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► To cite this version:

Catherine Papetti, Sylvie Christofle, Vanessa Guerrier-Buisine. Digital tools: their value and use for marketing purposes. Collaborative forms and strategies for business venturing in tourism industries, 2018. hal-02280909

HAL Id: hal-02280909

<https://hal.science/hal-02280909>

Submitted on 6 Sep 2019

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Chapter 15

Digital tools: their value and use for marketing purposes

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Learning objectives

After working through this chapter, you should be able to:

- have an overview of all the digital tools used in the the tourism related industries
- define social media and have a better understanding of their uses and objectives
- have a precise idea of which tools are useful for independent tourism providers / businesses and also discuss the opportunities for independent hotels to use some specific digital tools

15.1 Introduction

Airlines, major hotel groups and especially online travel agencies were the first to develop digital solutions to improve the user experience and increase their online sales. The explosion over the last fifteen years or so of large OTAs (Online Travel Agencies) such as Booking.com or Expedia.com has been linked to the budgets they have invested in Research and Development and in marketing efforts. They quickly offered tourists simple and ergonomic solutions to compose their journey. They were among the first to propose reservation systems on their websites, to develop applications, to offer packages with car rental companies. Today, airports are setting up internet of things to improve the experience within their walls. The hotel groups create 100% digitalized itineraries, allowing tourists to prepare their entire stay without leaving

their smartphones and to avoid wasting their vacation time with administrative procedures. Finally, the major tourist resorts are also developing digitalized experiences, in particular through the use of connected objects such as beacons or bracelets allowing to pay for their services without a credit card nor cash. In most of small tourism businesses / enterprises / providers, human and financial resources are missing to engage in digital development. It is by taking into account multiple constraints that many start-ups deploy specialized products, offering a monthly package rather than an annual cost that is far too high for small businesses. Hotels have at their disposal a very important arsenal of technological tools to facilitate their operational and managerial management. Some of them make the most of it to streamline their staff's experience and achieve substantial savings, but existing software and tools represent a new burden on hotel budgets and they often have to opt for one tool rather than integrating tools for each department of the hotel.

In this chapter, we will therefore take a look at all the digital technologies that Tourism providers can deploy in the back-office for all marketing and team management processes internally. In the following section, we will describe main technologies that a hotel can deploy in front office for all face-to-face operations with the customer and communication actions. In the last section, we will propose recommendations for small independent businesses, highlighting the minimum required to take full advantage of the digital features, with a reasonable budget.

15.2 Use of digital back-office technologies

15.2.1 At the level of the commercialization process

Although most hotels today use management systems, almost all of them have basic functionalities compared to other industries. Today, there are new tools that will become real competitive advantages for hotel establishments.

The Property Management System (PMS): Tools available to facilitate procedures and optimize human or material capital are either transversal, such as the PMS (Property Management System) or specific to each department.

The PMS is the flagship and essential tool in hotel establishments. It is the tool that concentrates all information on customers and allows hotel managers to register, bill and track their

customers. All booking information is collected there. Moreover, most of the technological tools are interfaced with the PMS and make it possible to condense all the useful information:

- The Central Reservation System (CRS), or the channel manager, allows real-time and two-ways connectivity with the OTAs to provide information on hotel rates and availability;
- Invoicing: Thanks to the interfaces with other services, invoicing from the PMS will group together information about consumption on restaurants, shops, spas, et cetera;
- The management of debtors, for a better follow-up of suppliers and customers;
- Customer relationship management (CRM), with CARDEX which, exploiting the data, allows more and more personalized communications with customers, through emailing, push SMS texts, feedback management, loyalty program, et cetera;
- The Computer-Aided Maintenance Management Tool (CAMM), which allows energy management, maintenance, teams, equipment, et cetera;
- Quality Management System (QMS);
- The management of links with housekeeping services for a housekeeping management;
- Monitoring of hotel statistics and key figures.

The best-known and most widely used PMS in the hotel industry are Oracle (ex-Fidelio) and Opera, but new generations of PMS are emerging, with the aim of simplifying and making the tool more versatile, such as Hotel Optimiser, which concentrates all the digital services that can be found in a hotel establishment. Some tools are available to facilitate sales, such as the booking engine, which is integrated into the hotel's website, applications and social networks.

Digital revenue management tools: Hotels are increasingly investing in revenue management tools to manage their hotel yield. Guests no longer expect to find fixed low/medium or high season rates, but rather dynamic rates evolving as in airlines depending on many factors such as availability, location of the hotel, average occupancy rate, competitor rates. Large hotels such as the Grand Hyatt Cannes Martinez have a dedicated team working in-house yield or tools such as PMT Hotels. This is also the case of the Mas de Pierre in St Paul de Vence, which uses the tool to optimize its rates and occupancy rate.

CRM tools: Working on CRM is essential to attract new customers and even optimize loyalty. With tools such as Sellinity or Medallia coupled with the booking engine, hotels collect relevant data on their customers and profiles, analyse them and can communicate with them by personalizing the exchanges, by email or SMS. Hotels that adopt Lounge Up applications, such

as the Sister Hotel in Paris, which operates the application for customer relations and upselling during the stay.

Mobile payment: The opening up to digitalized and more varied means of payment is also a competitive advantage adopted by the best hotels. In the most advanced cases, hotels such as the Mountain Hostel, located in Oz in Oissans in the French Alps, have adopted the use of connected wristbands to allow their guests to pay for all hotel services. In the Louvre Hotels group, Chinese guests can pay for their stay via the successful Alipay and WeChat applications. These new digital payment tools open up sales prospects for new markets.

