Information Technology Usage Among Afghan Women Business Leaders

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Cover Page Footnote

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ABSTRACT

Prior to 2001, under the Taliban-ruled government, Afghanistan Information Technology (IT) usage was restricted to a few select individuals. Women were not allowed to attend schools or enter public areas without a related male escort and were expected to stay in the family home (Roshan, 2013). However, since 2001, the Afghan IT infrastructure allowed women to join the business sector to become educated in commerce, and they marketed products, goods, or services. Simple IT tools such as mobile phones have offered affordable business options for women, such as payment transactions over the phone or social media accounts. Afghan women leaders have embraced IT usage as a modern method to conduct their businesses.

INTRODUCTION

Afghanistan experienced over 40 years of war, beginning with the Soviet Union occupation in 1979. Spasms of violence linger although redevelopment occurred as well (Goepner, 2018). Since the end of Taliban rule in 2001, the status of Afghan women was slowly redefined (Ahsan, 2015). The women strove to lead businesses in one of the most challenging countries for women in terms of rights (Myatt, 2015). However, scarce information exists regarding this unique group of Afghan businesswomen. This study was conducted to learn and understand the working of the Afghan women's business leadership and the women themselves. This was possible through interviews that provided a view of their motivations, obstacles, and successes. The investigation of the leadership skills and IT usage of Afghan women may benefit women in other developing countries.

IT empowers individuals to change the world (Caytiles & Park, 2013; De', 2016) and enables widespread and significant societal changes (Souter & MacLean, 2012). The rapidly expanding development of IT usage is comparable to the societal impact of the industrial revolution (De', 2016). Few other modern advances have globally impacted the way people live, work, learn, and govern in the range the way IT usage has (Bongo, 2004). However, although information and knowledge accessed through the Internet is unlimited in developed countries, limited Internet access is prevalent in developing countries because of weather, natural disaster, or phenomena such as terrorism. Access to IT may assist developing countries in improving issues such as gender equality, disease, poverty, and education (The World Bank, 2011). However, internet access has yet to properly reach the poor and rural areas, creating a disparity known as the digital divide (Moloney, 2006). In fact, there exist gaps in IT and Internet access deficiencies in Afghanistan that leave individuals powerless to enable change.

Afghan women have lacked access to business information. However, IT possesses the potential to be a source of business knowledge for Afghan women. Women leaders do not have role models to emulate because Afghan society has limited the participation of women in business owing to government decree, Sharia law, and societal norms (Antonio & Tuffley, 2014; Beath, Christia, & Enikolopov, 2013; Jelodar, Hashim, Yusof, Raihanah, Shahizah, & Zandi, 2014). Afghan society has remained patriarchal over time. The cultural expectations for women in Afghanistan cause

them to remain at home. Sequestrations have limited women's access to business management, financial information, and income generation (Kaifi & Mujtaba, 2011). Thus, the Afghan businesswomen are a unique group because Afghanistan has traditionally limited women's roles to subservient ones such as housekeeping, cooking, and child-bearing. However, as Afghan businesswomen were denied access to schools and experienced limited exposure to the Internet up to 2001, IT usage within the industry is a relatively new concept for many Afghan women.

Research Question

The research question that we investigate in the paper is the manner in which Afghan women business leaders utilize IT to conduct and improve their business. This was realized through an interview process, because it provided an opportunity for Afghan women to speak and be heard. The significance of the study is the development of knowledge, contribution of scholarly literature, and highlighting Afghanistan's women business leaders in a country listed as the third most corrupt in the world (Goodhand, 2002; Kaushik, 2012). The study offered a glimpse into IT development in a country that did not have Internet access country-wide in 2001. Social technologies are transformative (Bertot, Jeger, & Grimes, 2012). However, while preparing for the case study, the researcher found a scarcity of the literature regarding the IT usage of Afghan women business leaders. The existing IT materials written by authors with English as their second language are difficult to comprehend affecting the usefulness of the study findings. To overcome this challenge and lessen the impact, the researcher utilized literature reported more than five years ago to broaden the width of the literature material's availability. Strategies employed to counter the lack of current, relevant literature on Afghan women business leaders are to increase the number of older literature sources to fulfill the width and breadth of a case study literary viewpoint.

Theoretical Framework

The theoretical framework includes the systems, bureaucratic management, and leadership theories. The framework can be employed as the vehicle for generalizing new case studies. The theoretical framework condition involved Afghan women business leaders affected by the IT usage phenomenon and is likely to be found in developing countries such as Afghanistan in 2021 with available Internet access. The systems theory provided a scholarly evaluation method of the IT usage among Afghan women business leaders. It provided the analytical framework with clear, defined concepts necessary for consistent evaluations of organizations and ensured that critical information communication transaction functions and services continued in the face of disruptions (Trotter, Salmon, & Lenné, 2013; Young & Leveson, 2014).

The bureaucratic management theory created a foundation for the female population of Afghanistan to build a leadership structure. Sociologist Max Weber popularized the bureaucratic management theory from 1930 through 1950. It divided organizations into structured hierarchical top-down business methods necessary for a modern society, with rigid lines of authority, and used functions for control. Further, authors Bass and Avolio (1999) described leadership theory with the full range leadership model transactional, transformational, and laissez-faire leadership styles (FRLM) (Chi, Lan, & Dorjgotov, 2012; Salter, Harris, & McCormick, 2015). Bass and Avolio proposed that learned leadership was possible (transformational leadership) versus innate leaders born with leadership qualities (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Avolio &

Gardner, 2005).

According to A.M. Mir, leadership is defined by the ability or capacity to persuade or influence people to achieve a common objective (2010). The Afghanistan Women's Chamber of Commerce and Industry (AWCCI) database lists most of the women-owned businesses as less than five years old of the total 17,639 registered businesses in Afghanistan (2021). In this study the Afghan women business leaders that were interviewed had businesses based in Kabul, ranged in age from 20 to 60 years, and had educational qualifications ranging from primary school to Master's degree. Moreover, the business expertise of the participants was varied: bakery, beauty parlor, dairy production, dress shop owner, education, pignolia nut farm, pottery business, restauranteur, rug business, seamstress, software coding business, and women's clothing shop owner.

The Afghan women business leaders created employment for family members, neighbors, and skilled workers, and stimulated their local economies. They individually interpreted what constituted successful business leadership. The definition of leadership and success for the women varied, from providing financial support for the family to independently turning a business profit. Many women experienced empowerment from business success in a country where women are considered powerless. Moreover, the Afghan women and Indian business leaders have become adept at inventing new services, concepts, and products to fill a niche market that satisfies demanding consumers efficiently (Anvari, Irum, Shah, Mahmoodzadeh, & Ashfaq, 2014). Nijat and Murtazashvili (2015) believed that the adaptive leadership approach would be more beneficial to achieve sustained results for Afghanistan's women's movement.

