

Keeping up the pace of digitalization in small businesses–Women entrepreneurs’ knowledge and use of social media

Anna Karin Olsson and Iréne Bernhard

School of Business, Economics and IT, University West, Trollhattan, Sweden

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Abstract

Purpose – This study aims to explore how women entrepreneurs in small businesses encounter digitalization and learn to use social media at work by combining theoretical perspectives from research on women entrepreneurs in small businesses, digitalization and use of social media and digital skills in response to calls from earlier research regarding women entrepreneurs’ adaptation to an increasingly digitalized world.

Design/methodology/approach – Qualitative methods were applied including a total of 13 in-depth interviews in two phases, in 2017 and 2019, with 11 women entrepreneurs in nine small businesses, along with observations of their digital presence.

Findings – This study contributes with new insights regarding women entrepreneurs’ behavior and ways to acquire digital skills to keep up the pace in digitalization. Learning by doing, informal learning and step-by-step self-development entrepreneurial behavior were practiced along with strategical recruiting of young digitally skilled employees, i.e. digital natives. Findings state that in order to remain competitive and generate business growth, women entrepreneurs constantly have to learn new skills to capture the potential of digitalization especially regarding the knowledge and use of social media. The women entrepreneurs emphasize challenges of digitalization as limited resources, constant need of new digital skills, digital stress or even burnout due to internal and external demands on online presence, scanning and maintenance of social media platforms. In contrast to earlier research, the women entrepreneurs did not express any significant gender stereotyping online, yet they strongly emphasized the continuous challenge of work—life balance.

Originality/value – This study contributes to an under-researched field with novel research combining theories from women entrepreneurship and information and communication technologies (ICTs) related to digitalization with a special focus on social media. Following the era of digitalization, the women entrepreneurs have to act as digital entrepreneurs finding new innovative ways of doing business. The importance of recruiting young digitally skilled employees in small businesses is vital for women entrepreneurs, since the needed learning and business development takes place when digital natives and digital immigrants work together.

Keywords Digitalization, Social media, Women entrepreneurs, Small businesses, Digital skills, Digital natives

Paper type Research paper

Introduction

Structural changes such as digitalization generate rapid advances in information and communication technologies (ICTs) that are changing, reshaping and challenging conditions for work and interaction (Faraj *et al.*, 2018; Schwab, 2017), shaking up the industry and generating new customer expectations (Aloulou, 2019). These digital technologies, such as

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social media, often involve major changes in organizing business operations and influence how products and services are produced and delivered as well as organizational processes and organizing logic (Aral *et al.*, 2013; Faraj *et al.*, 2018; Gellerstedt and Arvemo, 2019; Nambisan, 2017; Norström *et al.*, 2019; Yoo *et al.*, 2010). Accordingly, businesses face new competitive dynamics, as digital technology needs to be an integral part of business strategies (Yoo *et al.* 2010; Rajahonka and Villman, 2019). Digitalization is thus a mechanism both for innovation and for entrepreneurship (Nambisan *et al.*, 2019; Sharafizad, 2016) that is of vital importance for local and regional growth (e.g. Audretsch *et al.*, 2006; Minniti, 2010; Minniti and Naudé, 2010). Entrepreneurs play a vital role in local economic development (Thurik *et al.*, 2002) and small firms generate economic growth (Audretsch and Thurik, 2001; Bernhard and Olsson, 2019). Digitalization as a societal change affects small businesses and entrepreneurs since it may generate new opportunities to grow, especially based on ICTs as communication, marketing and transaction channels (Genç and Öksüz, 2015; Nambisan *et al.*, 2019; Sharafizad, 2016). However, several studies stress that owners of small businesses, as entrepreneurs, seldom have all the knowledge and skills needed to develop their businesses to meet societal digital challenges. There are calls for further research on how social media are implemented in organizations related to sensemaking processes of social media (Högberg and Olsson, 2019). The understanding is often based on digital skills from personal use of social media (Högberg and Olsson, 2019).

The field of research on women entrepreneurs covers various aspects although it still needs further investigation (Dy *et al.*, 2017; Minniti, 2010; Minniti and Naudé, 2010). Earlier research argues that women entrepreneurs act as drivers of growth (McClelland *et al.*, 2005; Minniti, 2010; Ramadani *et al.*, 2013; Sharma, 2018), hence interest in the importance of women entrepreneurship worldwide has increased (Ahl, 2006; Henry *et al.*, 2016). Women entrepreneurship has been acknowledged as an important factor in economic development, in which women entrepreneurs create new jobs for themselves and others (Acs *et al.*, 2005; Sharma, 2018). Earlier research states that women entrepreneurs experience challenges but also advantages when using digital technologies (Rajahonka and Villman, 2019) and that they are involved in a broad range of activities online. The potential of social media platforms for women entrepreneurs is globally acknowledged (Genç and Öksüz, 2015; McAdam *et al.*, 2019; Ukpere *et al.*, 2014). Still there are calls for more research regarding ICTs and small businesses, especially women entrepreneurs' adaptation to an increasingly digitalized work (Rajahonka and Villman, 2019; Sharafizad, 2016) and becoming a digital entrepreneur (Dy *et al.*, 2017; Kaplan and Malach-Pines, 2010; McAdam *et al.*, 2019; Nambisan, 2017; Rajahonka and Villman, 2019). Digital entrepreneurship has been defined as "the pursuit of opportunities based on the use of digital media and other information and communication technologies" (Davidsson and Vaast, 2010, p. 2) and is here viewed as the intersection of digital technology and entrepreneurship (Nambisan, 2017).