15.2.2 At organizational level

The main uses of digital technologies for back-office purposes are presented below.

Technical and maintenance services: Other tools make everyday life easier for hotel staff, such as the 1Check application very useful in optimizing all the services related to accommodation.

Example 15.1 the Aubusson Hotel in Paris

“If PMSs have mobile modules that can handle cleanliness issues, the scope of these applications is very limited. With my managers, we want to invent the 2.0 hotel business and move away from the traditional modes of operation where paper is omnipresent, visual checks and oral exchanges are frequent. We wanted to break this way of working and go towards 2.0 with tools made available to the staff that make them save time in their work” explains Cyril Dauphin, the hotel's executive officer. Hence, a hosting management tool such as 1Check, developed by the Best Artisan in France, executive housekeeper, is the solution for integrated or independent hotels to manage:

- The inspection: the tool registers cleanliness and maintenance issues for guest rooms and public spaces. This option updates all departments in real time if any anomaly is discovered. This possibility increases the productivity, as all the housekeeping, technical and other team members are updated in real time.

- **The maintenance:** any issue can be notified and processed through the app. Housekeeping can report the issue, the work orders are available immediately. Maintenance staff can analyse the issues and modify their preventive maintenance plan in the app.

Those functionalities allow real-time efficiency and a real traceability of every hotel issue.

With tools such as 1Check, hotels can also manage stocks of equipment and products, inventory, housekeeping planning, and have complete control and cross-functional monitoring of budgets, teams and schedule management. With such digital services, hotels gain in productivity and efficiency in the various back-office services, such as housekeeping and technical services. If 1Check gathers all the tools available for this type of services, other tools linked with the PMS can also be used to optimize the hotel durability: it is the Computer-Aided Maintenance Management Tool (CAMM).

Room services: Many room services are dematerialized: information on the hotel, menus, schedules, concierge services, laundry. This is the case of the Accor group and its service portal called My Web Valet. Customers can order meals, read the newspaper, contact the concierge service, book a taxi, a restaurant, spa treatments, and much more. Others use Facebook's Messenger and WhatsApp instant messaging applications to inform their customers and validate reservations.

There is a range of basic customer requirements that can be automated using appropriate technology. This allows hotel staff to focus on other activities and improve the customer experience. The technologies used in back office have a direct effect on customer contact activities. There are many features dedicated to front-office activities and customer experience and we will present them in the next section.

15.3 Use of digital front-office technologies: enhancing customer experience

Numerous digital technologies are available to enhance the experience of customers during their stay.

Online check-in and check-out: Thanks to the online check-in, customers can check before their arrival from their smartphone or computer. Very practical for clients, this service reduces administrative formalities. On the day of departure, thanks to the Quick check-out, customers

can simply return the key and let the staff know that the room is free. The invoice is automatically sent by e-mail.

Mobile terminal as key: Today, the electronic key is widespread and is totally dematerialized in some hotels via NFC technology or the digitization of a visual code, as many airports are doing today for airline tickets.

High-tech reception areas / lobby: are places where customers who are not willing to stay in their room can have fun or work with Wi-Fi access. The scenarios for the use of technology in the hotel industry are increasingly varied, and hotels anticipate the desires of their customers by creating stylish semi-public spaces, where everyone can take advantage of new technologies at will. Many customers have even begun to incorporate technology into their online hotel searches, and establishments that do not offer these services may ultimately be at a disadvantage.

High-tech meeting rooms: The modern meeting space has evolved. It no longer boils down to well-stocked tables, chairs and service trolleys. Modern meetings need technology. The audio/video rooms of yesteryear, which required dedicated staff, no longer have their place. The speakers want to make multimedia presentations and integrate remote participants by videoconference or both; for marathon meetings, they want to be able to access various services (catering, for example) with a minimum of interruptions. And above all, discerning hotel managers know that they must make these spaces as welcoming as possible.

15.4 Digital / online social media: tools that are indispensable for marketing purposes

15.4.1 Why is it so important to use online social media?

The widespread adoption and use of social media (SM) is undeniable. Today, digital consumers are spending more time on social networks and messaging platforms than ever before. It is thus important for hotels to have a brand presence and to make a marketing effort on SM channels, especially since social media marketing has been proven more effective than traditional marketing, when utilized correctly. SM marketing allows for a two-way communication between consumers and businesses; this interactive element helps companies build a long-term consumer following. Additionally, SM marketing supports the real-time promotion of new products and services, all while yielding measurable consumer data that can be further

leveraged to target, engage, and grow a base of consumers.¹ Among the different typologies that have been proposed, we have selected the one from Kaplan & Haenlein (2010) because it classifies SM according to their social presence/media richness and self-presentation/self-disclosure. We also complete this classification with Fotis, Buhalis & Rossides (2012) work about online social networks. These different criteria lead to the following SM classification:

- Social networking sites (Facebook, LinkedIn): We add the distinction made by Zhu and Chen (2015) because these have evolved into two main types: the ones which are person based, i.e., centered on the individual user's personal profile and network (e.g., Facebook and LinkedIn), and content based, where the visual content is of primary importance (e.g., Pinterest, Instagram)
- Consumer reviews and rating websites (TripAdvisor, Yelp, Epinions)
- Internet fora (ThornTree, Fodor's Travel Talk)
- Blogs & microblogs (Twitter) - Content communities (YouTube, Flickr, Scribd, Slideshare, Delicious)
- Collaborative projects (Wikipedia, Wikitravel)
- Social worlds (Second Life)
- Virtual games (World of Warcraft)

