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The Future of Work: Evaluating Job Susceptibility in the Creative Industries

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Abstract

Early studies on the influence of technological advancements on job susceptibility suggested that creative jobs were less inclined to technological displacement. However, as technology becomes more intelligent and capable of producing creative works, there is an increased need to reassess the future of creative jobs. Technological advancements in the media industry have led to a highly competitive market, increasingly characterized by a rise in gig work, precarious working conditions and job losses. There has also been a rise in innovations that substitute work (automation and digitization) and innovations that make work more efficient (Artificial Intelligence), raising the threat of technological job displacement for content creators. This study examined the social, political, economic and technological factors that make content creator jobs vulnerable, proposing a conceptual framework for evaluating their job susceptibility. A Confirmatory Factor Analysis was used to demonstrate the proposed framework based on survey data from content creators. The results confirm that job susceptibility among content creators is shaped by social factors (organisational and leaders' values, job precarity, occupational wellbeing and skills, knowledge, and ability), technological factors (innovative systems that drive efficiency and new technology driven models of business), political factors (a competitive labour market) and economic factors (emerging and declining occupations, job polarization, wage rates and wage equality, conditions of employment and precarious working conditions). The study makes a contribution to the creative sector, particularly in identifying a framework to determine how technological advancements could affect jobs and market dynamics among content creators. The framework can also assist practitioners, policymakers, and organisations in the creative industries in making informed decisions to mitigate job displacement and navigate the complexities of the shifting creative labour market.

1 Introduction

In the past decade, the global media and entertainment industry has witnessed a significant transformation, primarily driven by rapid technological advancements and further accelerated by the global COVID-19 pandemic. This transformation began with broadcasters, who were among the first to experience the profound impacts of three pivotal developments: the expansion of broadband penetration and Internet speed, the rise of Over-the-Top (OTT) technologies, and the integration of artificial intelligence (AI) and automation within the broadcasting value chain. These advancements have led to a reconfiguration of the broadcasting landscape, necessitating an evolution in operational strategies and workforce dynamics (Brynjolfsson & McAfee, 2014). As broadcasters adapted to these technological changes, the ripple effects extended to the broader creative industries. The intersection of technology and creativity has reshaped the modes of content production, distribution, and consumption (Bakhshi, Freeman & Higgs, 2013). These shifts have not only altered the competitive environment but have also brought new challenges and opportunities for those involved in creative content production, including content creators. Content creators, spanning a diverse array of roles such as journalists, filmmakers, and digital media artists, have found themselves at the center of this transformation. The rapid evolution of AI and OTT platforms, while democratizing content creation and enabling broader participation, also poses significant challenges to traditional content creation roles. The increased reliance on technology for content generation and the growing popularity of OTT platforms have disrupted traditional channels and practices, impacting job security and the integrity of certain professions (Cavaliere, 2020).

The impact on content creators is multi-faceted. On one hand, these technological advances have facilitated novel forms of creative expression and allowed for a more inclusive and diverse media landscape. On the other, they threaten to make certain traditional roles redundant and challenge the journalistic and creative integrity long upheld by the industry (Chin-Fook & Simmonds, 2011). As such, there is a pressing need to understand how the Future of Work (FoW) for content creators is shaping up in this new digital era.

This paper aims to develop and validate an instrument for measuring the factors that constitute job susceptibility among content creators and to propose a framework to evaluate job susceptibility that can be applied to other sectors in the face of these technological disruptions. Specifically, the paper seeks to answer the research question, “What are the important factors for evaluating job susceptibility for content creators in South Africa?” The study contributes to the understanding of the broadcasting sector and examines how recent changes in the technological environment have affected the social, economic and political outlook for content creators. The impact of these technological, social, economic and political factors may assist in predicting and mitigating the conditions that make content creator jobs susceptible to displacement and to anticipate what the Future of Work for content creators may look like. The application of the proposed evaluation framework for job susceptibility can assist practitioners in identifying those specific roles at risk, as well as to recognise new opportunities within the creative industries.

