



CREATIVE DESTRUCTION AND THE LABOUR MARKET

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Article DOI: <https://doi.org/10.36713/epra26942>

DOI No: 10.36713/epra26942

ABSTRACT

The paper examines the relationship between technological innovations and the labour markets. The entry of AI into general use has shown significant signs of reducing future job opportunities. Drawing on Schumpeterian growth theory, the study affirms that innovation is a creative process with destructive outcomes. Technological progress occurs in a cycle of vertical innovation that generate temporary monopoly rents for entrepreneurs and inevitably render labour redundant, jobs polarized, and skills obsolete. The creative part of innovation expands aggregate demand, lowers production, creates new occupations, and shifts labour to words service oriented tasks. In contrast, the destructive phase renders skills obsolete, displaces routine jobs, and accelerate labour market polarization. It also creates short-term hardships due to the relative immobility of human capital compared to financial capital. AI innovation represents a qualitative departure in technological disruption by encroaching on non-routine cognitive tasks previous considered exempt from automation. Preliminary evidence shows AI risks compressing entry-level pathways in knowledge work, slowing skills development, limiting human capital adaptability, and increasing inequality. Emerging economies must remodel human capital development to mitigate the harsh reality posed by technological advancement.

KEY WORDS: Creative, Destruction, Innovation, Labour, Displacement.

INTRODUCTION

The entry of general use artificial intelligence (AI) has seen a significant bump into layoffs in the technology sector despite a strong evidence of high market capitalization in most blue-chip corporations. A 2025 Pew Research Center survey revealed that about 52% of employees fear AI will render many workers redundant in most industries (Lin & Parker, 2025). 32% of those interviewed fear AI may lead to fewer job opportunities in the future. This modern tension is not new; but a constant reminder that change is constant. Joseph Schumpeter (1942) ascribed technical evolution as the basis of capitalism. He argued that industrial mutation was vital for economic revolution; it is necessary to destroy the old order and create a new order through innovation. While time has changed, today, AI is aligned to disrupt white-collar mundane work with the same force that industrialization disrupted cottage industries and reshaped modern manufacturing.

Creative destruction is an indispensable component of long-term growth. Aghion and Howitt (1990) describe creative destruction as a major driver of technical improvement and innovation in production. Creative destruction is linked to the general improvement in human welfare and living standards. However, creative destruction has an inherent duality. The creative part is responsible for developing new industries and opportunities while the destruction segment renders labour and firms obsolete (Ziemnowicz, 2020). The disjuncture brings in a transitional gap between the old economic structures from the full realization of

new ones. Critically, this gap is a chronic feature of capitalism, exacerbated by accelerating technological change (Autor, 2015). Technological change results in structural unemployment which albeit being transitory can have lasting impact on communities, firms, and individuals caught in the web of innovation and economic mutation. Therefore, creative destruction is the harbinger for long-term prosperity; its unintended transitory influence on the labour market requires appropriate anticipatory investment in social structure, human capital, and market structure for displaced workers.

Theoretical Basis

Schumpeterian Growth Theory is a significant departure from neoclassical growth models and endogenous growth models that treat innovation as deliberate and non-disruptive. Embedded in Schumpeter's views, growth is driven by new innovations that render existing firms, skills, and technologies obsolete (Schumpeter, 1942). Thus, there is a perpetual cycle of displacement and renewal in three core mechanisms. First, growth is driven by vertical innovations that replace existing inferior processes. Each new innovation creates a temporary monopoly rent as reward to the innovator before they are eroded by subsequent innovations. Second, entrepreneurs motivated by these rents and growth prospects take up such innovations. Third, wide adoption of these innovations emerges with significant disruption in the labour market in the short-run. Aghion and Howitt (1998) demonstrate that new innovations displace workers who must seek alternative employment as an unintended



byproduct of growth. Thus, a transition gap exists due to skills mismatch. Imperatively, innovation occurs in discontinuity and its benefits accrue unevenly and the labour market cannot adjust instantaneously. Therefore, based on Schumpeterian Growth Theory, creative destruction reflects an inherent feature of innovation-driven growth which require deliberate institutional intervention.

The turbulent relationship between innovation and labor is premised on Schumpeter's creative destruction analogy. This was part of the larger innovation theory. According to Schumpeter (1942), the capitalist economy is a dynamic organism that is perpetually thrown into disequilibrium through the decision-making process of entrepreneurs. At any point in time, the economic landscape is always mutating; new technological innovations come up while old technologies fade away, new firms emerge while old ones exit (Ziemnowicz, 2020). This dynamism is driven by competition for new supply sources, new commodities, new technologies, and new types of organizations which affect the basic existence and survival of firms and industries (Schumpeter, 1942). Innovation is born from basic research and seized by entrepreneurs who commercialize and popularize it to the extent it becomes embedded in everyday processes. Thus, as with any technology, inventions go through development, adoption, internalization, and later maturity when the technology gets to full capacity and entrepreneurs start looking for ways to optimize or overhaul the entire innovation. This framework reveals that technological changes in the economy bring about a transitionary gap.