The abovementioned SM were classified according to their use by consumers as "Relationship", "Self-media", "Collaboration" and "Creative outlets" (Zhu and Chen, 2015). We also combined this typology with the one of Leung, Law, van Hoof & Buhalis (2013) to elaborate a simplified classification of SM depending of their marketing utility. The outcome is the classification depicted in Table 15.1

¹ https://www.hotel-online.com/press_releases/release/social-media-marketing-in-the-hotel-industry-trends-and-opportunities

Table 15.1: A typology of online social media depending on their marketing objectives and uses

TYPE OF MEDIA	EXAMPLES	MAIN CONSUMERS' USAGES			MAIN MARKETING USES				
		RELATIONSHIP Profile-based X Customized message Self- presentation, Develop relationship	SELF-MEDIA Profile-based X Broadcast message Have an impact, Promote one's self	COLLABORATION Content-based X customized message Help others establish reputation/fame	CREATIVE OUTLETS Content-based X broadcast message Hobby sharing, Showcase of creativity	PROMOTION suppliers' application for: reaching a global audience, disseminating promotional information, strengthening company's marketing forces	DISTRIBUTION suppliers' application for : facilitating online bookings, distributing products and services	COMMUNICATION suppliers' application for: facilitating communication between suppliers and customers or partners	RESEARCH suppliers' application for: maintaining internal knowledge, improving, and customizing products to suit customers' needs
Person based Social networks	Facebook LinkedIn, Snapchat, Whatsapp	X				XXX	X	XXX	XXX
Micro-Blogging and publishing media	Twitter, WordPress, Tumblr, Medium		X			XXX	X	XXX	XXX
Consumer review and rating websites	Yelp, Zomato, TripAdvisor			X		XXX	X	XXX	XXX
Discussion forums & blogs	Reddit, Quora, Digg, Fodor's Travel Talk			X		XXX	X	XXX	XXX
Content based social communities and networks	Pinterest Instagram Youtube				X	XX	X	XX	XXX

Source: Authors, retrieved from various sources

SMS, characterized by their rapidity, convenience, anonymity and virtual nature, are digital tools which are particularly effective in a sector characterized by experiential consumption and perceived risk. Thus, the hospitality industry is wholly reliant on word of mouth, as it is the simplest distribution channel for a business. Guest loyalty does generate business, yet positive reviews provided by word of mouth marketing encourages new guests and higher revenue margins (Aluri, Slevitch & Larzelere, 2016); Duan, Yu, Cao & Levy, 2016). According to a recent TrustYou study, 95 percent of all tourists use online review sites like TripAdvisor to help them make their final decision. While a hotel's overall brand reputation is still important, potential guests want to know the nuances of individual properties. A report on hotel bookings by TripAdvisor shows that out of 12,659 responses, 77% of those tourists choose to use reviews and recommendations from the website before booking a hotel room. Another recent study from Cornell University found that by boosting its overall review score by one point (based on the typical five-star rating system), a hotel can increase room rates up to 11 percent. Hotel guests

clearly want the best experience, even if it costs more. More than 75 percent of guests are willing to pay more for a room that has positive reviews, and they are four times as likely to move to a pricier hotel option if the ratings are outstanding. Such an information speaks loudly to the necessity for an online presence that is not only informative, but also distinct and able to be discovered among the “clutter” of hotel advertising and promotion.

The possible use of each of the main SM and their utility for a hotel are outlined in the next subsection.

15.4.2 Interesting uses of social media

The main uses of SM include:

- The provision of a means of communication with its customers and other potential consumers.
- The possibility of personalizing the brand or product. Customers then feel that they talk to the brand and no longer to the company.
- The opportunity for clients to inform and assist other clients in a collaborative community.
- Some websites offer the possibility to advertise specifically for a specific group.
- Create traffic on the company's website and blog.
- The creation of a "virtual consumer community" of the product or brand. This community will engage with appreciations, criticisms and suggestions that can only be useful in return for the company's marketing policy.
- They can also identify influential groups and virtual consumer communities that can become ambassadors of the brand and thus contribute to the growth of its notoriety.
- Another important benefit is that marketing on social networks is less expensive in comparison with conventional marketing programs, especially since most social networking sites are free of charge.

15.4.3 Interesting uses of main social media in the hospitality industry

For a better perception and complete understanding of the various uses, you can see the typology in appendix 1. The main tools a hotel can use to improve its visibility on the Internet are outlined below.

TripAdvisor: Some hotels, too little in number, apart from luxury hotels, are monitoring their e-reputation for strategic purposes. A debriefing of opinions and feedback from the online travel community can lead to a questioning of certain hotel services or facilities. Opinions may therefore have a managerial and operational interest, but the sole watch of these opinions is not enough. The free "owners" space on TripAdvisor allows you to activate tools such as response to reviews or Review Express to solicit TripAdvisor opinions from guests who have actually stayed at the hotel. Some hotels like Novotel ask their guests to share their experiences and make free communication with future tourists. A communication that is sometimes called "story living" because the client will tell the story of the experience he or she has really lived in the place. Here is the message posted on the website: "To help other travellers choose their hotel, we invite you to share your impressions on the website"².

