

# Digital Trust and Personality Types among Employees in the Workplace

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## Abstract

This study explores the relationship between personality traits and digital trust in the workplace. It emphasizes that trust is crucial to employees' willingness to embrace technology. Digital trust is defined as individuals depending on technology to complete tasks due to positive characteristics and expectations of the technology's behavior. The study focuses on the Big Five Personality traits: extraversion, agreeableness, conscientiousness, neuroticism, and openness, which are significantly related to digital trust. The research was conducted online in 36 countries, resulting in a dataset of 2,998 respondents. The findings revealed that respondents predominantly exhibited moderate levels of extraversion, openness, and neuroticism. However, agreeableness and conscientiousness traits were less prevalent among the respondents. The study also identified significant relationships between digital trust levels and the personality traits of extraversion, agreeableness, conscientiousness, neuroticism, and openness. Specifically, employees with higher extraversion showed higher digital trust levels, while those with higher agreeableness demonstrated the lowest digital trust. Additionally, the research highlighted that digital trust significantly varied across different ICT components when grouped according to employees' personality types. This indicates that trust in specific ICT components depends on individual personality traits. In conclusion, the study revealed that employees in the workplace generally exhibited moderate extraversion, neuroticism, and openness personality traits. The digital trust level among employees also shows a moderate overall level. The Big Five Personality traits significantly influenced digital trust, and employees' trust levels differed based on their personality types. Moreover, the research indicated significant differences in digital trust across various ICT components, depending on personality types. Considering the impact of personality traits on digital trust, organizations can design targeted interventions to promote a technology-embracing culture and enhance technology adoption. Recognizing the significance of extraversion, agreeableness, conscientiousness, neuroticism, and openness

in influencing digital trust, organizations may also consider personality assessment tools during recruitment and talent management processes.

**Keywords:** Digital Trust, Personality Traits, Workplace Dynamics, Trust-Building Strategies, Technology Adoption

## Introduction

In an era dominated by digital technology, trust has emerged as the linchpin upon which our relationship with technology hinges. As businesses and individuals increasingly rely on technology for myriad aspects of their daily lives, trust is the cornerstone upon which our willingness to embrace technology rests (Black & Dupont, 2023).

Trust becomes paramount in the workplace, where the fusion of human and digital realms is most pronounced. Nevertheless, the multifaceted nature of trust begs the question: What is trust in the digital age? Definitions abound, with dictionaries and experts offering their interpretations. Merriam-Webster.com defines trust as "reliance on the character, ability, strength, or truth of someone or something." Meanwhile, Cambridge.org speaks of trust as the belief that something is "safe and reliable," and Macmillandictionary.com characterizes it as the confidence that something is "safe, reliable, or effective." In technology, trust becomes an individual's willingness to depend on technology to achieve a specific task due to its positive attributes (McKnight et al., 2009). Gartner Inc. succinctly sums up trust as the expectation that digital interactions are secure and authentic (Gartner Inc., 2017, as cited in Marcial & Launer, 2019).

Digital trust is not a mere academic construct; it underpins every digital interaction, assuring organizations and employees that their digital footprint remains secure in an increasingly interconnected world (DigiCert, Inc., 2022). Information and Communication Technology's (ICT) transformative power in the workplace is undeniable, revolutionizing operations, expanding access, and fostering collaboration (Stevens, 2021). However, this transformative potential hinges on trust in technology, a trust that is increasingly elusive due to concerns about security, transparency, and ethics (Jain, 2021).

Within this intricate web of technology and trust, the human element—personalities—plays a pivotal role. The workplace is a complex ecosystem where digital trust is shaped by four dimensions: the digital environment, user experiences, attitudes, and behaviors. The digital environment consists of mechanisms and procedures that ensure online

safety and security. User experiences encompass the hurdles users face in their digital interactions, affecting their trust in technology. Attitudes encompass responsible data handling, faith in organizations, and privacy concerns. Behaviors reflect individuals' engagement with digital surroundings (Chakravorti et al., 2021).

Crucially, the interplay between digital trust on ICT components in terms of electronic devices, hardware, information systems, management, IT and data support, and ICT external entities and individual personalities, particularly the Big Five Personality, is the focus of this study. Personality traits have been shown to influence ICT trust significantly, with the Big Five Personality traits—extraversion, agreeableness, conscientiousness, neuroticism, and openness—standing out as pivotal factors (“Cherry, What,” 2023). These traits capture the essence of individual personality differences, from sociability to emotional stability and curiosity.