Studies of entrepreneurial decision-making and uncertainty state that emotions affect investment decisions such as ICTs are based on own experiences or others' (Brundin and Gustafsson, 2013; Cope and Watts, 2000). Small businesses tend to be slower than larger ones in incorporating ICTs in their work mainly due to limited resources such as time, money and digital competences (Fleet, 2012; Sharafizad, 2016). Furthermore, the increasing level of digitalization in workplaces causes a growing need to learn digital skills (Noonan *et al.*, 2017; Sharafizad, 2018) and to adapt to new digital work processes in smaller businesses (Rajahonka and Villman, 2019; Taylor, 2015).

Existing research shows that there are gender gaps in the use of ICTs, hence this too calls for further research (Rajahonka and Villman, 2019; Robinson *et al.*, 2015). The challenge of using social media in organizational work practices has been pointed out as a specific important field of research that needs further elaboration (Aral *et al.*, 2013; McAdam *et al.*, 2019). Social media is here defined as "a group of Internet-based applications built on the

ideological and technological foundation of Web 2.0 that allow the creation and exchange of user generated value” (Kaplan and Haenlein, 2010, p. 60).

This study aims to explore how women entrepreneurs in small businesses encounter digitalization and learn to use social media at work by combining theoretical perspectives from research on entrepreneurship, gender and ICT. The research questions are (1) How do women entrepreneurs in small businesses encounter the increasing digitalized world with focus on social media? (2) How do women entrepreneurs in small businesses learn and develop their digital skills?

The empirical setting of this study is the tourism industry. This sector includes many small businesses (Hjalager, 2010) which is of increasing local and regional importance and is being transformed due to digitalization (Buhalis and Connor, 2005; Solvoll *et al.*, 2015) and social media (Leung *et al.*, 2013). The tourism sector is hence viewed as an innovative entrepreneurial sector generating growth, where ICTs are essentially changing the nature, structure and organization (Buhalis, 2019; Minghetti and Buhalis, 2010; Solvoll *et al.*, 2015).

ICTs such as social media have transformed the service encounters in tourism and broadened it from a physical meeting to digital interaction with customers before, during and after the service. Furthermore, the importance of digital presence and online reviews, comments and ratings has greatly affected this sector (Högberg, 2018). The Swedish tourism sector is here broadly defined to include service providers, such as hotels, restaurants, experience and event businesses, as well as retail businesses (SKL, 2018). Throughout this study, we refer to small businesses as including both microenterprises and small firms. Within the SME category, a small firm is defined as employing fewer than 49 people (European Union, 2003), while a microenterprise is defined as employing fewer than 10 persons (European Union, 2003). The Swedish business sector is made up almost entirely of SMEs (Ekonomifakta, 2019). In 2018, 27% of the roughly 480,000 entrepreneurs in Sweden were women (Ekonomifakta, 2019).

Theoretical framework

Following our research questions the theoretical framework of this study is based on an overview of literature covering theories and earlier research on women entrepreneurs in small businesses, digitalization and use of social media and digital skills underpinning our analysis as illustrated in Figure 1.

Women entrepreneurs in small businesses

The number of women entrepreneurs is increasing worldwide (Danish and Lawton Smith, 2012), hence also in Sweden (Pettersson, 2012). Earlier research state that there are calls to

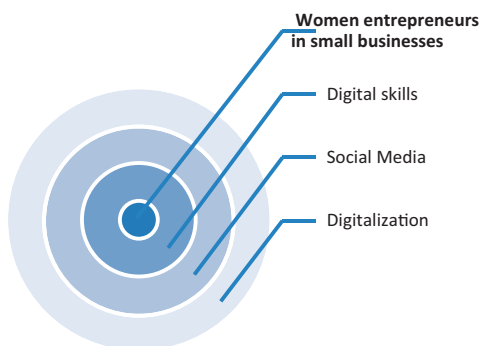


Figure 1.
Overview of theoretical
framework

focus on issues related to women entrepreneurs in future studies (cf. [Ahl, 2006](#); [Henry et al., 2016](#); [Minniti, 2010](#); [Pettersson, 2012](#); [Sharafizad, 2016](#); [Sharma, 2018](#)). Issues of stereotyping and prejudice appear in existing research such as: [Marlow and McAdam \(2013\)](#) who argue that “women-owned businesses often are described as under-performing because there is a general expectation that they will be so” (p. 119) and the need for increased reflexive criticism on assumptions on gender and small businesses.

This is in line with [García and Welter \(2013\)](#) who argue that stories on women entrepreneurs are of importance since they “allow us to challenge the taken-for-granted assumptions of gender neutrality regarding typical business behavior and entrepreneurship” (p. 384).