The next section presents an overview of the current state of the broadcasting sector and the issues related to job susceptibility and the Future of Work for content creators. The remainder of the paper examines the theoretical underpinnings of the Future of Work and applies them to the broadcasting sector to explain the technological landscape and the prevalent social, political and economic conditions surrounding content creators. Political factors will also be examined with respect to their role in addressing the challenges faced by content creators. The paper will proceed to describe the methodology applied, followed by the empirical analysis, findings, discussion and conclusions.

2 Literature Review

The broadcasting sector has been radically affected by advances in technology, with implications for creative jobs. This section describes the transformation that has taken place over the recent years and how these changes have impacted the Future of Work in the sector. The social, economic, political and technological factors related to job susceptibility are examined and presented as a conceptual framework to evaluate job susceptibility.

2.1 The Digital Transformation of the Broadcasting Sector

Technological innovations have long been recognized for their dual role in society and business: advancing efficiency, productivity, and quality of life, while simultaneously posing threats of job displacement. Economic growth has been shown to have a mutual relationship with technological change leading to a reconfiguration of the job market (Schilirò, 2019). This reconfiguration is often marked by job displacement, with market compensation balancing the losses (Piva & Vivarelli, 2018). The broadcasting sector provides a pertinent illustration, where the rise of OTTs and democratization of content creation has intensified competition from various new players, including streaming services and independent producers.

The market reconfiguration in broadcasting is mirrored by a broader shift in labour markets, characterized by a growing demand for high-skill cognitive jobs and low-skill manual jobs, leading to the hollowing out of middle-income jobs, a trend observed during industrialization (Frey & Osborne, 2013). Global examples, such as Disney's and Netflix's recent job cuts, and the situation in the South African broadcasting sector (Munoriyarwa, Chiumbu & Motsathebe, 2021), further illustrate the sector's susceptibility to these trends. However, a comprehensive understanding of why some jobs are more vulnerable than others remains elusive. While studies like those of Mitchell Waldrop (2018) have explored job susceptibility, there is a need for more integrated and detailed research. The perspective of Autor, Levy, and Murnane (2003) on the role of information technology in shaping job tasks and the demand for human skills is insightful. They categorize job tasks as routine or nonroutine, observing that routine tasks are more susceptible to displacement by technology, a trend that has accelerated since the 1970s with advances in computing.

Frey and Osborne (2017) further extend this discussion, exploring the expanding scope of computing and its potential to automate even nonroutine tasks, limited only by "bottleneck variables" like machines' inaptitude for perception, manipulation, and creativity. However, their predictions did not fully anticipate the advancements in AI's capabilities for perception, manipulation, and creativity. Recent developments in AI, as demonstrated in the works of Zhou & Lee (2023) and Yang & Lerch (2020) have shown significant progress in AI-generated creative content, raising concerns about job displacement in the content creation industry (Caporusso, 2023; Aissani, Abdallah & Al Adwan, 2023).

Given these developments, focusing solely on technological limitations as indicators of job susceptibility is inadequate. Instead, a more holistic approach, that also considers the interplay of political, economic, social, and technological factors is required.

2.2 Job susceptibility and the Future of Work

Job susceptibility is reflected in a rise in contract work (fixed-term contracts and temporary work), an increase in job turnover, and weakened employer–employee relationships (International Labour Organisation, 2016). While job susceptibility has been widely attributed to technological displacement (Mkansi & Landman, 2020), the overly techno-determinist view of the job susceptibility has been challenged, arguing that other non-technology effects such as the political and even environmental contexts play a role in influencing the future of work (Schilirò, 2019; Santana and Cobo, 2020). As such, Santana and Cobo (2020), describe the changing landscape of work beyond just the technology,

to include social, political and economic factors, which they classify into FoW themes. Isabirye, Twinomurinzi and Rammitlwa (2022) draw on Santana and Cobo's (2020) themes and operationalize them into a questionnaire on job susceptibility. The questionnaire conceptualizes the FoW as a set of social, political, economic and technological factors that make jobs susceptible to displacement. This study validates the instrument defined by Isabirye et al. (2022) and applies it in a survey to evaluate job susceptibility for content creators in South Africa. The factors that informed the questionnaire are described in the section that follows.