Holmen, Tar Min, and Saarelainen (2011) reported that the motivating factors for the Afghan female entrepreneurs engaged in launching their business were economic necessities, financial independence, helping others, and autonomous achievement. The Shakib (2014) study of university women graduates discussed additional factors such as measures of work quality, corruption reduction, women working in reproduction, the role of women as domestics, and workforce gender equity. Further, the Mashriqi (2013) qualitative and phenomenological study identified barriers, benefits, institutional characteristics, and education opportunities for Afghan women business leaders. The Sabri (2015) study suggested that female entrepreneurship can effectively involve women in social and economic development. The Myatt (2015) study identified the methods the owners used for operational and successful businesses. In addition, the Beath, Christia, and Enikolopov (2013) study suggested that women's empowerment through development programs with mandated female participants was possible in high discrimination environments.

METHOD

The researcher interpreted qualitative research approaches from the perspective of the subject through documents, artifact collection, and discussions (Toloie-Eshlaghy, Chitsaz, Karimian, & Charkhchi, 2011). Multiple methods to collect data, known as triangulation, have provided a thorough and broad investigation of the subject participant (Flyvberg, 2006). Moreover, descriptive qualitative research has described the events, phenomena, or groups accurately (Langley, 2009), while triangulation has supported descriptive validity, accuracy, and factual reporting. Furthermore, through the study, deep exploration of the linked business actions of the

individuals with more extensive IT processes was conducted and a new theory was suggested (Eze, Duan, & Chen, 2013). In addition, the interview response analysis included trend and pattern analysis.

Design

The study sources of data included theory supporting documents, archival records, researcher notes, and transcribed interview narratives. The data sources were triangulated during the data analysis phase to view the bounded case from three perspectives: evidence source documents, study database, and chain-of-evidence. The study data collected artifacts were stored in the case study database in NVivo v.12 software application, maintaining a chain of evidence to explain drawn conclusions. The study artifacts involved the single pilot interview and 11 interviews transcribed into Microsoft Word documents. Thereafter, they were coded, and the NVivo v.12 software application was used to automatically organize the data into categories. Additional documents uploaded into the NVivo software included memos written during the interview by the researcher, demographics, informed consent documents, study acceptance letters, and theoretical framework reference documents. Further, the research design was based on the study assumption that IT usage behavior by Afghanistan's women business leaders was witnessed minimal change throughout the study development activity. However, numerous additional factors for IT usage may have impacted business leadership for Afghan women, such as the general economic climate in Afghanistan and cultural differences in Afghan society (Mujtaba, 2013). The triangulation technique ensured that the case study description was comprehensive, robust, developed well, and added richness (Fielding, 2012). Furthermore, the case study design ensured a sense of personal safety of businesswomen while attempting to understand the phenomenon.

The natural language processing software was employed instead of manually determining themes among the 12 subjects to avoid researcher bias. Reviews of bias avoidance and objectivity are detailed in the report and asking why-type questions may have promoted a defensive posture from interviewees. Further, the how-type question was a probing question and did not contain a no or yes answer option. Moreover, the unstructured, open-ended interview questions lacked a categorical answer, offered flexible exchanges, added discovery elements, uncovered surprising evidence, and gained deep understanding through rich data collection. In addition, the research was designed in such a manner that all risks to the study were mitigated by removing possible threats to research such as participant selection bias, researcher personal experience influence, or researcher findings expectations. Furthermore, the researcher had no impact or influence on the subject's voluntary participation, equitable selection, or risks such as privacy, economic, social, or personal security. In addition, any possible study conflict of interest from introduced bias was circumvented, objectivity was increased, risk prevention was ensured, and potential harm to participants was avoided.

Setting

The study characteristics satisfied a descriptive case study criteria because the women were business leaders despite living in an area that was hostile, patriarchal society, and had few women's rights. Afghan women business leaders were studied in-depth to provide an enriched description of the IT usage phenomenon in their environment. Descriptive case study bounds were as follows:

12 Afghan women business leaders were selected from one area of the city of Kabul over a seven-month timeline, open-ended questions were used and the discussions were recorded. The aim was to learn about the IT usage of these women to become leaders and thereafter share this information to assist women in other developing countries.

Population and Sample

The study population included Afghan women who lived and worked in the city of Kabul, Afghanistan. The inclusion criteria for the population were: Afghan citizens, women, business leaders, and able to speak, write, and read the English language. Absolute discretion for the interview participant's personal security was assured and honored. The researchers did not select any specific organization to recruit Afghan women business leaders. Study introduction letters were posted in the business areas of Kabul, Afghanistan, which solicited potential Afghan women business leader participants to participate in the study. No financial gain was achieved for the researcher or participants. The maximum sample size for the study from the city of Kabul was 12 Afghan women business leaders and one Afghan women business leader for the field test interview process. Moreover, telephone interviews were utilized as they eliminated the necessity to justify travel to the interview location, request a related male escort, or risk being identified as speaking of their work during the interview process. Thus, the telephone interviews changed the public face-to-face interview venue into a private discussion, mitigating the risks that they may have faced from interviewing. Furthermore, the entire study was gender-segregated by the female researcher who conducted phone interviews with Afghan women business leaders and conformed to Afghan societal norms.

Instrument

The data collection instrument consisted of demographic and interview questions. According to Baškarada (2013), the interview process requirement of subject matter expertise, data collection, and objective interview experience is critical. Further, threats to constructive interviews were identified as the misunderstanding or misinterpretation of responses influenced by personal bias, adding leading questions, and commenting. The written response data entry was exported directly to the NVivo v.12 project database software application for future analysis. The interview agenda provided a step-by-step repeatable process for each interview to maintain a consistent process. Moreover, the NVivo v.12 study organizational records provided the residence for the study documents and accompanying query results. The aim of this study was repeatability to answer the research question with high dependability. Further, telephone pre-screening ensured interested participants qualified for the study. Subsequently, the participants who qualified received demographic and consent forms sent via electronic mail, which they returned via electronic mail with either digital or ink signatures to verify that they understood the terms of study participation.

