.3 EMMA Platform

The previous sections have presented the approach EMMA has applied in order to derive user requirements. Moving on from those to specific functional system requirements, in this section we

will first label the identified requirements and for each of them look at what system functionality is necessary to accommodate them. In doing so we also take into consideration the example use case scenarios that have been presented above.

The table below shows the high-level requirements that have been identified from the user studies and assigns them a label that we will use as a reference for the system requirements that will be presented subsequently.

Table 2: High-level user requirements identified from the EMMA user studies

#	User requirements
R1	Understand and promote better what is happening around the core stakeholder activities
R2	Interact and network with core stakeholders in a closer way
R3	Differentiate between user-generated content and content produced by the core stakeholders themselves
R4	Better target the message to both user profiles and media available
R5	Organise content in a more effective way
R6	Integrate tightly with websites and blogs
R7	Support more creative, visual and engaging storytelling
R8	Publish more efficiently and become more time effective
R9	Better ways to filter out the noise of social media
R10	Aggregate conversations around events, places and topics
R11	Provide highly specialised dashboards and analytics

The table below assigns a label to use cases presented above that we will use to motivate the identified system requirements.

Table 3: EMMA Use Cases

#	Use case
UC1	Promoting a destination
UC2	Hotel promotion

UC3	Promoting a new book via digital communication
UC4	Reading promotion via digital communication
UC5	Content-centric promotion for festivals

In order to avoid confusion in the rest of this section we use the following definitions of the terms that are part of the system requirements:

- *Stakeholder*: an actor who is an essential part of the business activity (e.g. event exhibitor, keynote speaker, hotel, restaurant, cultural attraction)
- *Visitor:* a visitor of an event, an event participant, a visitor of a destination
- *Owner*: a user of the EMMA platform who is in charge of the business activity (e.g. event organiser, DMO, publisher) and the dedicated EMMA hub
- *Member*: a user of the EMMA platform who has been invited by the owner to contribute and access to dedicated functionality (e.g. dashboard and analytics) that the platform provides.
- *Users*: both owner and members of an EMMA hub
- *End-users:* visitors accessing public interfaces (e.g. collections, stories) of the EMMA hub
- *Social media stream*: an automatically updated information stream from a specific social channel (e.g. posts of a Twitter user or a Twitter hashtag, post from a Facebook page)
- *Web feed*: an automatically updated information stream using RSS from a website or blog
- *Content:* any type of media e.g. photos, documents, flyers, presentations, press releases, audio-visual files.

Table 4: Initial set of system requirements

#	System requirement	Reference
S1	Stakeholders register to the platform and become members of an EMMA hub	R1, R2, R3
S2	Members upload content to the EMMA hub they are given access to	R1
S3	Users tag and assign keywords to content	R1, R5
S4	EMMA platform provides tools to automatically index textual content	R5
S5	EMMA platform provides tools to automatically index visual content	R5
S6	Members set-up social media streams in the EMMA hub they are given access to	R1, UC2

S7	EMMA platform stores access keys for users' social media channels using OAuth	R8, R10
S8	Members import individual social media posts in the EMMA hub they are give access to.	R10
S9	Members set-up web feeds in the EMMA hub they are given access to	R10
S10	Members create content collections and stories based on all their available content	R7, R8
S11	Visitors register to the EMMA hub and get only access to the publicly published content that owner and members made available	UC5, R10
S12	Visitors create their own personal collections/bookmarks on top of the publicly available content	R1, UC5
S13	Visitors upload their own personal content and publish it to their own collections	R1, UC5
S14	EMMA platform provides tools to assess quality of visual content	R9
S15	EMMA platform provides tools to cluster visual content	R9, R11
S16	EMMA platform provides tools to automatically mark content from users compared to user-generated content from outside channels	R3
S17	EMMA platform provides tools to automatically create social media user profiles	R4, R11
S18	EMMA platform provides tools to identify social media influencers	R4, UC1
S19	EMMA platform provides tools to tag user profiles	R1, R2, UC5
S20	EMMA platform provides tools to support and automate social media publishing processes	R8, UC3
S21	EMMA platform provides intelligent indexing that allows for advanced search and filtering of content	R5, R11
S22	EMMA platform provides tools to automatically create collections of interests to aggregate conversations around social media users, places and topics	R5, UC4
S23	EMMA platform allows export of items in collections, stories and other end-user visualisations (e.g. JSON, XML)	R6
S24	EMMA platform provides a range of pre-defined end-user	R7