Technological factors: Changes to the labour market is a central theme of the FoW. Workers, today, face the risk of displacement by technologies that substitute work or innovations that improve efficiency (Santana & Cobo, 2020). Furthermore, the shifting nature of work has also exposed skills gaps that need to be systematically addressed in order to meet the dynamic needs of the new labour market (Gruen, 2017; Balliester & Elsheikhi, 2018; Santana & Cobo, 2020; Singh et al., 2021). This study examines the aforementioned factors by examining the extent to which job susceptibility is determined by new innovations to systems and processes, by technologies that substitute work or enhance efficiency, or by the prevalence of gig work or new forms of work. This study also recognizes that changing technology driven business models may have an influence on job susceptibility. In the case of content creators, the democratization of content creation is one such change that has been prominent.

Economic factors: The changes in the technological environment described above have economic implications for workers and the labour market. Firstly, gig work increases competition in the labour market, leading workers to accept lower wages and unfair contracts (Cruz-Del Rosario & Rigg, 2019). These conditions have been evident in the broadcasting sector where there is a growing trend towards permanent positions being replaced by freelance positions (Skinner, 2022). Job polarization is also gaining prominence as new forms of work and the changing nature of work raises the demand of some jobs at the expense of others (Santana & Cobo, 2020; Singh et al., 2020; Balliester & Elsheikhi, 2018; Frey & Osbourne, 2017). The result of these economic changes is job precarity as workers face the threat of job displacement, accept lower wages and function under unfair working conditions in a highly competitive job market. This study examined the fairness of wages, job polarisation, conditions of employment, opportunities in the job market and the risks facing jobs as economic factors that relate to job susceptibility.

Social factors: The previous section described the economic factors that drive competition in a labour market, especially under conditions of technological disruption. Job precarity (a prominent challenge facing gig workers) (Visser, 2019) and the threat of technological displacement facing content creators (Capporusso, 2023; Aissani, Abdullah, Adwan & Taha, 2023) are conditions that create uncertainty amongst content creators. In addition, content creators operate in a sector characterized by challenges relating to the changing nature of work and emerging forms of work, which demand new skillsets in order to remain competitive in their fields. These conditions collectively have been related to issues of occupational wellbeing such as job dissatisfaction, burnout and poor work-life balance (Santana & Cobo, 2020). The need for career development and talent management is another theme identified by Santana and Cobo (2020) which alludes to the idea that the demand for specific skills, knowledge and ability has an influence on the FoW and job susceptibility. These conditions also call for the adaptation of leadership and organizational values to accommodate a changing landscape of work (Santana & Cobo, 2020). These factors were assessed in this study as social factors influencing the susceptibility of content creator jobs.

Political factors: Technologically driven change will inevitably impact the social, technical and economic landscape, what remains uncertain is how or if at all to respond to the changes in order to avert job displacement, precarious work and unfair or inhumane working conditions. Understanding the level of influence of political factors on the FoW and job susceptibility is likely to inform which approach to adopt. Four themes dominate the political discourse on the FoW; these include industrial/labour relations, the declining influence of trade unions, the call for educational reform and

responses to changes in the labour market (Santana and Cobo, 2020). The influence of these factors on job susceptibility and the FoW for content creators are measured in this study.

The emergence of the platform economy, gig work, and informal working arrangements in the broadcasting sector have increased the risk of unfair labour practices, which could be alleviated through greater intervention from labour institutions and the government (Santana & Cobo, 2020; Isabirye et al, 2022). Unfortunately, platform labour and gig work have also disrupted employee relations in the broadcasting sector, making it challenging for organized labour institutions to protect workers' interests (Silva, 2022). The declining influence of trade unions has been related to the loss of the voice of workers (Addison, 2020) reflected in a highly competitive job market with a decreased bargaining power of workers and an increased bargaining position of employers (Cruz del Rozario & Rigg, 2019).

Figure 2. illustrates the proposed framework for evaluating job susceptibility, composed of political, technological, social and economic factors. The next section will describe the steps taken to validate the model, followed by the findings of the empirical analysis.

