



# Impact of Visual and Digital Literacy on the Performance of Women entrepreneurs

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**ENG Abstract:** Digital revolution has transformed all aspects of the human world including relationships, lifestyle and business. As physical commerce went through revolutionary changes, a notion of digitalization of businesses was observed. This evolution not only impacted operations, communications and transactions in business but also influenced the concept of entrepreneurship. Due to pandemic, entrepreneurs are swiftly acknowledging the power of digital commerce and are adopting online channels to grow their businesses. During this momentum, scholars are observing the factors impacting this change that may or may not alter their course of action. To comprehend the impact of literacy on this groundbreaking digital transformation journey, this study explores Visual Literacy and Digital Literacy and their influence on the performance of women entrepreneurs. The results were deduced based on quantitative analysis of data collected through a survey; and examined whether this set of literacies has any relationship with Entrepreneur's Performance. The key findings suggest that a direct linear correlation is evident between Visual Literacy, Digital Literacy and womenpreneur's performance.

**Keywords:** Visual Literacy, Digital Literacy, E-Commerce, Womenpreneurs, Survey

## ES El impacto de la alfabetización visual y digital en el desempeño de las mujeres emprendedoras

**Resumen:** La revolución digital ha transformado todos los aspectos del mundo humano, incluyendo las relaciones interpersonales, el estilo de vida y el ámbito empresarial. A medida que el comercio físico experimentó cambios revolucionarios, se observó un proceso de digitalización en los negocios. Esta evolución no sólo impactó las operaciones, las comunicaciones y las transacciones empresariales, sino que también influyó en el concepto mismo de emprendimiento. Como consecuencia de la pandemia, los emprendedores han reconocido con mayor rapidez el poder del comercio digital y han adoptado canales en línea para expandir sus negocios. En este contexto de transformación acelerada, los académicos están analizando los factores que inciden en este cambio y que pueden, o no, modificar su desarrollo. Para comprender el impacto de la alfabetización en esta trascendental transformación digital, el presente estudio explora la alfabetización visual y la alfabetización digital, así como su influencia en el desempeño de las mujeres emprendedoras. Los resultados fueron obtenidos mediante un análisis cuantitativo de datos recopilados a través de encuestas y permitieron examinar si estos tipos de alfabetización guardan relación con el desempeño empresarial. Los hallazgos clave sugieren la existencia de una correlación lineal directa entre la alfabetización visual, la alfabetización digital y el rendimiento de las emprendedoras.

**Palabras clave:** Alfabetización visual, Alfabetización digital, E-comercio, Emprendedoras, Cuestionario

**Sumario:** Introduction. Literature Review. Digitalization of Business. Significance of Digitalization for Businesses. Digitalization and Social Media. Challenges faced by SMEs in using Social Media. Digitalization and Emerging Economies. Importance of Digitalization for Emerging Economies. Challenges faced by SMEs in Emerging Economies. Emerging Economies and Women Entrepreneurship. Visual Literacy. Digital Literacy. Conceptual Framework. Hypothesis. Methodology. Research Strategy. Population and Sampling. Data Collection and Data Analysis. Results. Visual Literacy & Entrepreneur Performance. Regression Analysis. Correlation Analysis. Digital Literacy & Entrepreneur Performance. Regression Analysis. Correlation Analysis. Discussion. Conclusions. References.

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## Introduction

The advent of internet has revolutionized the data processing mechanism, allowing everything to be on our fingertips (Saini, 2020). We are living in a digital era that allows us to find, buy and sell commodities globally with just a few clicks. Its impact is not limited to simplifying our lives but also includes new, convenient and profitable pathways for business growth. Thanks to digital revolution followed by rapid advancement of technology, we can access information in real time (Hassoun et al., 2022). This breakthrough in technology has pushed us to explore digital ways of communication, transforming physical shops into online e-commerce stores (Costa & Castro, 2021).

