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TECHNOLOGY AFFORDANCE FOR ENHANCING JOB PERFORMANCE IN  
INSTITUTE OF TECHNOLOGY AND BUSINESS INDRAGIRI

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**Abstract**

*The widespread use of digital platforms has completely changed how workers collaborate and communicate. Through the prism of job characteristics, our study reveals the methods by which four distinct technology affordances impact employees' job performance. A total of 100 questionnaires from frontline staff members who utilize the digital enterprise platform to assist their everyday job are gathered for an online survey. Through the mediation of perceived task autonomy and task feedback, statistical analysis results indicate that visibility, editability, association, and interactive affordance demonstrate substantial influences on employees' task performance and inventive performance. The latter section of the study discusses its theoretical and practical ramifications.*

**Keywords:** *Technology Affordance, Job Performance*

**INTRODUCTION**

Workplaces are becoming more and more understood as states of mind rather than actual locations. The physical location of a workplace has become less significant over time as information technology has advanced. Work from home policies have been adjusted for modern working life. The idea of working from home is when staff members are employed by a company without having to travel to a single, central location for work. It is also known as working from home and working online.

Technology affordance is the ability of technology to accomplish objectives through behavior that is goal-oriented and tangible activities. Utilizing digital technologies can enhance job performance through better communication, coordination, sharing of knowledge, and decision-making, according to study. These enhancements may result in a better work-life balance and more effective time management. The advancement of information and communication technologies has made it more simpler to finish duties outside of the office due to affordable, reasonably priced, and more user-friendly PCs, laptops, and other devices. This lessened the likelihood that employers would have to pay for such an arrangement and made working from home more manageable and feasible. The ability of technology to accomplish

tasks through purposeful behavior and tangible actions is known as technological affordance. Research indicates that the use of digital technologies can enhance decision-making, coordination, communication, and information sharing at work. Better work-life balance and more effective time management may result from these advancements.

The ways in which technology enablement has captured the working and the future possibilities emerging in organizations today are unfolding exponentially (Khatatbeh et.al,2023).One such profound transformation has been in the working patterns across various sectors through online mode of working working. The shift to online mode of working work has become a necessity for many organizations to ensure business continuity and the safety of their employees. Online mode of working working as a new perspective of job design has been discussed in this research through the lens of socio-technical systems (Yang et.al, 2022).

Through the lens of socio-technical systems, online working has been examined in this research as a fresh perspective on job design (Yang et al., 2022). The majority of previous study has been on the effects of working remotely on employee satisfaction and productivity (Jalagat, 2019). Instead, using the socio-technical theory as a starting point, the current study has attempted to investigate the efficacy of online working from the perspective of the employee via the lens of socio-technology enablement (Kowalski, Slebarska, 2022). The study used a quantitative approach to its technique. In order to investigate the variables influencing employees' digital savvy when working online, a survey was conducted among Information Technology (IT) organizations in North India as part of this quantitative study (Wells et al., 2023).

The goal of the current study is to investigate digital prowess in detail, looking at all of its constituent parts and how they interact with one another. The principal purpose of this study is to offer insights that may direct the formulation of strategies designed to improve employee productivity when working remotely. This entails organizational initiatives that maximize socio-technical interactions, especially while working in an online environment. Specifically designed for the IT industry, the study serves as a case study to investigate and comprehend the dynamics of working remotely, with the aim of providing insights into techniques for optimizing success and productivity in Institute of Technology and Business Indragiri.

## **LITERATURE REVIEW**

Previous research has attempted to examine how tech-savvy employees are at work by using a variable called "Digital Readiness" (Gfrerer, 2021). This provides a significant conceptual foundation for the current research that analyzes digital skills or acumen, which includes

technology literacy, cognitive skill management, communication facilitators, sense-making abilities for changes in the digital world, and digital crisis management (Reza et al., 2018). With practical implications for digital transformation management, especially for online working, this research strives to expand our understanding of change readiness in the digital era. To determine the characteristics that make up socio-technical skills—human skills that determine technological enablement—a literature analysis was carried out. These skills are listed as major variables in the current study and are described in the section below.

### **The Theory of Technology Affordability**

The definition of affordance in affordance theory, which defined it as an object's perceived utility in an ecological environment, is where technology affordance theory got its start. In order to investigate the function of technology in organizations, scholars in the field of information science have extended affordance theory (Treem and Leonardi, 2013). In the context of IS, affordance refers to the action options that a technology makes available to its users and symbolizes the possible things that a user can accomplish with it.