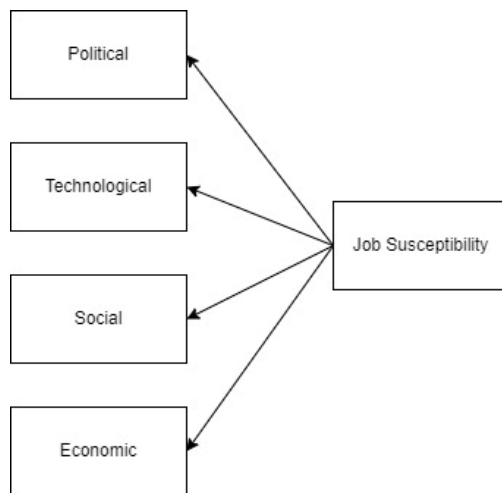


Figure 2: Conceptual framework for evaluating job susceptibility.

3 Methodology

This study sought to create and test a conceptual framework for evaluating job susceptibility. The suggested framework is evaluated and validated with confirmatory factor analysis techniques. A closed-ended survey questionnaire was developed for data collection sampling content creators in South Africa.

3.1 Data collection

The target population was content creators in the broadcasting sector. Using a convenient sample, questionnaires were administered online between December 2022 and March 2023. The participation was voluntary, and responses were confidential. The population group was from Johannesburg based television and radio stations to identify respondents that met the selection criteria. A snowballing approach was then used to identify new respondents through referrals and shared links from the initial respondents. One hundred and twelve completed questionnaires were returned.

There was an approximately equal gender representation of the respondents (48.2% females). Most of the respondents had matric (high school) qualifications (31.3%) or diplomas (25.9%). Advanced degrees (15.2%) or below matric (15.2%) constituted the smallest proportion of respondents. Work experience ranged from 6 months to 24 years, with a median of six years. The median age, with a range of 18 - 50 years, was 31 years. Table 1. summarises the demographic profile of the respondents.

Table 1:Demographic profile of respondents

<i>Highest qualification</i>	N	%
Below Matric (High School) or Higher Certificate	17	15.2
Matric (High School)	35	31.3
Diploma	29	25.9
Degree	14	12.5
Advanced degree	17	15.2
<i>Sex</i>	N	%
Female	54	48.2
Male	53	47.3
Prefer not to say	5	4.5
	Median	Range
Years working	6	0.5-24
Age (years)	31	18-50

3.2 Scale development

This study aimed to empirically test and apply the instrument for measuring job susceptibility developed by Isabirye et al. (2022) within the context of content creators. A closed ended 53-item questionnaire was adapted to achieve this aim (Appendix A). Items were clustered into four scales corresponding to economic (9 items), social (22 items), political (3 items), and technological (19 items) factors of job susceptibility. A five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) was used to measure respondents' views.

3.3 Analysis

The initial analysis sought to verify the violation of multivariate normality. Accordingly, a web power online tool (Zhang & Yuan, 2018) confirmed that the data was not multivariate normally distributed, given the results of Mardia's multivariate skewness ($\beta = 1600.3, p < 0.001$) and multivariate kurtosis ($\beta = 3018.7, p < 0.001$).

Using a confirmatory factor analysis (CFA), a measurement model was proposed based on the conceptualization of job susceptibility developed by Isabirye et al. (2022). Job susceptibility was conceptualized as a reflective second-order construct, explained by four reflective 1st-order latent constructs: economic, social, political, and technological factors. In other words, the measurement model specified that job susceptibility is manifested in four latent constructs or dimensions, and those constructs are assessed with 53 items or indicators from the measuring scale.

We favored using partial least squares structural equation modeling (PLS-SEM) to examine our theoretical framework empirically. Besides not requiring the data to be multivariate normal, PLS-SEM deals with adequate but relatively small sample sizes, and more importantly, it has robustness in analyzing the complex higher-order models, as utilized in the current study (Hair Jr et al., 2017).

