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The Interplay of CSR Attributes and Dimensions with CSR Authenticity in the Textile Sector of Pakistan: A Smart Technologies Perspective

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ABSTRACT

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. .	suggested a research framework which is supported by Triple
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Keywords:	and CSR Dimensions (Environmental CSR, Economic CSR and
CSR	Social CSR) can be the possible independent variables that
Attributes, Dimensions	instigate the adoption of Smart technologies as mediator and then
Fit	ultimately, the smart technologies pave the way towards CSR
Impact	Authenticity as being dependent variable. the authentic databases
Competencies	like Emerald, JSTOR, Wiley, Taylor and Francis, Springer, SAGE
Social	and Science Direct had been consulted to search the relevant
Environmental	literature for this framework. Accordingly, the keywords like CSR
Economic	Authenticity, CSR Impact, CSR Fit, CSR Competence, Economic
Smart Technologies	CSR, Social CSR and Environmental CSR were used to search the
Authenticity	relevant literature that ultimately furnished the described
Funding:	conceptual framework. Moreover, the conclusion has been drawn
This research received no specific	from this conceptual search by lastly illustrating the significance,
grant from any funding agency in the	limitation & future research directions and recommendations.
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1. Introduction

The concept of CSR validity pertains to an extent to which a company's corporate social responsibility endeavors are sincere, open, and in accordance with its declared principles and objectives. Authentic corporate social responsibility (CSR) efforts transcend superficial public relations tactics and instead reflect a genuine dedication to effecting constructive change in both societal and environmental realms. According to Alhouti in the study defined CSR authenticity as the view of CSR activities of a company's being an authentic and sincere reflection of the company's values and conduct towards society, going beyond what is legally mandated (Alhouti, Johnson, & Holloway, 2016). CSR authenticity may be defined as the degree to which CSR-related actions conducted by corporations are real and sincere. The notion of corporate social responsibility (CSR) has garnered significant international interest (Fatma & Khan, 2023). In September 2015, United States formulated a set of seventeen sustainable development objectives that were widely agreed upon and specifically targeted environmental and social dimensions, while also including the concept of corporate social responsibility (Yasin, Huseynova, & Atif, 2023).

The textile sector of Pakistan is an important contributor to the country's economy (Jehan, Hussai, Batool, & Imran, 2020) and has important influence on economic, political, and social landscape of the region. Most important sector has the 8th largest export in Asia, the 4th largest producer, and the 3rd largest consumer of cotton. It contributes more than 61% to Pakistan's exports and provides more than 40% of total employment (Ministry Of Commerce, 2023). Pakistan's textile sector contributes 8.5% of GDP (Composite and Garments - The Pakistan Credit Rating Agency Limited, 2022). The textile sector has been criticized for its lack of adherence to CSR reporting, although this sector contributes sufficiently to GDP and provides jobs to a large number of people. However, factors that affect CSR authenticity of

textile companies in Pakistan have not been thoroughly studied. As a result, the purpose of this study is to scrutinize the elements that contribute to authenticity of CSR in the textile industry of Pakistan. As, developing states are facing a CSR authenticity problem (Afzali & Kim, 2021). As per sustainable development report 2023, Pakistan stand on 128 position out of 166 states (Index, 2023). It's often seen that mostly companies are claiming that their respective companies are doing CSR activities, but the report on sustainable development 2023 showed something different (United Nations The Sustainable Development Goals Report, 2023).

There is scarce research on the factors that contribute to effective CSR authenticity in the textile sector of Pakistan. While existing researches have highlighted the significance of various aspects, including CSR attributes (Liu & Jung, 2021), CSR fit (Liu & Jung, 2021), CSR impact (Liu & Jung, 2021) CSR competencies, and CSR dimensions (Tsang, Hu, & Li, 2020), environmental CSR, economic CSR (Shim, Moon, Lee, & Chung, 2021), and social CSR (Ferreira & Real de Oliveira, 2014) in many countries by focusing on other various sectors banking, electronical (Huifang & Jin-Sup, 2021) and pharmaceutical industries. Moreover, although the concept of CSR is getting more value in businesses and companies are investing more in CSR (Fatma & Khan, 2023). There is a considerable gap in the existing body of research when it comes to comprehending the elements that influence CSR authenticity (Alhouti et al., 2016) initiatives in developing countries like Pakistan with limited resources and infrastructure, a lack of regulations and standards, and specific challenges related to labor, environmental, and social(Bux, Zhang, & Ahmad, 2020). This contextual gap emphasizes the need for research that considers the specific context of the Pakistani textile industry to make a thorough an understanding of the influences CSR authenticity in this sector.

It is difficult to find theoretical frameworks that explain those activities that influence the authenticity (Hassan, Pandey, Behl, Pereira, & Vaz, 2023). Additionally, it is time to do more empirical studies on relationship between CSR authenticity and various CSR dimensions, such as economic, and social CSR, in the context of textile sector in Pakistan (Hassan et al., 2023). In addition, there is a gap in research concerning the function of smart technologies in the textile industry of Pakistan as a mediator between the characteristics of CSR and the authenticity of CSR (Nazish & Akhtar, 2021). Furthermore, it stands a scarce of investigation that examines CSR commitment as moderator and smart technologies as mediator in between the independent variables (CSR attributes; fit, impact, competencies & CSR dimensions; environmental, economic and social) and the dependent variable (CSR authenticity). Big data analytics, blockchain, and the internet of things are examples of such technologies (Liu & Jung, 2021), have the potential to enhance transparency, accountability, and traceability in CSR authenticity, which can lead to more authentic CSR practices. Therefore, a theoretical gap is in literature that desires to be considered by investigating the mediating role of smart technologies in enhancing CSR authenticity in the textile sector of Pakistan. As a result of this concern, the study's primary objective is to develop a theory outlining the factors that affect the veracity of CSR initiatives in Pakistan's textile sector.

