Informing Science:
the International Journal of
an Emerging Transdiscipline

An Official Publication
of the Informing Science Institute
InformingScience.org

Inform.nu

Volume 28, 2025

AMUSEMENT AS A KEY MOTIVATION: INFORMING CLIENT NEEDS IN CMC TECHNOLOGIES FOR ENHANCED COLLABORATION

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ABSTRACT

Aim/Purpose	This study explores the motives behind the use of computer-mediated communication (CMC) technologies in business planning, where effective team communication is vital for collaboration.
Background	Effective communication and collaboration are crucial in business planning, making the selection of the right communication tools essential.
Methodology	By addressing this topic from a uses and gratifications (U&G) perspective and applying the Technology Acceptance Model (TAM), the research informs our understanding of both extrinsic and intrinsic motivations influencing the adoption of CMC tools. An empirical survey conducted with students, coupled with factor analysis, identified seven key motivational factors driving the use of CMC technologies.
Contribution	The study provides critical insights for clients and developers of popular CMC platforms such as Messenger, Telegram, Skype, and KakaoTalk, informing the design of features that align with user needs and preferences.
Findings	Factor analysis revealed seven key motivational factors: (1) amusement, (2) usefulness, (3) perceived ease of use, (4) style, (5) information seeking, (6) sociability, and (7) connection with people. Among these, amusement emerged as the most significant motivator, even in the context of business planning. This finding underscores the importance of engaging and enjoyable features in promoting the use of these tools.
Impact on Society	By incorporating the seven identified motivations, companies can refine their platforms to better meet client expectations, fostering greater user satisfaction and adoption in collaborative business environments.

Accepting Editor Francesco Tommasi | Received: November 29, 2024 | Revised: February 5, February 19, 2025 | Accepted: February 20, 2025.
Cite as: Nam, J. (2025). Amusement as a key motivation: Informing client needs in CMC technologies for enhanced collaboration. *Informing Science: The International Journal of an Emerging Transdiscipline, 28,* Article 1.
https://doi.org/10.28945/5459

Future Research	Future research could build on this study by exploring how users' personality traits influence their participation and behavior when using CMC technologies.
Keywords	computer-mediated communication, business planning, motivation, use and gratification

INTRODUCTION

An increasing number of individuals are becoming frequent users of computer-mediated communication (CMC) tools. CMC technologies offer several advantages, such as storing or recording information, enabling real-time communication between distant individuals, facilitating reflection on information, and enhancing information processing (Baltes et al., 2002). These technologies are becoming essential in both personal and professional settings. To communicate with remote colleagues or partners, we rely on various digital platforms such as email, social networking services (SNS), and VoIP. CMC refers to human communication facilitated by digital devices and includes technologies like email, instant messaging (IM), SNS, and blogs (Ellison et al., 2007). Effective communication is key to productive collaboration in business planning, and selecting the right communication tools is crucial for fostering teamwork and keeping everyone engaged. Recent innovations in CMC have made communication more accessible and affordable than ever before. In business planning, using CMC technology effectively can help bridge geographic distances, enabling discussions and sharing ideas.

This study specifically focuses on CMC use in business planning among college students. Entrepreneurship-related courses, including those focused on business planning, are increasingly popular worldwide. In the U.S., entrepreneurship courses have surged over the past 25 years, with nearly every institution accredited by the American Assembly of Collegiate Schools of Business (AACSB) offering such programs (J. A. Katz, 2003). These courses help students develop positive attitudes toward entrepreneurship and enhance their perception of business opportunities (Bae et al., 2014).

Generation Z, born between 1997 and 2012, are digital natives deeply immersed in online environments. According to the IBM Institute for Business Value (n.d.), three-quarters of Gen Zers dedicate most of their free time to online activities, with 25% spending over five hours daily on their mobile devices. This generation prioritizes seamless digital experiences, with 62% and 60% respectively, unwilling to engage with platforms that are difficult to navigate or slow to load.

While millennials adapted to the rise of social media, Generation Z has grown up in a world dominated by video-centric platforms, as highlighted by Barber (2021). Immersed in technology from birth, this generation exhibits a strong reliance on smartphones, with 75% identifying them as their primary devices (Froehlich, 2022).

Business planning is a management process focused on setting objectives and identifying the resources needed to achieve them. It is particularly valuable in uncertain or ambiguous environments, as it can help reduce the risk of venture failure and foster product development and organizational activity (Delmar & Shane, 2003). Effective communication and collaboration are crucial in business planning, making the selection of the right communication tools essential. Teams may decide to adopt specific CMC technologies that best meet their needs, as different tools are designed to fulfill unique communication requirements. Even though some CMC technologies serve similar functions, the motivations driving their use can vary. Understanding the specific gratifications users seek from CMC technology can provide valuable insights into how these tools should evolve to meet users' needs and preferences better. This study aims to explore the motivational factors that influence CMC technology use, offering a deeper understanding of how these tools can be optimized for more effective communication and collaboration.