Table 3 presents the factor loadings of each indicator on its respective latent constructs, as well as the other metrics for assessing convergent validity, including reliability and internal consistency (via Cronbach's alpha and Composite reliability) and average variance extracted (AVE). Discriminant validity was evaluated using the heterotrait-monotrait ratio of correlations (HTMT) (Henseler et al., 2015). HTMT values less than .90 establish discriminant validity (Henseler et al., 2015).

The PLS-SEM was analyzed with the SmartPLS 3.3.5 software (Fornell & Larcker, 1981; Hair et al., 2013, 2017; Hair Jr. et al., 2019; Ringle et al., 2022) Where necessary, we used the average estimates from bootstrapped 5000 subsamples to assess the significance of the parameter estimates (Hair et al., 2013).

3.4 Results

As shown in Table 2., the original measurement model had some weak indicators (standardized loadings < 0.5). Consequently, an initial set of 13 items (S2, S8, S9, S15, S20, T1, T7, T8, T9, T13, T16, T17, T18) were deleted. A second model was rerun, and a further set of 2 items (T15, T19) was deleted, making a total of 15 weak indicators deleted from the measurement model.

The new, reduced model is a 38-item model whose scales meet the standards commonly accepted in literature. As shown in Table 3., Composite reliability and Cronbach alpha values were above 0.7, reflecting internal consistency reliability. We assessed convergent validity through indicator reliability and AVE. Regarding indicator reliability, the indicator's standardized outer loadings were above a conservative threshold of 0.5. Only one of the four constructs, political factors, had AVE < 0.5 value, and the convergent validity of all four constructs remained adequate because, collectively, their composite reliability was higher than 0.6 (Fornell & Larcker, 1981). Jointly, the FoW factors explained a total variance of about 45.2% in measuring job susceptibility.

Table 2: Convergent validity based on the original theoretical model.

Construct	SFL	AVE	CR	CA	Construct	SFL	AVE	CR	CA
<i>Economic</i>		0.364	0.835	0.780	<i>Social</i>		0.284	0.889	0.867
E1	0.520				S1	0.573			
E2	0.517				S2	0.051			
E3	0.512				S3	0.505			
E4	0.601				S4	0.555			
E5	0.650				S5	0.682			
E6	0.569				S6	0.606			
E7	0.642				S7	0.648			
E8	0.689				S8	0.663			
E9	0.691				S9	0.559			
<i>Political</i>		0.589	0.810	0.666	S10	0.583			
P1	0.834				S11	0.538			
P2	0.693				S12	0.596			
P3	0.769				S13	0.374			

<i>Technological</i>		0.272	0.869	0.840	S14	0.419
T1	0.441				S15	0.415
T2	0.660				S16	0.557
T3	0.615				S17	0.562
T4	0.698				S18	0.605
T5	0.624				S19	0.544
T6	0.614				S20	0.129
T7	0.101				S21	0.534
T8	0.474				S22	0.542
T9	0.466					
T10	0.545					
T11	0.594					
T12	0.546					
T13	0.479					
T14	0.544					
T15	0.508					
T16	0.250					
T17	0.441					
T18	0.437					
T19	0.524					

Note: Bolded values indicate $SFL \leq .4$. SFL: Standardized factor loadings; AVE: Average variance extracted; CR: Composite Reliability; CA: Cronbach's Alpha.

Table 3: Convergent validity assessment based on the reduced measurement model.

Construct	SFL	AVE	CR	CA	Construct	SFL	AVE	CR	CA
<i>Economic</i>		0.364	0.835	0.780	<i>Social</i>		0.351	0.901	0.883
E01	0.523				S01	0.588			
E02	0.500				S03	0.525			
E03	0.523				S04	0.538			
E04	0.605				S05	0.701			
E05	0.661				S06	0.646			
E06	0.574				S07	0.655			
E07	0.627				S10	0.720			
E08	0.693				S11	0.615			
E09	0.692				S12	0.592			
<i>Political</i>		0.587	0.809	0.666	S13	0.546			
P1	0.844				S14	0.617			
P2	0.673				S16	0.519			
P3	0.772				S17	0.524			
<i>Technological</i>					S18	0.589			

T02	0.705	0.417	0.864	0.824	S19	0.531
T03	0.635				S21	0.549
T04	0.750				S22	0.561
T05	0.695					
T06	0.678					
T10	0.578					
T11	0.624					
T12	0.585					
T14	0.531					

Table 4. shows the results of the HTMT assessment of discriminant validity for the reduced measurement model. All the HTMT values were lower than the acceptable threshold of 0.90, supporting discriminant validity for all constructs.