2. Literature Review

2.1. Theoretical Back ground

This research is grounded in the principles of Triple Bottom Line (TBL) Theory. Concept of this theory was first proposed by John Elkington in 1994, and it has since gained significant recognition as an established framework for CSR. The word under consideration stands in opposition to the conventional and prevalent bottom line, an accounting term used by business professionals to denote either profit or loss. This implies that organizations should assume responsibility not only for their financial performance but also for their social and environmental performance. The three accounting measures known as the bottom line encompass the concept of "people." These measures involve the assessment and evaluation of the positive and equitable business practices that companies provide for the employment of disadvantaged individuals, as well as their contributions to the welfare of society and the reduction of disability costs in the local community where the companies operate. Furthermore, the research is supported by stakeholder theory. Stakeholder theory adopts a distinct approach by beginning its analysis from an external standpoint rather than originating from a commercial entity and thereafter examining the ethical duties that exist within the broader context. The document enumerates and provides explanations for the individuals and groups who will experience the consequences of the company's activities. It poses the question, "What are the valid entitlements these stakeholders have in relation to the business?" What are the rights possessed by individuals in relation to the acts undertaken by the company? Furthermore, it is important to consider the kinds of duties and obligations that might reasonably be imposed on a certain corporate entity.

2.2. CSR Authenticity

The appraisal of corporate social responsibility activities have addressed as a significant element in most research on CSR authenticity, particularly with respect to negative views such as commercial intent (Williams, 2014). Price, Arnould and Tierney discovered that authentic corporate social responsibility is achieved through real regard for others rather than societal expectations or responsibilities (Price, Arnould, & Tierney, 1995). For CSR marketing to be effective, a company must be transparent about its intentions and show that its social contribution activities are genuine attempts to address real issues in the community and the natural environment (Benn, Edwards, & Williams, 2014). A company's CSR authenticity is judged on a scale of sincerity that is both subjective and globally and it is used to determine how customers view genuine and responsible CSR actions. If CSR efforts are regarded as solely driven by a desire to help others, they are evaluated as genuine acts, resulting in positive responses toward both the firm and the deed itself (Bhattacharya & Sen, 2004). Activities motivated by profit, on the other hand, may be interpreted as insincere, leading to an adverse reaction. Various marketing literature has examined authenticity, but its function in CSR is weak (Alhouti et al., 2016).

2.3. CSR Fit

As long as there was some obvious connection between the social issue and company's operations, CSR was a good fit. CSR fit define as the arrangement of an organizations CSR initiatives with its core values, mission, beliefs, business strategy and actions. Aquinis and Glavas wrote CSR fit as the mark to which a organization CSR initiatives align by its core business strategy and goals (Aguinis & Glavas, 2012). Organizations that have a strong fit between their CSR activities and their core values and competencies have a greater chance of having their CSR initiatives viewed as genuine. This is because a strong CSR fit and the organization's vision, mission and values creates a sense of authenticity and credibility among stakeholders. Previous research has found that a strong CSR fit and organizational values and competencies can result in more authentic CSR efforts (Choi, Chung, & Young, 2019). Organizations that are seen to be genuine in their CSR activities are also more likely to receive positive feedback from stakeholders, which in turn helps to improve their reputation (Bhattacharya & Sen, 2004). Stakeholders are more likely to trust and be loyal to businesses that are trusted to make genuine CSR efforts. This is because authenticity creates a sense of transparency and accountability that builds trust and credibility with stakeholders. Similarly, organizations that build trust and loyalty with stakeholders are more likely to achieve long-term success (Saeidi, Sofian, Saeidi, Saeidi, & Saaeidi, 2015). It has found that organizations may engage in face saving to enhance their reputation without genuinely addressing social and environmental issue. Similarly, companies that are widely believed to inauthentic in their CSR efforts may face reputational damage and loss of trust from stakeholders (Cho, Kang, Lee, & Park, 2020).

H₁: There is a noteworthy effect of CSR fit on CSR Authenticity

2.4. CSR Impact

The concept of CSR impact pertains to the extent to which corporate social responsibility (CSR) initiatives have effectively addressed and resolved societal challenges, as discussed by Bhattacharya (Bhattacharya & Sen, 2004).

Organizations that demonstrate a significant influence via their corporate social responsibility (CSR) initiatives are more inclined to be seen as genuine in their endeavors towards CSR. The reason for this is that a robust corporate social responsibility (CSR) effect fosters a perception of legitimacy and confidence among stakeholders, constituting a fundamental element of CSR authenticity. According to (Brammer, Jackson, & Matten, 2012), prior studies have shown that CSR effect is associated with increased levels of CSR authenticity. In a study conducted by Bhattacharya, it was shown that firms that are viewed as genuine in their corporate social responsibility (CSR) initiatives are more inclined to garner favorable responses from stakeholders and improve their overall reputation (Bhattacharya & Sen, 2004). Organizations that are viewed as honest in their corporate social responsibility (CSR) endeavors are more likely to gain the confidence and loyalty of stakeholders. The reason for this

phenomenon is that authenticity fosters a perception of openness and responsibility, thereby establishing confidence and enhancing the credibility of an individual or organization among many parties involved. According to Bhattacharya, prior studies have shown that firms that are viewed as genuine in their CSR endeavors are more inclined to cultivate trust and bolster their reputation among stakeholders (Bhattacharya & Sen, 2004). According to Saeidi, firms that establish trust and loyalty among stakeholders have a higher probability of attaining sustained success in long run (Saeidi et al., 2015). Consequently, researcher has formulated following hypothesis:

H₂: There is a significant influence of CSR impact on CSR Authenticity

2.5. CSR Competencies

According to a study by Kim, there is a positive correlation between the perception of authenticity in an organization's CSR initiatives and the development of trust and improvement of reputation among stakeholders (J. Kim et al., 2016). Educational academics have put forward many criteria for skills connected to CSR in the context of education. As an illustration, De Haan competence, employed а broad perspective on incorporating the concept of Gestaltungskompetenz. These competencies are anticipated to facilitate engaged, thoughtful, and collaborative involvement in pursuit of sustainable development. According to Bhattacharya, organizations that successfully interact with stakeholders in their corporate social responsibility (CSR) initiatives are more inclined to cultivate trust and bolster their reputation among stakeholders (Bhattacharya et al., 2006). Competencies related to CSR play a vital role in establishing the authenticity of CSR initiatives. Organizations that possess robust CSR competence are more inclined to give priority to CSR initiatives and effectively convey their CSR endeavors, thereby augmenting their authenticity. According to Bhattacharya, firms that possess a robust ethical culture are more inclined to cultivate trust and bolster their standing among stakeholders (Bhattacharya et al., 2006). Hence, a hypothesis may be posited that there exists a higher correlation between CSR abilities and the authenticity of CSR practices inside firms. Osagie, Wesselink, Blok, Lans, and Mulder conducted a study to identify the essential abilities that individuals should possess or cultivate to facilitate the effective implementation of corporate social responsibility (CSR) inside their organization (Osagie, Wesselink, Blok, Lans, & Mulder, 2016). Therefore, drawing upon the aforementioned debate and existing literature, the researcher has formulated the following hypothesis:

H₃: There is a significant effect of CSR competencies on Authenticity

2.6. Environmental CSR

One aspect of CSR that has gained particular attention in recent years is environmental CSR, which refers to the initiatives and strategies that organizations undertake to reduce their bad influence on environment. Curras, Garcia, and Marint defined the environmental CSR as 'to how businesses can affect ecosystems, the environment, air, and waste". Extent to which environmental management influences how partners evaluate an firm's commitment to corporate social responsibility linked activities is still contested (G. Kim et al., 2018). An everexpanding body of research exploring relationship between environmental CSR and CSR authenticity, with some studies suggesting that environmental CSR can increase the awareness of authenticity in CSR efforts. Environmental CSR initiatives are becoming increasingly important to stakeholders and society at large. Organizations that effectively implement environmental CSR strategies and communicate their efforts are more likely to enhance their legitimacy and credibility among stakeholders. Organizations that effectively communicate their environmental CSR efforts are more probable to build trust and increase their standing with stakeholders (Bhattacharya & Sen, 2004). Environmental performance is an important factor in ensuring that environmental CSR efforts are perceived as authentic. Firms with a solid environmental performance are more probable to prioritize. Previous research has found that environmental performance moderates significant the affiliation between environmental CSR and CSR and effectively communicate their efforts, which enhances their authenticity. Authenticity (Hazenberg, Bajwa-Patel, Mazzei, Roy, & Baglioni, 2016). Similarly, organizations with a strong environmental performance are most probable to build trust and increase their standing with stakeholders (Bhattacharya & Sen, 2004). Zahid Yousaf found significant relations between environmental management and CSR authenticity (Yousaf, Radulescu, Nassani, Aldakhil, & Jianu, 2021). Lin discovered that the environmental management techniques and activities presented in their research for the tourist and hotel sectors are highly and favorably associated with CSR authenticity (Lin, Peng, Anser, Yousaf, & Sharif, 2021). Environmental management, according to Choi and Heinze's findings, attracts increased attention from stakeholders in order to improve authentic CSR (Heinze et al., 2014). Stakeholders give credence to companies that validate CSR activity via green environmental initiatives. Therefore, the researcher has hypothesized the following based on the aforementioned discussion and literature results:

H₄: There is a significant effect of CSR environment on CSR Authenticity

2.7. Economic CSR

One aspect of CSR that has gained particular attention in recent years is economic CSR, which refers to the initiatives and strategies that organizations undertake to promote economic growth in the community. There is need in literature to relationship between economic CSR and CSR authenticity, with some studies suggesting that economic CSR can increase the awareness of authenticity in CSR efforts. Economic CSR initiatives are becoming increasingly important to stakeholders and society at large. Organizations that effectively implement economic CSR strategies and communicate their efforts are more likely to enhance their legitimacy and credibility among stakeholders. Among stakeholders, an organization is more likely to gain trust and a better reputation if they are seen to be genuine in their CSR efforts (Bhattacharya & Sen, 2004). Organizational transparency is critical to the efficacy of CSR activities that have a positive economic impact and a positive public perception of CSR efforts. Transparency level can influence the effect of economic CSR on corporate social responsibility authenticity in organizations. Organizations that effectively communicate their economic CSR efforts are much possible to build trust and improve their reputation with stakeholders (Bhattacharya & Sen, 2004). Jamali and Mirshak examined the connection between CSR and bottom-line results for businesses in emerging markets, finding that economic CSR activities, such as investing in employee training and development, can improve business performance and enhance CSR authenticity (Jamali & Mirshak, 2007). Kolk and Perego examined the use of sustainable bonuses as a form of economic CSR, finding that they can be an effective way to incentivize employees to engage in sustainable behaviors and enhance CSR authenticity (Kolk & Perego, 2010). So, the researcher has come up with a hypothesis based on what's already been discovered and suggested in the literature:

H₅: There is a significant effect of CSR economic on CSR Authenticity

2.8. Social CSR

One aspect of CSR that has gained particular attention is social CSR, which refers to the initiatives and strategies that organizations undertake to contribute to the social well-being of society. Social CSR has been shown in some studies to improve how CSR is seen as genuine. Social performance is an important factor in ensuring that economic CSR efforts are perceived as authentic. Organizations with powerful social performance are much possible to prioritize economic CSR and effectively communicate their exertions, which enhances their authenticity (Gao & Zhang, 2015). Similarly, organizations with a strong social performance are much possible to build trust and improve their status with stakeholders (Bhattacharya & Sen, 2004). So, the researcher has come up with a hypothesis based on what's already been discovered and suggested in the literature:

 H_6 : There is a significant effect of CSR social on CSR Authenticity

2.9. Smart Technologies

Smart technologies now penetrate every firm's activities and alter the essence of the company. Companies, for example, are attempting to develop intelligent management systems by integrating smart technology into machinery (Yoo, Henfridsson, & Lyytinen, 2010). Smart technology-enabled products and services provide innovative features that transform their design, production, distribution, and usage (Yoo et al., 2010).