Four key characteristics of technological affordances in organizational social media—visibility, persistence, editability, and association—that may alter how people socialize, share information, and exercise power within companies were identified by Treem and Leonardi (2013). Fan et al. (2016) looked at how interactive affordance influences users' behavior when using technology. We used visibility, editability, association, and interactivity—all based on the body of existing literature—to highlight the key technological benefits of digital enterprise platforms in businesses.

### **Job Characteristics Theory**

Hackman and Oldham (1976) developed the job characteristics theory, which identified five key job features—skill variety, job autonomy, task identity, task significance, and perceived feedback—that influence outcomes connected to the work that is done at the workplace. According to Kang et al. (2017), job autonomy and feedback in particular are acknowledged as the two most important aspects of job management. These elements may have a substantial impact on the ideas and execution of employees (Oldham and Silva, 2015).

Although the notion of job features has been extensively utilized to investigate work-related outcomes, there is, as far as we are aware, comparatively little research that looks at how job factors affect workers' creative performance. Our study thus takes up the two key job attributes from the theoretical model and investigates the relationship between technological affordance

and workers' creative output.

## RESEARCH METHODS

The theoretical model is developed using technology affordance theory and job characteristics theory. We contend that the mediation impact of job factors is how four technological affordances affect employee performance. In order to limit their possible effects on job performance, we also included demographic characteristics (such as age, gender, use frequency, job tenure, and platform familiarity) as control variables.

This article's research approach is library research or library research. This research is carried out by gathering all of the information and data using various materials available in the library or on the internet, such as reference books and prior research results. Texts, articles, notes, and journals relating to the topic to be tackled (Sari and Asmendri, 2020)

In this study, descriptive quantitative methodologies were used, and the population consisted of all MSMEs in Indragiri Hulu. This study employs the Nonprobability sampling approach, which is a sample collection methodology that does not provide equal possibilities to each member of the population chosen to be sampled (Sugiyono, 2016). various factors (Muvidah & Andriani, 2022).

The four affordances of a digital enterprise platform, which are based on technology affordance theory, enable employees to freely access and share information, communicate with one another at any time and from any location, post and edit content, and more. This gives them the chance to receive more feedback and develop a sense of autonomy at work (Oldham and Silva, 2015).

In particular, visibility permits staff members to demonstrate their actions and expertise to other members of the company, as well as to actively participate in their work roles and offer helpful criticism. Association makes it possible for people to connect with one another (social relations), which strengthens the sense of community and promotes the exchange of information. According to Treem and Leonardi (2013), editability gives people the ability to modify or alter content that they publish, giving them editorial control and increasing the likelihood that others will respond.

Three dimensions make up interaction: two-way communication (the information flow between users in both directions), synchronicity (the platform's response time during the interaction), and active control (the user's ability to voluntarily participate in a communication or interaction) (Fan et al., 2017). Interactivity represents the degree to which the interaction among users can be synchronized and controlled. Users can obtain instant feedback through

two-way communication and synchronization, while active control facilitates flexible work schedules. Based on the above arguments, we propose the following hypotheses:

**H1a:** Visibility affordance is positively related to perceived task autonomy.

**H1b:** Perceived task feedback is positively correlated with visibility affordance.

**H2a:** Perceived task autonomy is positively correlated with interaction affordance.

**H2b:** Perceived task feedback is positively correlated with interactive affordance.

**H3a:** Perceived task autonomy is positively correlated with editability affordance.

**H3b:** Perceived task feedback is positively correlated with editability affordance.

**H4a:** Perceived task autonomy is positively correlated with association affordance.

**H4b:** Perceived task feedback is positively correlated with association affordance.

Task feedback is the precise and unambiguous information one receives regarding the efficacy of one's performance at work, whereas task autonomy refers to the freedom and independence granted to employees when arranging the work (Hackman and Oldham, 1976). While innovative performance relates to the deliberate creation and implementation of new ideas within a work position, task performance concentrates on organizing and completing organizational duties. The theory of job characteristics states that two important factors are thought to be able to predict an employee's effectiveness at work: autonomy and feedback.

The existent literature has also addressed the beneficial impacts of autonomy and feedback on innovation. Oldham and Silva (2015), for example, hypothesized that the autonomy, discretion, and greater volume of feedback brought about by computing devices may enhance engagement in the work role and spur the production of innovative ideas. Digital enterprise platforms can act as catalysts for innovation performance because of their capacity for flexibility and cooperation (Yoo et al., 2012).