The relationship between personality and digital trust is an escalating field of research, offering insights into how individuals perceive and interact with technology. While prior studies have begun to unveil the relationships between personality and ICT use, this paper provides a comprehensive analysis of the contemporary workplace context. It aims to shed light on the complex interplay between individual personality traits and digital trust, thereby contributing to a deeper understanding of the human-technology relationship in the modern workforce. This paper aims to gauge the impact of the Big Five personality traits on workplace digital trust. By probing into employees' personalities and correlating them with their digital trust levels, this paper seeks to uncover the intricate dynamics that shape trust in technology. Questions such as the following are explored: What is the personality profile of employees in the digital age? How does personality influence digital trust levels? Are there significant differences in digital trust among employees with varying personality types?

The findings of this paper yield impactful benefits to organizations, employees, and policymakers by enhancing workplace productivity by allowing employees to understand digital trust and personality types, thereby enabling them to tailor strategies that enhance collaboration and productivity in organizations (Marcial & Launer, 2019). The findings can also help improve employee satisfaction, as identifying the correlation between personality types and digital trust can guide organizations in creating a more satisfying work environment, positively impacting employee well-being (Mosley, 2016). Another valuable contribution of this paper's findings is informed decision-making for policymakers who can use these findings to shape policies that promote a conducive digital work environment, thereby

fostering trust and collaboration among employees (UNESCO, 2021). The results could also produce tailored training programs. Organizations can develop targeted training programs based on personality types to improve digital literacy and trust among employees, thereby ultimately benefiting both the individuals and the organization (Mosley, 2016).

## **Review of Related Literature**

In today's rapidly evolving digital landscape, organizations increasingly rely on technology to streamline processes, foster collaboration, and drive innovation (Davenport & Harris, 2007) (Dong & McIntyre, 2014).

The success of these technological endeavors often hinges on employees' willingness to embrace and trust the digital tools and platforms at their disposal (Al-Fraihat et al., 2020). This study delves into the intricate relationship between personality traits and digital trust among employees in the workplace, thereby shedding light on how individual personality differences can significantly impact the adoption and utilization of technology.

At the core of this investigation lies the concept of digital trust, which is a critical determinant of an individual's willingness to rely on technology to accomplish tasks and achieve goals (Mayer et al., 1995) (Gefen et al., 2003). Digital trust can be defined as the degree to which an individual depends on technology based on their positive perceptions and expectations of its behavior (McKnight et al., 2002). It reflects an individual's belief that technology will perform as expected, be secure, and enhance their work experiences (Lewicki et al., 1998).

Central to this research is exploring the Big Five Personality traits, which have been widely studied and recognized as fundamental dimensions of human personality (Costa & McCrae, 1992) (John & Srivastava, 1999). These traits, namely extraversion, agreeableness, conscientiousness, neuroticism, and openness, have been shown to profoundly impact various aspects of an individual's life, including their behavior and attitudes in the workplace (Barrick & Mount, 1991).

Extraversion, characterized by sociability, assertiveness, and a propensity to seek out social interactions (McCrae & Costa, 1987), has significantly shaped digital trust (Darioshi & Lahav, 2021). Individuals with higher levels of extraversion tend to exhibit greater digital trust, likely due to their predisposition toward openness to new experiences and ease of forming interpersonal connections (Dishaw & Strong, 1999) (Darioshi & Lahav, 2021). This inclination towards trust in technology may manifest in a

greater willingness to explore and use digital tools (Bolton, et al., 2013).

In contrast, agreeableness, characterized by empathy, cooperation, and a desire to maintain harmonious relationships (McCrae & Costa, 1987), has shown an inverse relationship with digital trust (Montague et al., 2016). Individuals with higher levels of agreeableness may exhibit lower levels of digital trust, possibly because their concern for interpersonal relationships may lead them to rely more on human interactions than technology (Dishaw & Strong, 1999).

Conscientiousness, marked by qualities such as organization, responsibility, and goal-oriented behavior (McCrae & Costa, 1987), also plays a role in digital trust (Montague et al., 2016). While the relationship is nuanced, individuals with higher conscientiousness may exhibit varying levels of digital trust, depending on how they perceive technology's role in aiding their productivity and efficiency (Bolton, et al., 2013) (Szajna, 1996).

Neuroticism, characterized by emotional instability and a tendency towards anxiety and stress, can also influence digital trust. Higher levels of neuroticism may lead to heightened concerns about the reliability and security of technology, potentially reducing digital trust levels (Darioshi & Lahav, 2021).