LITERATURE REVIEW

When faced with complex decision-making, individuals must communicate and exchange information to gather knowledge. Cohen (2009) introduced the Informing Science framework, emphasizing its interdisciplinary nature. This framework recognizes that understanding the impact of information systems necessitates insights from diverse fields, including computer science, psychology, sociology, communication studies, and organizational studies.

According to Cohen (2009), the effectiveness of information systems is significantly influenced by the specific social, organizational, and cultural contexts in which they are used. The framework underscores the crucial role of user-centered design, prioritizing the understanding of user needs, experiences, and perspectives. Furthermore, Cohen (2009) defines "informing" as the core function of Informing Science, emphasizing the provision of essential information to individuals and organizations to facilitate informed decision-making and effective action.

Reed and Knight (2013) expanded the Informing Science model by introducing the Channel Impact Model. This model emphasizes that different communication channels have varying strengths. Face-to-face communication is generally more effective for building trust, fostering social relationships, and conveying complex information. Conversely, CMC excels at transmitting specific facts and details. The choice of communication channel significantly influences the effectiveness of the message, according to Reed and Knight (2013). The channel itself acts as a filter, potentially distorting or weakening the intended message

Theories such as social presence and media richness classify communication media as a continuation of social presence and media richness. Social presence theory posits that face-to-face communication has the highest social presence, while text messages are at the other end of the spectrum, with the least social presence. Media richness theory (Daft & Lengel, 1986) similarly places communication media along a continuum of "richness," where richer media include visual social cues, offer immediate feedback, and convey personality, making them more effective for conveying complex messages. According to this theory, face-to-face communication is considered the richest and most effective for reducing ambiguity and delivering complex information, while text-based communication, like emails, lacks richness due to the absence of nonverbal cues (A. S. Lee, 1994). However, people do not always opt for richer media for every task. Factors like social influence and geographic distance may lead individuals to choose leaner media, as might the desire to avoid embarrassment or emotional discomfort. Empirical research shows that social influences, such as social networks and cultural or contextual factors, impact the use of CMC media (Fulk & Steinfield, 1990).

Kaye et al. (2022) proposed a classification system for online behaviors, considering their origin (online or offline) and their interaction with internet-enabled technologies. This classification includes online-exclusive behaviors, which occur entirely within digital environments; online-mediated behaviors, which are facilitated by online platforms but originate offline; and online-recorded behaviors, which are initially offline but subsequently recorded or tracked online. According to this classification system, the CMC used in this study is a combination of online-mediated behavior (video chat) and online-exclusive behavior (SNS, email, text).

The COVID-19 pandemic in spring 2020 necessitated lockdowns, restricting social interactions. During this period, CMC proved crucial for maintaining social connections. Research by Meier et al. (2021) found a strong positive correlation between perceived social closeness and the quality and quantity of CMC usage during lockdown. Moreover, the study revealed that the motivation to continue using communication media post-lockdown was significantly influenced by the extent and quality of their usage during the pandemic.

Research by Nam (2022, 2021) indicates that users of CMC value informational, physical, and service quality aspects. Among these, the 'physical' component, encompassing media-related characteristics

such as speed, accessibility, timeliness, convenience, interactivity, and assurance, is perceived as most crucial.

The Task-Technology Fit (TTF) theory (Goodhue & Thompson, 1995) suggests that the choice of CMC technology depends on the specific tasks individuals need to accomplish. People can enhance productivity by selecting CMC technologies that best match the characteristics of the task at hand (Wilson & Sheetz, 2008). CMC technologies can be categorized into two types: synchronous and asynchronous. Synchronous CMC involves real-time communication, regardless of participants' locations. Examples include video calls and voice calls. Asynchronous CMC, on the other hand, involves communication where immediate responses are not expected, such as email or text messaging.

Email is a form of asynchronous CMC that allows users to send, receive, and store messages over the Internet (Hung et al., 2007). Since email is text-based, users can review and revise their messages before sending them (Boneva et al., 2001). Social networking sites (SNS), such as Facebook, have become popular platforms where users share content, build social networks, and connect with others. YouTube and Facebook were the leading social media platforms in 2024 (Pew Research Center, 2024). IM, which includes platforms like Messenger, Telegram, Skype, KakaoTalk, and WhatsApp, provides richer communication capabilities, offering text, voice, and even video chats. These features give IM a richer set of cues compared to email, which is primarily limited to text and attachments. For example, KakaoTalk, a popular messaging app in Asia, offers instant messaging, free audio and video calls and has around 200 million users as of 2017 (The Korea Herald, 2017).