Recent research on ecommerce and online businesses have highlighted the game-changing impact of digital landscape; proving online stores to be economical due to low transaction and managing costs, as well convenient for customers as they can explore variety of products and services in one go (Costa & Castro, 2021). It's been observed that COVID-19 pandemic has been proved as the pivotal moment for many startups and small businesses, as the entrepreneurs realized that in this age of technology, they must explore online marketplaces and e-commerce for the sustainability and growth of their business (Kuckertz et al., 2020). Adding more to this, some scholars explored the significance of digital commerce for emerging economies where they found that adoption of online pathways can help improve financial status of the country. However, there are some major limitations – specifically rural populace and low literacy rates. These are proven to be roadblocks in the acceptance of the digital landscape (Javed, 2020).

Irony is even when women entrepreneurship is the growing segment of online business thanks to safe, convenient and easier processes, there is still a long way to go. Women entrepreneurs struggle to keep up with capital and logistics, market data, and business networks (Kamberidou, 2020). In this context, if we investigate the conditions of women entrepreneurs, we will see what kind of factors will affect their performance. Lack of knowledge is the primary reason why women entrepreneurs can't grow and catch up with the competitive business world (Arora & Bhardwaj, 2020). In order to navigate digital landscape, one must possess certain level of literacy to search, understand and evaluate the trends and norms of the online world (Kelly & McAdam, 2022). Building on this narrative that certain level of literacy is involved to grow and perform well in digital world, this paper explores Visual Literacy and Digital Literacy to test their importance and effectiveness on the performance of women entrepreneurs; hereby referred as “womenpreneurs”.

## Literature Review

### Digitalization of Business

The term “Digitalization” refers to a technical process, described as incorporation of digital technologies into the everyday life (Luppicini, 2013). As a result, world is witnessing rapid improvements in Information and Communication Technologies (ICTs) that are modifying, redefining, and creating difficult environments for work and interaction (Roy, 2020). Perpetual change, unforeseen disruption, and perpetual innovation have been the most popular corporate buzzwords in recent years (Savić, 2019). This is majorly due to the society-wide repercussions of the exponential growth of digitization, which are becoming considerably apparent as it opens up previously unthinkable possibilities (Brynjolfsson & McAfee, 2014). Due to their ever-increasing communication bandwidth, storage capacity, SMAC technologies (social, mobile, analytics, and cloud computing), and processing power are fueling innovation among organizational and societal practices, resulting in an unprecedented wave of digitalization (Legner et al., 2017). Rapid and revolutionary developments brought about by digitalization introduced countless possibilities for businesses of all sizes working in an extensive array of industries. Because of digital transformation, businesses can now achieve and reap numerous benefits such as improved resource utilization, cost reduction, increased employee productivity, supply chain optimization, and increased customer satisfaction and loyalty (Loebbecke & Picot, 2015).

### Significance of Digitalization for Businesses

As we have acknowledged that digitalization is inevitable, it has put a great deal of demand on businesses to get on board with the digital revolution in order to stay competitive and suffer consequences such as becoming obsolete or redundant - leaving firms with no choice but to embrace a paradigm shift where competition is exceptionally disruptive, and processes are technology-mediated (Warner & Wäger, 2019). As a result, it is not surprising to see majority of firms embarking on an expedition towards digital transformation to capitalize on the benefits of digitalization, such as the new and innovative ways to develop new forms of collaboration or modify relationships within and across ecosystems (Grandinetti et al., 2020). In response to the pressures exerted by digitalization, businesses must reevaluate their current strategic and operational models in order to capitalize on what is now feasible for competitive differentiation (Dr. Linz et al., 2017). Organizations must update their current product portfolios and construct or upgrade to new business models by using innovative technology thereby switching from conventional practices (Matzler et al., 2018).

### Digitalization and Social Media

It is accredited that digitalization has the power to enhance and develop small businesses, fostering growth and enhancing their competitiveness and inventiveness – this is accomplished through adopting and integrating ICTs into company goals and operations (Barba-Sánchez et al., 2007). This pertains to the idea of “digital entrepreneurship,” which describes business owners who develop novel uses for digital technology

and typically include switching from offline to online businesses (Kraus et al., 2019). Due to its widespread use and relatively simple, low-cost technologies, social media is now being used more and more for commercial purposes (Högberg, 2018), which makes it easier for small enterprises and people to participate in the exchange of fresh ideas and knowledge while also lowering the barriers to sophisticated technical advances innovations. The economic benefits of operating social platforms, such as Facebook or Instagram, is the capacity to anticipate users' future needs, as these platforms are intended to encourage users to post interactive and personal material online (Zuboff, 2015). Hence, as social networking sites enable companies to interact with, hear from, and learn from their consumers in ways they weren't able to previously, they not only propagate data but also offer helpful tools for relationship development (Jones et al., 2015).