Next, we establish the measurement model for the second-order construct by assessing the standardized loadings via the path coefficients from the 1st-order to the 2nd-order construct. In addition, the statistical significance of these path coefficients was evaluated with bootstrap-based p-values.

Table 4: Discriminant validity using the Heterotrait-Monotrait (HTMT) ratio of correlations.

	Economic	Political	Social	Technological
Economic				
Political	0.899			
Social	0.799	0.379		
Technological	0.672	0.361	0.785	

As shown in Figure 2, the outer loadings for the four 1st order constructs were higher than the recommended threshold (> .5) and statistically significant ($p < 0.001$). This demonstrates that the first-order constructs significantly explain the second-order construct. It was also confirmed that job susceptibility exhibits a structure with four factors as a result of establishing the measurement model for the second-order construct.

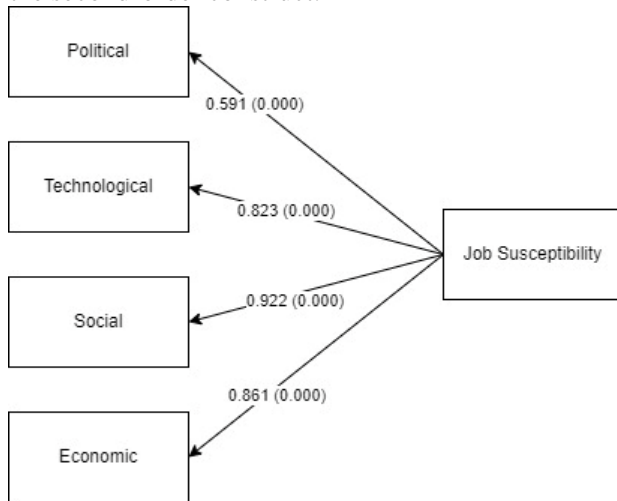


Figure 1: Measurement model assessment of the second-order Job susceptibility construct

4 Discussion and Findings

The study sought to develop a framework to evaluate job susceptibility as a measure of social, political, technological and economic factors by validating and applying Isabirye et al’s. (2022) survey instrument to content creators. This section reports on the results of the analysis and attempts to explain the findings.

4.1 Technological factors

The technological factors measuring job susceptibility that were examined in this study included gig work, new forms of work, innovations to processes and systems, new technology driven models of business and technologies that substitute work. The results found that factors relating to gig work, technologies that substitute work, and new forms of work did not contribute to job susceptibility, while innovative systems that drive efficiency and new models of business were found to have an effect on job susceptibility. The effect of new technology driven models of business on job susceptibility for content creators aligns with the study's initial propositions, which describe how technologically driven changes to business models affect the labour market. For content creators, these new models may include shifts such as the democratization of content creation, which has opened up the market to include a wider, more diverse scope of participants, increasing competition for organisations and workers alike. The increased competition has implications for market share, revenue and the supply of and demand for workers.

Innovations that improve the efficiency of systems and processes were also found to contribute to job susceptibility, whereas technologies that substitute work were not found to have an effect. This finding suggests that content creators may not be as concerned or affected by the substitution of work by technology as they are by innovations associated with enhanced efficiency. Generative AI may be one such advancement as it can optimise writing, editing, production, and directing of content (Aissani et al., 2023). Despite questions on the quality (Lou, Shi & Zou) and integrity (Cavaliere, 2020) of the content produced, generative AI allows less skilled or experienced content creators to contend with professionals in the field. As a result, the threat is not from technology displacing jobs, but rather from technology levelling the playing field for amateur and experienced content creators.