During the interview, voice recording file timestamps verified the interview time of discussions. The principal researcher's relationship with the proposed research did not involve potential risk to the human study participants or threaten the research integrity of the proposed study. However, the risk levels for the study were more than minimal risk because there was a possibility of physical or psychological harm related to a breach of confidentiality. Harm from telephone interviews may have occurred because Afghanistan remains a patriarchal society. Further, Afghan society

members may have considered the women working outside the home as threatening to the Afghan societal norms. However, the availability of mobile phones enabled the women to select the time of day and a secure location to feel comfortable speaking about their experiences (Oates, 2009). Mobile phone communications were sometimes challenging because of interferences causing dropped calls. Moreover, expectations of rescheduled discussions at the participant's desire occurred because Afghanistan remains a developing country with a growing infrastructure.

Telephone interview questions. The purpose of the telephone interview was to generate participant responses to the ten research questions as follows:
Q1: How does IT use affect your business performance or productivity?
Q2: How does IT use allow you to meet cultural factors such as autonomous business leadership?
Q3: How does IT use enhance your business collaboration?
Q4: How does IT use influence your business interaction through social media such as Facebook?
Q5: How does IT use enable business financial opportunities such as access to credit, microloans, or banking?
Q6: How does IT use impact your business marketing?
Q7: How does IT use affect your desire or drive for financial independence?
Q8: How does IT use affect your decision-making ability?
Q9: How does IT use achieve customer relations management?
Q10: How does IT use affect your business leadership style?

Reliability and Transferability

The qualitative study findings are considered to be trustworthy; reliability, transferability, confirmability, and dependability is achieved (Korstjens & Moser, 2018). Qualitative research reliability was achieved through the triangulated data finding's truth and accuracy (Anney, 2014). Further, qualitative research transferability of study findings has been applied to women in developing countries, Muslim women, and women experiencing gender segregation (Moon, Brewer, Januchowski-Hartley, Adams, & Blackman, 2016). Qualitative research confirmability was realized through the step-by-step process detailed in the data analysis section outlining the researcher's interpretation of the interview responses, NVivo coding iterations, and theoretical framework documents for corroboration. Finally, qualitative research dependability was exhibited with thorough, detailed information for study replication and consistent findings (Golafshani, 2003).

Triangulation

According to Yin (2008), quantitative research triangulation testing or maximization increases the qualitative study's reliability. Yin (2008) suggested quantitative research tools such as triangulation, testing, or maximizing the qualitative study's reliability (Baškarada, 2014; Denzin, 2012). Moreover, qualitative study aspects of dependability, reliability and triangulation definition may present replicate paths to accurate analysis (Baškarada, 2014). Further, multiple methods to collect data known as triangulation provided a thorough and broad investigation of IT usage among Afghan women business leaders. The descriptive case study used three data collection principles out of the four suggested by Yin (2008) and Denzin (2012). Yin believed that the sources of evidence, combined with triangulation, increased the study's relevance (2008).

The first data collection principle involved numerous evidence source reference documents merged from study findings for triangulation to increase the reliability of the study. The relevant sources of information originated from the University of Phoenix's library database resources such as ProQuest, EBSCOhost, InfoTrac, SAGE, and published dissertations in the Digital Dissertations sections. Further, data was gleaned from peer-reviewed articles, reports, and papers to amass information relevant to the study. In addition, literature searches included scholarly articles, reports, conference presentations, textbooks, dissertations, organizational and government Websites. The second data collection principle was the database that contained clearly marked study notes, study documents, all collected and created materials, and initial interview responses to the open-ended study questions. The NVivo v.12 project database systematically held all documents related to the study such that they were separate from the study reported findings, could be searched, and readied for pattern analysis, pattern contrast, or proposition linked to data. Further, the third data collection principle was the chain of evidence that maintained the link to the initial study questions, case study procedures, case study protocol, and the evidence collection circumstances. The database contained the case study chain of evidence documentation such as researcher notes, theory-supporting documents, interview respondent narratives with answers to the open-ended study questions, citations, informed consent documents, study acceptance letters, and conclusions. The purpose of the organizational records was to verify whether a sufficient amount of data was collected to achieve triangulation.

Data Collection and Analysis Procedure

The case study design encompassed all the comprised sources of data. The database contained the case study researcher notes, documents, interview respondent narratives with answers to the open-ended study questions, chain of evidence documentation, citations, final report, and conclusions. Moreover, the database cross-referenced files listed titles, authors, participant numbers, and question responses alpha-numerically assigned to ensure the ethical interview practice of protected and encoded identities. Further, the study participant demographic information names were kept confidential and known only to the researcher. In addition, a unique four-digit code was used to identify each participant to ensure the confidentiality of study participants.

Interviews. The interview process involved female participants only to avoid cultural conflicts (Nazire, Kita, Okyere, & Matsubara, 2016). The interview notes included the time, date, place, persons attending, interview topic, encountered events, climate, tone of voice, and emotions detected to include data not captured during the interview. Further, impressions, feelings, reactions, reflections, or interpretations of interview discussions were additional interview notes. The timeline for the study was March 2019 through September 2019 owing to availability during the spring and summer months, while the time of day was chosen as morning to facilitate unhurried speech and unimpeded post-interview tasks (Merrill, Paxson, & Tobey, 2006). The telephone interviews in Kabul, Afghanistan offered secure areas and times when the women felt comfortable to speak openly (Oates, 2009). Further, the interviews were repeated as necessary for the participants to convey their thoughts and share their live experience. The interview questions pertained to how the women used IT for their business, such as mobile phones or the Facebook Website, permitting open and friendly conversations (Ramsaran-Fowdar & Fowdar, 2013). The intent was for the study participant to feel they were assisting in further studies, rather than

becoming the focus of study under scrutiny.

Documents. The study report contained citations of specific literature, interview notes, documents, interviewee narratives, the chain of evidence documentation, citations, final report, and conclusion. Further, the study database housed interview narratives, circumstances, and location. The descriptions of IT usage from interviews were merged with study findings from different source documents increased reliability. Consequently, through multiple data sources, triangulation strengthened the reliability of the case study, corroborated the findings, and allowed replication consistency (Denzin, 2012).

Triangulation. The case study triangulation served as a means of ensuring that the study views were based on differing directions (or triangular points) to test the reliability and dependability of the case study. Triangulation described the study participants' IT usage behaviors with the interviews, observations, and theory-supported literature employed as cross-verification methods used to triangulate data. Further, study analysis supported the theory using defined procedures build the evidence logically to create strength for the study (Di Pietro & Pantano, 2012).

Analysis

The NVivo V.12 software application feature includes a matrix coding query that demonstrated a theme occurring over the different sources of documents. Case study database citations, final report evidence, and concluding remarks were adequate and sufficient for the chain of evidence (Baxter & Jack, 2008; Yin, 1981). Further, descriptive theories were identified and interpreted by the researcher into themes.

