# Knowledge Creation in Digital Spaces: The intention to use digital technologies of free-lancers and micro-entrepreneurs in the creative industries

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The creative economy has become an increasingly popular topic in academic research ranging from areas such as digitalisation, heritage culture, business, economics, information technology, and knowledge management. Disruptive changes driven by digitalisation made the creative economy a transformative power source for social and economic development. Its rapid growth in income generation and job creation has encouraged developing countries to incentive this economy (Flew, 2011). While in developed countries, new laws are gradually being adopted to protect intellectual property, and therefore, the

knowledge created in the digital environment. Digital technologies provide the advantage of the dematerialisation of creative and cultural work, resulting in reduced costs for production and distribution. However, the accessibility of those products is just not is linked to the digital divide suffered by those who consume it but also to the creative workforce who produce it.

Within this scenario, the developed countries could be considered a step ahead for their better infrastructure in telecommunication and network connection, but what about the digital literacy level of their creative professionals? Previous studies in the creative economy for the European context, point out the eminent expectation that its workforce presents a high level of digital literacy (Müller et al., 2009; van Laar et al., 2019). This study focuses its efforts on answering "*what factors implicate in the knowledge creation in digital environments by creative workers from European countries, where Internet access is practically ubiquitous?*". To answer this research question, it was performed a thorough literature review to devise a conceptual model including constructs such as digital literacy (DL), perceived usefulness (PU), perceived ease of use (PEOU), social norms (SN), self-efficacy (SE), attitude towards using (ATT), and intention to use (INT), see Figure 1. The core theoretical focus of this paper is on investigating factors that influence the intention to use digital technologies. A survey questionnaire was developed and distributed, which allowed data to be collected from 163 European creative professionals working in different fields such as design, illustration, animation, 3D modelling, and photography.
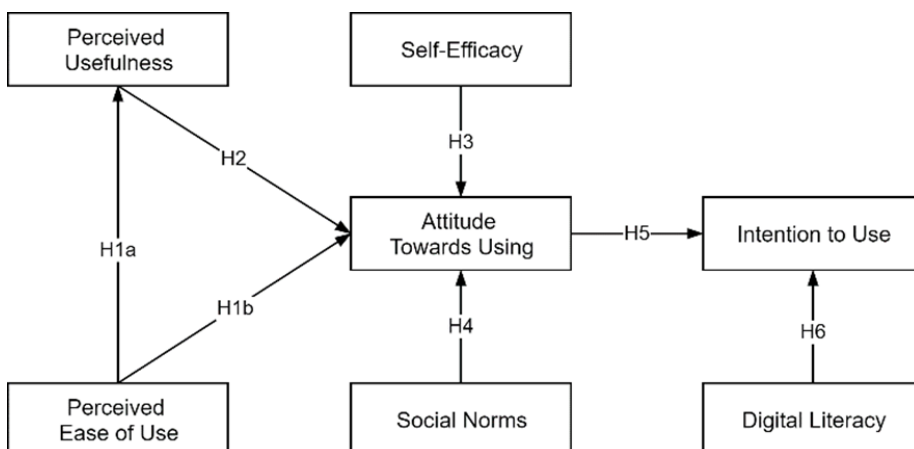


*Figure 1: Research Model*

## Methodology

The methodology employed in this paper is a quantitative approach through partial least squares structural equation modelling (PLS-SEM) using Smart-PLS. The measurement items and constructs were selected from validated measurements, from which minor adjustments were necessary to adjust them to the context of this article. All measurement items are measured on the 7-point Likert scale from "1 = strongly disagree" to "7 = strongly agree". Gender was considered a control variable, assuming this variable has an impact on the intention of creative professionals to perform their work activities through the use of digital technologies.

## Preliminary results

The research model was analysed in two different stages (a) measurement model assessment and (b) structural model assessment. The assessment of the reliability and validity was achieved through the outer loadings, composite reliability (CR), and average variance extracted (AVE). The values of outer loadings, CR and AVE were all above the recommended threshold values of .70, .70 and .50, respectively. For discriminant validity, this study used the square root of AVE for each latent variable to establish discriminant validity (Fornell & Larcker, 1981), and all the values were higher than other correlation values among the latent variables. The SEM results showed that the intention to use digital technology was explained by variance of 63%. The construct attitude towards using and perceived usefulness were explained by variance of 62.5% and 24.5%, respectively. The PLS-SEM analysis showed that attitude towards using had the strongest effect on the intention to use digital technology ($\beta$ = .67, t = 9.67, p <.001. The relationships between PU ($\beta$ = .41, t = 5.46, p < .001), PEOU ($\beta$ = .15, t = 2.08, p < .001), SN ($\beta$ = .17, t = 2.97, p <. 01), and SE ($\beta$ = .25, t = 3.02, p < .01), were found to be significant to attitude towards using. The path between PEOU to PU was significant ($\beta$ = .49, t = 7.80, p < .001). When analysing the relationship between DL and intention to use, it was found that DL has a direct effect in intention to use ($\beta$ = .22, t = 2.60, p < .01), see Figure 2.
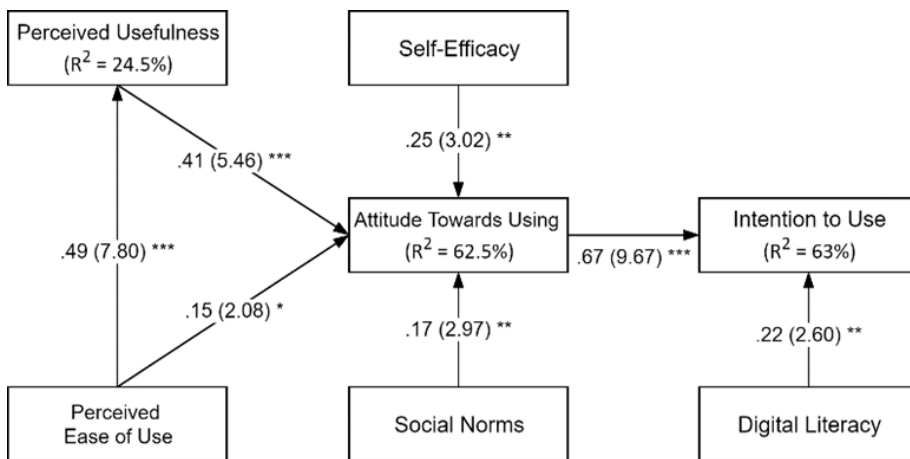
*Figure 2: Conceptual Results*

## Findings

This study contributes to the academic literature by theoretically validating a research model that shows not only attitude towards using digital technology impacts the decision of creative workers, but also providing theoretical support showing that digital literacy has a direct effect on the creative workers' intention to use digital technologies. Moreover, the outcomes of the analysis show that there are significant differences between males and females in the path between SE and attitude towards using, and the path between DL and intention to use. These results suggest that gender is a factor of digital divide in the intention to use digital technologies for knowledge creation among the 163 European respondents.

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