Production methods, consumer preferences, distribution channels, and other infrastructure will all be uprooted as new business models are implemented, the notion of CSR caused tremendous changes in industry and society. To implement these things in business is say use of smart technologies. Huifang and Jung used word digital transformation in their research (Liu & Jung, 2021). Potocan, and Wang's research in optics and technology cannot be

appraised in terms of sustainability, but the degree of sustainability for various technical solutions can be determined (Potocan, 2021). Financial constraints can influence the extent to which organizations prioritize economic CSR initiatives, as well as the adoption and integration of smart technologies that enhance efficiency and reduce costs. Organizations that face greater financial constraints may be less able to invest in smart technologies to enhance efficiency and reduce costs. An engaged workforce that values efficiency and cost-effectiveness may encourage the adoption and integration of both economic CSR initiatives and smart technologies that enhance efficiency and reduce costs. Organizations that prioritize economic CSR may foster employee engagement that encourages the adoption and integration of smart technologies that enhance efficiency and reduce costs. Organizations with strong economic CSR commitments are more likely to embrace smart technologies for process optimization, cost reduction, and enhance efficiency (Porter & Linde, 1995).

According to Bekaroo, experts have indicated that the major reasons for sustainability via smart technology often involve an economic expectation to enhance efficiency (Bekaroo, Bokhoree, & Pattinson, 2016). Furthermore, modern smart technologies' power-saving capabilities may assist in lowering cooling loads by reducing the amount of heat that is generated, which leads to a more efficient economic gain (Bekaroo et al., 2016). Technological breakthroughs and novel forms of smart technologies may bring reduced cost structures and create chances to achieve different sustainability goals (Costa-Campi, Jamasb, & Trujillo-Baute, 2018). Overall, the researches argue that smart technologies can play a vital role in enhancing CSR authenticity by improving the transparency and accountability of CSR initiatives, facilitating stakeholder engagement, and enabling companies to collect and analyze data on their CSR initiatives and their impact on stakeholders.

2.10. Mediating Role of Smart Technologies Between CSR Fit and CSR Authenticity

There has been little study on the function of smart technology in moderating the relationship between CSR fit and CSR authenticity. The resemblance between an company's features and the characteristics of its corporate social responsibility operations is referred to as CSR fit (Bhattacharya et al., 2010). According to the definition provided by, "smart technologies" are a collection of features that allow previously nondigital equipment to function as intelligently as digital gadgets (Saunila, Nasiri, Ukko, & Rantala, 2019).

Corporate social obligations and technologies, according to Orbik and Zozulakova, are essential aspects of improving global competitiveness in contemporary society (Orbik & Zozul'aková, 2019). In order to address current problems in a more environmentally friendly manner, people can take advantage of the technologies that have already made significant contributions to reducing pollutant emissions and improving environmental protection (Feroz, Zo, & Chiravuri, 2021). In response to the post-COVID era, governments are increasing their efforts to reorganize technology in all fields (Romdhane, 2021). Huifang and Jung conducted studies in the electronics sectors of Korea and China using questionnaires and discovered a favorable influence of digital transformation between CSR fit and corporate social responsibility authenticity in the Korean sample, while CSR fit was rejected in the Chinese sample (Huifang & Jin-Sup, 2021).

In short, Studies have found that CSR fit initiatives have imparted significant impact upon smart technologies with influence of technology readiness (Garriga & Melé, 2004) and consequently, organizations that effectively adopt smart technologies have a better chance of gaining Credibility and Improving their status with stakeholders. Therefore, it can be inferred that smart technologies can play a mediating role between CSR fit and CSR authenticity, although further research is needed to explore this relationship in the context of the textile industry of Pakistan. Hence, based on the literature and above relationships, the researcher has developed a following hypothesis;

H₇: Smart Technologies mediates the relationship between CSR Fit and CSR Authenticity

2.11. Mediating Role of Smart Technologies Between CSR Impact and CSR Authenticity

Scarce studies have shown a link between CSR impact and smart technology. Kim and Park used structural equation modeling to investigate the mediating role of technological innovation in the link between CSR and smart technology innovation (Kim, Park, & Kim, 2020).

There have been huge shifts in both the corporate world and society as a whole recently (Choi et al., 2019). All of these different kinds of work are together referred to as technologies.

In addition, Michael, Kramer, found that businesses may advance their financial interests while also producing benefit for society (Porter & Kramer, 2018). According to Yadong, technology is employed as a moderator variable in order to create a strong association between factors that are dependent and independent in order to enhance the performance of Chinese banking industry (Liu & Jung, 2021). Huifang Liu and Jin-Sup Jung researched by taking electronics industries, using questionnaire, of Korea and China and found positive role of digital transformation between CSR Impact and CSR authenticity (Huifang & Jin-Sup, 2021). Meanwhile, it is plausible to assume that the use of smart technologies can strengthen the impact of CSR initiatives on authenticity, as they allow for greater transparency, accountability, and traceability in the application of corporate social responsibility performs.