The case study analysis compared a predicted or alternate pattern to an empirically-based pattern (Porter & Detampel, 1995). The researcher identified the meaningful patterns and categories from the study qualitative data. The primary case study predicted pattern proposition was a link that existed between the IT usage of the Afghan women business leader and conducting or improving their business, whereas the secondary predicted pattern proposition was a link that existed between computer usage and conducting or improving their business. Further, the third predicted pattern proposition was a link that existed between mobile phone usage and conducting or improving their business, while the fourth was a link that existed between social media usage and conducting or improving their business. Furthermore, the fifth predicted pattern proposition was a link that existed between e-Government Website usage and conducting or improving their business. Duplication strengthened the internal reliability of the case study when pattern duplication occurred. The case study pattern matching was relevant to the predicted pattern defined. The author followed the theoretical pattern propositions that led to the case study. The data and literature theoretical propositions were based on the collective study data, helped organize the descriptive case study, and defined alternative explanations (Baškarada, 2014).

The completed interview data analysis, theoretical supporting documentation, and chain of evidence suggested the following pattern proposition findings existed between IT usage among Afghan women business leaders and conducting or improving their business. When conducting the transcribed interview query of word frequency for all twelve interviews using NVivo v.12, the keywords IT usage, Internet, and technology occurred 152, 12 times, and six times, respectively.

Moreover, pattern propositions suggested links existed between computer usage and Afghan women business leaders conducting or improving their business. Keywords mentioned such as computer and database computer applications occurred nine and eight times, respectively, when conducting a word frequency query in NVivo v.12. Further, pattern propositions also suggested links existed between mobile phone usage and Afghan women business leaders conducting or improving their business. Keywords mentioned such as cellphone, mobile phone, and phone occurred twice, twice, and once, respectively, when conducting a word frequency query in NVivo v.12. In addition, pattern propositions suggested links existed between social media usage and Afghan women business leaders conducting or improving their business. Keywords mentioned such as social media, Facebook, Instagram, Twitter, and TikTok occurred 52, 52, 12, 5, and 5 times, respectively, when conducting a word frequency query in NVivo v.12.

In contrast, no pattern propositions suggested links were found between E-Government Website usage and Afghan women conducting or improving their business, and keywords mentioned such as e-Government Website occurred zero times when conducting a word frequency query in NVivo v.12. According to Baškarada, case study pattern matching involved compared predicted patterns with patterns (2014). The greater the pattern differences were, the simpler it was to match patterns, and the more convincing the findings (Baškarada, 2014).

FINDINGS

Category development from the interviewee responses to the ten interview questions occurred during the interview data analysis. The researcher transcribed the 12 participant interviews. Ten interview questions, interview transcripts, encoded transcripts to interview questions, encoded interview questions categorized were uploaded into themes into NVivo Node 1. Further, the researcher performed a manual text search for the second round of coding and executed a word frequency query to identify patterns (Aghakhani & Asllani, 2020). The three themes developed from the categories identified through the data analysis were IT affects business advancement, IT use affects cultural factors, and IT use affects business marketing.

Category development owing to the comparing and contrasting of the study results to existing literature occurred during the literature data analysis. The researcher uploaded PDF files of all citation reference materials by the article title and imported citation reference management file from Mendeley by the article author and year into NVivo Node 2. The theoretical framework contained three theories added to NVivo Node 2, and the researcher encoded PDF files into theories to perform thematic analysis. Consequently, the three themes identified through the literature data analysis were that IT use affects business advancement, IT use affects cultural factors, and IT use affects business leadership.

<u>Interview Data Analysis Theme 1 Findings</u>

The *IT usage affects business advancement* theme links to the following interview questions: Q1: How does IT use affect your business performance or productivity; Q3: How does IT use enhance your business collaboration; Q4: How does IT use influence your business interaction through social media such as Facebook; Q6: How does IT use impact your business marketing; and Q9: How does IT use achieve customer relations management?

Theme 1 Q1 interview quotation. Afghan women business leaders used IT to research ways to grow their business, trained themselves, learned how to achieve business success, and discovered more efficient business processes. All 12 women described that manner in which they searched the Internet. Further, eight watched television sets, one listened to the radio, learned about business processes and discovered how others perform business practices. The women grasped and applied the concepts they found, despite having little or no business education or mentorship.

Theme 1 Q3 interview quotation. Afghan women business leaders used business collaboration to learn from and grow their businesses. Afghans, socially inclined by nature, enjoyed exchanging and discussing business ideas and recommendations. Further, learning of local and foreign cultures through IT assisted the women in maintaining a competitive edge with their businesses. From radio to mobile phones to computers, IT provided the 12 women the access they needed to meet others in a manner that was socially appropriate for them, such as chatting or online shopping with other women.

Theme 1 Q4 interview quotation. Social media usage by Afghan women business leaders was prevalent in the discussions and reflected the widespread acceptance of Facebook in Afghanistan. Facebook remains one of the most popular social media platforms used in Afghanistan. It was perfect for current Afghan women business leaders because it offered anonymity to protect their identity while allowing business transactions to occur. Moreover, Facebook offered a global view of women who experienced travel limitations. In addition, Facebook sites such as Kabul Security Now offered real-time news of insurgent events and news. Eleven of the women reported social media usage for their business.

Theme 1 Q6 interview quotation. IT provided a wealth of information to the women to market their products and provided a platform to conduct business transactions. Further, IT offered information, tools, and media applications to the home-bound, lower-educated women, and those limited to travel with an escort only. All 12 women learned from tutorials for entrepreneurs to understand their abilities in the Afghan and global markets. Inexpensive mobile phones were the most likely medium for access to the Internet and social media sites.

Theme 1 Q9 interview quotation. IT assisted the Afghan women business leaders in developing and learning skills such as communication and trustworthiness that were essential for customer relations. Online training was available for women to understand the importance of the customer base and keep the customer satisfied. In fact, ideas such as customer service techniques or handling issues with customers may have been a new concept for these women and they grasped the importance of customer relations to business development. Customer relations appeared to occur naturally with Afghan women. All 12 women reported IT usage for their customer relations.

Interview Data Analysis Theme 2 Findings

The *IT usage affects cultural factors* theme links to the following interview questions: Q2: How does IT use allow you to meet cultural factors such as autonomous business leadership; Q8: How does IT use affect your decision-making ability; and Q10: How does IT affect your business leadership style?