### **Challenges faced by SMEs in using Social Media**

Despite the fact that social networking can give countless prospective customers, there is a possibility that entrepreneurs owning Small to Medium Enterprises (SME) may waste their time and efforts if they are unable to reach their intended audience (Genc & Öksüz, 2015). In availability of sufficient assets and difficulty in reconciling the demand for ICT knowledge, may result in failure of successful digitalization process by SMEs as compared to the major firms (Barba-Sánchez et al., 2007). Previous studies have highlighted the difficulties for small firms in starting and maintaining a digital presence, as well as handling the dispersed and frequently growing number of digital channels effectively (Bernhard & Grundén, 2016).

Due to its affordability, ability to overcome time and resource limitations (Jones et al., 2015), user-friendliness, and accessibility to everyone, social networks are essential for small companies and are regularly utilized by people in their personal lives (Högberg & Olsson, 2019). But here is a disadvantage to it - negative remarks and comments may result from connections and interactions with customers or friends on social media (Orlikowski & Scott, 2015), that might potentially result in undesirable outcomes that are difficult to prevent or reverse (Norström et al., 2019). Since business owners are typically emotionally attached and identified by their firms - they are sensitive to negative feelings such as stress and fear of failure (Prayag et al., 2018), leading to entrepreneurial burnout (Rajahonka & Villman, 2019). In the context of women entrepreneurs, the need and expectations of customers for ongoing internet connectivity and a persistent social media presence are referred to as an increase in perception of digital stress - frequently results in unending interruptions both throughout working hours and during personal time at home (Högberg & Olsson, 2019). As a result, digitization, particularly the work-life balance of women entrepreneurs is impacted by the overconsumption of online media, which blurs the lines between work and personal life (Rajahonka & Villman, 2019). Moreover, studies indicate that to tackle the challenges of digitization, particularly social media, there is escalating request for digital literacy and expertise in the workforce (Noonan et al., 2017).

### **Digitalization and Emerging Economies**

One of the key forces behind economic empowerment and financial stability is entrepreneurship and thus is seen as a viable tool to grow emerging economies and can resolve severe problems associated with poverty in developing nations (Si et al., 2020). Implementation of digital technologies can help benefit an organization in a range of methods, like through lowering expenses, competitive advantages, more revenues, and the chance to develop novel business structures (Soluk et al., 2021). No matter what an organization's location, size, age, or sector is, implementing digital technology is more important (Sorescu, 2017). Moreover, business organizations can develop firm value and competitive advantages through the use of digital technology, that might inspire them to become more innovative (Soluk et al., 2021). Hence, emerging economies may find it crucial to accept digital technologies to enhance their economic stability.

### **Importance of Digitalization for Emerging Economies**

Digitalization of economy brings multiple opportunities, boost profitability, expand market access, generate revenue from the size of the market, and support national economic growth (Abbas et al., 2018). Yang et al (2016) further added that by utilizing online channels, businesses can significantly reduce costs and improve corporate performance that can push their economic activity (Yang et al., 2016). According to the latest report (2018) of the United Nations Conference on Trade and Development (UNCTAD), as advanced technology will further their commercial, economic, social, and human growth, emerging economies should embrace digital wholeheartedly. Furthermore, lower operational costs, higher corporate productivity, and better international market integration can result from this. When it comes to scientific and technical advancement, emerging economies, are frequently cited as being in the forefront, notably in the areas of military technology advancement, information technology (IT), social and economic industrialization (Nazir & Roomi, 2020). As the digital world opens different avenues of trade, it can contribute a crucial part in financial stability of emerging economies.

### **Challenges faced by SMEs in Emerging Economies**

Regardless of the booming reputation of digital commerce, studies have uncovered some obstacles to its acceptance by small-medium businesses, especially those in developing countries (Nazir & Roomi, 2020). By explaining why this might be happening, Kartiwi et al (2018) pointed out that small-medium businesses in emerging economies that embrace digital commerce, face certain challenges that are more critical than the

developed ones (Kartiwi et al., 2018). Adding to this, Mainardes et al (2019) stated that the advantages of digital scope are still unknown to majority of business owners in emerging markets (Mainardes et al., 2019).