[Minniti and Naudé \(2010\)](#) point out the increasing research interest on issues such as entrepreneurial teams, networks, growth and performance, management styles and social entrepreneurship to show the “multi-varied and dynamic role” of women entrepreneurs (p. 288). This is also stated in [Duran-Sanchez et al.'s \(2019\)](#) study of trends and changes of entrepreneurship research stating that the field of women entrepreneurship has fluctuated over time and now undergone a renaissance (p. 1510). Research on women entrepreneurs hence need to address and add contemporary issues and new dimensions ([Duran-Sanchez et al., 2019](#)), such as women entrepreneurs’ use and adoption of ICTs and social media to establish and develop businesses ([Kaplan and Malach-Pines, 2010](#); [Rajahonka and Villman, 2019](#); [Sharafizad, 2016](#)). [Dy et al. \(2017\)](#) and [Duffy and Pruchniewska \(2017\)](#) highlight aspects of digital gender inequalities and criticize the idea of the Internet as a neutral platform for entrepreneurs, since gender structures tend to persist in a digitalized context. [Robinson et al. \(2015\)](#) also emphasize that gender stereotyping appears online combined with the fact that women often tend to underestimate their online skills. On the other hand, [Rajahonka and Villman \(2019\)](#) argue that social media may enhance equality at work and work–life balance for entrepreneurs.

Digitalization and use of social media in small businesses

Digitalization is recognized as having potential for change and development of small businesses, generating growth and making them more competitive and innovative by adopting and integrating ICTs into business strategies and processes ([Barba-Sánchez et al., 2007](#)). [Duffy and Hund \(2015\)](#) and [Markowska et al. \(2018\)](#) recognize the increasing importance of the emerging and innovative new categories of women entrepreneurs such as social media influencers. This relates to the concept of digital entrepreneurship i.e. digital entrepreneurs as entrepreneurs finding new ways of doing business based on digital technology hence often including a transformation from offline to online businesses ([Kraus et al., 2019](#)). Regarding fostering of ICT adoption and use in small businesses, [Barba-Sánchez et al. \(2007\)](#) identify key elements: a gradual introduction of ICT, access to adequate training and support and to fully understand the potential of ICT.

Contemporary use of social media in businesses is increasing mainly due to the pervasiveness and the relatively easy-to-use, low-price technology ([Högberg, 2018](#)) that lowers the barrier to advanced technological functions and as such enables not only large firms but individuals and small businesses to take part in exchange processes of ideas and new knowledge ([Chesbrough, 2006](#)). The business perspective of using social media platforms, e.g. Facebook or Instagram, is to be able to predict users’ future needs and these platforms are designed to make people share interactional and personal data online ([Zuboff, 2015](#)). Social media is hence not limited to spreading information but also offers friend-based tools to build relationships as it “allows businesses to communicate with, listen to, and learn from their customers in a way they have never been able to before” ([Jones et al., 2015](#), p. 611).

However, [Genç and Öksüz \(2015\)](#) strongly argue the need to also study disadvantages of social media for women entrepreneurs. They critically discuss social media as a “two-sided medallion” (p. 299) since social media give access to unlimited number of potential customers, still entrepreneurs in small businesses may spend time on efforts that do not really hit their target audience. These disadvantages are also recognized by [Rajahonka and Villman \(2019\)](#). The challenge in balancing the need for ICT knowledge vs the limited resources of small businesses, often resulting in that all SMEs will not necessarily follow the digitalization of large firms ([Barba-Sánchez et al., 2007](#)). The challenges for small businesses related to limitations of time, knowledge and skills to start and maintain a web and social media presence, and furthermore to manage the fragmented and often increasing number of digital channels efficiently is also stressed in earlier research ([Bernhard and Grundén 2016](#); [Burgess et al., 2009](#); [Jones et al., 2015](#)). Social media platforms are hence of importance to small businesses since they are affordable and overcome limitations of time and financial resources ([Jones et al., 2015](#)), user friendly and accessible platforms often used by individuals in private life ([Högberg and Olsson, 2019](#); [Norström et al., 2019](#)). Relationships and interaction with customers or friends in social media may nevertheless, generate negative reviews and comments ([Orlikowski and Scott, 2015](#)) which also may create negative scenarios and that will be difficult to stop or change ([Norström et al., 2019](#)).

Since entrepreneurs as individuals often are closely associated with their own businesses and susceptible to negative emotions due to e.g. stress and fear of failure ([Cope and Watts, 2000](#); [Prayag et al. \(2018\)](#) this may result in entrepreneurial burnout ([Palmer et al., in press](#); [Rajahonka and Villman, 2019](#)). An increasing perception of digital stress here referring to the demand and customer expectations of entrepreneurs’ constant connectivity online and social media presence as visibility of their businesses, often causing continuous interruptions during the workday and nonwork hours at home ([Barley et al., 2011](#); [Colbert et al., 2016](#); [Duffy and Pruchniewska, 2017](#); [Högberg and Olsson, 2019](#)). Hence, digitalization and especially the use of social media blurs the borders between business work and private life ([Grönlund and Öun, 2018](#); [Ramarajan and Reid, 2013](#)) and challenges the work–life balance of women entrepreneurs ([Rajahonka and Villman, 2019](#)).

Research also suggests an increasing need of digital knowledge and skills at work and workforces in order to meet the challenges of the digitalization and especially social media ([Colbert et al., 2016](#); [Noonan et al., 2017](#)). A general categorization of contemporary workforce related to digital skills is suggested by [Prensky \(2001\)](#) as “digital natives”, referring to individuals who are born after 1980 and technological fluent, or “digital immigrants”, as individuals born before 1980 who have gradually grasped aspects of digitalization ([Prensky, 2001](#)).