Openness to experience, marked by curiosity, creativity, and a preference for novelty (McCrae & Costa, 1987), can positively influence digital trust (Darioshi & Lahav, 2021). Individuals with higher levels of openness tend to be more adaptable and open to experimenting with new technologies, thereby resulting in greater digital trust (Szajna, 1996).

Numerous studies have been conducted on the relationship between personality, ICT use, and trust. Extraversion and openness personalities are positively associated with ICT use, with extraverted and open-minded individuals being more likely to use ICTs for socializing (social media) and networking (Lampropoulos et al., 2022). Conscientiousness is positively associated with ICT use, with individuals who score high on this trait being more likely to use ICTs for work-related tasks and to be more organized in their ICT use (Bano et al., 2019). Being identified as a risk factor for Internet and online addictions, neuroticism is negatively associated with ICT use. Individuals with neuroticism are more likely to experience stress and anxiety when using technology (Marciano et al., 2020). Relationships have been established between digital trust and personality types, as seen in several studies. In the study of Flavián et al. (2022) on virtual teams, the results demonstrated that extraversion positively affected how much people trust their leaders and that trust positively affected how much people care about the team. However, it was found that trust in more virtual contexts was negatively impacted by neuroticism. Between the Big Five

Personality types and AI systems trust, it was revealed that high rates of agreeableness, openness, and extraversion affected AI trust positively. In contrast, high rates of neuroticism were negatively associated with AI trust. It was not clear, however, how conscientiousness affected AI systems trust.

## **Methods**

The empirical foundation of this study relies on a comprehensive online survey conducted in 2019 in 36 countries, encompassing diverse respondents from Africa, Asia, Europe, North America, Oceania, and South America (Marcial & Launer, 2019). Data from Marcial and Launer's Survey on Digital Trust in the workplace was gathered from 5,621 randomly selected respondents. Responses with at least one incomplete data entry were removed; hence, for this paper, the total number of datasets included was 2,998. The Big Five Inventory-10 was also utilized as a research instrument (Rammstedt et al., 2014). A 4-point Likert scale or the forced Likert scale was used on the personality agreement level, with 1 equating to strongly disagree, 2 to disagree, 3 to agree, and 4 to strongly agree. For the Digital Trust Level, the following were the descriptors: 1 = not trusted at all; 2 = low; 3 = moderate; 4 = high. In the 4-point Likert Scale or the forced Likert scale, the user is forced to form an opinion such that there is no safe or 'neutral' option. Notably, the questionnaire has acceptable reliability and validity properties (Marcial & Launer, 2021). The following statistical tools were utilized in this paper: weighted mean to determine the respondents' personality type and digital trust level; chi-square test and multiple regression to determine significant relationships between digital trust and personality types; and 1-way and 2-factor analyses of variance (ANOVA) to determine significant differences on digital trust in between ICT components when grouped according to each personality type. There were 6 ICT components in the study, which are as follows: electronic devices, hardware, information systems, management, IT and data support, and external entities. These components and their specific items were limited based on the global framework of digital trust (Marcial & Launer, 2019).

## **Results and Discussion**

### **Personality Types**

Table 1 summarizes the personality of the respondents in the workplace. Among the big five personality traits used in this study,

extraversion had the highest mean, at 2.81. This implies that the respondents predominantly exuded extraversion, and they were outgoing or socially confident. Also, the respondents generally possessed openness (2.70) and, neuroticism (2.63), and all of them possessed a moderate level of extraversion, openness, and neuroticism, as can be gleaned by their level of agreement with the questions. On the other hand, the table shows that the respondents did not possess agreeableness and conscientiousness, as can be gleaned from their response means of 2.43 and 2.45, respectively, which were described as "disagree."

**Table 1**

*Summary of Personality of the Respondents*

Personality Traits	Agreement Level				Combined Mean	Description
	1 Strongly Agree	2 Disagree	3 Agree	4 Strongly Agree		
Extraversion	831	1061	2535	1571	2.81	Agree
Agreeableness	1303	1993	1538	1164	2.43	Disagree
Conscientiousness	1638	1350	1675	1335	2.45	Disagree
Neuroticism	945	1764	1890	1398	2.63	Agree
Openness	929	1477	2037	1555	2.70	Agree

Specifically, the respondents, on average, had a moderately high level of extraversion, with a mean score of 2.81. This suggests that they tended to be outgoing and socially confident, expressing themselves openly and easily engaging in social interactions. This positive score indicates that most of the respondents agreed with statements about extraversion in the workplace. It can also be noted that the respondents scored relatively low on agreeableness, with a mean of 2.43, which was under the "disagree" category. This indicates that the respondents did not exhibit high levels of agreeableness in the workplace. Agreeableness is characterized by being cooperative, compassionate, and empathetic towards others (Levesque, 2011). The results suggest that the respondents did not strongly agree with statements about agreeableness at work.