The most small-medium enterprises apparently didn't profited from e-commerce whether by increasing their reach, extending their market access, enhancing their connections with their clients and suppliers, lowering their expenses, or enhancing their effectiveness (Molla & Licker, 2005). This gives another dimension to the study. A scholarly article published by (Duncombe & Molla, 2009), uncovered that the issues with inadequate awareness of the context have been blamed for the failure of many digital projects in emerging nations, which has caused the closure of online firms. Emerging economies are mostly at a disadvantage due to the digital divide as they lack essential intellectual capital (Alyoubi, 2015).

### Emerging Economies and Women Entrepreneurship

Women's entrepreneurship has been recognized and emphasized in developing economies to help people get out of poverty and to boost the economy while defying gender hierarchy (Kamberidou, 2020). However, some studies point towards a contrasting image - despite of rising poverty rate, emerging economies restrain women entrepreneurship as it challenges their conventional gender roles (Cesaroni et al., 2017). His perspective was supported by various studies as they found that women entrepreneurs in developing regions encounter greater sociocultural barriers than their western counterparts. The empirical data that reveals how women's entrepreneurial efforts are frequently discouraged or limited in the patriarchal societies like Pakistan (Abdul & Hashmi, 2014). Lightening women's domestic responsibilities is an essential prerequisite for their entrepreneurial success, particularly in patriarchal societies of emerging nations where women are the majorly homemakers and caregivers, with responsibilities for house, children, and older family members (Kamberidou, 2020).

Furthermore, when we consider the digital skills divide, the picture becomes even bleaker, particularly in the emerging economies (Fatoki, 2016). The unavailability of a sizable number of the working population from the digital economy—particularly women—indicates the sad reality that emerging economies have failed to make any substantial advancement in redefining the digital divide. To compete successfully in the digital world, innovations are needed in global economy to enable technological revolution in industries, organizations, and businesses (Carayannis & Campbell, 2018).

### Visual Literacy

Visual literacy, which is crucial for both learning and communication in today's world, is the capacity to comprehend and create visual messages, irrespective of being articulated via objects, actions, or symbols (Omiunu, 2019). Visual literacy as an ability of an individual to write, encode, and develop their own visual statements, besides how they read, decode, and understand other visual messages (Debes, 1969). It encompasses a range of abilities from the routine and practical recognition of objects to more complicated interpretation that works on a contextual, metaphorical, and abstract level (Hattwig et al., 2013). Visual literacy is among the essential 21st-century skills - as it includes that the learner must be able to analyze, recognize, enjoy, and grasp the information provided by observable objects, activities, and symbols and either naturally occurring or artificial (Greenstein, 2012). The significance of visual literacy in the communication process is the capacity to decipher and produce visual messages in a communication (Zulkarnain et al., 2020). Cognitive visual inclusion images are utilized for exposition, practice, and attention-grabbing - that's why the advancement of the communication process can be impacted by the limited awareness of visual communication (Zulkarnain et al., 2020). Although a handful of studies are done on visual literacy and its impact on education there is a significant gap in its relationship with entrepreneurship.

### Digital Literacy

Digital literacy is the ability to use technology to create long-term learning activities and make positive contributions to society (Çam & Kiyici, 2017). The ability to receive information and especially when it comes to digital information, track and identifying the information received are key skills of a digital literate individual. Addition to it, the capacity to assess and incorporate data offered by computers in a variety of formats also involve competent digital skills (Gilster et al., 2020). Paper published by UNESCO in 2018 identifies the capacity to use digital technology to securely and effectively access, manage, comprehend, integrate, communicate, analyze, and generate information for employment, decent work, and entrepreneurship as Digital Literacy (Law et al., 2018).