Meanwhile, it is plausible to assume that the use of smart technologies can strengthen the impact of CSR initiatives on authenticity, as they allow for greater transparency, accountability, and traceability in the implementation of CSR practices. These novel digital technologies are anticipated to fundamentally transform consumer behavior and recognition (Hoffman & Novak, 2018). Increased trust in CSR efforts is another benefit of technological advancements, which narrow the knowledge gap between businesses and their stakeholders (including consumers). CSR impact encompasses the quantifiable results of CSR initiatives, such as reduced emissions or improved working conditions. Smart technologies enable organizations to collect, analyze, and present this data transparently, reinforcing CSR authenticity (Blowfield, Blowfield, & Murray, 2008). The integration of smart technologies into CSR initiatives has been found to enhance perceived authenticity among consumers (Huifang & Jin-Sup, 2021). According to the research, the use of sophisticated technological tools moderates the connection between CSR and the credibility of a company's claims. Therefore, the following hypothesis has been formulated by the researcher based on the aforementioned literature and connections:

 $\mathsf{H}_{\$}$: Smart technologies mediates the relationship between CSR impact and CSR authenticity

2.12. Mediating Role of Smart Technologies Between CSR Competence and CSR Authenticity

CSR competencies are described as " the integrated set of abilities, perspectives, and facts essential to the success of CSR initiatives" (Heiskanen et al., 2016). In this age of information economies, organizational capabilities are being oriented toward the creation of smart technologies Successfully navigating a competitive environment. Companies, for example, are attempting to develop intelligent management systems by integrating smart technology into machinery (Yoo et al., 2010). Smart technology-enabled products and services provide innovative features that transform their design, production, distribution, and usage (Yoo et al., 2010). The essence of them, smart technologies are required for all aspects of people and businesses, particularly from an organization's standpoint, which involves using digital technology to create new business processes (Kim et al., 2020). Professor Erik Stolterman of Sweden coined the phrase "digital transformation" in 2004 as " something that happens when people start using technology to make their lives better" (Stolterman & Fors, 2004). Many organizations use smart or digital technologies to strengthen their business models at the company level. Further, the adoption of smart technologies enhances transparency in reporting and accountability in social CSR initiatives. This substantiation contributes to the authenticity of corporate social responsibility claims (Gond, El Akremi, Swaen, & Babu, 2017). Thus, it creates a path that starts from CSR Competencies, then directs towards smart technologies and ends at CSR Authenticity. So, it can be hypothesis as below.

 $\ensuremath{\text{H}_9}\xspace$: Smart Technologies mediates the relationship between CSR Impact and CSR Authenticity

2.13. Mediating Role of Smart Technologies Between Environmental and CSR Authenticity

Environmental CSR initiatives, such as decreasing emissions of greenhouse gases, conserving natural resources, and advancing environmentally responsible practices, can create

culture of sustainability within an organization. This culture can drive the adoption and integration of smart technologies that further promote sustainability goals. It has been seen that regulatory pressure have influenced the extent to which organizations prioritize environmental CSR initiatives, as well as the adoption and integration of smart technologies that promote sustainability goals. Resultantly, this environmental concern has given birth to the hundreds of smart technological devices.

Greenhouse gas emissions reductions are only one of the many presumed environmental advantages of smart technologies like ICT and digitalized industrial equipment (Bekaroo et al., 2016). Smart technologies not only help cut greenhouse gas emissions, but they also optimize industries as manufacturing, output in diverse as electricity generation, agriculture. According to Iacovidou, RFID technology may be used to encourage and facilitate the reuse of building components and cut down on waste, both of which contribute to environmental sustainability triumphs in the construction sector (Iacovidou, Purnell, & Lim, 2018). By improving information flow across production processes, smart technology may also assist in achieving sustainable development and environmental protection goals. Using real-time data, for instance, might lead to more effective regulation of manufacturing processes, which in turn could lead to lower overall energy usage across buildings, machinery, and finished goods. Several studies suggest that digitalized manufacturing technologies and automated working machines, among other examples of smart technologies, may be an essential part of the answer to dealing with present environmental concerns and issues connected to climate change. Therefore, environmental CSR is the source of all of these innovative innovations. Therefore, the following hypothesis is put forth based on data from prior research:

 H_{10} : Smart Technologies mediates the relationship between environmental CSR and CSR Authenticity

2.14. Mediating Role of Smart Technologies Between Economic CSR and CSR Authenticity

Economic CSR initiatives, such as reducing waste and optimizing resource utilization, can create a culture of efficiency within an organization. This culture can drive the adoption and integration of smart technologies that further enhance efficiency and reduce costs. As, According to (Balta-Ozkan, Davidson, Bicket, & Whitmarsh, 2013), experts have shown that the key reasons for sustainability in utilizing smart technology often involve an economic expectation to enhance efficiency. Furthermore, power-saving capabilities of today's smart technology may help minimize cooling loads by reducing the amount of heat generated, resulting in a more effective economic benefit (Balta-Ozkan et al., 2013). Energy-efficient smart technologies that are automated and digitalized, as well as other resource-saving technologies and processes, may cut costs and thereby boost the productivity of companies across many sectors (Jänicke, 2012). Smart technologies aid in the optimization of manufacturing processes as well as the full product life cycle. Thus, smart technologies enhance the workforce, the location and organization of lots, and the quality of production machines (Bandyopadhyay & Sen, 2011). Furthermore, self-organizing manufacturing, predictive and cooperative maintenance, efficient transportation planning, and correct categorization of retirement and disposal choices may all help boost the economic benefits of smart technology. Based on the above, smart technologies may be utilized to boost productivity, speed, quality, and safety of operations in conventional industrial settings, thereby increasing economic sustainability (Gunasekaran, Subramanian, & Yusuf, 2018). Further, these all technologies which are derived by economic concern of CSR ultimately heads towards CSR Authenticity. Khattak explored the digital effect between corporate social responsibility and strategic performance and found a positive impact that would enhance authenticity of organization (Khattak & Yousaf, 2021). Thus, based on past study findings, the following hypothesis is proposed:

 $H_{11}\text{:}$ Smart Technologies mediates the relationship between CSR economics and CSR Authenticity

2.15. Mediating role of smart technologies between CSR social and CSR authenticity

One of the critical components of CSR is social responsibility, which involves the identification and fulfillment of a company's obligations to the community and society as a whole. With the advent of smart technologies, businesses have the opportunity to integrate these technologies into their CSR strategies to enhance their social responsibility and improve their

CSR authenticity. As a result of the introduction new ways of doing business and the dismantling of old ways of doing things like manufacturing, retail, and distribution the notion of CSR caused major changes in industry and society. Companies are improving current services by integrating them with different technological advances in areas like AI and IoT. Smart technologies are used to accomplish these things in the company. Huifang Liu did Aup Jung's study utilizing the term "digital transformation" (Huifang & Jin-Sup, 2021). All of these measures are referred to as "digital transformation." The digital transformation of a company is an approach that merges digital and physical elements to create novel market opportunities and shift existing business models (Vial, 2021).