Digital skills–women entrepreneurs’ learning in small businesses

The main aspect of the digitalization for entrepreneurs is to continuously develop the business, by adapting to new digital work processes and behaviors at the workplace often including learning digital skills ([Dery et al., 2017](#); [Li and Herd, 2017](#); [Nambisan et al., 2019](#); [Noonan et al., 2017](#); [Sharafizad, 2018](#); [Taylor, 2015](#)). Furthermore, research stress that entrepreneurs in small businesses seldom have all the knowledge and skills needed to develop their businesses to meet contemporary societal digital challenges ([Lans et al., 2008](#); [Smith and Barrett, 2014](#)). Entrepreneurs often apply learning by doing ([Cope and Watts, 2000](#)), informal learning and self-development as part of their work activities to maintain control of what and when to learn ([Lans et al., 2008](#); [Smith and Barrett, 2014](#)) to develop and change their businesses. Learning is vital for entrepreneurs throughout the life cycle of the business, not only in the start-up phase. Entrepreneurial learning may be viewed as parallel processes of business growth and the entrepreneur’s personal development and learning by experiencing business incidents, crises and challenges and other emotionally-laden nature

phases (Cope and Watts, 2000) often unintentional and accidental (Murphy and Young, 1995). This is also stated by Rajahonka and Villman (2019), as continuous changing digital technologies affect women entrepreneurs' lifelong learning, while combining learning by doing and "seeing technology as a means to an end, not an end in itself, they learn to translate the language of digital technologies into the language of organizations" (p. 21).

In order to embrace and understand aspects of digitalization and especially social media, women entrepreneurs may need to apply an organizational "double-loop learning" (Schön and Argyris, 1996) to question and adjust their previous pattern of thoughts and proactive reflections in an ongoing sensemaking process (Barba-Sánchez *et al.*, 2007; Cope and Watts, 2000; Högberg and Olsson, 2019).

Studies of women entrepreneurs state that the main sources for renewal processes and knowledge sharing related to digitalization are co-owners, staff, networks, families and friends (Bernhard and Olsson, 2020), role models and women networks (Rajahonka and Villman, 2019) or to hire in or partner with individuals with needed skills (Sharafizad, 2018). Networks are associated with knowledge sharing, knowledge transfer, mutual learning and innovation and it is recognized that networking activities play an important role in women entrepreneurs' access to various resources (Bernhard and Olsson, 2020; Brush *et al.*, 2009; Zhang and Hamilton, 2010).

Methodology

This study aims to explore how women entrepreneurs in small businesses encounter digitalization and learn to use social media at work by combining theoretical perspectives from research on entrepreneurship, gender and ICT. The empirical setting of this study is limited to three cities in Western Sweden, a region in which the tourism industry is of major importance. The selected cities are small with populations ranging from 10,000 to 55,000, situated in areas that are mainly coastal and rural. All cities aim to increase their attractiveness with focus on the competitiveness and innovation capacity in trade and tourism.

Research design

In order to design the study according to the nature of the research problem and aim, we applied qualitative methodology (Dana and Dana, 2005; Gioia *et al.*, 2013) since knowledge and learning are hard to observe or quantify (Cope and Watts, 2000). In order to achieve methodological rigor, multiple data sources were employed (Gioia *et al.*, 2013), including two phases of data collection 2017–2019. Qualitative methods such as in-depth interviews in two phases and observations of social media and digital communication channels are employed as these seek to investigate a phenomenon in depth (Ekanem, 2007). Furthermore, to reach a deeper understanding, this study is inspired by a narrative approach to collect and analyze the interviews as stories revealing women entrepreneurs' views and experiences of digitalization of their businesses (Czarniawska, 2004; García and Welter, 2013; Henry *et al.*, 2016; Mc Adam *et al.*, 2019).

In total, 13 interviews with 11 women entrepreneurs (designated R1 to R11) related to the tourism sector were conducted during the spring of 2017 and spring of 2019 as illustrated in Table 1 inspired by McAdam *et al.* (2019). All the 11 respondents participated in the first phase of interviews in 2017. All respondents were invited to participate again in the second phase of interviews in the spring of 2019 but due to their time constraints, four interviews were performed. The selection was based on referral sampling originating from respondents from previous studies (Bernhard *et al.*, 2016; Bernhard and Olsson, 2019, 2020). The respondents represented in total nine different businesses such as fashion businesses in retail, hospitality and experiences, music and entertainment, bakeries, restaurants and arts. The studied

	Time of interview	Age	Years of operation	Profile of business	No. of employees	Owner /shared ownership	Size of the city (approx.)
R1	Feb 2017 March 2019	41–50	27	Hotel and conference	16	Shared ownership	15,000
R2	Feb 2017 March 2019	51–60					
R3	Feb 2017 March 2019	51–60	19	Retail jewellery	<3	Sole owner	15,000
R4	Feb 2017	41–50	19	Café and restaurant Bakery	5	Sole owner	15,000
R5	March 2017	51–60	27	Resort Camping	<50	Shared ownership	55,000
R6	May 2017	51–60	25	Restaurant Groceries	4	Shared ownership	55,000
R7	Feb 2017 March 2019	41–50	23	Music and events, resort	<50	Sole owner	55,000
R8	Feb 2017 March 2019	41–50	16	Art	0	Sole owner	10,000
R9	Feb 2017	41–50	10	Bakery	2	Shared ownership	10,000
R10	Feb 2017	41–50	20	Retail fashion	1	Shared ownership	10,000
R11	Feb 2017	41–50					