Digital commerce provides multiple business avenues for small businesses. But to establish a name in this highly technical and competitive industry, they need to equip themselves with up-to-date knowledge and digital skills. This has been acknowledged that customer satisfaction may be affected by a business's awareness of market orientation and digital literacy, which can further improve the performance of small to medium businesses (Suryani et al., 2020). Furthermore, to increase the dispersion of e-commerce in developing countries, it is crucial to have access to ubiquitous digital infrastructures and digital capabilities (Ariansyah et al., 2021). Therefore, it is more likely to play an important part in the uptake of innovative technologies that can be a great asset for local small-medium enterprises who are striving to reach larger audience (Jamila et al., 2020).

The development of SMEs was positively and significantly impacted by both literacies (Fauzi et al., 2020). Also, Digital literacy had a favorable and considerable impact on growth. The findings also showed that, in the short term, understanding and using financial literacy and digital literacy are essential. Conversely, digital

literacy is vital in the long run since it affects corporate growth. This is consistent with increased market competition, as the market shifts from conventional to contemporary marketplaces. In addition to the market altering, customers are shifting from conventional to digital consumers (Fauzi et al., 2021).

### Conceptual Framework

As suggested by previous studies, Digital Literacy has a substantial positive impact on women entrepreneurs' performance (Sariwulan et al., 2020) – in this paper, it is analyzed in the context of Pakistan. Furthermore, the impact of Visual Literacy on the entrepreneur's performance will be evaluated to get a holistic insight of the impact these literacies of the digital age have on the performance of women entrepreneurs; here by quoted as "womenpreneurs". Here is the working conceptual framework to understand the proposed hypothesis and direction of the study:

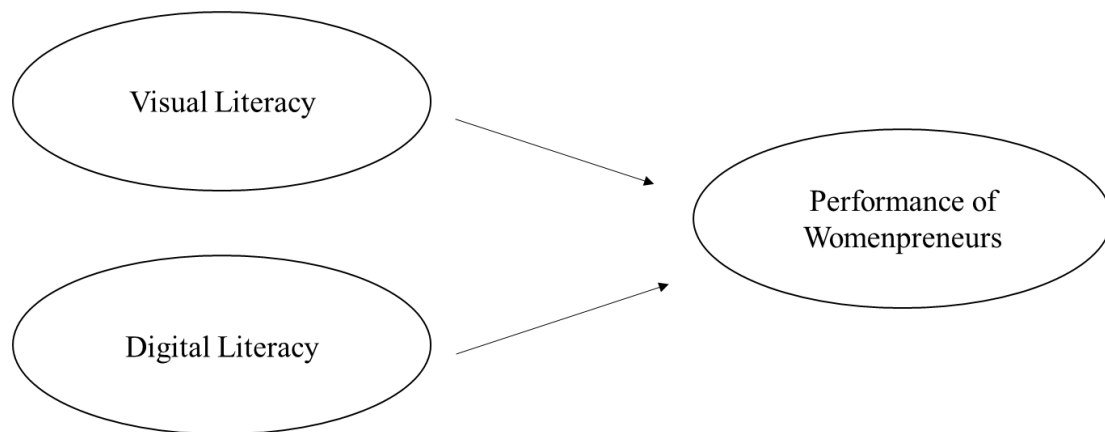


Fig. Conceptual Framework of Visual Literacy, Digital Literacy and Entrepreneur Performance

### Hypothesis

- H1: There is significant influence of Visual Literacy on the performance of womenpreneurs.  
 H2: There is significant influence of Digital Literacy on the performance of womenpreneurs.

### Methodology

#### Research Strategy

Survey research techniques and quantitative strategies were utilized to collect and analyze data. A questionnaire in Google Forms was created with closed-ended questions and distributed to our sample population through social media channels. An incentive, i.e., a Content Planner was offered as a token of gratitude to each participant for their time and input in this research.

A Content Planner is a tool to plan, strategize and build a comprehensive campaign for a business. It's especially helpful for online businesses who need to stay on top of recent trends, tools, and algorithm changes. This tool is basically a spreadsheet which breaks down into monthly and weekly portions, specifying the type of content that is going to be published where, when and on what platform. It's indeed an essential tool for content creation and is used by marketing experts throughout the world. This incentive was indeed a driving force that made the data collection process easier. As small business owners find this tool very effective, they were interested in being part of our study and got their hands on this template. The survey form was available online from March 29, 2023, till June 6, 2023. During this period, 194 responses from women entrepreneurs were successfully collected.