CSR and digital transformation are essential components in improving global competitiveness in contemporary society (Orbik & Zozuľaková, 2019). Digital transformation decreases environmental impact and increases talent diversity, allowing businesses to meet their social duties (Lee, 2019). Furthermore, greater digital maturity, a stronger governance structure, and more thorough ethical standards represent the enterprise's reaction to societal duties (Kane, Palmer, & Phillips, 2019). Moreover, the Social CSR hedges towards use of technology as (Zhen, Yousaf, Radulescu, & Yasir, 2021) found that the use of artificial intelligence in supply chain management can help companies to identify and address ethical and environmental risks. Similarly Zhen argued that big data can be used to monitor and improve CSR performance, as well as to identify opportunities for social and environmental innovation (Zhen et al., 2021). This means businesses can advance their bottom lines and improve society at the same time (Porter & Kramer, 2018). Nwagbara explored that companies hugely relies on technologies for effectiveness, when company managing relations of corporate social responsibilities that make authenticity. Thus, based on past study findings, following hypothesis is formulated:

H₁₂: Smart Technologies mediates the relationship between CSR economics and CSR

3. Conceptual Framework

By considering the literature review discussed and suggestions by several studies, this study has developed a framework to explore the smart technologies as mediator in between CSR attributes (Fit, Impact, Competencies), CSR dimensions (Environmental, Economic, Social) and CSR authenticity in textile sector of Pakistan.



The research framework has six independent variables "CSR Fit (CSRF), CSR Impact (CSRI), CSR competencies (CSRCOMP), Environmental CSR (ENCSR), Economic CSR (ECOCSR), Social CSR (SOCCSR)", which are further divided into two contexts, namely CSR Fit (CSRF), CSR Impact (CSRI) and CSR competencies (CSRC) represent CSR attributes context and Environmental CSR (ENCSR), Economic CSR (ECCSR) and Social CSR (SOCSR) represents CSR dimensions. CSR authenticity (CSRA) is the dependent variable, while smart technologies (ST)

is mediating variable. Lastly, based on the studied theories withare TBL (triple bottom line theory) and STH (Stakeholder theory), the study variables build a relationship and converted into the theoretical framework.

4. Conclusion and Discussion

The problem of corporate social responsibility Authenticity has become crucial nowadays. Thus, the study suggested the possible pathway that leads towards CSR Authenticity. After extensive review of literature, it has been found the CSR FIT, CSR Impact and CSR Competence, Environmental CSR, Economic CSR and Social CSR are antecedents of CSR Authenticity. Moreover, these all antecedents fetch their way towards CSR Authenticity by the use of Smart Technologies as mediator.

This study is significant by suggesting a framework that needs empirical testing by addition of smart technologies as mediator. Moreover, this study is also important for the Textile Sector of Pakistan as this frame work has been proposed by viewing the current challenges of textile sector of Pakistan. In addition, this research has some limitations. For example, the research is limited to conceptual model. The future researchers can further empirically test it for validation. Moreover, it has identified certain variables that can be the potential antecedents of CSR Authenticity, but there can be other possible variables that can also be predictors and outcomes of CSR authenticity. Thus, those variables should also be identified by the future researchers.

This study also recommends the practitioners and policy makers of textile sector of Pakistan to consider the issue of CSR authenticity as crucial one and eradicate the possible cause the authenticity issue. Moreover, the dire need of smart technologies for execution of CSR initiatives is not negligible and needs policy decision for automation.

References

- Afzali, H., & Kim, S. S. (2021). Consumers' responses to corporate social responsibility: The mediating role of CSR authenticity. *Sustainability*, 13(4), 2224. doi:<u>https://doi.org/10.3390/su13042224</u>
- Aguinis, H., & Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. *Journal of management, 38*(4), 932-968. doi:<u>https://doi.org/10.1177/0149206311436079</u>
- Alhouti, S., Johnson, C. M., & Holloway, B. B. (2016). Corporate social responsibility authenticity: Investigating its antecedents and outcomes. *Journal of business research*, 69(3), 1242-1249. doi:<u>https://doi.org/10.1016/j.jbusres.2015.09.007</u>
- Balta-Ozkan, N., Davidson, R., Bicket, M., & Whitmarsh, L. (2013). Social barriers to the adoption of smart homes. *Energy policy*, *63*, 363-374. doi:https://doi.org/10.1016/j.enpol.2013.08.043
- Bandyopadhyay, D., & Sen, J. (2011). Internet of things: Applications and challenges in technology and standardization. *Wireless personal communications, 58*, 49-69. doi:<u>https://doi.org/10.1007/s11277-011-0288-5</u>
- Bekaroo, G., Bokhoree, C., & Pattinson, C. (2016). Impacts of ICT on the natural ecosystem: A grassroot analysis for promoting socio-environmental sustainability. *Renewable and Sustainable Energy Reviews, 57*, 1580-1595. doi:https://doi.org/10.1016/j.rser.2015.12.147
- Benn, S., Edwards, M., & Williams, T. (2014). *Organizational change for corporate sustainability*: Routledge.
- Bhattacharya, C. B., & Sen, S. (2004). Doing better at doing good: When, why, and how consumers respond to corporate social initiatives. *California management review*, 47(1), 9-24. doi:<u>https://doi.org/10.2307/41166284</u>
- Blowfield, M., Blowfield, M., & Murray, A. (2008). *Corporate responsibility: A critical introduction*: Oxford University Press.
- Brammer, S., Jackson, G., & Matten, D. (2012). Corporate social responsibility and institutional theory: New perspectives on private governance. *Socio-economic review*, *10*(1), 3-28. doi:<u>https://doi.org/10.1093/ser/mwr030</u>
- Bux, H., Zhang, Z., & Ahmad, N. (2020). Promoting sustainability through corporate social responsibility implementation in the manufacturing industry: An empirical analysis of barriers using the ISM-MICMAC approach. *Corporate Social Responsibility and Environmental Management*, 27(4), 1729-1748. doi: https://doi.org/10.1002/csr.1920