Theme 2 Q2 interview quotation. IT allowed these women to conform to the social expectations of working from home autonomously without provoking the rejection of women working in a traditionally conservative society. The 12 women mentioned that IT assisted them in overcoming this challenge by allowing women to work discreetly. Many Afghan women often used pictures of Asian or Indian movie stars to mask their identity on social media. Further, IT enabled automation of business transactions for women online or through mobile phone applications. Moreover, seeking financial independence through business may have been one of the motivators for Afghan women.

Theme 2 Q8 interview quotation. Afghan women business leaders have developed their leadership decision-making skills out of necessity. Traditionally, they have been powerless, and male family members made all the decisions in the household. However, leading a business necessitated business decision-making, assessing risks, weighing decision outcomes, and making the decision promptly. All of the 12 women conducted research using the Internet to gather information to aid in their decision-making. The women learned to create business plans with contingencies for emergencies and alternate business methods if the need arose.

Theme 2 Q10 interview quotation. The Afghan women business leaders demonstrated innate leadership styles and qualities of empathy, passion, and humility. None of the interviewed Afghan women started a business to benefit themselves. Generally, their motivations to create a business were based on the economic necessity to bring additional income to the family, helping family members gain employment, or seeking financial security or independence. The women exhibited an inner strength to lead a business in a country filled with adversities and challenges to women as a gender group.

Interview Data Analysis Theme 3 Findings

The *IT usage impacted business marketing* theme links to the following interview questions: Q5: How does IT use enable business financial opportunities such as access to credit, microloans, or banking; and Q7: How does IT use affect your desire or drive for financial independence?

Theme 3 Q5 interview quotation. The Afghan women business leaders faced financial challenges because business funding opportunities were more likely limited to Afghan men. However, the Afghan women were resourceful when accessing business loans and were usually financially supported by their families. On the other hand, male family members may have exerted power over the bank accounts and closed them because they had the right. As a solution, one Afghan women used digital currency as a payment method to secure funds for the rightful owner and prevent thefts.

Theme 3 Q7 interview quotation. Many Afghan women were affected by the IT influence for financial independence because they envisioned the possibility for themselves. They saw the manner in which women in India and Pakistan lead businesses in similar cultural environments and conservative societies. Women shared the restrictions imposed from the culture that frowns on women working outside their home or leading a business. Through IT, all 12 women found solutions and tools for their struggle to operate a business as experienced by women in other

countries.

Literature Data Analysis Theme 1 Findings

The *IT usage affects business advancement* theme links to the following interview questions: Q1: How does IT use affect your business performance or productivity; Q3: How does IT use enhance your business collaboration; Q4: How does IT use influence your business interaction through social media such as Facebook; Q6: How does IT use impact your business marketing; and Q9: How does IT use achieve customer relations management?

Theme 1 Q1 literature quotation. Afghan women business leaders used IT to research ways to advance their business, trained themselves in business management, learned to achieve business success, and discovered more efficient business processes. In comparison, the Martinez and Nguyen (2014) report stated that IT tools improved business performance and aided in overcoming women entrepreneurs-specific challenges: time constraints, mobility constraints, financial constraints, skills, information, advisements, and business network participation. Further, the Beath, Christia, and Enikolopov 2013 study suggested that mandated female participation in development aid empowered women in high discrimination environments such as Afghanistan.

Theme 1 Q3 literature quotation. Afghan women business leaders used IT to enhance business collaboration by learning from and growing their businesses. The Afghans were very social by nature and enjoyed exchanging and discussing business ideas and recommendations. In comparison, Bertot, Jaeger, and Grimes (2012) stated that social media designed for social exchanges utilized many-to-many interactions to foster participation and information sharing. However, Vossenberg (2015) advised that if the embedded gender bias was left intact, efforts to promote entrepreneurial leadership would be in vain and without significant macroeconomic and social impact.

Theme 1 Q4 literature quotation. Social media usage by Afghan women business leaders was prevalent in the discussions and reflected the widespread acceptance of Facebook in Afghanistan. In comparison, Ramsaran-Fowdar and Fowdar (2013) suggested that Facebook marketing worked well because the Facebook organization entered and engaged as a friend to customers in a community. A friendship on Facebook implied trust (Ramsaran-Fowdar & Fowdar, 2013). However, Nijat and Murtazashvili's 2015 report recommended that women aspiring to exercise leadership roles required self-confidence, mentorship, seeing the bigger picture, and building support networks.

Theme 1 Q6 literature quotation. IT provided a wealth of information to the Afghan women to learn the manner in which to market their products and provided a platform to conduct business transactions. In comparison, the GIZ (2014) survey found that Afghan businesses used social media to connect on the supply side to establish supplier relationships; and on the demand side to engage with customers, to promote the business activities and to publicize promotions. In addition, Ritchie (2016) reported that in fragile settings such as Afghanistan, the external role of non-government organizations (NGOs) may have initiated positive change moderated by stability and trust and the role that entrepreneurs and local authorities played in supporting and driving change.

Theme 1 Q9 literature quotation. IT assisted the women in developing and learning skills such as communication and trustworthiness that were essential for customer relations. Further, learning of local and foreign cultures through IT assisted the women in maintaining a competitive edge with their businesses. In comparison, Zinke and Prator (2014) suggested that social media transformed traditional customer relation management (CRM) processes into mass collaborative processes that benefited both customers and the company to enhance traditional CRM processes. Moreover, the United States Agency for International Development (2012) report stated that the lure of international trade provided a gender-neutral market if accessible to women. Consequently, the United States Agency for International Development (2019) Women in the Economic (WIE) program assisted Afghan women in increasing their business marketing in the economy, securing employment, and improving the viability of Afghan women-owned businesses.

Literature Data Analysis Theme 2 Findings

The *IT use affected cultural factors* theme links to the following interview questions: Q2: How does IT use allow you to meet cultural factors such as autonomous business leadership; Q8: How does IT use affect your decision-making ability; and Q10: How does IT use affect your business leadership style?

Theme 2 Q2 literature quotation. IT allowed these women to conform to the social expectations of working from home without provoking the rejection of women working in a traditionally conservative society. This challenge was overcome owing to the aid provided my IT in allowing women to work discreetly. In comparison, Plane's (2010) survey at Kabul University results found that both men and women felt that the work environment would be inappropriate for women. Without a male family member present there was concern regarding the employment of women in a safe environment that the family would find acceptable. However, Kaifi reported (2011) that traditionally, Afghanistan women remain in the home to rear children while the men work outside of the house, and only recently has there been a paradigm shift where women are being encouraged to go out and work outside of their home to help support their family.