	visualisations as templates	
S25	EMMA platform provides means to exclude (block) posts from social media users from entering the hub.	R9
S26	EMMA platform provides tools to assess trustworthiness of social media users	R9
S27	EMMA platform provides tools to identify trending topics within hubs	R9

The above table presents the current state of functional system requirements as a result of the user needs and the work we have performed until now. In the next steps we plan to follow though the iterative development approach of the project and refine/extent these requirements using concrete demo applications and user tests. This will help the EMMA project to reach its ambition and provide a valuable communication platform ready for market uptake.

© EMMA Consortium 2017-2018

5. Conclusions

A comprehensive set of actives was carried out by the EMMA project in order to better understand the user perspective and ensure that the technical developments of the projects reflect real market needs.

Firstly, a short market analysis was performed for each sector (i.e. tourism, events, and publishing), providing a clear view of the market size and trends related to digital communication and the use of original content and social media. The stakeholders of each sector were then segmented using the marketing strategy grid approach. The resulting stakeholder canvases of each sector categorize stakeholders and identifies their main features. In this way we were able to identify the most important stakeholders which we could later interview, ensuring thus that the data gathered is reliable and representative.

Table 5: EMMA stakeholders

Stakeholders		
Tourism	**Events**	**Publishing**
1. Destination Management Organisations 2. Web marketing agencies and consultants 3. Corporate companies 4. Cultural chains 5. Research centers 6. Travel blogs 7. Local communities	1. Event / Festival Management Organisations 2. Event/Festival Promotion Organisations 3. Interest-Based Audiences 4. Event/Festival venues and locations 5. Service providers (security, catering, technical, ICT, etc) 6. Sponsors & Advertisers 7. Related blogs and social media hubs	1. Publishers 2. PR and communication agencies and consultants specialised in promoting literary products and events 3. Trade associations 4. Trade magazines 5. Cultural institutions 6. Event organizers for B2B and B2C events (conferences and literary festivals)

In order to conduct the user requirements study we have followed a targeted approach, with the following sequential activities: initial project workshop, a more in depth consultation with internal

stakeholders from the end-user organisations, and finally interviews with external stakeholders. At the end of each of these activities we analysed and summarised the feedback gathered. This resulted in a broad list of identified user needs and expectations for the optimal use of content and social media in their digital communication.

Although stakeholders are facing problems related to the specific situation in their sector, there are some common aspects which affect all of them. We analysed these answers and distilled a number of needs that apply across the different sectors. Five usage scenarios were then created for stakeholders coming from each sector. In this way we were then able to elicit a list of user requirements for the EMMA platform, which let to the formalisation of over twenty system requirements. This list is however not exhaustive and following the first end-user evaluations of the EMMA platform, we plan to revisit these requirements based on the new feedback gathered from the stakeholders.

© EMMA Consortium 2017-2018

Annex 1 - Stakeholder Interview Question Schedule

Digital communication strategy of the organization

1. What are the main objectives of your organization's digital communication strategy?
    a. How do you digitally engage with your target group to achieve these goals?
        i. If you use social media, in which platforms is your organisation most active and why?
        ii. In which languages do you communicate on your website and via social media?
    b. How do you measure success of your digital communication strategy?
        i. What about, in particular, from the use of social media?
2. Which sector of digital communication do you expect will play an increasing role for your organization?