- Cho, S.-Y., Kang, P. K., Lee, C., & Park, C. (2020). Financial reporting conservatism and voluntary CSR disclosure. *Accounting Horizons*, 34(2), 63-82. doi:<u>https://doi.org/10.2308/horizons-17-093</u>
- Choi, D., Chung, C. Y., & Young, J. (2019). An economic analysis of corporate social responsibility in Korea. *Sustainability*, *11*(9), 2676. doi:<u>https://doi.org/10.3390/su11092676</u>
- Costa-Campi, M. T., Jamasb, T., & Trujillo-Baute, E. (2018). Economic analysis of recent energy challenges: Technologies, markets, and policies. In (Vol. 118, pp. 584-587): Elsevier.
- Fatma, M., & Khan, I. (2023). An Integrative Framework to Explore Corporate Ability and Corporate Social Responsibility Association's Influence on Consumer Responses in the Banking Sector. Sustainability, 15(10), 7988. doi:<u>https://doi.org/10.3390/su15107988</u>
- Feroz, A. K., Zo, H., & Chiravuri, A. (2021). Digital transformation and environmental sustainability: A review and research agenda. Sustainability, 13(3), 1530. doi:<u>https://doi.org/10.3390/su13031530</u>
- Ferreira, P., & Real de Oliveira, E. (2014). Does corporate social responsibility impact on employee engagement? *Journal of Workplace Learning*, 26(3/4), 232-247. doi:<u>https://doi.org/10.1108/JWL-09-2013-0070</u>
- Gao, L., & Zhang, J. H. (2015). Firms' earnings smoothing, corporate social responsibility, and valuation. *Journal of corporate finance, 32*, 108-127. doi:https://doi.org/10.1016/j.jcorpfin.2015.03.004
- Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of business ethics, 53*, 51-71. doi:https://doi.org/10.1023/B:BUSI.0000039399.90587.34
- Gond, J. P., El Akremi, A., Swaen, V., & Babu, N. (2017). The psychological microfoundations of corporate social responsibility: A person-centric systematic review. *Journal of Organizational Behavior, 38*(2), 225-246. doi:<u>https://doi.org/10.1002/job.2170</u>
- Gunasekaran, A., Subramanian, N., & Yusuf, Y. (2018). Strategies and practices for inclusive manufacturing: twenty-first-century sustainable manufacturing competitiveness. In (Vol. 31, pp. 490-493): Taylor & Francis.
- Hassan, Y., Pandey, J., Behl, A., Pereira, V., & Vaz, D. (2023). CSR authenticity and microfoundations of business: a systematic review. *Cross Cultural & Strategic Management*, 30(1), 37-68. doi:<u>https://doi.org/10.1108/CCSM-11-2021-0213</u>
- Hazenberg, R., Bajwa-Patel, M., Mazzei, M., Roy, M. J., & Baglioni, S. (2016). The role of institutional and stakeholder networks in shaping social enterprise ecosystems in Europe. *Social Enterprise Journal, 12*(3), 302-321. doi:<u>https://doi.org/10.1108/SEJ-10-2016-0044</u>
- Hoffman, D. L., & Novak, T. P. (2018). Consumer and object experience in the internet of things: An assemblage theory approach. *Journal of Consumer Research*, 44(6), 1178-1204. doi:<u>https://doi.org/10.1093/jcr/ucx105</u>
- Iacovidou, E., Purnell, P., & Lim, M. K. (2018). The use of smart technologies in enabling construction components reuse: A viable method or a problem creating solution? *Journal of environmental management*, *216*, 214-223. doi:https://doi.org/10.1016/j.jenvman.2017.04.093
- Index, S. (2023). Sustainable Development Report 2023. Retrieved from
- Jamali, D., & Mirshak, R. (2007). Corporate social responsibility (CSR): Theory and practice in a developing country context. *Journal of business ethics*, *72*, 243-262. doi:<u>https://doi.org/10.1007/s10551-006-9168-4</u>
- Jänicke, M. (2012). "Green growth": From a growing eco-industry to economic sustainability. *Energy policy, 48*, 13-21. doi:<u>https://doi.org/10.1016/j.enpol.2012.04.045</u>
- Jehan, Y., Hussai, D., Batool, M., & Imran, M. (2020). Effect of green human resource management practices on environmental sustainability. *International Journal of Human Capital in Urban Management,* 5(2), 153-164. doi:https://doi.org/10.22034/IJHCUM.2020.02.06
- Kane, G. C., Palmer, D., & Phillips, A. N. (2019). *Accelerating digital innovation inside and out*. Retrieved from
- Khattak, A., & Yousaf, Z. (2021). Digital social responsibility towards corporate social responsibility and strategic performance of hi-tech SMEs: Customer engagement as a mediator. *Sustainability*, *14*(1), 131. doi:<u>https://doi.org/10.3390/su14010131</u>