#### Population and Sampling

Population for this study is women owners/CEOs of Small businesses in Pakistan. Purposive sampling technique was used to reach 194 (approx.) sample size. To collect data, each business was approached individually through their official social media channels, i.e., Facebook and Instagram. Also, utilized Facebook Groups such as "Ask the Village", "Connected Women Pakistan", "Women in Tech PK", "Super Talented Women", "Womenza Pakistan", "All about Pakistan Women Entrepreneurs", "Pakistani Women Entrepreneurs" to reach large numbers of women entrepreneurs.

#### Data Collection and Data Analysis

Data was collected online through Google Forms and analyzed through SPSS (Statistical Package for the Social Sciences) software to generate empirical results. The instruments for Digital Literacy (Sariwulan et al., 2020), Visual Literacy (Arslan & Nalinci, 2014), and Entrepreneurial Performance (Sariwulan et al., 2020) were adapted to develop the questionnaire of this study.

A bi-variant regression and correlation analysis was performed through SPSS software on the dependent and independent variables to explore their relationship and impact. These tests are well-established statistical approaches used to analyze the relationships between variables. They helped us examine the degree to which our independent and dependent variables are correlated quantitatively.

## Results

### Visual Literacy & Entrepreneur Performance

To inspect the association between Visual Literacy and Entrepreneur Performance, Regression Analysis and Correlation Analysis were done on the collected data. Here are the results:

#### Regression Analysis

Table 1. Model Summary of Visual Literacy & Entrepreneur Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.309 <sup>a</sup>	.095	.090	3.87660
a. Predictors: (Constant), Visual Literacy				

To evaluate the fortitude of the relationship, a bivariate regression test was done on the independent (Visual Literacy) and dependent variable (Entrepreneur Performance). The value of R (.309) and R-square value of .095 indicate a positive correlation between the two.

Table 2. Regression Coefficients for Visual Literacy & Entrepreneur Performance

Coefficients <sup>a</sup>						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	9.109	.908		10.030	.000
	Visual Literacy	.450	.100	.309	4.495	.000
a. Dependent Variable: Entrepreneur Performance						

The bivariate regression test gave the p-value at .000 ( $p < 0.05$ ) which means the coefficient of Visual Literacy is highly significant. Hence proves that a prominent relationship exists between Visual Literacy and the Entrepreneur's Performance.

#### Correlation Analysis

Table 3. Correlation Analysis between Visual Literacy & Entrepreneur Performance

Correlations			
		Entrepreneur Performance	Visual Literacy
Entrepreneur Performance	Pearson Correlation	1	.309**
	Sig. (2-tailed)		.000
	N	194	194
Visual Literacy	Pearson Correlation	.309**	1
	Sig. (2-tailed)	.000	
	N	194	194
**. Correlation is significant at the 0.01 level (2-tailed).			

We performed Correlation Analysis to examine the strength of the association between Visual Literacy and Entrepreneur Performance. The p-value at .000 ( $p < 0.05$ ) determines that a statistically significant bivariate association exists – Therefore, Correlation is significant at the 0.01 level (2-tailed) for the Visual Literacy and Entrepreneur Performance.

## Digital Literacy & Entrepreneur Performance

To inspect the link between Digital Literacy and Entrepreneur Performance, Regression Analysis and Correlation Analysis were done on the collected data. Here are the results:

### Regression Analysis

Table 4. Model Summary of Digital Literacy & Entrepreneur Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.503 <sup>a</sup>	.253	.249	3.52226
a. Predictors: (Constant), Digital Literacy				

To evaluate the strength of their relationship, a bivariate regression test was done on the independent (Digital Literacy) and dependent variable (Entrepreneur Performance). The value of R (.503) and R-square value of .253 indicates a positive correlation between the two.

Table 5. Regression Coefficients for Digital Literacy & Entrepreneur Performance

Coefficients <sup>a</sup>						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	6.334	.864		7.334	.000
	Digital Literacy	.841	.104	.503	8.065	.000
a. Dependent Variable: Entrepreneur Performance						

The bivariate regression test gave the p-value at .000 ( $p < 0.05$ ) which means the coefficient of Digital Literacy is highly significant and a significant connection exists between Digital Literacy and the Entrepreneur's Performance.