Online Content use for communication activities

1. On content production
    a. How often do you produce original/owned content?
    b. What type of content do you produce?
    c. How much effort do you invest in these activities? (How many hours per day/week)
    d. How important, on a scale from 1 to 5, is visual content for communication purposes?
    e. Do you have an editorial plan for producing original/owned content?
2. On social media
    a. What is the main objective of your organization's social media strategy?
    b. What are the typical activities in social media for the organization
    c. How much time per day does your organisation spend managing these social media activities?
        i. The management of which social media channel and type of activity takes up most of the time?
3. How important, on a scale from 1 to 5, is user-generated content in your communication strategy, and how do you use it?
4. How important, on a scale from 1 to 5, is to share social media content from users / other stakeholders (e.g. Retweets, Links, Facebook shares...)? How often do you share them?

5. How important, on a scale from 1 to 5, is to be able to use originally created content in more than one place/communication channel, and possibly at different times? E.g. re-using a photo from a blog post several months, or even years later, in a newsletter or social media post.

Content management and social media management

1. Do you currently combine content management and social media management?
    a. If YES
        i. Which content (press releases, FAQs, etc.) from your organization's website(s) and app(s) do you share via social media?
        ii. Which content formats (texts, photos, videos) from your organization's website(s) and app(s) do you share via social media?
        iii. What challenges are you facing in regard to managing your organization's content management in social media? (Please describe at least one "user-scenario situation")
        iv. Is finding a solution for this challenge a priority? If not, what would be your priority?
        v. Do you currently use tools to help you combine content and social media management?
            1. If YES
                a. Which one(s)?
                b. For which feature do you use them?
                c. What do you like especially about the tool? / What do you dislike?
                d. In your opinion, which feature would be the most valuable for such a tool to have?
            2. If NO
                a. Why haven't you used such a tool yet?
                b. In your opinion, which feature would be the most valuable for such a tool to have?
                c. Which processes concerning content and social media management would you like a tool to facilitate? (Please name one to three processes.)
                d. Which other tools do you currently use (if any)? What do you especially like and dislike about each of them?
    b. If NO

i. Why not? Is it because of technical difficulties? Or maybe because in your work you did not see the need?

Closing questions

1. How many people work at your organization?
    a. And how many employees are responsible for managing the corporate social media channels?
    b. In which department(s) of your organization are these employees based?
2. Would you like to remain informed about the developments of the project? (You will receive our newsletter and important updates. We promise not to spam.)

© EMMA Consortium 2017-2018

Annex 2 - EMMA Informed Consent Form

Consent Form

*Required

EMMA Project

EMMA is an EC-funded project that aims to redefine interactive storytelling and content marketing to better connect and engage with audiences through more compelling content and experiences. The EMMA innovation platform especially focuses on touristic destinations and event organisers in Europe helping them to seize the opportunities offered by the latest solutions in ICT content technologies and information management.

More information about this project is available at https://emma.in-two.com/ or by contacting emma@in-two.com

During the course of the EMMA project we will carry out face-to-face or remote interviews, focus groups and usability tests and will ask participants to test out tools and systems that the project will provide. In this respect, we will record answers, process them electronically and by other means, analyse them, aggregate information and draw conclusions based on them. Data protection will be guaranteed. None of the data from the interviews will be made publicly available. Only the conclusions drawn from the aggregated data will be made publicly available. This will be done in a way that no conclusions on individual data sets can be drawn.

Any personal data that we might collect will be kept confidential and only authorised people from the project will have access to them.

Consent Form (Please read and agree to this form)

I understand and consent to the use and release of recordings and information I will share on interviews, group discussions and system evaluations.

I understand that the information I provide is for research purposes and that can only be used within the frame of the EMMA project.

I understand that my name, image, statements and any recordings can only be used within the frame of the EMMA project.

I understand that participation is voluntary and I agree to immediately raise any concerns I might have.

If you have any questions after today, please contact the EMMA project team at emma@in-two.com

1. **My First and Last names** *

2. **My e-mail address** *

3. **I would like to be kept informed** *

We will occasionally send to your e-mail address information about the work we are doing and results we have achieved

Mark only one oval.

- Yes
- No

4. **I have read and understood the information in this form and agree to take part** *

Mark only one oval.

- Yes
- No
- Other: _____

Thank you very much for helping the EMMA project

We appreciate your time and your support.

European Commission

The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 732665.

Powered by Google Forms