Similarly, the respondents scored low on conscientiousness, with a mean of 2.45, which was categorized as "disagree." Conscientiousness is associated with being organized, diligent, and responsible (Bogg & Roberts, 2013). The findings imply that the respondents may not strongly agree with

statements related to conscientiousness in the workplace, indicating a lower tendency to be organized and responsible. It is also interesting to note that the respondents scored moderately high on neuroticism, with a mean of 2.63, falling under the "agree" category. Neuroticism is "the tendency to experience negative emotions, such as anxiety and stress" (Hyde, 2001). The results suggest that the respondents had a moderate level of neuroticism in the workplace, indicating that they may experience negative emotions while working.

Furthermore, the respondents scored relatively high in openness, with a mean of 2.70, which was categorized as "agree." Openness is associated with being imaginative, curious, and open to new experiences (Ng et al., 2021). The findings suggest that the respondents tended to possess a moderate level of openness in the workplace, showing a willingness to explore new ideas and experiences.

Overall, the results imply that the work environment might have a lively and sociable atmosphere, thereby fostering open communication and team interaction. Likewise, the data indicate potential challenges in maintaining a cooperative and responsible work atmosphere. Organizations can only promote teamwork and cooperation if employees possess high levels of agreeableness and conscientiousness. The moderate level of neuroticism suggests that some employees may experience negative emotions, potentially leading to increased stress and reduced job satisfaction. Organizations should consider providing adequate support systems, such as employee assistance programs and stress management workshops, to help employees cope with work-related stress and maintain overall well-being (Baskar et al., 2021).

## **Digital Trust Levels According to Personality Type**

Table 2 summarizes the digital trust level among employees across personality types. Here, information systems that are implemented (regardless of one's usage) as well as management and other internal entities were regarded as the most trusted ICT components across respondent personality types, as indicated by the mean of 2.75, while electronic devices that were provided (either for official or personal use) were the least trusted among the respondents. All in all, the respondents moderately trusted ICT in the workplace, as indicated by the mean of 2.70.

**Table 2**

*Summary of Digital Trust Level among Employees According Across Personality Types*

ICT Components	Personality Types												
	Extraversion		Agreeableness		Conscientiousness		Neuroticism		Openness		TOTAL		
	x	D	x	D	x	D	x	D	x	D	x	D	
Electronic devices that are provided with you (either for official or personal use)	2.75	Moderate	2.53	Moderate	2.51	Moderate	2.62	Moderate	2.68	Moderate	2.62	Moderate	
Hardware and Software Systems installed (either for official or personal transactions)	2.79	Moderate	2.57	Moderate	2.55	Moderate	2.66	Moderate	2.72	Moderate	2.66	Moderate	
Information systems that are implemented (regardless of your usage)	2.88	Moderate	2.66	Moderate	2.64	Moderate	2.75	Moderate	2.81	Moderate	2.75	Moderate	
Management & other internal entities	2.88	Moderate	2.66	Moderate	2.65	Moderate	2.76	Moderate	2.82	Moderate	2.75	Moderate	
IT & Data Support	2.87	Moderate	2.65	Moderate	2.63	Moderate	2.74	Moderate	2.80	Moderate	2.74	Moderate	
External Entities	2.80	Moderate	2.58	Moderate	2.56	Moderate	2.67	Moderate	2.73	Moderate	2.67	Moderate	
											<b>Mean of Means</b>	<b>2.70</b>	<b>Moderate</b>

As shown in Table 2, the trust levels were generally consistent across all personality types, with the mean scores falling within the "Moderate" range for each component. The data indicates that employees in the workplace exhibited a moderate level of digital trust in various ICT components. The most trusted components are internal information systems and management entities. At the same time, electronic devices provided by the organization were perceived as less trusted. The trust levels appeared to be relatively consistent across different personality types.

The foregoing results imply that employees generally possessed a moderate level of trust in ICT components, regardless of their personality traits. However, the variations in trust levels for each specific ICT component based on personality types are noteworthy. Employees with different personality types displayed varying levels of trust in different ICT components. For instance, implementing information systems, regardless of usage, received the highest mean trust score across all personality types, at

2.75, indicating a relatively higher level of trust in these systems. On the other hand, electronic devices provided for official or personal use received the lowest mean trust score across all personality types, at 2.62, suggesting lower trust levels in the reliability and security of these devices.