### Correlation Analysis

Table 6. Correlation Analysis between Digital Literacy & Entrepreneur Performance

Correlations			
		Digital Literacy	Entrepreneur Performance
Digital Literacy	Pearson Correlation	1	.503**
	Sig. (2-tailed)		.000
	N	194	194
Entrepreneur Performance	Pearson Correlation	.503**	1
	Sig. (2-tailed)	.000	
	N	194	194
**. Correlation is significant at the 0.01 level (2-tailed).			

We utilized Correlation Analysis to examine the strength of the connection between Digital Literacy and Entrepreneur Performance. The p-value at .000 ( $p < 0.05$ ) determines that a statistically significant bivariate association between the two – Therefore, Correlation is significant at the 0.01 level (2-tailed) for the Digital Literacy and Entrepreneur Performance.

### Discussion

The outcomes of regression analysis suggest that the R value is .503. As the value of R is close to 1 it means that a direct positive link exists between the two variables, i.e., Digital Literacy and Entrepreneur Performance. This confirms that if the Digital Literacy increases, the performance of women entrepreneur increases too. Furthermore, the p-value of .000 ( $p < 0.05$ ) suggests that the coefficient for Digital Literacy is statistically highly significant. This indicates a significant association between Digital Literacy and Entrepreneur

Performance. The Pearson correlation of Visual Literacy and Entrepreneur Performance was found to be moderately positive and statistically significant ( $r = .309^{**}$ ,  $p < .001$ ). This shows that an increase in Visual Literacy levels will lead to better entrepreneur performance. The results from both Regression and Correlation Analysis suggest that a solid, positive, and prominent statistical association is evident between Visual Literacy and Entrepreneur Performance. Therefore,  $H1$  is supported by the results. Hence, if a women entrepreneur can search, access, understand and create visual media such as images, graphics, and videos; they can perform better as an entrepreneur as they are able to achieve their business goals and objectives through increase in revenue, market share, and innovations.

The results of regression analysis highlight that the value of R is .503. As the R value is close to 1 it means that a positive direct affiliation exists between the two variables i.e., Digital Literacy and Entrepreneur Performance. This confirms that if the Digital Literacy increases, the performance of women entrepreneur increases too. Furthermore, the p-value of .000 ( $p < 0.05$ ) suggests that the coefficient for Digital Literacy is statistically highly significant. This indicates a powerful affiliation between Digital Literacy and Entrepreneur Performance. Pearson product correlation of Digital Literacy and Entrepreneur Performance was found to be moderately positive and statistically significant ( $r = .503^{**}$ ,  $p < .001$ ). This shows that an increase in Digital Literacy levels will lead to better entrepreneur performance. The results from both Regression and Correlation Analysis suggest that a solid, positive, and substantial statistical correlation exists between Digital Literacy and Entrepreneur Performance. Therefore,  $H2$  is supported by the results. Hence, if a women entrepreneur can adapt, evaluate, and manage digital technologies to utilize media for marketing, analyzing trends, and demand for goods and services; they can perform better as an entrepreneur as they are able to achieve their business goals and objectives through increase in revenue, market share, and innovations.

## Conclusions

Through comprehensive analysis of the relationship between the following set of literacies i.e., Visual Literacy and Digital Literacy and Entrepreneur Performance, this research has delivered valuable insights and aided the existence of knowledge in this field. The findings gave us an insightful approach to evaluate the crucial role of these digital media literacies in empowering women entrepreneurs as they navigate challenges of the digital era.

Furthermore, this investigation has accredited that as the digital world is consistently developing, the need for continuous learning and adaptation is crucial for sustainability of a business. Women entrepreneurs must work on enhancing their digital media literacies and evolve their knowledge base through continuous learning to stay up to date with emerging digital trends and platforms. This will enable them to remain relevant and competitive in business world while they expand their horizons and build a strong enterprise as they contribute to the economic expansion of Pakistan. Hence, the outcome of this paper suggests that by recognizing and harnessing the power of certain digital media literacies women entrepreneurs can overcome obstacles, unlock opportunities, and create sustainable businesses in the digital age.

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