The question of what motivates individuals to choose different CMC technologies is central to understanding CMC usage. Daft (1997) defined motivation as the forces that inspire people to persist and act in certain ways. Motivation can be intrinsic or extrinsic. Intrinsic motivation involves engaging in an activity for its own sake – such as when individuals find the activity interesting or enjoyable without expecting external rewards (Deci, 1975). In contrast, extrinsic motivation is driven by the pursuit of external rewards, such as recognition, advancement, or material gain (Vroom, 1964). In the context of CMC, extrinsic motivation might influence users to choose tools that help them achieve specific work-related goals (Cheng et al., 2012). For example, Davis et al. (1992) found that enjoyment (intrinsic) and perceived usefulness (extrinsic) were key factors influencing the intention to use computer systems. Perceived usefulness refers to the belief that a technology will help individuals perform their tasks more effectively, while perceived ease of use indicates the belief that a system is simple to use (Davis, 1989).

However, these motivation theories are often based on assumptions about mandatory use in work settings. In contrast, CMC technologies in this study are chosen voluntarily by individuals for collaborative tasks, meaning that extrinsic factors like job performance, promotion, or monetary rewards may not apply. People may instead choose CMC technologies to meet specific personal or task-related needs.

To better understand the motivations behind CMC technology choices, this study applies the uses and gratifications theory (E. Katz et al., 1973), which focuses on the gratifications users seek from various technologies. "Gratifications sought" refers to the anticipated rewards or benefits that users expect before actually using the technology. Previous research has identified various gratifications sought from different CMC technologies. For instance, Leung (2001) found that motivations for using IM include affection, entertainment, relaxation, sociability, and escape. For SNSs like Facebook, Park et al. (2009) identified motivations like socializing, entertainment, self-status seeking, and information gathering. Similarly, Nam (2014) highlighted social escapism as a major motivation for web portal usage. Ku et al. (2013) explored the gratifications sought from SNS, IM, and email, identifying relationship maintenance, information seeking, amusement, and style as common motivations across these technologies. Ultimately, people use different CMC tools to fulfill specific gratifications, such as maintaining relationships or seeking entertainment.

RESEARCH QUESTIONS

This study explores various CMC technologies, including IM, email, telephone, text messaging, and SNSs, to investigate the following research question:

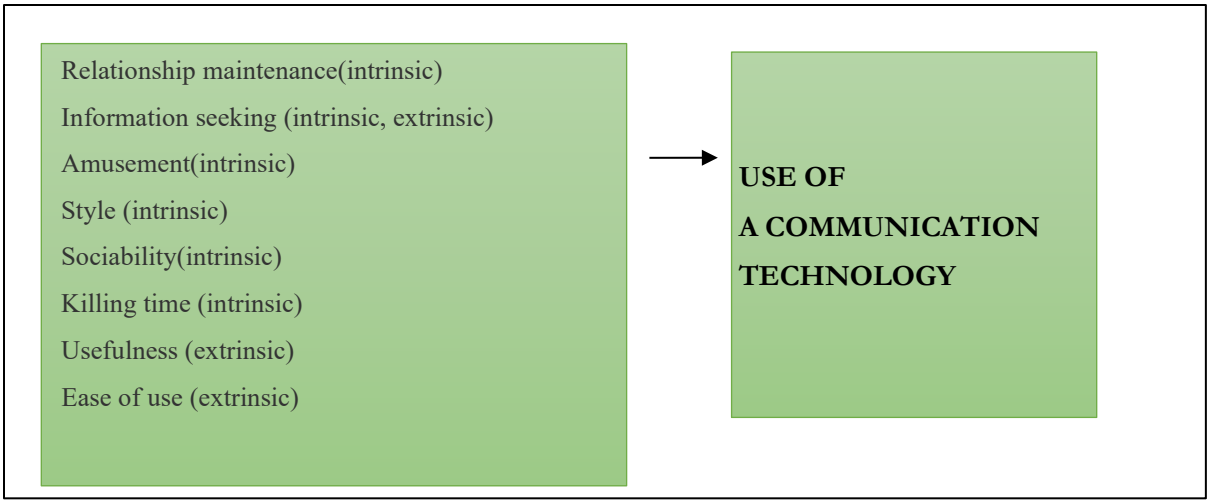
> **Research Question:** What motivations are associated with the use of CMC technology in business planning?

To address this question, the study applies the uses and gratifications (U&G) framework. It adopts six key motivations Ku et al. (2013) identified for examining communication technology use: relationship maintenance, information seeking, amusement, style, sociability, and killing time.