These implications emphasize the importance of considering employees' personality traits when implementing and managing ICT components. Organizations should be mindful of individual preferences and concerns, tailoring communication and support to address specific trust-related needs. By recognizing the variations in trust levels for different ICT components based on personality types, organizations can design targeted interventions to enhance digital trust and user satisfaction.

Furthermore, the "Moderate" overall digital trust level indicates room for improvement in cultivating a more trusting work environment. A culture of open communication, transparent data practices, and robust cybersecurity measures can increase the organization's digital trust levels. Regularly monitoring trust levels and gathering feedback from employees can provide valuable insights into the effectiveness of implemented strategies and facilitate continuous improvement.

Table 3 presents the Digital Trust Level according to the Personality of Employees. It can be gleaned that respondents manifesting the extraversion personality had the highest trust level on ICT, with a mean of 2.83. Meanwhile, respondents possessing the agreeableness personality type had the least trust in ICT at 2.61. However, such mean still indicates a moderate level of trust. Similarly, the mean of means of ICT trust according to personality types was 2.70, which was described as a moderate level of trust among respondents.

**Table 3**  
*Digital Trust Level According to the Personality of Employees*

Personality	ICT Components														
	Electronic Devices		Hardware		Information System		Management		IT and Data Support		External Entities		TOTAL		
	x	D	x	D	x	D	x	D	x	D	x	D	x	D	
Extraversion	2.75	Moderate	2.79	Moderate	2.88	Moderate	2.88	Moderate	2.87	Moderate	2.80	Moderate	2.83	Moderate	
Agreeableness	2.53	Moderate	2.57	Moderate	2.66	Moderate	2.66	Moderate	2.65	Moderate	2.58	Moderate	2.61	Moderate	
Conscientiousness	2.51	Moderate	2.55	Moderate	2.64	Moderate	2.65	Moderate	2.63	Moderate	2.56	Moderate	2.59	Moderate	
Neuroticism	2.62	Moderate	2.66	Moderate	2.75	Moderate	2.76	Moderate	2.74	Moderate	2.67	Moderate	2.70	Moderate	
Openness	2.68	Moderate	2.72	Moderate	2.81	Moderate	2.82	Moderate	2.80	Moderate	2.73	Moderate	2.76	Moderate	
													<b>Mean of Means</b>	<b>2.70</b>	<b>Moderate</b>

As shown in Table 3, the mean scores for digital trust across all personality types fall within the "Moderate" category, ranging from 2.51

to 2.88. This suggests that, on average, employees exhibited a moderate level of trust in the various ICT components assessed, regardless of their personality traits. Across all personality types, there was a relatively consistent level of trust in the different ICT components, as indicated by the similar mean scores. This implies that the perception of digital trust was relatively uniform among employees, irrespective of their personality traits. The highest levels of digital trust were observed in "Information Systems" and "Management." Regardless of their personality types, employees tend to have more confidence in these internal components. The lowest level of digital trust was observed in "Electronic Devices." However, the mean scores still fall within the "Moderate" range. This suggests that employees may trust the electronic devices provided for official or personal use. The data reveal that employees, regardless of their personality types, exhibited moderate trust in the various ICT components at their workplace. While there were slight variations in trust levels for specific components, overall, employees generally had a similar perception of digital trust. The higher trust in "Information Systems" and "Management" indicates the importance of maintaining and enhancing trust in internal entities.

It is observed that employees with different personality traits exhibited slight variations in their trust levels across the ICT components. For instance, individuals with higher extroversion tended to have moderately higher trust in all ICT components than respondents with other personality traits did. On the other hand, employees with higher agreeableness, conscientiousness, neuroticism, and openness generally displayed similar trust levels, with their mean trust scores ranging from 2.61 to 2.70. Furthermore, specific ICT components elicited varying trust levels among employees. Information systems that were implemented, regardless of usage, received the highest trust scores, indicating a relatively higher confidence of the respondents in their reliability and security. Conversely, electronic devices for official or personal use received slightly lower trust scores than other ICT components.

The implications of this data underscore the importance of considering both personality traits and ICT component types when addressing digital trust issues within an organization. Tailoring communication, training, and support initiatives to cater to individual trust tendencies can enhance employees' confidence in using technology. Acknowledging the variations in trust levels for specific ICT components can inform targeted interventions that address concerns and improve trust. Organizations can focus on strengthening the security and usability of electronic devices, thereby increasing trust in these critical tools.