Instagram: Hotels can capitalize on this trend by motivating consumers to use branded hashtags or specific hashtags that are relevant to a current promotion or event. For example, Starwood hotels launched a campaign in 2016 to encourage the #SPGLife branded hashtag on Instagram. Posts with this hashtag feed into the Starwood website's guest gallery of user-generated content, where visitors can also book a hotel room directly via a link. A simple hashtag is effective because it allows users to easily discovering related content through a search filter. The key is to first encouraging tourists to post stories, photos and videos of their visit to the SM channels (Lo, McKercher, Lo, Cheung & Law, 2011; Stepchenkova & Zhan, 2013). Then, leverage its value by sharing across the digital network. Tourist-generated content provides independents with fresh, authentic voices that help separate them from competitors and strengthen their identity among other tourists.

Facebook: An ideal tool to interact with its customers, promote its brand and services. Ideally, it should also be a traffic provider for the company's website. Of course, the website should be regularly enriched in order to provide Facebook with sufficient material. In addition, the statistical analysis tools, through Facebook Insights, developed by the platform can be used to monitor the dynamism of the page and posts. A study published in 2017 shows that in the MICE – Meetings, Incentives, Conferences and Exhibitions - industry, visuals play a more important role on consumers' participation than texts. The relevance of tools such as Sociograph to

² <http://www.novotel.com/fr/newsletter/hotel-review.shtml>

monitor the ratio between the nature of the elements posted on the page and the rate of customer engagement was highlighted (Christofle, Papetti & Fournier, 2017).

Snapchat: Major hotel companies have made successful forays into marketing through Snapchat, a social-media messaging application that allows users to send photos and videos to friends or publish them onto “My Story” where the users’ followers can view them. The increasing popularity of Snapchat comes from the fact that photos and videos are ephemeral; they disappear after a certain amount of time once they have been viewed. It is a SM channel that hotels cannot afford to ignore; especially because it has the highest percentage (more than 70 per cent of millennial users (the 18 to 34 age group) of all the SM platforms. This platform, however, will require a completely different approach because re-purposing content simply will not work. It does offer an incredible level of engagement, though, and it will certainly grow significantly in 2018³. In 2015, Starwood Hotels experimented with Snapchat geofilters at some of its W Hotels to see how guests would use them. Geofilters allow users of Snapchat to add a sponsor-created geolocational tag to their photo or video message that can only be used when sending a Snap within a sponsor-defined geographical area (e.g., within a 10-metre radius of the hotel). The usage rates and number of views for the geofilters were well above what Starwood had anticipated, indicating that Snapchat may be a viable option for future brand marketing initiatives. Its success is so big that Facebook has developed its own stories system on Instagram and Facebook.

Periscope: Periscope is a platform from Twitter born in 2015 that allows users to broadcast live video to their followers. Video, in general, has a high level of engagement, and live video is even more popular. Periscope is here to stay thanks to its interactive, instant and on-demand features. Moreover, the platform currently has ten million accounts and people are watching 40 years’ worth of videos every day, with these figures constantly growing. This platform is excellent to establish face-to-face contact with the people following you, thus giving your hotel a human face and helping you build relationships much faster. Following this example, Facebook has its own live broadcast system, “Facebook Live”.

Hyper: Hyper contains all the functions needed to create either a local playlist just for now, or an online playlist, tied to your YouTube account. It also offers geographic tags that allow users

³ https://www.hotel-online.com/press_releases/release/social-media-marketing-in-the-hotel-industry-trends-and-opportunities

to discover new things happening in their vicinity. This feature could be an incredible asset to hotels in attracting customers because those tags are searchable.

As we have just seen, the objectives pursued through these various tools are numerous: to communicate, develop a brand community, inform, ensure an e-reputation monitoring, et cetera. The question that now arises is to know, among all the technologies that we have just described which tools an independent hotel, with limited financial and human resources must implement. The next section is dealing with this issue.

15.5 Recommendations regarding the uses of digital technologies

In practice, hotels' owners and managers adopt different strategies and positioning depending on whether they belong to an integrated chain, a voluntary chain or whether they are independent. The range of products they belong to and the target customer have an impact on the adoption of digital tools. Given the resources available to hotel groups and, in turn, to most of their franchisees, we have just seen all the technological features they use in general. The recommendations presented below are focusing on independent hotels.

15.5.1 Digital technologies as managerial tools are not necessary

The use of managerial tools varies mainly according to hotel capacity. A small capacity hotel will have less difficulty in monitoring the condition of its equipment and planning its maintenance because it will be easier to list and plan the work or interventions necessary for the proper maintenance of the hotel. Investing in CAMM-type tools does not seem essential to them, so many remain on an "artisanal" management of the operational. On the housekeeping side, tools such as 1Check target hotels with an Executive Housekeeper and a large enough number of staff in rooms to set up an elaborate planning process and is not fully adapted to smaller units / businesses.

15.5.2 Digital technologies for purposes of customer relations and customer experience: a must

Management and marketing tools have become indispensable for all types of establishments. According to PMS Editors, hoteliers only master and exploit 20 per cent of the functionality of

their tools. Rather than taking training time, they use basic functions such as check-in or invoicing, but do not expand the CRM-based customer relationship capabilities often included in large tools. Hotels, especially independent, invest in specialized tools such as CRM and consider training to be a waste of time and prefer several friendly use tools but these duplicate services have a cost. Instead, we advise them to invest their PMS to the fullest extent possible, even if they have to go through a more extensive training phase. In addition, today's minimum necessary is to offer Wi-Fi on all floors. Wi-Fi is an equipment both awaited by tourists and the facilitator for other digital supports of the hotel, such as the application. The deployment of Wi-Fi is a real commercial argument because it has become one of the first criteria for selecting a hotel. Investing in other very modern technologies can of course improve the customer experience, but due to access costs, we will focus on the presence of hotels in the digital media.