Socializing is an intrinsic motivation defined as the "affiliation need and the enjoyment of being connected" (Jeon et al., 2011). It is a significant motivation that drives the use of information technology (Ji & Fu, 2013). Additionally, Watchravesringkan et al. (2010) considered perceived fashionability (Style) as an intrinsic motivation influencing technology use. This study treats the six motivations – relationship maintenance, information seeking, amusement, style, sociability, and killing time – as intrinsic drivers that motivate individuals to use CMC technologies.

From the perspective of organizational behavior, motivations can be categorized as either intrinsic or extrinsic. This study includes two extrinsic motivations – usefulness and ease of use – to measure the motivations for using CMC technologies. According to the TAM, a technology's perceived usefulness and ease of use are key factors influencing its adoption (Davis, 1989). Given that CMC technologies are part of the broader IT landscape, these extrinsic motivations are relevant for explaining the factors that drive CMC usage. All row attributes are provided in Appendix A. Table 1 presents the research model used in this study, outlining the intrinsic and extrinsic motivations for the use of CMC technologies in business planning.

Table 1. Research model



SUBJECTS AND PROCEDURE

The participants in this study were college students enrolled in the Entrepreneurship and Innovation course at Ulsan National Institute of Science and Technology (UNIST) in South Korea. The course was mandatory for all undergraduate students at the university, and each student was assigned to a team to develop a business plan. Teams typically consisted of 6-7 members who collaborated on the project. Participation in the study was voluntary, and students who took part received additional course credits as a reward.

At the end of the semester, participants completed a self-administered survey to assess their motivations for using CMC technologies and the extent of their usage. To measure motivations, the study adapted scales from Ku et al. (2013) and Davis et al. (1992) to suit the business planning context. Respondents rated each item on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Additionally, participants were asked to indicate which CMC technologies they had used for teamwork during their business planning projects.

DATA ANALYSIS AND RESEARCH FINDINGS

A total of 218 undergraduate students participated in the study. Among the participants, 74% were male, and 26% were female. The average age was 23.1 years, ranging from 19 to 28 years. Regarding technology ownership, 94% of participants owned a laptop, and 29.4% had a Tablet PC. All participants owned a smartphone. For business planning meetings, 39% preferred using their laptop as the main device, 12.4% preferred smartphones, and 33.5% used both devices. Regarding smartphone usage, 90% of participants had been using smartphones for less than seven years, with an average of 4.3 years.

To identify the motivational factors driving CMC use, exploratory factor analysis (EFA) was conducted. EFA is a technique used to uncover hidden patterns within a dataset. In this study, EFA helped identify seven key underlying factors that explain the relationships between different attributes, even though these attributes initially seemed unrelated. To make these factors easier to understand, a technique called 'rotation' was applied. Specifically, Varimax rotation was used to simplify the results and clearly identify which attributes are most strongly associated with each factor.

The analysis employed maximum likelihood extraction with iterations and varimax rotation. Seven factors with eigenvalues greater than one were identified, explaining 68.67% of the total variance. Other factors explaining the rest of the variance (31.33%) were dropped and not considered, as their eigenvalue was less than 1. Factors with eigenvalues less than 1 are typically dropped in factor analysis because they explain less variance than a single original variable, suggesting they may not represent meaningful underlying constructs.

Results indicated that the original research model, which included eight motivational factors, was not fully supported. The factor analysis led to a reorganization of the model. The Kaiser-Meyer-Olkin (KMO) measure was 0.893, and Bartlett's Test of Sphericity (BTS) was significant at the 0.00 level. The seven factors identified were: (1) amusement, (2) usefulness, (3) perceived ease of use, (4) style, (5) information seeking, (6) sociability, and (7) connection with people.

Reliability testing was performed using Cronbach's alpha for each factor. All factors had Cronbach's alpha values greater than 0.70, indicating strong reliability. The reliability estimates for the four factors were statistically significant ($p < 0.05$). A summary of these results is provided in Table 2.

Table 2. Cronbach's alpha value and factor loading of motivations and concerns

Factors	Attributes
Factor 1: Amusement (Cronbach's alpha=.929)	D17: To have fun (.854) D15: Because it is pleasant (.832) D14: Because it is entertaining for me (.830 D18: To enjoy the pleasure of contacting teammates (.729) D16: Because it relaxes me (.713) D27: To joke with teammates (.645)