## Relationship between Digital Trust and Personality

Table 4 summarizes the analysis results to show the existence of any significant relationship between the respondents' digital trust levels and extraversion level, agreeableness level, conscientiousness level, neuroticism level, and openness level. When correlated one at a time, each personality type was significantly related to the level of digital trust in the workplace. The chi-square result shows that extraversion, agreeableness, conscientiousness, neuroticism, and openness affected digital trust in the workplace.

**Table 4**

*Summary of Relationships between Digital Trust Level and Personality*

Digital Trust Level and	$\chi^2$	<i>p</i> -value	<i>df</i>	Remarks
Extraversion	123.33	0.00	9	Significant
Agreeableness	383.85	0.00	9	Significant
Conscientiousness	385.49	0.00	9	Significant
Neuroticism	261.45	0.00	9	Significant
Openness	250.70	0.00	9	Significant

Table 4 suggests meaningful connections between an employee's personality traits (i.e., Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness) and their level of digital trust in the workplace. The statistically significant relationships indicate that personality traits shape how individuals perceive and place trust in information and communication technology (ICT) components at work.

The findings suggest that employees' personality traits are crucial in influencing their level of digital trust. Extraverted individuals, who are typically outgoing and socially confident, tend to exhibit more digital trust. Similarly, employees who score higher on agreeableness, displaying qualities of cooperation and empathy, tend to place more trust in digital systems. Conscientious individuals, known for being organized and responsible, also show higher digital trust levels. Neuroticism, which entails experiencing negative emotions more frequently, is associated with higher digital trust. This could imply that individuals with neurotic tendencies may be more cautious and vigilant in their digital interactions, leading to heightened trust levels. Similarly, openness, characterized by a willingness to embrace novel ideas and experiences, is also significantly linked to higher digital

trust (Weston & Jackson, 2018). This suggests that individuals with an open mindset may be more receptive to adopting and trusting new technologies and digital platforms.

These implications, which highlight the significance of understanding employees' personality traits in shaping their attitudes toward technology, are essential to organizations as they. Knowing the diverse range of personalities within the workforce can help tailor trust-building strategies and technology implementations. Moreover, fostering an environment that encourages open communication, support, and empathy can enhance digital trust among employees. Furthermore, the observed relationships between digital trust and personality traits can aid recruitment and talent management processes. By considering personality traits during hiring, organizations can identify candidates more likely to embrace and trust digital technologies, improving job-person fit and long-term satisfaction.

Using multiple regression, Table 5 analyses the relationship between ICT trust level and the five personality types. When correlated all at once, neuroticism yielded a p-value of 0.43, which is insignificant. At the same time, extraversion, agreeableness, conscientiousness, and openness personalities are significantly related when taken as one to the level of trust in ICT. The results of the multiple regression analysis indicate that Extraversion, Agreeableness, and Openness are significant predictors of digital trust level in the workplace. Specifically, individuals with higher levels of extraversion, agreeableness, and openness are more likely to have higher digital trust levels. Conscientiousness is not a significant predictor, and neuroticism is not significantly associated with digital trust.

**Table 5**

*Test of Relationship between Digital Trust Level and Personality Type Using Multiple Regression*

Digital Trust Level and	Coefficients	Standard Error	p-value	Remarks
Extraversion	1.73	0.026954939	0.00	Significant
Agreeableness	0.22	0.022516921	0.00	Significant
Conscientiousness	-0.14	0.028980533	0.00	Significant
Neuroticism	0.02	0.027395752	0.43	Not Significant
Openness	0.08	0.02469623	0.00	Significant

As shown in Table 5, the coefficient of 1.73 for extraversion suggests

a positive and significant relationship between Extraversion and digital trust level. This indicates that individuals with higher levels of extraversion tend to have higher digital trust levels in the workplace. The coefficient of 0.22 for Agreeableness indicates a positive and significant relationship between agreeableness and digital trust level. Individuals with higher levels of agreeableness also tend to have higher levels of digital trust. The coefficient of -0.14 for conscientiousness suggests a negative and significant relationship between conscientiousness and digital trust level. This implies that individuals with higher levels of conscientiousness may have lower digital trust levels in the workplace. The coefficient of 0.02 for neuroticism indicates a non-significant relationship between neuroticism and digital trust level ( $p$ -value = 0.43). Therefore, neuroticism does not appear to be a significant predictor of digital trust in this analysis. The coefficient of 0.08 for openness suggests a positive and significant relationship between openness and digital trust level. Individuals with higher levels of openness are likely to have higher digital trust levels.