The literature argued that the prevalence of gig workers in a job market contributes to the susceptibility of jobs, however the results of the study, surprisingly, did not support this proposition. On the other hand, job precarity (which will be explained among the findings relating to economic factors) was shown to be an indicator of job susceptibility. Job precarity, in the literature review, was also described as a consequence of the gig economy. In South Africa, gig work and precarious jobs are highly prevalent conditions among content creators, especially in journalistic roles (Skinner, 2022). The conflicting results may indicate that there are other unexplored factors that affect the precarity of content creator jobs. The results may also indicate that the respondents recognised that they were operating under precarious working conditions but may not have been aware of the prevalence and influence of gig workers in the sector. This proposition is plausible given a possible sample bias towards workers who have spent considerable time in their job role (the respondents have worked in their current roles for an average of 6.7 years). Respondents with fewer years in their role may have had different perspectives on gig work.

New forms of work (such as remote work or new ways of working) were hypothesized to have an effect on job susceptibility but were also not supported by the results of the analysis. This finding suggests that changes in the place, time or manner in which content creator work is done do not necessarily pose a threat of job losses.

4.2 Economic factors

All the identified economic factors measuring job susceptibility were supported by the empirical analysis. The results confirmed that labour market issues (emerging and declining occupations), job polarization, wage issues (wage rates and wage equality), conditions of employment and precarious working conditions were all factors that indicated the susceptibility of content creator jobs.

4.3 Social Factors

The study posited that organizational and leaders' values, job precarity, occupational wellbeing and skills, knowledge, and ability were social factors that defined job susceptibility. These factors were all confirmed in the empirical analysis. These findings suggest that the values held by leaders and organisations may mitigate some of the risk of job susceptibility. It also provides a basis for further analysis to measure the influence of job precarity on occupational wellbeing. While the findings did not correlate job precarity to occupational wellbeing, it can be hypothesized that precarious working conditions challenge occupational wellbeing (compromising work life balance and burnout). Job satisfaction (an element of occupational wellbeing) did not load as a factor affecting job susceptibility for workers. Ability, knowledge and skills was also a factor that was empirically confirmed. This supports the theoretical claim that knowledge and skills gaps in the changing labour market should be addressed in order to alleviate the risk of job losses.

4.4 Political factors

The political factors assessed included factors related to the labour market that indicated the level of competition amongst workers, the rising bargaining power of employees, and the diminishing bargaining power of workers. The results supported the theoretical proposition that a competitive labour market, where employers have greater bargaining power than workers, is a factor that contributes to the susceptibility of content creator jobs. These conditions are prevalent among content creators and may be mitigated by efforts to strengthen labour unions in the sector (Visser, 2019).

4.5 Implications for content creators

The uncertain conditions facing content creators have called for deeper insight into the Future of Work for content creators, specifically, findings from this study provide a mechanism to evaluate which jobs are vulnerable to displacement and why. Understanding these factors can assist in defining responses to anticipate and mitigate the risks of job losses, or to guide career choices for practitioners in creative fields.

5 Conclusion

The study set out to measure the factors that should be evaluated when determining job susceptibility and theorised that job susceptibility is a function of social, political, economic and technological factors. The results of the analysis confirm the factors that constitute job susceptibility for content creators. In broadcasting, the interface between technological change and economic change has been evident, with technological changes (increased broadband penetration and the rise of OTTs and video on demand) leading to economic changes (democratization of content creation, reduced barriers to entry and increased competition from emerging stakeholders in the sector). Consequently, the unfavourable economic conditions caused by the increased competition in the sector have affected the labour market (shifting the balance of power between workers and employers) and likely also catalysed an opportunity for businesses to adopt cost saving innovations, however, findings from the study suggest that innovations that promote efficiency currently pose a greater threat to content creation occupations than technologies that substitute jobs. The study also confirmed that content creators function under conditions of precarity, however, the initial hypothesis that gig work was amongst the economic factors relating to job susceptibility was not supported. As such, there may be other factors that make content creator jobs precarious.

The findings only examine linear relationships between the first-order constructs and the second-order construct; however, the literature suggests that technological and economic factors drive one another and suggest that there are social implications to these conditions that may be mitigated through political responses. This view aligns with Isabirye et al.'s (2022) conceptual model which describes these interrelationships. As such, future work should focus on testing the relationships in Isabirye et al.'s (2022) conceptual model.