15.5.3 Presence on digital social media

We recommend that professionals invest in SM channels because of their low cost of entry. The important issue is to choose the most relevant ones for their clientele and above all to manage the content in a homogeneous way on all media and consistent with the establishment's strategy. Rather than being present on Facebook, if the hotel welcomes business customers, being active on Twitter can be interesting. On the other hand, an establishment in the "hostel" category would be well advised to launch on the digital networks of generations Y or Z, because they are no longer on Facebook, and most of them are using Instagram and Snapchat (White, 2010). With a small team, running the SM accounts can be a collaborative effort. It is critically important that this endeavour is guided by a common set of ideas that are shared by everyone managing the accounts.

When planning and implementing a business operational SM marketing it is important to perform the following actions:

- Keep your hotel's style at the forefront
- Express it with a consistent voice
- Only use an idea or piece of content if it is clearly in the top 20 per cent
- Tailor your message to each SM
- Post videos and photos of good quality: more than 50 per cent of SM users claim that they find videos and images more engaging than posts only with text.

If independent hotels only need to invest in four networks, we recommend Facebook, Instagram, TripAdvisor and Twitter, especially if their clientele is the business segment. It is important to choose only a few SM, but to publish quality content regularly. The use of Instagram could enable an independent hotel to distinguish itself among current buyers, and imprint a lasting message and/or visual for the viewer. Obviously, visual messages are essential here. Instagram has accumulated 77.6 million users in 2015 in the U.S. alone, 50 per cent of whom are millennials.

Quality is also important on Facebook for similar reasons, that said, there is a bit more latitude for humour, self-promotion and a variety of content on Facebook. TripAdvisor allows to activate free tools such as the Review Express to solicit opinions from customers who have been staying at the hotel. The tool also offers hoteliers and restaurateurs the possibility of being alerted when a new notice is published. Managers must take the time to monitor and respond to comments, either to thank them if they are positive or to try to find a solution or to dialogue with courtesy if the client's opinion is negative. «Tourists say an appropriate response from hotel management is more likely to make them book (57%), improves their overall impression (84%) and makes them feel the hotel cares (78%) ». Finally, with Twitter, the 140-character limit is an important factor in planning for this network, but there are strong tools (like images with text) that can work to tell a longer story (Syed-Ahmad, Musa, Klobas & Murphy, 2013). Twitter streams are busy places so managers can repeat messages as on other SM.

In addition, the use of free analysis tools available on these platforms makes it possible to measure the dynamism and impact of publications. Even more interestingly, some analyses concern competitors and propose effective benchmarks and comparisons between the pages of which one is an administrator and those of which one is not. At the end of this chapter, appendix 2 is depicting a table summarizing the main free tools that an independent hotel can use to improve its visibility on the Internet.

Thus, very little research uses this type of quantitative tool to test hypotheses, particularly on the relationship between the nature of posts and the type of engagement of Internet users. In a 2017 study, the authors attempted to verify whether the evolution of the importance of the visibility of a city of tourism and congresses on Facebook and the ranking of the city in world statistics were converging. At this aim, the researchers mobilized the free benchmarking tools of the various pages for which they are not administrators, i.e. Sociograph and LikeAlizer, and were able to build a cartography of congress cities whose visibility on Facebook accompanies

their dynamism. A series of explanations of these results are given (Christofle et al., 2017). A research project currently under way aims at deepening the analysis by proposing to test the relationship between the precise nature of published posts (visual versus textual content) and the type of reactions aroused, in the case of the world's major tourist cities. Some of the results that negate the work on the role of photos in Internet users' level of engagement are discussed in conclusion and research proposals are set out (Papetti, 2018). In addition, independent hotels to save time should use programming tools available directly on SM or via platforms such as Hootsuite.

15.5.4 Website update

Most of the tourism providers' websites are only fed very occasionally, except for the update of prices via their booking engine. These websites benefit from the Content Management System, which allows hotel managers to modify textual and visual content without systematically referring to a specialized service provider. In addition, some hotel sites still insist on returning to an application form for a reservation, which scares away today's customers, and even when the websites benefit from a booking engine, the tool is sometimes already outdated in comparison with the behaviour of new tourists, both mobile and international. Hotels are increasingly adopting responsive design sites, but their booking tool is sometimes out of step and customers via smartphone prefer to book on OTA sites or apps, to the detriment of independent hotels.

Finally, independent hotels should think about a synergy between SM and website in taking advantage of the growth of E-commerce features. E-commerce features are gaining ground in SM platforms, with Facebook ads already permitting users to click straight through to a business' website. In 2016, IHG (InterContinental Hotels Group) began using dynamic ads on Facebook to target "high-potential" customers with personalized advertisements based on searches, which yielded an increase in the brand's ability to reach relevant tourists and a lower cost per booking. In the big picture, SM channels are beneficial to hotel companies because they offer an opportunity to create personalized interactions with consumers, which can be leveraged to yield more direct online bookings.

In summary, the minimum survival kit for an independent hotel could include:

- A first or responsive mobile website encompassing: a CMS to update text and visuals; a high-performance booking engine that accepts a multitude of payment methods,

including via messaging systems such as WeChat pay; a widget with certified customer reviews, so that the customer is reassured before booking; and a basic analytics tracking tool to react based on the behaviour of visitors to the website.