Factors	Attributes
Factor 2: Usefulness (Cronbach's alpha=.916)	D30: To increase my productivity (.772) D31: To enhance my effectiveness on the job (.762) D32: To make it easier to do my job (.757) D33: It is useful in my job (.709) D29: To improve my job performance (.706) D28: To enable me to accomplish tasks more quickly (.573)
Factor 3: Perceived easy to use (Cronbach's alpha=.882)	D34: It is easy for me to learn how to use (.765) D35: It is easy to get it to do what I want it to do (.756) D39: Easy to use (.728) D38: Easy for me to become skillful at using the chosen technology (.715) D36: Clear and understandable (.704) D37: Flexible to interact with (.537)
Factor 4: Style (Cronbach's alpha=.873)	D21: To look stylish (.803) D22: To look fashionable (.802) D20: As a status symbol (.713) D19: To feel like a grown-up person (.631) D24: To be confident when talking to a stranger (.608) D1: To tell teammates I am all right (.569)
Factor 5: Info seeking (Cronbach's alpha=.887)	D11: To obtain useful information) (.849) D12: To obtain helpful information (.843) D9: To find out industry information (.766) D10: To find out a business idea for myself (.745) D13: To acquire information in an inexpensive way (.599)
Factor 6: Sociability (Cronbach's alpha=.841)	D5: To improve the relationship with teammates (.692) D23: To meet people (make new acquaintances) (.673) D4: To feel closer to my teammates (.622) D2: To let teammates know I care for them (.586) D25: To allow teammates to find me easily (.580) D26: To relieve boredom by contacting teammates (.492) D6: To organize social events (.404)
Factor 7: Connection with people (Cronbach's alpha=.709)	D7: To keep in contact with teammates I have no time to meet. (.743) D8: To interact with teammates easily (.588) D3: To keep in contact with teammates (.539)

The measurement model in AMOS 26 confirmed the validity of the seven factors. Using the maximum likelihood solution algorithm in AMOS 26, the model parameters were estimated. The model's $\chi 2$ value was 1512.396 ($p = 0.000$), with a TLI of 0.830, CFI of 0.851, and RMSEA of 0.075. The 90% confidence interval for RMSEA ranged from 0.070 to 0.080, and the p-value for the test of close fit (RMSEA < 0.05) was 0.000. Maximum likelihood was applied to handle missing data. Since the chi-square value (1512.396) divided by degrees of freedom (681) was less than 5, the model is deemed appropriate. The standardized factor loadings for all items were above the acceptable threshold, indicating strong convergent validity. Figure 1 illustrates that each variable exhibits significant loading.