The use of a convenient sample focusing on South African content creators was a limitation of the study and the findings cannot be generalized beyond the scope of South African content creators.

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Appendix

Table 5: A summary of the indicator variables in the full measurement model

<i>Item #</i>	<i>Description</i>	<i>Theme</i>
<i>Economic factors</i>		
E01	There are adequate job opportunities	Labour market
E02	Jobs are at risk	Labour market
E03	Wages are fair for permanently employed workers	Job precarity
E04	Basic conditions of employment are fair for contract/freelance workers	Job precarity
E05	Basic conditions of employment are fair for permanently employed workers	Job precarity
E06	Wages are fair for contract/freelance workers	Job precarity
E07	Certain occupational types are becoming redundant	Job polarisation
E08	New occupations are emerging	Labour market
E09	Jobs in the sector pay medium to high wage	Wage rates
<i>Political</i>		
P01	The job market has become more competitive	Labour market
P02	Workers have less bargaining power	Labour market
P03	Employers have more bargaining power	Labour Market
<i>Technological factors</i>		
T01	Jobs in the sector can be easily mechanized, automated or computerized	Technological substitution of work
T02	There have been innovations to processes that have made work more effective	Technological Innovation
T03	There have been innovations to processes that make work more efficient	Technological Innovation
T04	There are new innovative systems that make work more effective	Technological Innovation
T05	There are new innovative systems that make work more efficient	Technological Innovation
T06	Digitization has transformed how work is done	Technological Innovation
T07	Workers are unsettled by digitization	Technological substitution of work
T08	Contractors can be appointed to fulfil specific job roles	Gig work
T09	It is important is it for our audience to co-create content on our platforms	Changing models of business

T10	It is important for our staff to update our social media accounts once a day	Changing models of business
T11	It is important to have a designated person to update our website every day	Changing models of business
T12	It is important for our organization to promote citizen journalism	Changing models of business
T13	Jobs will be partially or fully replaced by technology	Technological substitution of work
T14	Workers can fulfil their work remotely	New forms of work
T15	The types of contracts between employer and employee are changing	Gig work
T16	The place in which work takes place is changing	New forms of work
T17	Working hours are changing	New forms of work
T18	The type of work required from workers is changing	New forms of work
T19	Individuals outside of the organization can pitch to fulfil projects or roles	Gig work
Social factors		
S01	I have the capacity to adopt emerging technologies to fulfil my job role	Knowledge, skills and ability
S02	Workers feel dissatisfied with their jobs	Occupational wellbeing
S03	Workers experience burnout in their jobs	Occupational wellbeing
S04	Workers experience a compromised work-life balance	Occupational wellbeing
S05	I can solve most problems if I invest the necessary effort	Knowledge, skills and ability
S06	I can remain calm when facing difficulties because I can rely on my coping abilities	Knowledge, skills and ability
S07	If I am in trouble, I can usually think of a solution	Knowledge, skills and ability
S08	I can usually handle whatever comes my way	Knowledge, skills and ability
S09	Thanks to my resourcefulness, I know how to handle unforeseen situations	Knowledge, skills and ability
S10	I am confident that I could deal efficiently with unexpected events	Knowledge, skills and ability
S11	There is adequate career development to meet the changing needs of workers	Knowledge, skills and ability
S12	When I am confronted with a problem, I can usually find several solutions	Knowledge, skills and ability
S13	Workers feel a sense of job insecurity	Job precarity
S14	Workers feel a sense of income insecurity	Job precarity
S15	Older or less technology savvy workers feel insecure in their jobs	Knowledge, skills and ability

S16	Leaders' values respond to the changing needs of the organization	Organisational values
S17	Organizations in the sector have good governance practices	Organisational values
S18	Organizations in the sector have fair business practices	Organisational values
S19	Organizations in the sector invest in the development of the workforce	Organisational values
S20	Freelance workers are treated unfairly	Gig work
S21	I can apply specialist competencies within my role	Knowledge, skills and ability
S22	I can apply current technologies to fulfil the needs of my role	Knowledge, skills and ability