- Kim, K. W., Park, J. J., & Kim, J. Y. (2020). A study on the promotion of digital transformation for micro enterprises: Focusing on the factors influencing digital transformation. *Korea Business Review*, 24, 131-150.
- Kolk, A., & Perego, P. (2010). Determinants of the adoption of sustainability assurance statements: An international investigation. *Business strategy and the environment*, 19(3), 182-198. doi:<u>https://doi.org/10.1002/bse.643</u>
- Lee, W.-H. (2019). A Study on digital transformation as a business strategy: Building a total digital business strategy framework for distribution. *Journal of distribution and management research*, 22(3), 85-99.
- Lin, K., Peng, M. Y. P., Anser, M. K., Yousaf, Z., & Sharif, A. (2021). Bright harmony of environmental management initiatives for achieving corporate social responsibility authenticity and legitimacy: Glimpse of hotel and tourism industry. *Corporate Social Responsibility* and *Environmental Management*, 28(2), 640-647. doi:https://doi.org/10.1002/csr.2076
- Liu, H., & Jung, J.-S. (2021). The effect of CSR attributes on CSR authenticity: focusing on mediating effects of digital transformation. *Sustainability*, *13*(13), 7206. doi:<u>https://doi.org/10.3390/su13137206</u>
- Nazish, M., & Akhtar, M. H. (2021). Impact of Corporate Social Responsibility on profitability of banks in Pakistan: Application of GMM Approach. *iRASD Journal of Management*, 3(3), 360-372. doi:<u>https://doi.org/10.52131/jom.2021.0303.0051</u>
- Orbik, Z., & Zozuľaková, V. (2019). Corporate social and digital responsibility. *Management Systems in Production Engineering*(2 (27), 79-83. doi:<u>https://doi.org/10.1515/mspe-2019-0013</u>
- Osagie, E. R., Wesselink, R., Blok, V., Lans, T., & Mulder, M. (2016). Individual competencies for corporate social responsibility: A literature and practice perspective. *Journal of business ethics*, *135*, 233-252. doi:<u>https://doi.org/10.1007/s10551-014-2469-0</u>
- Porter, M. E., & Kramer, M. R. (2018). Creating shared value: How to reinvent capitalism—And unleash a wave of innovation and growth. In *Managing sustainable business: An executive education case and textbook* (pp. 323-346): Springer.
- Porter, M. E., & Linde, C. v. d. (1995). Toward a new conception of the environmentcompetitiveness relationship. *Journal of economic perspectives*, 9(4), 97-118. doi:<u>https://doi.org/10.1257/jep.9.4.97</u>
- Potocan, V. (2021). Technology and corporate social responsibility. *Sustainability*, *13*(15), 8658. doi:<u>https://doi.org/10.3390/su13158658</u>
- Price, L. L., Arnould, E. J., & Tierney, P. (1995). Going to extremes: Managing service encounters and assessing provider performance. *Journal of marketing*, *59*(2), 83-97. doi:<u>https://doi.org/10.1177/002224299505900207</u>
- Romdhane, S. B. (2021). Impact of Information Technology and Digitalization on Banking Strategy pre-COVID-19, challenges in the COVID era and post-COVID stakes. *International Journal of Accounting & Finance Review, 6*(2), 60-73. doi:<u>https://doi.org/10.46281/ijafr.v6i2.1068</u>
- Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saaeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of business research*, 68(2), 341-350. doi:<u>https://doi.org/10.1016/j.jbusres.2014.06.024</u>
- Saunila, M., Nasiri, M., Ukko, J., & Rantala, T. (2019). Smart technologies and corporate sustainability: The mediation effect of corporate sustainability strategy. *Computers in Industry*, 108, 178-185. doi:<u>https://doi.org/10.1016/j.compind.2019.03.003</u>
- Shim, J., Moon, J., Lee, W. S., & Chung, N. (2021). The impact of CSR on corporate value of restaurant businesses using triple bottom line theory. *Sustainability*, 13(4), 2131. doi:<u>https://doi.org/10.3390/su13042131</u>
- Stolterman, E., & Fors, A. C. (2004). Information technology and the good life. *Information* systems research: relevant theory and informed practice, 687-692. doi:<u>https://doi.org/10.1007/1-4020-8095-6_45</u>
- Tsang, A., Hu, W., & Li, X. (2020). CSR and firm value: A comparative study of CSR performance measures. *China Accounting And Finance Review, Forthcoming*.
- United Nations The Sustainable Development Goals Report, u. (2023).
- Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing Digital Transformation*, 13-66.
- Williams, O. F. (2014). CSR: Will it change the world? Hope for the future: An emerging logic in business practice. *Journal of Corporate Citizenship*(53), 9-26.

- Yasin, R., Huseynova, A., & Atif, M. (2023). Green human resource management, a gateway to employer branding: Mediating role of corporate environmental sustainability and corporate social sustainability. *Corporate Social Responsibility and Environmental Management*, 30(1), 369-383. doi:<u>https://doi.org/10.1002/csr.2360</u>
- Yoo, Y., Henfridsson, O., & Lyytinen, K. (2010). Research commentary—the new organizing logic of digital innovation: an agenda for information systems research. *Information systems research*, 21(4), 724-735. doi:<u>https://doi.org/10.1287/isre.1100.0322</u>
- Yousaf, Z., Radulescu, M., Nassani, A., Aldakhil, A. M., & Jianu, E. (2021). Environmental management system towards environmental performance of hotel industry: does corporate social responsibility authenticity really matter? *Engineering Economics*, *32*(5), 484-498. doi:https://doi.org/10.5755/j01.ee.32.5.28619
- Zhen, Z., Yousaf, Z., Radulescu, M., & Yasir, M. (2021). Nexus of digital organizational culture, capabilities, organizational readiness, and innovation: Investigation of SMEs operating in the digital economy. *Sustainability*, *13*(2), 720. doi:https://doi.org/10.3390/su13020720