Creative Destruction

The Creative Phase

The creative phase constitutes a theoretical and empirical basis that lays ground the essence of technological innovation. This phase is the reason for emergence of new industries and industrial processes that create novel job categories and promote long-run expansion of aggregate demand and productivity (Ziemnowicz, 2020). The creative phase denounces the Luddite Fallacy that assumes technological change to be unfavourable in the economy. According to Acemoglu & Restrepo (2019) innovation leading to automation led displaced workers in resisting mechanization of routine worker previously done by labour during the industrial revolution. In essence, they viewed innovation as the cause of economy-wide unemployment that cannot be absorbed in other sectors.

From a modern economic perspective, labour saved by technical innovation does not always end in unemployment. First, innovation increases competition. According to Aghion and Howitt (1998), improved operational processes lower the cost of production which leads to lower prices and increased real income and demand. Research has established the reality that technology expand labour demand in the market. Mokyr et al. (2015) established that mechanization did not permanently eliminate textile labor but reduced the cost of cloth production which enabled proliferation of new firms. Thus, the amount of labour

employed in the sector expanded. Therefore, there is an overall increase in demand for labour. Thus, more employment in the affected sector and the economy in general.

Secondly, innovation creates new tasks and occupations. Innovation displaces labour in one sector but simultaneously creates new employment opportunities in other sectors. Autor (2015) demonstrate that automation often displaces labour from existing roles and creates new tasks that complement human labour. For instance, Acemoglu and Restrepo (2018) formalize this perspective through a task-based model of automation showing that technological change has two forces displacement and reinstatement. Labour is displaced in one sector is reappointed in another sector albeit in different job tasks. The net effect on employment depends on the relative strength of these forces.

In the USA for instance, mechanization of agriculture over the years has resulted in significant departure of labour to other sectors. Autor and Salomons (2018) reveal that U.S labour in farming has reduced by over 40% in 1900 to just below 2% currently. However, more labour has found footing in the digital economy in terms of desk jobs since unemployment has always decreased despite the widespread displacement. Thus, what has changed is the structure of employment as labour shifts from dying sectors to new ones. In the banking sector Bessen (2019) established that introduction of ATMs did not render bank tellers obsolete. Rather, ATMs reduced operating costs which encouraged banks to establish more branches and higher more tellers to handle customer service roles. The net effect was an increase in job opportunities for bank tellers.

Nonetheless, innovation brings forced labour transmission which is often challenging to cope. Acemoglu and Restrepo (2019) agree that automation has always been a drive of wage stagnation and increased economic inequality. Skills rendered obsolete due to automation results in massive layoffs and those who fail to transition end-up jobless and in dire economic conditions. Imperatively, in the short-run the creative phase disfavours labour displaced by technological innovation to benefit a distinct set of labour needs. Thus, the creative phase comes at a cost to labour albeit in the short-run as structural and frictional unemployment increases.

The Destructive Phase

The destructive phase is a central mechanism of economic evolution. It is a disruptive phase with harsh and more tangible realities for labor displacement. According to Schumpeter (1942), innovation involves destroying the old order to establish a new order. In the wake of innovation, labour is disrupted from one sector and reassigned in another sector. Acemoglu and Restrepo (2019) assert that automation incurs dual effects; displacement and reinstatement. Skills are rendered obsolete and labour redundant when machines replace and displace human capital used in production because of a shift in task content of production. Thus, automation reduces the share of labour in value addition



and labour demand even in the face of higher productivity. However, automation results in creation of new tasks (Autor & Salomons, 2018). The new tasks often require more labour than technology hence creating a counterbalancing reinstatement effect. However, with automation on the rise, the level of displacement has accelerated while reinstatement has decelerated. The net effect is higher automation has rendered many more workers jobless and reduced demand for labour.