Table 1.
Overview of
respondents

entrepreneurs had a varying degree of dependence on seasonality. The women entrepreneurs all run small businesses with one owner or a shared ownership. The number of employees varies seasonally among the businesses but ranges from 0 to approximately 50. The businesses are located in the city centers as well as on the outskirts of the local community. Some of the entrepreneurs have chosen to co-locate their business together with other firms. All the respondents had several years of experience as women entrepreneurs ranging from 10 to 27 years.

Semi-structured in-depth interviews were conducted to reveal respondents' views on digitalization of their businesses and their stories of ICT use and learning. The interview guide covered themes such as digitalization over time, digital tools and processes, digitalized workplace and more specific benefits and challenges of social media and the entrepreneurs' individual learning processes related to digitalization and the use of social media. The interviews were performed face to face or by telephone and lasted approximately 30–60 min. All interviews were recorded, transcribed and then analyzed to identify ideas and themes linked to the theoretical framework. The analysis builds on transcripts from interviews and data were categorized into themes (Gioia *et al.*, 2013) and gradually into subcategories following the two research questions related to the theoretical framework (See Figure 1).

In addition, a follow-up observations of the respondents' digital presence (Burgess *et al.*, 2009; Högberg and Olsson, 2019; Jones *et al.*, 2015) at social media and websites were performed in the spring of 2019. All the selected small businesses in this study apply social media and digitalized processes in constantly developing their businesses and work in digital networks/platforms, although their digital presence varied as illustrated in Table 2. Some of the women entrepreneurs have integrated ICTs in their businesses such as online booking systems, web shops or plan to start e-commerce, although others have reconsidered their ICT adoption regarding e-commerce and chosen to focus merely on their physical shops.

Table 2.
Respondents' digital
presence, May 2019

Respondents	Profile of business	Web site	Blog	Face-book	Insta-gram	You-Tube	Twitter	Pinte-rest	Trip advisor	Online-booking/Web shop
R1, R2	Hotel	X	X	X	X				X	
R3	Retail			X	X					
R4	Restaurant/bakery			X	X					
R5	Resort	X		X	X	X				X
R6	Retail/ restaurant	X		X	X					
R7	Resort/Music event	X		X	X	X				
R8	Art	X		X	X					X
R9	Bakery	X	X	X	X		X	X		
R10, R1	Retail			X	X					

Findings

The present study aims to explore how women entrepreneurs in small businesses encounter digitalization and learn to use social media at work. Their stories and experiences are revealed in the quotes below according to the two research questions.

Digitalization in small businesses

How do women entrepreneurs in small business encounter the increasingly digitalized world with focus on social media?

Findings show that the respondents' overall entrepreneurial behavior is characterized as constantly developing their businesses by adapting to the ongoing digitalization in order to "stay ahead of the times" (R5) while being "visible and active online" (R5), otherwise "you are doomed!" (R1). Furthermore, social media is used for collaboration and inspiration among small local business owners. A step-by-step adaption behavior to digitalization is stressed:

We [four companies] collaborate with a digitally shared website, while each of us entrepreneurs have our own social media channels. (R6)

Being an entrepreneur in a small town in a rural area you always have to have an open mind and work "wider" in order to broaden your contact areas in order to find and develop your own business opportunities – often together with others. . . . By being present in this local community of other small businesses – we always help, support and inspire each other. (R9)

I have worked with limited resources and worked forward step-by-step. I do not take a big step forward, I want to feel safe, but developing all the time. (R3)

I have received support from being active in networks . . . you will have a lot of exchanges from other business owners . . . things I cannot talk to my employees about. (R7)

Being two owners, we have challenged each other in the digitalization process of and hence risked a little more. (R1 and R2)

Due to the benefits of social media, its speed, affordability, accessibility and focus, the respondents have chosen to change their behaviors regarding how to communicate with their target customers which are emphasized in the following quotes:

It [social media] is a very fast and easy way to reach out to many people with little effort. Cost-wise, it is very advantageous. Especially that you can target different offers and projects. (R1)

Availability, reaching many customers, free, and there are very good tools for events, booking of visits, etc. (R8)

We post offers on Facebook every weekend and if we skip a weekend, we notice it immediately. (R5)

Several respondents mention the importance and the challenge in how to continuously choose and use an optimal and updated mix of digital channels and social media platforms in order to be visible and present online. In the quote below, the respondent has integrated ICTs in the hotel booking procedures, describing the advantages of using large online booking systems but also her frustration when the different systems do not communicate properly with each other:

It's so much technology. First, I set up packages of kayak tours and spa offers online on our website and then I connect it via the channel manager and out to these others. There are so darned many parameters and places, and I do not know my booking system perfectly either or the channel manager. The "channel" does not know how the booking system works and vice versa. If something is malfunctioning and it does not work when presenting price offers and no one knows why it goes wrong, then it is not that easy to find out why! (R1)