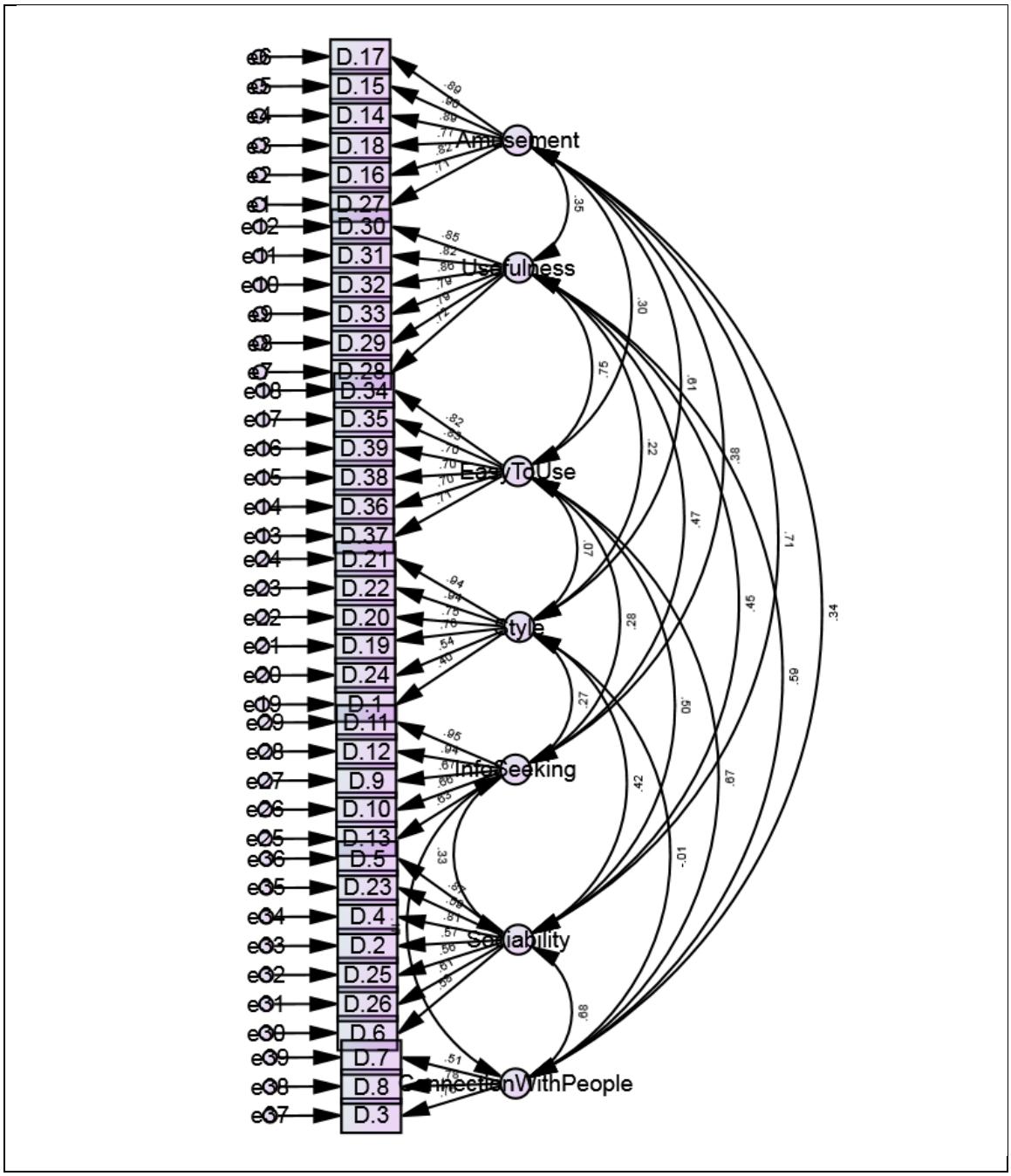


Figure 1. Standardized estimates

To assess discriminant validity, the correlation parameter (Φij) between pairs of factors was constrained to 1.0, and a chi-square difference test was performed between the constrained and unconstrained models (Anderson & Gerbing, 1988). Appendix B shows that the unconstrained model yielded significantly lower $\chi 2$ values than the constrained models, except for Φ16. The chi-square difference test was significant ($\chi 2(1) = 10.83$, $p < 0.001$), confirming that the factors in this study have discriminant validity.

RESULTS AND DISCUSSION

Among the various CMC technologies, IM was the most preferred tool, chosen by 82.6% of participants, followed by email (15.1%) and mobile phones (2.3%). IM has become a dominant form of communication, not only for social interaction but also in professional environments, where it is used for various tasks. Research by Shaw et al. (2007) indicates that IM enhances productivity in the workplace by reducing reliance on voicemail and phone calls while also providing the ability to check the availability of coworkers online.

According to a Pew Research Center (2024), 36% of smartphone users used messaging apps like WhatsApp, iMessage, etc., in 2015, and even higher use (49%) among young adults (18-29), believing that IM improves productivity, collaboration, work quality, and workflow efficiency (Duggan, 2015). However, concerns regarding IM also exist, such as constant distractions that could delay work. While IM is primarily used to contact coworkers (40%) and friends/family (33%) at work, it has been criticized for potentially fostering gossip and increasing stress.

Despite these concerns, the widespread use of IM by students for collaborative work in business planning is noteworthy. IM helps facilitate idea sharing, encourages student engagement, and improves teamwork (Graham & Jones, 2019). IM allows users to communicate in real-time via private chat rooms over the Internet, similar to a phone call but through text-based communication. When users log on to an IM application, their presence status is immediately visible, and they are notified when others are available for online communication. This feature, known as Presence-Aware Communication (PAC), allows users to know when their contacts are online, a feature that differentiates IM from traditional text messaging (Shaw et al., 2007).

Although IM lacks the social presence of face-to-face communication, its text-based format provides users with more time to reflect on their responses, reducing the likelihood of uncomfortable or embarrassing interactions. This allows individuals to express their opinions or seek help more freely (Kitsantas & Chow, 2007). IM's presence-aware feature also promotes live interaction, helping users collaborate more effectively in real time.

While SNSs are frequently cited as popular CMC technologies (Ku et al., 2013), SNS was not chosen for business planning collaboration in this study, likely due to its limitations in facilitating real-time communication and interaction.

This study aimed to understand what motivates college students to use CMC technologies in business planning. The research successfully identified several key motivational factors related to CMC use. The scales developed by Ku et al. (2013) and Davis et al. (1992) were used to measure motivations, including six intrinsic motivations (amusement, usefulness, perceived ease of use, style, information seeking, sociability, and connection with people). The Cronbach's alpha values for all motivational factors exceeded .70, and all were statistically significant ($p < .05$), confirming the reliability of the measurements.

Factor analysis revealed seven key motivational factors: (1) amusement, (2) usefulness, (3) perceived ease of use, (4) style, (5) information seeking, (6) sociability, and (7) connection with people. Amusement was the most significant factor, explaining 32.22% of the total variance, followed by usefulness (13.14%) and ease of use (8.1%). The factors of style, information seeking, sociability, and connection with people accounted for smaller portions of the variance, respectively.