Differential mobility of labour and capital also influence the transition. Capital, especially investment and venture capital is highly mobile. Such capital can be re-deployed from a declining industry to an emerging industry since the owners are always seeking the highest returns (Alcouffe & Kuhn, 2004). However, labour is sticky due to skills specificity, geographical immobility, and the social cost of job transition. Human capital is mostly firm and or industry specific and workers are embedded in communities with families and social ties that make reskilling and relocation for new employment financially and socially untenable. Thus, capital fluidity and labour rigidity create an inevitable transitional gap. Therefore, innovation unintentionally alters economic trajectory of the affected labour. The destructive phase creates job polarization. The entry of new technologies that improve productivity means more labour displacement, skills obsolescence, and disintegration of previously robust occupational structures (Acemoglu & Restrepo, 2019). Job polarization is the change in occupational distribution caused by changing technical and operational processes. Technological changes often displace routine cognitive and manual tasks handled by middle-level skills and people in the working-class category (Millington, 2017; Autor & Dorn, 2013). However, employment expands in high-skill, high-wage cognitive roles and the lower end of the spectrum consisting of low-skill low-wage manual service positions. Essentially, the middle-level skills encounter task displacement. Ryberg (2025) reveals that automation in vehicle manufacturing has improved productivity per worker but reduced employment over the years. There is a natural dispensation to automation because cheaper technologies reduce the total wage compensation of labour in the firm. Acemoglu and Restrepo (2018) acknowledging that cost was an important driver of entrepreneurial decisions towards automation. Thus, the demand for middle-skilled labour has declined while the low-skill low-pay labor and high-skill high-pay labour continues to expand. Therefore, labour expansion is only occurring at the extreme polar ends; high pay and low pay while the middle, which accommodates most employment opportunities continue to hollow out due to automation.

Finally, human capital depreciates rapidly with technological shifts. Skills that commanded respect and premium wages become obsolete and extensively invalid. According to Acemoglu and Autor (2011), technological breakthroughs come with discontinuous demand for specific skills bundles. There are losers and winners, whose predicament depends on how their current skills are aligned with the direction of ongoing technological change. In advanced, capitalist economies, the destruction phase is a permanent feature. With AI on the wake, technological

change is accelerating and promising to disrupt cognitive, non-routine tasks that were previously safe from automation disruption (Eloundou et al., 2024). Looking into the future, the transition gap between destruction and displacement of labour to re-skilling and re-employment is widening.

Impact on Labour

The contemporary challenge posed by generative artificial intelligence (AI) is a qualitative departure from the usual automation. For the first time, technologies are demonstrating proficiency in non-routine cognitive tasks that were once a safe haven for labour (Brynjolfsson et al., 2025). The shift has renewed concerns on the distributional consequences of AI-driven disruption. The International Labour Organisation (2025) has shown that almost 25% of all jobs are at risk of displacement by AI. The risk is much higher in high-income countries where at least 34% of all jobs are exposed to labour displacement (Gmyrek, 2025). While the exposure does not equate automation, it signals significant task transformation in handling specialized tasks.

Empirical literature on AI and employment has shown modest impact on entry level jobs. Brynjolfsson et al. (2025) analyzed ADP payroll data of millions of U.S. workers which established that workers between 22 and 25 years were the most exposed to AI displacement. Approximately, 16% employment decline has occurred in this age-bracket who are mostly entry level employees since the release of ChatGPT. In a similar study in the UK, Klein Teeselink (2025) established that exposed firms reduced hiring and employment in junior and entry level roles. In addition, remuneration in these exposed occupations have declined. These findings point to a new form of skill polarization. At the moment, AI is causing compression and elimination of traditional entry-level pathways in knowledge-based occupations.

Hosseini Maasoum and Lichtinger. (2025), provide corroborating evidence from a large-scale analysis of more than 62 million job postings between 2015 and 2025. The findings show that there has been a significant divergence from 2023 where adverts of senior level staff increased while entry level postings declined by 7.7% driven by reduced hiring and adopting AI in return. In firms adopting AI, the hiring of junior entry level professionals has declined as these tasks have been automated. Essentially, AI is not working to destroy existing jobs but to restructure the mechanisms of skills acquisition and career progression. Therefore, does it mean the pathway to skills development is foreclosed? Will workers in exposed occupation have the opportunity to learn, adapt, and work with these technologies?

From a macroeconomic perspective, AI's aggregate effects are generally modest. In a task-based macro model, Acemoglu (2025) established that even under optimistic assumptions, AI's total factor production will increase by no more than 0.66% in a ten-year period. This projection is way below most industry expectations. In essence, the research notes that AI has already demonstrated effectiveness in easy-to-learn tasks but remains



limited on hard-to-learn tasks that are context-dependent and require objective outcome measures. Therefore, AI's transformative outcomes could be impactful in some sectors but have modest aggregate macroeconomic effects.