Findings show how the ongoing digitalization have forced transformations of the women entrepreneurs' workplaces and work processes especially related to time and space, as well as display of sales of products, services and how to communicate with customers:

I communicate and market myself digitally by displaying my products [art] via the website. I no longer have my store open for visits regularly, no fixed opening hours anymore, hence only on special occasions. I do not need to be stationed and may be mobile and able to show [my art] anywhere. (R8)

One thing that has changed is my workplace – today there are no product catalogs anymore, but we use iPads in digitally displaying our products. We have all suppliers' apps with photos and information of dimensions, part numbers, prices, etc. (R3)

The dialogue with customers also takes place online. It is both positive and negative. We always try to respond within ten minutes even though it is Saturday night. If I do not respond, my "position" declines, i.e. the rating that customers post and that is of main importance to me. (R3)

The respondents have chosen slightly different approaches regarding how to manage the social media platforms, i.e. who is allowed to post and maintain the platforms. The digital skills and understanding of young people are recognized as illustrated below:

We have shared responsibility among us and the staff regarding responding to comments on various social media and booking systems. . . . We, the two owners, do publish material online, but we have several receptionists who help and support us with this. Our staff in the bar and kitchen chefs also are expected to post on our social media especially when it comes to the evenings and the menus in the restaurants. (R1)

We have a really skilled reception manager . . . you realize that we do need these younger persons. She is 28. It is very important that you realize your own limitations when working with digital tools. . . . she grasps and connects things so fast that we publish our material in several social media platforms. (R2)

On the other hand, Respondent 7, strongly argues for the sole responsibility of the owner to deal with social media. She maintains and updates all the social media platforms herself.

Many of the mentioned advantages of digital tools and especially social media also generate some challenging disadvantages in how to cope with the digital presence, such as need of technology skills to use and maintain several platforms, digital stress, to be present online 24/7, and having to deal with negative online comments and reviews that are difficult to stop or change. The women entrepreneurs acknowledge and cope with these challenges in different ways:

It is so stressful to have to be available all the time and respond to comments and questions. There are so incredibly many places to be contacted through, and I believe there are too many different platforms! Too many digital channels or platforms that I have to scan and, if necessary, comment. (R8)

It takes so much time to keep track on all these social media platforms. We use Booking, TripAdvisor and the Fork. . . . It is an awful lot of work! You could just work with this full time but we cannot afford that! As a hotel owner of today you not only should run the hotel but you also have to know a lot about technology and computers and of course this is difficult to keep up with. (R1)

There has been an incident three years ago that I still think is incredibly unpleasant to think back to as examples of how social media works as worst spreading something that was not true . . . and suddenly there were 300 shares on Facebook . . . It was awful! (R7)

There are clear disadvantages with the rating on social media. I think it's pretty awful! I can boast a rating of 4.5 out of 5 on Facebook but when I look at those reviews where I received poor grades it is because "the weather has been cold." I think it's really hard! (R7).

Furthermore, respondents state how they have dealt with digital stress and entrepreneur's burnout forcing business procedures to be performed in a traditional or nondigital way:

I have a camping and holiday village and it has been a conscious choice not to digitalize using online booking in my business. It has to do with me working my way into fatigue syndrome. After that, I simply had to change things in my life to be able to continue to run my business. I had to remove as much screen time with computer and cellphone as I could. (R7)

How do women entrepreneurs in small business learn and develop their digital skills?

All respondents discuss and reflect on their need for continuous learning to be able to adjust to the digital workplace. Their learning is mainly informal and self-development and step-by-step learning due to limited resources especially regarding time. Several sources of digital skills are mentioned mainly by personal use of social media platforms, but also learning from friends, family, networks, other entrepreneurs and especially young employees, i.e. digital natives.

I have attended courses on social media although I mainly learned myself and sometimes via networks and other entrepreneurs. (R8)

I have learned about the social media tools myself. (R7)

You have to learn day by day. I try to choose the easiest path otherwise you will not cope. I cannot spend a whole day on a course for every new social media or other digital tools. We have to try and keep up the pace! (R1)

I have hired professionals to help me with the website and to start-up my e-commerce but it always falls on my ignorance, because I simply do not have time to learn enough, while at the same time I do realize more and more how important it is to be present online in different ways. But I do not have the time. Right now, it is a bit like a standstill [with the digitalization]. (R3)

Several respondents appreciate that social media offers new ways to build and maintain friend-based relationships with customers, hence demanding that they have to learn how to create social media messages with focus on feelings and emotions not merely sale.

It should be three-quarters non-sell posts – we should publish a “feeling.” (R1)

We have digital relationships with my customers. I work a lot with emotions – I always try to bring about an emotion in my Facebook posts. (R7)

Respondents clearly emphasized that age matters for learning and developing their digital skills. The ages of the women entrepreneurs were ranging from 40 to 60 years. Respondents 1, 3 and 5 stated that knowledge about social media and age of employees are important when recruiting new staff.