- A tool for monitoring e-reputation, with online opinions / reviews on TripAdvisor, Booking and Expedia, to respond to them.
- A revenue management tool, essential to optimize hotel availability and rates.
- A SM that targets the hotel's main clientele. This requires regular feeding of the SM, using programming tools and performance monitoring tools if they exist.
- Facebook Messenger or WhatsApp channel as a communication tool.
- An easy-to-access PMS that requires minimal training, like the new generation of Thai Soft, including basic functionalities such as a good CRM.

Finally, it is believed that the employees' training for SM is essential. Online training solutions are now available and less constraining for independent hotels since they do not have to send their teams for several days off their premises.

15.6 Summary

Tourism related industries is entering the era of artificial intelligence. This includes significant advances on data, voice assistants and chatbots. Big data mining and exploitation will soon enable hotel managers to propose a hyper-personalization of the customer experience. A typical customer who visits the Delta Hotel website will not see the same textual and visual content as the Beta customer. The applications are already customized according to location and time of use, but these opportunities will increasingly extend to groups and independent hotels.

In this chapter, we have seen the various digital tools available to tourism businesses. Its focus has been on their value and uses for marketing purposes.

CRM and website management tools will take into account the stage, the tourist's profile and behaviour in order to offer a hyper-personalized experience. "If an establishment can [...] collect a large amount of data, it is necessary to work across the different data collection departments for a customization strategy. Agility implies exploiting millions of variables (keywords, audience, devices, location...). By crossing dynamic advertisements, remarketing and using automation systems, [hotels will gain] agility, for better customization, thus conversion". (Guerrier-Buisine, 2017).

The learning machine allows companies to fine-tune communication in all languages with tourists. Expedia works on its Chabot to allow bookings without going through a human before the stay on site. Robots are able to have interactive and built exchanges with tourists to bring them the necessary information at any moment, without any waiting time. Guerrier (2017a) indicate that 56 per cent of hosting providers plan work on data "to personalize the customer experience" and 38 per cent want to automate some of the online exchanges with visitors and customers. This hyper-personalization will also be made possible by the deployment of digital tools such as voice assistants by the giants of the web, such as Amazon with Echo or Alexa and Google Home. The tourist who is looking for inspiration, information, or wants to make a reservation can simply turn to this connected and intelligent object. For this purpose, a huge amount of R&D work is devoted to the learning machine, which will accompany the hotel owners of tomorrow.

Internally, projections are turning towards increasingly accessible and agile tools, and towards a real digitalization of the offer. From home automation, which has already invaded the luxury hotel industry, to software and applications that will allow forever more responsiveness by improving customer care, teams and equipment, hotels will have an arsenal of tools that will improve their productivity, the well-being of employees and the experience of their guests. Increasingly versatile and intuitive tools will be essential for better back-office management. These tools will have to link the different departments of the hotel, which are fully connected each to other. Those functionalities are common to every department and also transferable. Guests no longer wanting to have a friction point during the preparation of their stay, they also want to arrive at the hotel and be recognized at each meeting point or purchase point of the hotel. In addition, in terms of customer experience, augmented reality mobile tools can also provide substantial improvements to the hotel experience. Experiments that allow the room to immerse the client in a virtual reality are underway. The question is to know the financial returns of these expensive technological investments. Although mobile augmented reality should allow less passive connection such as traditional in-situ or online content delivery, beyond it the challenge of the right balance between physics and digital named *phygitalization* to serve the customer experience arises. Only the experiments in progress will better guide the strategic choices to be made (Antonczak & Papetti, 2017).

15.7 Review questions

Check your understanding of this chapter by answering the following questions or discussing the topics below:

- What are the different objectives of a PMS and a CRM? Is it always necessary to have both?
- What are the most relevant online social media for developing a brand community?
- How can digital tools improve your customers' experience during their journey?
- What are the key tools of the *phygitalization* of tourism businesses?

Finally, the opportunities for an independent hotel to implement specific *phygitalized* tools could be discussed.

References and further reading

Aluri, A., Slevitch, L. and Larzelere, R. (2016). "The influence of embedded social media channels on travelers' gratifications, satisfaction, and purchase intentions", *Cornell Hospitality Quarterly*, Vol. 57 No. 3, pp. 250-267.

Antonczak, L. & Papetti, C. (2017): Towards a mobile enhancement of glocal heritage: Developing user experiences in relation to mobile technologies, geo-localisation and culture, The Thirteenth International Conference on Wireless and Mobile Communications, ICWMC, 23-27 juillet, Nice.

Christofle, S., Papetti C. & Fournier, C. (2017): Tourisme, trajectoires et images : les média socio numériques, outils contemporains d'adaptation communicationnelle de destinations mondiales de congrès ?, 7ème édition du colloque AstRES, Université de Grenoble, 14-16 juin.

Duan W., Yu Y., Cao Q. & Levy S. (2016): Exploring the Impact of Social Media on Hotel Service Performance, *Cornell Hospitality Quarterly*, 57, Issue 3.

Fotis, J., Buhalis D. & Rossides (2012): Social media use and impact during the holiday travel planning process. In: Fuchs, M., Ricci, F. and Cantoni, L., eds. *Information and Communication Technologies in Tourism*, Vienna, Austria: Springer-Verlag, 13-24.