Amusement, driven by motivations like "having fun," "enjoying contacting teammates," and "relaxing," was found to be the most important motivation for CMC use. This was followed by usefulness, which included motivations such as improving productivity and job performance. Ease of use was also significant, reflecting the importance of simplicity in technology adoption. Style-related motivations (e.g., "looking stylish" and "feeling like a grown-up") were also important, but to a lesser extent.

The findings of this study align with previous research that highlights enjoyment as a key factor in technology use. For example, M. K. O. Lee et al. (2005) found that enjoyment significantly influenced the use of Internet-based learning tools, while Nam (2014) identified social escapism as a primary motivation for web portal use. Similarly, studies have shown that entertainment is a major factor in the use of devices like the iPad (Albanesius, 2012; PCMag Staff (2012) and social media like Facebook (Alhabash et al., 2012).

However, the findings of this study diverge from the original theoretical model, which proposed eight motivations for CMC use. The context of business planning appears to place greater importance on motivations related to enjoyment and productivity rather than factors like self-disclosure or accessibility, which are more relevant to learning environments (Du et al., 2010; Guo et al., 2011). This suggests that different contexts can shape the relative importance of various motivational factors in CMC use.

THEORETICAL AND PRACTICAL CONTRIBUTIONS

This study makes several key contributions to informing CMC research, with a focus on client needs and motivations:

Advancing Understanding of Motivational Factors: The study informs the understanding of key motivational factors driving the use of CMC in collaborative business planning. Unlike previous research that mainly examined motivations for voluntary media use or compulsory IT use in workplaces, this study focuses on the voluntary adoption of technology for collaborative work, an area that remains underexplored.

Identifying Seven Core Motivational Factors: This research identifies seven crucial motivational factors influencing CMC use in collaborative business settings: (1) amusement, (2) usefulness, (3) perceived ease of use, (4) style, (5) information seeking, (6) sociability, and (7) connection with others. These factors integrate both intrinsic and extrinsic motivations, offering a deeper understanding of client preferences in collaborative environments.

Positioning Motivations as Explanatory Variables: The study emphasizes motivations as key explanatory variables for the voluntary adoption of CMC technologies in collaboration. Unlike prior research on mandatory work-related technologies, this study reveals a broader range of motivational factors, such as amusement, typically absent in compulsory systems, informing how clients choose and use CMC technologies.

Extending Motivational Theory: By developing a theory specific to CMC in business planning, this research expands on existing studies of motivational factors in information products, such as general web portals. It provides deeper insights into what drives clients to select specific CMC technologies for collaboration, positioning them as a distinct category of information products.

Practical Implications for CMC Design: The findings offer actionable insights for improving the performance of CMC technologies by informing developers and practitioners on the importance of user-centered design. Factors such as amusement, usefulness, and ease of use should be prioritized to enhance user adoption and satisfaction. For example, incorporating entertaining features – such as creating avatars or blending real images with dynamic animations – could improve engagement. Collaborative VR platforms supporting user-created avatars are also highlighted as a way to boost entertainment in CMC systems.

This motivational framework provides a practical model for designing CMC technologies tailored to collaborative work, offering valuable guidance for both researchers and practitioners, ensuring better alignment with client expectations, and enhancing the overall user experience.

LIMITATIONS AND FUTURE SCOPE

One limitation of this study is the potential threat to external validity, as the participants – college students – may not represent the general population. The participants, born between 1997 and 2012, represent Generation Z, a cohort characterized by deep immersion in online environments. Since the participants in this study belong to Generation Z, who are highly proficient in online activities, there is a limitation in generalizing the findings to the entire population. It is possible that the general population may not be as skilled in using digital devices as Generation Z.

Due to their limited resources, their choice of CMC may also be restricted. Motivational factors influencing CMC use might vary in different demographic or contextual settings. For instance, older adults might prioritize different motivational factors compared to younger individuals, as they often encounter greater technical challenges and vision-related limitations (Chou et al., 2013).

Student teams may be more inclined towards amusement if the assignment is perceived as low-stakes, for instance, if the grade weight is minimal or the consequences for poor performance are insignificant. In such cases, some students might prioritize fun over serious work, potentially diminishing their motivation for engaging in meaningful CMC use. Furthermore, a lack of clearly defined individual contributions or assessments can exacerbate this issue. Without clear accountability, some students may feel less pressure to participate actively, leading to distractions, off-topic discussions, and a decreased focus on the task at hand.

Future research could build on this study by exploring how users' personality traits influence their participation and behavior when using CMC technologies. Investigating the relationship between personal characteristics and motivations for adopting specific CMC tools could yield valuable insights. For example, individuals who use CMC primarily for information exchange and knowledge sharing may exhibit distinct personality traits compared to those leveraging CMC to promote or sell products and services.