Theme 2 Q8 literature quotation. Afghan women business leaders have developed their leadership skills out of necessity. In comparison, Mujtaba (2013) proposed that Afghan women's influential leader's decision-making process should have involved idea-integration in exploring and discovering the best available option for everyone. However, Bullough, De Luque, Abdelzaher, and Heim (2015) discovered that Afghan women entrepreneurs are reluctant to share information regarding their business successes owing to the fear of extortion or kidnapping.

Theme 2 Q10 literature quotation. The Afghan women business leaders demonstrated the innate leadership qualities of empathy, passion, and humility. Sabri's (2015) study found that Afghan women entrepreneurs who worked outside the house before becoming an entrepreneur, found entrepreneurship fulfilling and rewarding, and that it offered them a leadership platform. Moreover, according to Mujtaba (2013), Afghan women leaders understood that when differences were acknowledged and respected, they could be used as a competitive advantage to move forward while serving one's customers promptly.

Literature Data Analysis Theme 3 Findings

The *IT use impacted business marketing* theme links to the following interview questions: Q5: How does IT use enable business financial opportunities such as access to credit, microloans, or banking; and Q7: How does IT use affect your desire or drive for financial independence?

Theme 3 Q5 literature quotation. Afghan women business leaders face financial challenges because business funding opportunities are more likely limited to Afghan men. However, the Afghan women are resourceful when accessing business loans and are usually financially supported through their families. In comparison, Myatt's (2015) study found that at places where institutions were unstable, the family provided the support required for a woman to conduct business in Afghanistan. Holmen, Tar Min, and Saarelainen (2011) stated that banks in developed countries acted as capital sources of small firms. Further, in developing countries, female entrepreneurs turned to families to finance their businesses. However, Shakib (2014) noted that one of the primary hurdles for many Afghan women entrepreneurs was operating as an independent business and accessing financial resources and funding capital.

Theme 3 Q7 literature quotation. IT use was found to affect financial independence. In comparison, Cummings and O'Neill (2015) said through digital ITs, women had learned new skills, developed confidence, became economically independent, and made informed decisions. In contrast, the Harris 2016 study declared that in Afghanistan, marriages strengthened family financial security, and that certain marriages settled debts.

Propositions

The interview and literature data analysis, theoretical supporting documentation, and chain of evidence suggested that the pattern proposition findings for IT usage among Afghan women business leaders such as computer, mobile phone, and social media usage were linked to Afghan women business leaders conducting or improving their business. However, the e-government Website usage was found to not be linked and did not occur in the discussion of Afghan women business leaders conducting or improving their business. Possible explanations for the lack of Afghan e-government website usage may be the one-page sites that are not interactive and poorly developed. Moreover, according to the Washington Times, since 2014, Afghan government ministries such as the Afghan National Security Council have been breached by threat actors (2021).

DISCUSSION

Limitations

Limitations to the study were the changes to the Afghan political climate, which loomed with post-Presidential election effects in 2019. Afghanistan's security posture weakened because of the United States and NATO troops' withdrawal in 2019, resulting in a dramatic increase in attacks and bombings (Khan, Moon, Swar, Zo, & Rho, 2012). Moreover, the fears among the Afghan population included worries of a collapse of the present government that would allow the possible resumption of Al-Qaeda rule or a reversal of the progressive society into a Sharia-Law type of severely restrictive government. Consequently, a substantial amount of pre-interview and

interview time was devoted to recent news discussions of injured family members and their health status. As the study data collection progressed, the allotted time required for scheduling interviews and accepting canceled interviews increased to the point where attempts to schedule interviews became futile. Thus, the researcher ceased interviews after the interviews of the 12 participants were completed because of the deteriorating security climate in Afghanistan, and participants no longer agreeing to telephone interviews.

Recommendations to Leaders and Practitioners

The first recommendation to religious and cultural leaders was to remove the stigma for Afghan women business leaders to work outside their homes. The bureaucratic theory framework supported this recommendation because the recommendation views organizations divided into structured hierarchies, rigid lines of authority, and used functions for control. The second recommendation was to legally allow Afghan women business leaders to contribute to the Afghan economy as equals. The leadership theory framework supported this recommendation as well because the recommendation was based on the premise that leaders positioned in the community affect economic development by creating relationships with colleagues. Finally, the third recommendation was to improve the security and stability of the Afghan power, Internet, and mobile phone IT infrastructure, and this was supported by the systems theory framework because the systems maintained critical functions and services in the face of disruptions.

Recommendations for Future Research

The first recommendation is to increase the case study group participant size if possible. The second recommendation is to conduct the qualitative, descriptive case study at the most efficient pace possible because the conditions in Afghanistan extended the current research study process to extremes. In addition, quantitative or mixed-method studies may also contribute new knowledge in this area.

CONCLUSION

The study's purpose was to describe the manner in which Afghan women business leaders use IT to conduct or improve their business using IT tools such as computers, mobile phones, social media, and e-government websites. The study findings presented the following key points of reviewing the research questions and pattern propositions, pattern proposition findings, study limitations, recommendations to leaders, suggestions for future research. Literature data analysis of the research question findings included three themes: IT use affects business advancement, IT use affects cultural factors, and IT use affects business leadership. Consequently, interview data analysis, theoretical supporting documentation, and chain of evidence suggested the following pattern proposition findings: IT, computer, mobile phone, social media, usage among Afghan women business leaders was linked to conducting or improving their business, respectively. In contrast, e-Government Website usage was not linked to conducting or improving their business.

The research study of Afghan women's business leaders' IT usage may give voice to this under-rated and under-valued population. Afghan women have exhibited selflessness in their leadership, with most of the women motivationally driven in service to others through their business creation,

management, and improvement (Piel, Putnam, & Johnson, 2019). As a group, the women have embraced IT tools fearlessly and have used them to grow their fledgling businesses into success stories. Further, women have discovered business product voids and filled the niche with their innovative Afghan-made products and services. In addition, the women demonstrated business acumen and cunning, despite the lack of formal education. They have thrived in incredibly adverse situations that showcased their leadership qualities and skills.

Thus, the women were capable of contributing to the Afghan economy and assisting the country in regaining independence and economic security. Study findings may assist other women business leaders in developing countries as a message that business success through IT usage is feasible and possible.

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REFERENCES

Ahsan, S. (2015). *States of honor: Sexual ethics and the politics of promiscuity in Afghanistan*. Available from ProQuest Dissertations & Theses Global. (3688507).

Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: looking at trustworthiness criteria.pdf. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), 272-281. Retrieved from http://jeteraps.scholarlinkresearch.com/

Aghakhani, N., & Asllani, A. (2020). A text-mining approach to evaluate the importance of Information Systems research themes. *Communications of the IIMA,* 18(1). Retrieved from https://scholarworks.lib.csusb.edu/ciima/vol18/iss1/3

Antonio, A., & Tuffley, D. (2014, October 31). The gender digital divide in developing countries. *Future Internet*, 6, 673-687. http://dx.doi.org/10.3390/fi6040673

Anvari, R., Irum, S., Shah, I. M., Mahmoodzadeh, N., & Ashfaq, M. (2014, June). Determinants of information technology leadership program. *Review of European Studies*, 6(2), 45-49. http://dx.doi.org/10.5539/res.v6n2p45

Avgerou, C. (2009). *The link between ICT and economic growth in the discourse of development*. Retrieved from www.lse.ac.uk

Avolio, B., Gardner, W., Walumbwa, F., & May, D. (2004). Unlocking the mask. *Leadership Quarterly*, 15(6), 801-823. Retrieved from http://www.sciencedirect.com

Avolio, B. J., & Bass, B. M. (1999, December). Re-examining the components of transformational and transactional leadership theory using the Multifactor Leadership Questionnaire. *Journal of Occupational & Organizational Psychology*, *72*(4), 441-462. Retrieved from http://www.wiley.com.contentproxy.phoenix.edu

Avolio, B. J., & Gardner, W. L. (2005, June). Authentic leadership development: getting to the root of positive forms of leadership. *The Leadership Quarterly*, *16*(3), 315-338. https://doi.org/10.1016/j.leaqua.2005.03.001

Baškarada, S. (2014, October 6). Qualitative case study guidelines. *The Qualitative Report*, *19*(24), 1-18. Retrieved from http://www.nova.edu

Baxter, P., & Jack, S. (2008, December 1). Qualitative case study methodology: study design and implementation for novice researchers. *The Qualitative Report*, *13*(4), 554-559. Retrieved from http://nsuworks.nova.edu

Beath, A., Christia, F., & Enikolopov, R. (2013). Empowering women through development aid: evidence from a field experiment in Afghanistan. *The American Political Science Review*, *107*(3), 540-555. https://doi.org/10.1017/S0003055413000270

Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2012). Promoting transparency and accountability through ICTs, social media, and collaborative e-government. *Transforming Government: People, Process and Policy*, *6*(1), 78-91. http://dx.doi.org/http://dx.doi.org/10.1108/17506161211214831

Bongo, P. (2004). *The impact of ICT on economic growth*. Retrieved from https://www.merton.ox.ac.uk/

Caytiles, R. D., & Park, B. (2013). Future directions of information and telecommunication systems through the technological advancement convergence. *International Journal of Multimedia and Ubiquitous Engineering*, *8*(1). Retrieved from www.sersc.org

Chi, H., Lan, C., & Dorjgotov, B. (2012). The moderating effect of transformational leadership on knowledge management and organizational effectiveness. *Social Behavior and Personality*, *40*(6), 1015-1023. Retrieved from https://www.sbp-journal.com

Cummings, C., & O'Neil, T. (2015). *Do digital information and communications technologies increase the voice and influence of women and girls?* Retrieved from https://www.odi.org

De, R. (2016, March 17). Societal impacts of information and communications technology. *Indian Institute of Management Bangalore Management Review*, *28*(1), 111-118. http://dx.doi.org/10.1016/j.iimb.2016.04.002

Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research*, *6*(2), 80-88. http://dx.doi.org/10.1177/1558689812437186

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. (2014). Social media in Afghanistan: measuring the usage and perceptions of the Afghan population. Retrieved from http://ez-afghanistan.de/fileadmin/content/news/Social_Media_251114.pdf

Di Pietro, L., & Pantano, E. (2012). An empirical investigation of social network influence on consumer purchasing decision: the case of Facebook. *Journal of Direct, Data and Digital Marketing Practice*, *14*, 18-29. http://dx.doi.org/10.1057/dddmp.2012.10

Eze, S. C., Duan, Y., & Chen, H. (2013, August 5). Examining emerging ICT's adoption in SMEs from a dynamic process approach. *Information Technology & People*, *27*(1), 27-82. http://dx.doi.org/10.1108/ITP-03-2013-0044

Fielding, N. G. (2012, March 12). Triangulation and mixed methods designs: data integration with new research technologies. *Journal of Mixed Methods Research*, *6*(2). Retrieved from http://journals.sagepub.com.contentproxy.phoenix.edu

Flyvberg, B. (2006, April). Five misunderstandings about case-study research. *Qualitative Inquiry*, *42*(2), 219-245. http://dx.doi.org/10.1177/1077800405284363

Goepner, E. W. (2018, June 19). War state, trauma state: why Afghanistan remains stuck in conflict. *Policy Analysis*, *844*(), 1-32. Retrieved from https://www.cato.org

Golafshani, N. (2003, December). Understanding reliability and transferability in qualitative research. *The Qualitative Report*, *8*(4), 597-607. Retrieved from nsuworks.nova.edu

Goodhand, J. (2002, October 1). Aiding violence or building peace? The role of international aid in Afghanistan. *Third World Quarterly*, *23*(5), 837-859. http://dx.doi.org/10.1080/0143659022000028620

Harris, M. (2016). *Finding the goddess in the shadows: unveiling her essence in Afghanistan*. Available from ProQuest Dissertations & Theses Global. (10180051)

Holmen, M., Min, T. T., & Saarelainen, E. (2011, September 1). Female entrepreneurship in Afghanistan. *Journal of Developmental Entrepreneurship*, *16*(3), 307-331. http://dx.doi.org/10.1142/S1084946711001860

Jelodar, E. Z., Hashim, R. S., Yusof, N. M., Raihanah, M. M., Shahizah, I., & Zandi, P. (2014, February 22). Educating prisoners of tradition: visual narratives of Afghan women on social media. *International Education Studies*, *7*(3), 60-66. https://doi.org/10.5539/ies.v7n3p60

Kaifi, B. A., & Mujtaba, B. G. (2011, March 1). Eastern Indian and Afghan women in management: a quantitative inquiry on their leadership proficiencies and propensities. *International Journal of Business & Management*, *6*(3), 3-11. Retrieved from http://www.theijbm.com

Kaushik, R. (2012, September 1). Afghanistan and the future of war. *International Area Studies Review*, *15*(3), 301-320. http://dx.doi.org/doi: 10.1177/2233865912453902

Khan, G. F., Moon, J., Swar, B., Zo, H., & Rho, J. J. (2012, March 26). E-government service use intentions in Afghanistan: technology adoption and the digital divide in a war-torn country. *Information Development*, *28*(4), 281-299. http://dx.doi.org/10.1177/0266666912438879

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: trustworthiness and publishing. *European Journal of General Practice*, *24*(1), 120-124. https://doi.org/10.1080/13814788.2017.1375092

Langley, A. (2009). *The sage handbook of organizational research methods*. Evanston, IL: SAGE Publications Ltd.