Guerrier-Buisine V. (2017) : Adapter sa distribution aux usages numériques des voyageurs, *Journal L'Hôtellerie Restauration*, 2 juin 2017, <http://www.lhotellerie-restauration.fr/>

Guerrier-Buisine V. (2017a) : Les 5 tendances de l'e-tourisme en 2017, *Journal L'Hôtellerie Restauration*, 14 juin 2017, <http://www.lhotellerie-restauration.fr/>

Kaplan & Haenlein (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68.

Leung D., Law R., van Hoof H., & Buhalis D. (2013). Social media in tourism and hospitality: A literature review. *Journal of Travel & Tourism Marketing*, 30(1-2), 3-22

Lo, I.S., McKercher B., Lo A., Cheung C., & Law R. (2011): Tourism and online photography. *Tourism Management*, 32(4), 725-731.

Martín-Santana, J.D., Beerli-Palacio, A., & Nazzareno, P.A. (2017): Antecedents and consequences of destination image gap. *Annals of Tourism Research*, 62(1), 13–25.

Papetti (2017) : Influence du type de matériel posté sur Facebook sur les réactions des internautes : le cas des grandes villes touristiques françaises, *Séminaire interne Nice, juin*.

Stepchenkova, S. & Zhan, F. (2013). Visual destination images of Peru: Comparative content analysis of DMO and user-generated photography. *Tourism Management*, 36, 590-601.

Syed-Ahmad, S-F., Musa, G., Klobas, J-E. & Murphy, J. (2013). Audience response to travel photos and Arab destination image. *Journal of Travel & Tourism Marketing*, 30(1-2), 161-164.

White L. (2010). Facebook, friends and photos: A snapshot into social networking for generating travel ideas. In N. Sharda (Ed.), *Tourism informatics: Visual travel recommender systems, social communities, and user interface design* (115-129), Hershey, PA; IGI Global.

Zhu, Y-Q. & Chen, H-G. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business Horizons*, 58(3), 335-345.

Word count: 6,540

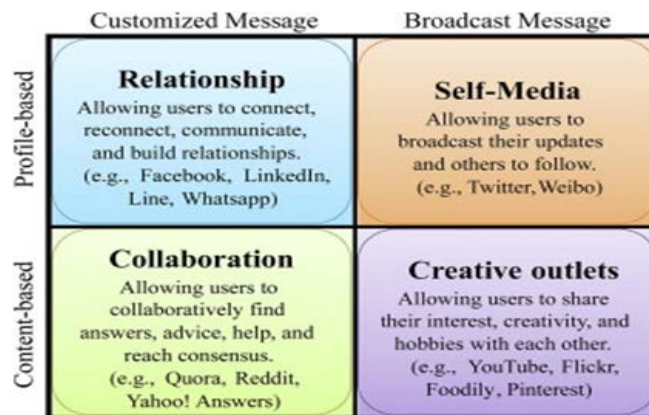
Some suggestions for additional resources (further reading)

- Ayeh, J.K., Au, N. and Law, R. (2013), “Do we believe in TripAdvisor? Examining credibility perceptions and online travelers' attitude toward using user-generated content”, *Journal of Travel Research*, Vol. 52 No. 4, pp. 437-452.
- Filieri, R., Alguezaui, S. and McLeay, F. (2015a), “Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth”, *Tourism Management*, Vol. 51, pp. 174-185.
- Filieri, R., Alguezaui, S. and McLeay, F. (2015b), “E-WOM and accommodation: An analysis of the factors that influence travelers' adoption of information from online reviews”, *Journal of Travel Research*, Vol. 53 No. 1, pp. 44-57.
- Inversini, A. and Masiero, L. (2014), “Selling rooms online: The use of social media and online travel agents”, *International Journal of Contemporary Hospitality Management*, Vol. 26 No. 2, pp. 272-292.

- Kim, W.G., Lim, H. and Brymer, R.A. (2015), “The effectiveness of managing social media on hotel performance”, *International Journal of Hospitality Management*, Vol. 44, No. 1, pp. 165-171.
- Ladhari, R. and Michaud, M. (2015), “eWOM effects on hotel booking intentions, attitudes, trust, and website perceptions”, *International Journal of Hospitality Management*, Vol. 46 No. 1, pp. 36-45.
- Sigala, M., Christou, E. and Gretzel, U. (Eds.) (2012), *Social Media in Travel, Tourism and Hospitality: Theory, Practice and Cases*, Ashgate, London.
- Sotiriadis, M. (2017) ‘Sharing Tourism Experiences in Social Media: A Literature Review and a Set of Suggested Business Strategies’, *International Journal of Contemporary Hospitality Management*, 29(1), pp. 179-225 (DOI: 10.1108/IJCHM-05-2016-0300).
- Sotiriadis, M. (2016) ‘The Potential Contribution and Uses of Twitter by Tourism Businesses and Destinations’, *International Journal of Online Marketing*, 6(2), pp. 62-77 (DOI: 10.4018/IJOM.2016040105).
- Sotiriadis, M. and Van Zyl, C. (2013) ‘Electronic Word-of-Mouth and Online Reviews in Tourism Services: The use of Twitter by Tourists’, *Electronic Commerce Research Journal*, 13(1), pp. 103-124.
- Sparks, A.B., Fung So, K.K. and Bradley, L.G. (2016), “Responding to negative online reviews: The effects of hotel responses on customer inferences of trust and concern”, *Tourism Management*, Vol. 53 No. 1, pp. 74-85.
- Xiang, Z. and Gretzel, U. (2010), “Role of social media in online travel information search”, *Tourism Management*, Vol. 31 No. 2, pp. 179-188.
- Xiang, Z., Schwartz, Z., Gerdes Jr., J.H. and Uysal, M. (2015), “What can big data and text analytics tell us about hotel guest experience and satisfaction?”, *International Journal of Hospitality Management*, Vol. 44 No. 1, pp. 120-130.
- Xie, H., Miao, L., Kuo, P. and Lee, B., (2011), “Consumers’ responses to ambivalent online hotel reviews: The role of perceived source credibility and pre-decisional disposition”, *International Journal of Hospitality Management*, Vol. 30 No. 1, pp. 178-183.
- Xie, L.K., and Zhang, Z. (2014), “The business value of online consumer reviews and management response to hotel performance”, *International Journal of Hospitality Management*, Vol. 43 No. 1, pp. 1-12.
- Zeng, B. and Gerritsen, R. (2014), “What do we know about social media in tourism? A review”, *Tourism Management Perspectives*, Vol. 10, pp. 27-36.
- Zhang, Y. and Vásquez, C. (2014), “Hotels’ responses to online reviews: Managing consumer dissatisfaction”, *Discourse, Context and Media*, Vol. 6, pp. 54-64.
- Zhao, X(R), Wang, L., Guo, X. and Law, R. (2015), “The influence of online reviews to online hotel booking intentions”, *International Journal of Contemporary Hospitality Management*, Vol. 27 No. 6, pp. 1343-1364.