Thus, we propose the following hypotheses:

**H5a.** Perceived task autonomy is positively related to task performance.

**H5b.** Perceived task autonomy is positively related to innovative performance.

**H6a.** Perceived task feedback is positively related to task performance.

**H6b.** Perceived task feedback is positively related to innovative performance.

### **Instruments and Data collection**

Data was gathered from the intended audience of the digital enterprise platform. From December 2023 to July 24, a Google form was used to conduct an online poll. A total of 100 questionnaires were received. After removing samples that had never used a digital enterprise platform and invalid samples that had given false answers for "Attention trap" items, we were

left with 100 valid samples for analysis. The association affordance and visibility affordance instruments were modified from Treem and Leonardi's (2013) research. The metrics for editability affordance and interactivity affordance were modified from Fan et al (2017). Drawing from the studies of Hackman and Oldham (1976) and Kuegler et al. (2015), respectively, we designed an instrument to measure job characteristics and job performance.

**Structural equation modeling analysis**

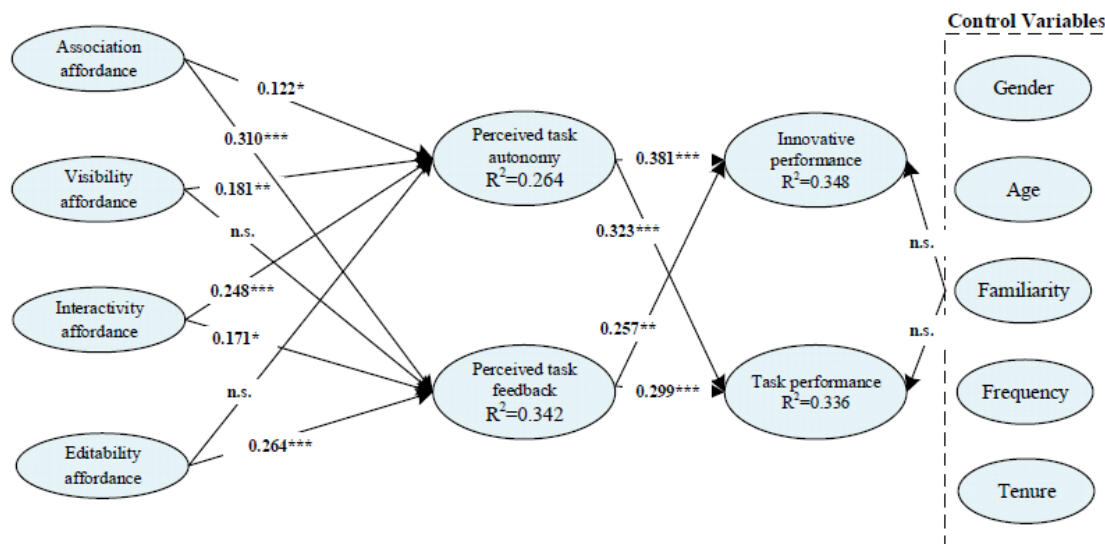
Our study model was analyzed using the PLS-SEM methodology, and the structural model and the statistical significance of the path correlations were examined using the SmartPLS Bootstrapping method.

**Mediation test**

We investigated the mediating roles of task autonomy and task feedback between the four technology affordances and work performance, according to Hayes's (2009) methodology. Except for the insignificance of the mediating effect of feedback between editability and inventive performance, as well as between interactivity and innovative performance, all of the path coefficients, as indicated in Table 1, have passed the mediation test. Overall, the findings point to a strong mediating role played by work characteristics in the relationship between job performance and technological affordance.

**FINDINGS AND DISCUSSION**

Our study reveals the influence mechanism of digital enterprise platform affordances on employees' task and inventive performance, drawing on technology affordance theory and job characteristics theory.



(Notes: \*\*\* represents p < .001; \*\* represents p < .01; \* represents p < .05; n.s. represents not significant)

According to our research, four distinct affordances—perceived autonomy and feedback—have a beneficial mediation influence on workers' performance. Our study explores how digital corporate platforms might improve individual employee work performance through the lens of technology affordance theory, with theoretical consequences. Second, from the standpoint of work characteristics, our analysis reveals the mediating role that perceived autonomy and perceived feedback play in the relationship between technology affordances and employee performance.

## CONCLUSION

Our findings have practical ramifications for managers, who should focus on how affordances of digital technology might improve workers' performance and allow for greater employee autonomy and feedback.

## LIMITATION & FURTHER RESEARCH

The limitations of the study are those characteristics of methodology that impacted or influenced the interpretation of the findings from the research. Further research should suggest the number of gaps in our knowledge that follow from our findings or to extend and further test of the research. It is necessary to explore more about Technology impact on job performance

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