The young ones do have great advantages. In fact, we are a little skeptical about hiring older people because everything is so digitalized today. It's a disadvantage for those who are older than 40. (R1)

It is very fruitful to work together with employees of different ages. . . . I have an employee that is almost 40 who is very good at taking photos. She publishes on Instagram and Facebook, but she is actually getting old in that sense. It sounds really awful but everything changes so incredibly fast! I have another employee who is only 20, who is even more the one who knows fashion online; how it should be posted and what kind of photos. We get even more “likes” on her photos. (R3)

When I have recruited I have probably more or less sought a person who has digital knowledge. She knows how and where to appear online. It is important. I am 52 years old, and my two employees are 40 and 20 years old and together we cover a wide range of different skills. (R3)

We work a lot with social media as Facebook and Instagram today. I hired a full-time communicator several years ago and he has very much to do. The communicator works close to me and he manages all updates. (R5)

Respondent 3 describes her learning step by step as an imitation of what the young employees do and respondent 7 mentions her children:

I learn from the young girls [employees] since I also have another small store. I am inspired by my employees and gradually I learn from them and take care of my own photos and postings for the other store. (R3)

In order to reach the young ones I should use Snapchat and then I have to learn from my kids. (R7)

Analysis and discussion

As presented in findings the women entrepreneurs have embraced digitalization in different ways and show a varying level of digital adoption from marketing to fully integrating work processes and systems, such as international online booking systems, that is in line with earlier research (Barba-Sánchez *et al.*, 2007; Kraus *et al.*, 2019; Sharafizad, 2016). However, the transformation from offline to online businesses discussed by Kraus *et al.* (2019) is not fully incorporated in the behavior of the studied women entrepreneurs.

Women entrepreneurs' encountering digitalization and social media

Following the era of digitalization, the women entrepreneurs, operating in the intersection of entrepreneurship and digital technology, have to act as digital entrepreneurs finding new innovative ways of doing business based on the use of ICTs as pointed out in earlier research (Davidson and Vaast, 2010; Duffy and Hundt, 2015; Dy *et al.*, 2017; Kraus *et al.*, 2019; McAdam *et al.*, 2019; Nambisan, 2017; Nambisan *et al.*, 2019; Rajahonka and Villman, 2019). Applying Barba-Sánchez *et al.*'s (2017) key elements of ICT adoption in small businesses findings in this study show that all respondents have had a gradual, step by step, introduction of ICT in their businesses. However, in contrast to Barba-Sánchez *et al.* (2017), the element of adequate training and support is limited in this study due to constraints of time and resources; hence, not all women entrepreneurs have reached the element of full understanding and sensemaking of the potential of ICT and social media. The respondents of this study have instead practiced learning by doing corresponding to Cope and Watts (2000) and, step-by-step self-development and informal learning that are in line with Fleet (2012), Lans *et al.* (2008) and Scharafizad (2016, 2018). This study further revealed novel results on women entrepreneurial behaviors and strategies to keep up the pace of digitalization in small businesses as strategical recruiting of young skilled digital natives was practiced. The importance of networks, friends and role models were also emphasized (Bernhard and Olsson, 2019, 2020; Rajahonka and Villman, 2019). However, findings also indicate a digital decline due to women entrepreneurs' reconsidering and returning to nondigital traditional work processes and not following the digitalization of other firms.

This study confirms earlier research that small businesses value the benefits of digitalization in particular regarding the affordability, accessibility, focus and speed of social media (Barba-Sánchez *et al.*, 2007; Bernhard and Olsson, 2019, 2020; Genç and Öksüz, 2015; Jones *et al.*, 2015; McAdam *et al.*, 2019). Women entrepreneurs value the changed dependence of time and space as well as access to new processes for displaying products are main benefits according to the studies by Dery *et al.*, 2017; Gellerstedt and Arvemo, 2019; Noonan *et al.*, 2017; Rajahonka and Villman, 2019. However, many of the mentioned advantages of digitalization also generate some disadvantages. The main challenges experienced by the women entrepreneurs are (1) knowledge to make judgments on the "right" digital channels

and platforms to use to be visible and present online; (2) to be present online i.e. to use, scan and maintain several digital channels and platforms as discussed in earlier research (Jones *et al.*, 2015; Palmer *et al.*, in press; Prayag *et al.*, 2018); (3) to deal with negative online comments and reviews as pointed out by Brundin and Gustafsson (2013) and Norström *et al.* (2019); (4) to be exposed to digital stress and risk of burnout as acknowledged in Palmer *et al.*, in press; Rajahonka and Villman, 2019); (5) to balancing work and life dealing with blurred borders between work and private life in use of social media that generates increasing nonwork hours at home as demonstrated in Grönlund and Öun (2018) and Rajahonka and Villman (2019).

However, in contrast to earlier research (Dy *et al.*, 2017; Duffy and Pruchniewska 2017; Robinson *et al.*, 2015) the women entrepreneurs did not stress any significant gender stereotyping online, yet they strongly emphasized the continuous challenge of work–life balance risking stress and burnout.

Women entrepreneurs' learning and developing of digital skills

All of the studied women entrepreneurs express a need to further increase their knowledge in order to develop their small businesses by using social media confirming the importance to keep up the pace in digitalization to survive and grow as a small business. To accomplish this, women entrepreneurs emphasize the need of support and inspiration, especially from fellow entrepreneurs in networks (Bernhard *et al.*, 2016; Bernhard and Olsson, 2019, 2020).