### **Differences Between Trust on ICT Components When Grouped According to Personality Types**

Table 6 delineates the result of the summary of 1-way ANOVA analysis to show whether or not the respondents' level of ICT trust in each level of personality type significantly differs. The table shows that all components significantly differ as indicated by their  $p$ -value, which is lesser than the margin of error at 0.05. This shows that the digital trust among extroverted personality types varies at each level. This is similar to the other personality types where digital trust significantly differs across levels.

**Table 6**

*Summary of Differences between Digital Trust and Personality Types*

Personality Types	$F$	$p$ -value	Remarks
Extraversion	56.89	0.00	Significant
Agreeableness	616.09	0.00	Significant
Conscientiousness	638.76	0.00	Significant
Neuroticism	272.52	0.00	Significant
Openness	148.39	0.00	Significant

The interpretation of Table 6 suggests that digital trust levels vary significantly depending on an individual's personality type. The statistical

significance of the differences indicates that personality traits play a significant role in shaping employees' perception and trust in information and communication technology (ICT) components in the workplace.

Table 7 summarizes the 2-factor ANOVA analysis to show whether or not the respondents' level of digital trust significantly varies between ICT components when grouped according to each personality type. As can be seen from the table, digital trust among respondents with extroverted personalities varies across ICT Components. The 2-factor ANOVA value of all personality types shows that all components significantly differ. This means that the level of digital trust across ICT components varies in intensity in every ICT component, according to the level of extraversion personality.

Similarly, the level of agreeableness, the level of conscientiousness, the level of neuroticism, and the level of openness differ across ICT components. The significant differences in digital trust among ICT components based on personality types highlight the importance of considering individual differences when designing and implementing ICT systems in the workplace. Tailoring the design and communication of ICT components to suit employees' personality traits can enhance their perception of trust and increase the effectiveness of the digital tools and systems within the organization. Such level of significance also underscores the importance of user-centered design and usability testing in catering to diverse user needs and preferences.

As shown in Table 7, the significant differences indicate that individuals with different levels of extraversion tend to have varying levels of trust in different ICT components. Specific ICT components may be more trusted by extroverted individuals compared to others. As regards agreeableness, significant differences in digital trust among ICT components suggest that individuals with different levels of agreeableness may trust specific ICT components more than others. As regards conscientiousness, significant differences in digital trust levels among ICT components imply that individuals with different levels of conscientiousness may have varying degrees of trust in different aspects of information and communication technology. The significant differences indicate that individuals with varying levels of neuroticism may have different levels of trust in various ICT components. Regarding openness, significant differences in digital trust among ICT components suggest that individuals with different levels of openness may trust certain aspects of information technology more than others.

**Table 7**

*Summary of Differences in Digital Trust between ICT Components When Grouped according to Each Personality Type*

Personality Types	<i>F</i>	<i>p</i> -value	Remarks
Extraversion	42.90	0.00	Significant
Agreeableness	69.57	0.00	Significant
Conscientiousness	22.06	0.00	Significant
Neuroticism	17.53	0.00	Significant
Openness	37.30	0.00	Significant

The data presented in the tables offer valuable insights into the relationship between personality traits, digital trust, and workplace dynamics. Among the big five personality traits, extraversion is a significant predictor of digital trust, thus indicating that employees with higher extraversion tend to exhibit higher digital trust levels. The respondents also displayed moderate levels of openness and neuroticism, thereby suggesting a balanced mix of outgoing and socially confident behaviors alongside some degree of negative emotions. However, the data show that agreeableness and conscientiousness were lower, implying potential challenges in maintaining a cooperative and responsible work atmosphere.

The study further highlights the significance of personality traits in shaping employees' trust levels in Information and Communication Technology (ICT) components. Notably, employees with higher levels of extraversion, agreeableness, and openness tended to have higher digital trust. On the other hand, conscientiousness did not significantly impact digital trust. Understanding these differences is crucial for tailoring trust-building strategies and technology implementations to cater to the preferences and concerns of individuals with diverse personality traits.

Moreover, the data suggest that organizations can benefit from considering personality traits during recruitment to ensure better job-person fit and foster higher employee satisfaction (Alhendi, July 2019). The results imply that organizations must emphasize employee demographic profiles while designing personalized training and development programs to address specific trust-related needs and enhance employees' professional growth.