Appendix 1: A typology of online SM

Profile-based vs. content-based social media		
	Profile-based	Content-based
Focal point	The individual member	Contents posted
Nature of information	Topics are typically related to the person	Discussions and comments are based around contents posted
Main purpose	Users make connections mainly because they are interested in the user behind the profile	Users make connections because they like the contents a certain profile provides
Examples	Facebook, Twitter, Line, WhatsApp	Flickr, Instagram, Pinterest, YouTube
Customized vs. broadcast messages		
	Customized messages	Broadcast messages
Intended audience	Intended for a specific person or a small group/audience	Intended for the general public
Exclusive	Yes	No
Permission rights	Generally with permission restrictions	No permission restrictions
Examples	Facebook comments and private messages	Twitter postings



Source: Leung, Law, van Hoof & Buhalis, 2013

Appendix 2: Main free tools for analysing SM presence (Papetti, 2017)

MAIN TOOLS FOR ANALYSIS OF DIGITAL SOCIONUMERIC MEDIA ACCESSIBLE BY FACEBOOK (January 2017)		
NAME	FUNCTIONALITIES	EXAMPLES OF RESULTS'S PRESENTATIONS
FOR ADMINISTRATORS OF PAGES		
<p>Facebook Insights</p> <p>https://www.facebook.com/help/383440231709427</p>	<p>Strategically gather Facebook Insights and page data.</p> <p>Discover what content resonates with your audience.</p> <p>Improve engagement and grow Facebook followers.</p> <p>Tag posts & comments for aggregate campaign insights.</p> <p>Visualize and export page data with dynamic charts.</p> <p>Understand Facebook page Impressions and Growth.</p>	
<p>Cyfe</p> <p>https://www.cyfe.com/</p>	<p>Monitor brand mentions, track number of Twitter followers over time, view Facebook demographics, and more.</p> <p>Monitor all marketing channels like email, SEO, SEM, social media, and analytics from one place.</p> <p>Track multiple websites, top referring domains, search engines, SEO keyword rankings, and more.</p>	
FOR ADMINISTRATORS & NON ADMINISTRATORS OF PAGES		
<p>Likealyzer</p> <p>https://likealyzer.com/</p>	<p>Compare your Facebook page to competitors, partners and all brands you want.</p> <p>Monitor and benchmark your Facebook page against your competitors with competitive metrics.</p> <p>Elevate your brand's influence on Facebook with Likealyzer's recommendations.</p>	
<p>SimplyMeasure</p> <p>https://simplymeasured.com</p>	<p>Learn what, where, and when to post for increased engagement. Save time by automating your reporting workflow.</p> <p>Drive more traffic with your social posts by analyzing onsite activity, URL sharing, leads, purchases, revenue and more from social.</p> <p>Track which content is shared the most via digital word-of-mouth, including private messaging.</p> <p>Learn which content drives leads, purchases, and revenue.</p> <p>A competitive analysis report is also available. It allows you to compare 10 pages with up to 250,000 fans.</p>	
<p>Sociograph</p> <p>https://sociograph.io/my.html</p>	<p>Analyze any Facebook page. Observe the total number of publications, authors, people who comment and like a publication.</p> <p>Obtain an average rating of the number of "Like" mentions, sharing and comments for each publication, the different types of publications, and the best publications for a period of time of your choice.</p> <p>You can go back to the page creation date and get time series analyses with monthly and annual comparisons.</p>	
<p>Quintly</p> <p>https://www.quintly.com</p>	<p>Combine the social media analytics data of all your social networks in one tool, whether you are using Facebook, Twitter, YouTube, Google+, LinkedIn, Instagram, Blogs or all.</p> <p>Get valuable competitor insights and data.</p> <p>Benchmark your social media performance and marketing analytics against competitors and alongside best-practice examples.</p> <p>Obtain data on influencers, customer service, detection of sponsored publications, content, and more than 250 indicators.</p>	