CONCLUSION

This study investigated the motivations driving the use of CMC technologies within the context of business planning, where effective team communication is crucial for collaboration. Drawing upon Uses and Gratifications Theory and building upon the work of Ku et al. (2013) and Davis (1989), the research examined eight potential motivations: amusement, usefulness, perceived ease of use, style, information seeking, sociability, connection with people, relationship maintenance, and killing time.

Factor analysis revealed seven key motivational factors: amusement, usefulness, perceived ease of use, style, information seeking, sociability, and connection with people. Notably, "killing time" and "relationship maintenance" were not found to be significant motivators in this context.

While amusement has been identified as a key motivator in personal CMC use, its significance in work-related CMC, particularly within business planning, has often been overlooked. This finding highlights the importance of considering factors beyond pure utility and ease of use in designing and implementing collaborative technologies.

The concept of "amusement" aligns with the broader concept of "enjoyment" frequently explored in information systems research since the early 2000s, as evidenced by the inclusion of "enjoyment" as a key predictor in the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003). Self-Determination Theory (Deci & Ryan, 2000) further emphasizes the importance of intrinsic motivation, including the enjoyment derived from using technology.

While "amusement" and "enjoyment" are often used interchangeably, "amusement" typically refers to immediate, fleeting pleasures, such as finding humorous memes, while "enjoyment" often connotes a deeper sense of satisfaction derived from achieving goals or learning something new. This

distinction suggests that incorporating elements of amusement, such as gamification features (e.g., points, rankings, visual progress indicators), within collaborative technologies may enhance user engagement and motivation.

Future research should investigate the generalizability of these findings by examining these motivational factors across different business contexts and within diverse organizational settings.

A CONFLICT-OF-INTEREST STATEMENT

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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APPENDIX A: ROW ATTRIBUTES

Relationship maintenance

1. To tell teammates I am all right.
2. To let teammates know I care for them.
3. To keep in contact with teammates.
4. To feel closer to my teammates.
5. To improve the relationship with teammates.
6. To organize social events.
7. To keep in contact with teammates I have no time to meet.
8. To interact with teammates easily.

Information seeking

9. To find out industry information
10. To find out business idea for myself
11. To obtain useful information
12. To obtain helpful information
13. To acquire information in an inexpensive way

Amusement

14. Because it is entertaining for me.
15. Because it is pleasant
16. Because it relaxes me
17. To have fun
18. To enjoy the pleasure of contacting teammates.

Style

19. To feel that I am a grown-up person
20. As a status symbol
21. To look stylish
22. To look fashionable

Sociability

23. To meet people (make new acquaintance)
24. To be less inhibited chatting with strangers
25. To allow teammates to find me easily

Killing time

26. To relieve boredom by contacting teammates.
27. To joke with teammates

Usefulness

28. To enable me to accomplish tasks more quickly.
29. To improve my job performance.
30. To increase my productivity
31. To enhance my effectiveness on the job
32. To make it easier to do my job
33. It is useful in my job.

Ease of use

34. It is easy for me to learn how to use.
35. It is easy to get it to do what I want it to do.
36. Clear and understandable
37. Flexible to interact with
38. Easy for me to become skillful at using the chosen technology.
39. Easy to use

APPENDIX B. CHI-SQUARE DIFFERENCE TEST OF MOTIVATIONAL FACTORS

Factors constrained to unity	X^2	df	p	ΔX^2	Δdf
Unconstrained	1512.4	681	0.000		
Φ12	1539.1	682	0.000	26.7	1
Φ23	1530.1	682	0.000	17.7	1
Φ34	1605.8	682	0.000	93.4	1
Φ45	1573.5	682	0.000	61.1	1
Φ56	1559.4	682	0.000	47.0	1
Φ67	1531.3	682	0.000	18.9	1
Φ13	1549.6	682	0.000	37.2	1
Φ14	1531.2	682	0.000	18.8	1
Φ15	1537.4	682	0.000	25.0	1
Φ16	1520.2	682	0.000	7.8	1
Φ17	1539.0	682	0.000	26.6	1
Φ24	1578.7	682	0.000	66.3	1
Φ25	1542.6	682	0.000	30.2	1
Φ26	1546.6	682	0.000	34.2	1
Φ27	1533.4	682	0.000	21.0	1
Φ35	1568.9	682	0.000	56.5	1
Φ36	1550.4	682	0.000	38.0	1
Φ37	1535.6	682	0.000	23.2	1
Φ46	1561.6	682	0.000	49.2	1
Φ47	1606.2	682	0.000	93.8	1
Φ57	1571.9	682	0.000	59.5	1

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