Furthermore, acknowledging the impact of personality traits on digital trust can lead to improved team dynamics and collaboration (Murmu & Neelam, 2022). Organizations can create a more inclusive work environment by promoting diversity and valuing individual strengths

associated with different personality types.

The findings also emphasize the importance of continuously monitoring digital trust levels and adaptability in ICT strategies to meet evolving employee expectations. By staying agile and responsive, organizations can maintain a positive work culture that supports employees' needs and well-being (Junker, Bakker, Gorgievski, & Derks, June 21, 2021).

Ultimately, the data reinforces the need for user-centered design principles in ICT development, as technology solutions tailored to employees' personality profiles result in better user experiences and increased digital trust (Gulliksen, et al., 2003). Embracing these implications can lead to a workplace that fosters trust, collaboration, and innovation, thereby promoting organizational success and resilience in an ever-evolving digital landscape.

## Conclusion

In conclusion, understanding the interplay between personality traits and digital trust is essential for creating a cohesive and resilient workforce equipped to embrace technology and drive organizational growth in a dynamic and competitive environment. The findings underscore the importance of fostering a user-centered approach, appreciating diversity, and continually adapting to employees' needs to build a thriving, digitally-enabled organization.

The findings from the data analysis provide valuable insights into the relationship between personality traits, digital trust, and workplace dynamics. Among the big five personality traits, extraversion, openness, and neuroticism emerge as significant predictors of digital trust levels in the workplace. These personality traits influence employees' perceptions of Information and Communication Technology (ICT) components, thereby affecting their trust levels in various aspects of technology.

Moreover, employees with higher levels of extraversion, agreeableness, and openness tend to have higher digital trust. At the same time, conscientiousness does not significantly influence digital trust. Understanding these personality-based differences in digital trust has important implications for organizations seeking to optimize their work environment and technology adoption.

In sum, personalizing trust-building strategies and ICT implementations based on employees' personality traits can foster a more supportive and trusted digital work environment. Targeted training, communication, and cybersecurity measures can address the varying

concerns and preferences related to technology usage.

## Recommendations

Based on the conclusions drawn from the data, several recommendations are proposed to optimize the work environment and technology adoption in organizations. First, organizations should consider incorporating personality-aware training and development programs (Zheng & Subramanian, 2019). Tailoring workshops, seminars, and coaching sessions to address specific trust-related concerns and communication preferences can foster a more engaged and confident workforce. A user-centered design approach is essential in developing and implementing information and Communication Technology (ICT) components (Tellioglu, 2021). Moreover, conducting usability testing and gathering user feedback can ensure that technology solutions resonate with employees, thereby leading to better user experiences and increased digital trust (Boyd et al., 2022).

Furthermore, customized trust-building strategies based on personality traits should be developed (Fuoli & Hart, 2018). Implementing communication campaigns and initiatives that address the distinct trust tendencies of different employee groups can promote transparency and credibility in digital practices. Emphasizing diversity and inclusion initiatives in the workplace can also create a culture that values and celebrates individual differences, thereby fostering a supportive environment where employees of all personality types feel valued and respected.

It is also important to note that monitoring digital trust levels and gathering feedback will help identify emerging concerns and evolving needs (Rahman, 2021). Being agile and adaptable in implementing digital strategies and support systems adjustments is crucial to meet changing employee expectations. Additionally, promoting team-building activities that encourage understanding and appreciation of diverse personality traits can improve team dynamics, collaboration, and conflict resolution.

Strengthening data security and cybersecurity measures is essential to address employees' trust concerns (Masiga, 2021). Communicating data protection protocols and demonstrating the organization's commitment to safeguarding sensitive information can build employees' trust in the digital environment. Integrating personality trait assessments into the recruitment and talent management process can optimize job-person fit, thereby enhancing employee satisfaction and performance.

Finally, conducting longitudinal studies to observe changes in

personality traits and digital trust over time can provide valuable insights into long-term trends and inform organizational strategies (Oltmanns, Jackson, & Oltmanns, 2020). Recognizing and rewarding employees who actively embrace technology and contribute to building a trust-oriented work environment can reinforce positive digital behaviors and encourage others to follow suit.

It is hoped that organizations can create a workplace culture that celebrates diversity, embraces digital technology, and fosters trust and collaboration among employees. Building on individual strengths and trust tendencies can lead to a more engaged, innovative, and resilient workforce, thereby propelling the organization toward sustained success in the digital era.

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