As mentioned above, the women entrepreneurs acknowledge and cope with the challenges of digitalization in different ways regarding in what degree they have incorporated digitalization in their business practices, choice of digital channels and centralization or decentralization of who is allowed to use and maintain social media platforms. Regarding acquiring knowledge and digital skills the studied women entrepreneurs recruit young employees and to improve their own skills by imitation and step-by-step learning.

Several respondents appreciate that social media offers new ways to build and maintain friend-based relationships with customers as pointed out in earlier research (Jones *et al.*, 2015; Norström *et al.*, 2019; Prayag *et al.*, 2018; Zuboff, 2015), hence demanding that they have to learn new ways to create and express messages to communicate online.

In order to be able to adjust to the increasing digital business, all women entrepreneurs confirm a need for continuous learning. Due to limited resources self-development, learning by doing informal and step-by-step learning were practiced that corresponds to earlier research (Cope and Watts, 2000; Fleet, 2012; Lans *et al.*, 2008; Sharafizad, 2016; Smith and Barrett, 2014; Taylor, 2015). The main sources for inspiration to increase digitalization are personal use of social media platforms, learning from friends, family, networks, other entrepreneurs and in particular young employees, i.e. digital natives.

As the women entrepreneurs of this study all are middle-aged, experienced and running mature small businesses, their stories included challenges, crisis and survival related to entrepreneurial learning, digital entrepreneurship, personal development and lifelong learning following business growth and the life cycle of their businesses.

Thus, the digital workplace is not a destination the women entrepreneurs can arrive at. It is an ongoing journey with requiring an entrepreneurial behavior including continuous learning and reflections along with challenges, opportunities and crisis of the digital world.

Conclusions, implications and future research

This study contributes with new insights regarding women entrepreneurs' behavior and ways to acquire digital skills to keep up the pace in digitalization.

This study explored how women entrepreneurs encounter digitalization and learn to use social media at work in response to calls for further research regarding ICT and small businesses, especially women entrepreneurs' adaptation to an increasingly digitalized world. Findings contributed in-depth insights on women entrepreneurs' perceptions over time on how to keep up the pace of digitalization and use of social media in small businesses with focus on their challenges and learning by combining theoretical perspectives from research on women entrepreneurs in small businesses, digitalization and use of social media and digital skills.

The narrative approach presented the stories of 11 experienced, middle-aged women entrepreneurs running mature small businesses within the tourism sector, as a response to earlier research revealing women entrepreneurs' experiences of digitalization in small businesses. By these novel findings, we make four theoretical contributions to research on women entrepreneurs, learning and digitalization.

First, the study demonstrates that in order to remain competitive, the women entrepreneurs constantly had to learn new digital skills to capture the potential of and keep up the pace in digitalizing their businesses. Learning by doing, informal learning and step-by-step self-development entrepreneurial behavior were practiced combined with strategic recruiting of young digital natives. Continuous learning took place when digital natives and digital immigrants worked together. The dependence on young digitally skilled employees may be viewed as a reversed master and apprentice relationship and this is of importance to maintain a competitive digital presence and integration of ICT in the businesses.

Second, despite all digital advantages, there are digital disadvantages pointed out by the women entrepreneurs mainly due to the limited resources and possibility to prioritize learning often causing digital stress or even burnout due to the constant need of social media presence, scanning and the maintenance of all digital channels and platforms. Additionally, having to deal with negative social media comments strongly affects women entrepreneurs' emotions.

Third, the continuous step-by-step digitalization along with the development of the small businesses also indicated some digital decline and a returning to offline processes. Women entrepreneurs may hence have practiced double-loop learning by reconsidering their own patterns of thought to understand the potentials and disadvantages of digitalization.

Fourth, in contrast to earlier research, the women entrepreneurs did not stress any significant gender stereotyping online, yet they strongly emphasized the continuous challenge of work–life balance risking stress and burnout that still may indicate gender equality issues for women entrepreneurs.

Implications for women entrepreneurs' encounter with digitalization and social media may hence be understood as part of their business processes involving learning new skills, knowledge, judgments, strategic recruitment of digitally skilled employees and also affecting work–life balance. As this study indicates, digitalization questions traditional entrepreneurial processes and forces new behaviors related to digitalization of small businesses. From a societal perspective, it is of importance that small entrepreneurs survive and adapt to digitalization and the changes of their industries in order to generate local and regional growth. This is especially important in times of crisis such as the coronavirus disease (COVID-19) pandemic that has affected all industries not at least the tourism sector. Furthermore, financial support for entrepreneurs who employ young digitally skilled individuals would be a mean to support and develop digitalization of small businesses and hence local and regional development. This study accordingly has its limitations such as no gender comparisons and focus merely on small businesses related to the tourism sector. Future research may meet these issues by conducting cross-sector studies, as well as applying mixed methods by combining interviews, workplace and online observations and surveys to reveal other aspects of women entrepreneurs' digitalization. Further research

focusing on the intersections of entrepreneurship, gender and age, related to ICT as well as entrepreneurial challenges related to the COVID-19 pandemic are also encouraged.

Digitalization
in small
businesses

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Corresponding author

Anna Karin Olsson can be contacted at: anna-karin.olsson@hv.se