Martinez, I., & Nguyen, T. (2014, May). Using information and communication technology to support women's entrepreneurship in Central and West Asia. *The Asian Development Bank Briefs*, *23*, 1-8. Retrieved from https://www.adb.org

Mashriqi, K. (2013). *Women's access to higher education in Afghanistan: a qualitative phenomenological study*. Retrieved from https://uopx.summon.serialssolutions.com

Merrill, L., Paxson, D., & Tobey, T. (2006). *An introduction to Afghanistan culture*. Retrieved from http://eafghanag.ucdavis.edu

Mir, A. M., (2010). Leadership in Islam. *Journal of Leadership Studies*, *4*(3), 69-72. https://10.1002./jls.20180

Moloney, T. (2006, March). ICT in developing countries. *Postnote*, *261*, 1-4. Retrieved from http://www.parliament.uk

Moon, K., Brewer, T. D., Januchowski-Hartley, S. R., Adams, V. M., & Blackman, D. A. (2016). A guideline to improve qualitative social science publishing in ecology and conservation journals. *Ecology and Society, 21*(3), 17-36. https://doi.org/10.5751/

Mujtaba, B. G. (2013). Ethnic diversity, distrust and corruption in Afghanistan. *Equality, Diversity and Inclusion: An International Journal*, *32*(3), 245-261. http://dx.doi.org/10.1108/EDI-12-2012-0113

Myatt, T. M. (2015). *A qualitative study of successful women entrepreneurs: developing a model for war-torn Afghanistan.* Available from http://asb.acadiau.ca.

Nazire, H., Kita, M., Okyere, S. & Matsubara, S. (2016) Effects of informal settlement upgrading in Kabul City, Afghanistan: a case study of Afshar area. *Current Urban Studies, 4*, 476-494. https://doi: 10.4236/cus.2016.44031.

Nijat, A., & Murtazashvili, J. (2015). *Women's leadership roles in Afghanistan*. Retrieved from
    https://www.usip.org

Oates, L. (2009, spring). Literacy in an extended family household in Kabul: a case study.
    Language and Literacy, *11*(3), 1-14. Retrieved from http://www.csse-scee.ca

Piel, M. A., Putnam, K., & Johnson, K. K. (2019). *Quantum leadership: toward ethical
    selflessness.* In D. Ochnik (Ed.), Selflessness in business (pp. 71-96). Wilmington, DE:
    Vernon Press.

Plane, J. (2010). *Approaching gender parity: women in computer science at Afghanistan's Kabul
    University* (Doctoral dissertation). Retrieved from http://drum.lib.umd.edu

Porter, A. L. & Detampel, M. J. (1995). Technology opportunities analysis, *Technological
    Forecasting and Social Change*, *49*(3) 237-255. https://doi.org/10.1016/0040-
    1625(95)00022-3.

Ramsaran-Fowdar, R., & Fowdar, S. (2013, March). The implications of Facebook marketing for
    organizations. *Contemporary Management Research*, *9*(1), 83-93.
    http://dx.doi.org/10.7903/cmr.9710

Ritchie, H. (2016, July). Unwrapping institutional change in fragile settings: women
    entrepreneurs driving institutional pathways in Afghanistan. *World Development*, *83*, 39-
    53. https://doi.org/10.1016/j.worlddev.2016.03.007

Roshan, B. (2013, September). The more things change, the more they stay the same: the plight
    of Afghan women two years after the overthrow of the Taliban. *Berkeley Journal of
    Gender, Law & Justice*, *19*(1), 271-286. https://doi.org/10.15779/Z38T43J23R

Sabri, N. (2015). *From invisibility to visibility: female entrepreneurship in Afghanistan*.
    Retrieved from https://uoregon.edu/

Salter, C. R., Harris, M. H., & McCormack, J. (2014). *Bass and Avolio full range leadership
    model and moral development*. Paper presented at the E-Leader, Milan, IT. Abstract
    retrieved from https://www.g-casa.com/conferences/milan/paper/McCormack.pdf

Shakib, M. K. (2014). *Afghan university women graduates are not well-represented in the job
    market in Afghanistan*. Retrieved from http://ecommons.luc.edu

Souter, D., & MacLean, D. (2012, December). *Changing our understanding of sustainability:
    the impact of ICTs and the Internet.* Retrieved from https://www.iisd.org/.

The Washington Times. (2021, July 21). *Hackers breach Afghan government in China-
    related espionage campaign, cybersecurity firm finds*.
    Retrieved from https://www.washingtontimes.com

The United States Agency for International Development. (2019). *PROMOTE: women in the economy.* Retrieved from https://www.usaid.gov

The World Bank. (2011). *Securing durable development in Afghanistan*. Retrieved from https://openknowledge.worldbank.org

Toloie-Eshlaghy, A., Chitsaz, S., Karimian, L., & Charkhchi, R. (2011, September). A classification of qualitative research methods. *Research Journal of International Studies*, *20*, 106-123. Retrieved from www.jois.eu

Trotter, M. J., Salmon, P. M., & Lenné, M. G. (2013, July 1). Improvisation in complex sociotechnical systems - a systems phenomenon? *Journal of Battlefield Technology*, *16*(2), 13-20. Retrieved from http://www.argospress.com

United States Agency for International Development. (2012). *Economic empowerment strategies for Afghan women*. Retrieved from http://pdf.usaid.gov

Vossenberg, S. (2015). *Women entrepreneurship promotion in developing countries: What explains the gender gap in entrepreneurship and how to close it*. Retrieved from Maastricht School of Management

Yin, R. K. (1981, March 1). The case study crisis: some answers. *Administrative Science Quarterly*, *26*(1), 58-65. Retrieved from http://www.johnson.cornell.edu

Yin, R. K. (2008). *Case study research: design and methods* (4th ed.). Thousand Oaks, CA: SAGE Publications.

Young, W., & Leveson, N. G. (2014, February 1). An integrated approach to safety and security based on systems theory. *Communications of the ACM*, *57*(2), 31-35. http://dx.doi.org/10.1145/2556938

Zinke, C., & Prator, S. (2014, September). *The role of social media for business and service systems*. Paper presented at the European Conference on Innovation and Entrepreneurship, Belfast, NI. Abstract retrieved from http://uir.ulster.ac.uk/