Finally, AI, while impressive in improving productivity, may limit skill development and affect quality of output. The Organization for Economic Co-operation and Development (OECD) established that AI use at the firm level may boost productivity but limit creative and critical thinking when users adopt AI content at face value (Calvino et al., 2025). The risk of relying on misleading and incorrect information is high especially since AI increases intellectual homogeneity and undermines independent judgment. AI compromises the durability of human capital which could deprive labour its market resilience and increase skill polarization. Consequently, today's challenge is more on eroding the essential cognitive foundation of skills development. Calvino et al. (2025) note the need for a balance between displacement and creation of new tasks through human-AI collaboration. User expertise and context of application should be made priority as AI cannot fully replace human capabilities. This calls for urgent policy attention to promote responsible integration to achieve sustainable outcomes across industries.

Policy Recommendations for Emerging Markets

Kenya and many emerging nations are caught in between rapid technological adoption and sustaining its young economy. Kenya has a vast informal sector with more than 90% of new job creations originating from the informal sector in 2024 (World Bank, 2025). This sector has limited social protection and high labour attrition. Urgent policy interventions are required to ensure the creation and adoption of new technologies do not exacerbate the already precarious labour market in such economies.

Kenya's nascent labour market could borrow vital lessons from Singapore's SkillsFuture movement and the Danish flexicurity model. In the Danish labour market flexibility, active labour policies, and income security limit marginalization and inequality (Ilsøe, & Larsen, 2023). The flexicurity model allows employees to change jobs more often since there is support to gain new roles without risking income loss (Andersen & Mailand, 2005). On the other hand, the SkillsFuture programme is a systemic initiative launched in 2015 as a response to the chaos of rapidly changing labour market (Lim et al., 2024). Its aim is to empower citizens to take charge of lifelong employability through upskilling and reskilling. A national skills framework exists to avail a common language of competency and align employer demand with training and learning needs. The framework thrives on a tripartite relationship among the government, the industry, and labour unions to anticipate and respond to technological shifts proactively (Fung, 2020). Therefore, using flexicurity, Kenya can promote labor market flexibility and the SkillsFuture programme for proactive skills development to meet evolving economic demands.

First, Kenya should enhance labour market flexibility. The Employment Act (2007) has minimal regulations for digital work, freelancing, and part-time work. This creates ambiguity around the rights of the gig economy workers. Based on the Danish model, flexibility must be accompanied with clear rights for transfer of employee benefits, access to unemployment benefits and training, and general employee conditions (Andersen & Mailand, 2005). The current labour laws should be amended to recognize non-standard work arrangements and guarantee minimum wage protections and portability social benefit contributions such that workers are not entirely vulnerable when exposed to redundancies.

Second, Kenya needs active labour market policies that address skills mismatch. Currently, investment in skills development and education has shifted to addressing skills mismatch through the competency-based curriculum. Based on the flexicurity model and SkillsFuture programme, the government must invest in reskilling and access to further training for the unemployed to advance their skills and catch up with the evolving market dynamics (Ilsøe, & Larsen, 2023). Given that technological changes are transforming labour utility, the existing frameworks on the Recognition of Prior Learning (RPL) must be fast-tracked to translate existing competencies into new opportunities.

Finally, there needs to be a reconfiguration of the relationship between the state, employers, and individuals to support proactive skills development. Skills development should be encouraged as a lifelong norm with adequate investment from individuals, firms, and the government. A data infrastructure modeled on the SkillsFuture would make skills visible, portable, and verifiable across sectors to guarantee labour mobility and reduce cyclical labour attrition (Fung, 2020). From Singapore and Denmark, it is possible to initiate legislative policies that anchor labour market flexibility in the economy through institutional defenses against skills obsolescence and labour dislocation in the face of creative destruction. Labour can survive the dynamism of change with minimal setbacks thus reducing the transition gap between new innovation and labour reinvention.

CONCLUSION

The central paradox of creative destruction is that its dynamism generates profound instability for those caught in between creation and destruction. Arguably, while Schumpeter's assertions on innovation as an indispensable facet of long-term prosperity are true, the unintended outcome of skills obsolescence and labour dislocation have far-reaching consequences in society. The transitory gap often leaves lasting scars as labour displacement and job polarization lingers longer during structural economic change. The creative phase does not automatically benefit displaced labour since the reinstatement effects are unevenly distributed. The rise of AI today intensifies these dynamics as it targets most skills that have been spared by previous technological innovations. AI is poised to compress entry-level pathways and deprive human capital off its critical thinking and creative capacity. In the decades ahead, skills acquisition and career progression may remain in limbo unless



urgent structural interventions are initiated to support labour flexibility to match the current labour market dynamics. Therefore, emerging markets like Kenya must build systemic capacity for continuous human capital renewal for a resilient economy.

REFERENCES

1. Acemoglu, D. (2025). The simple macroeconomics of AI. *Economic Policy*, 40(121), 13-58.
2. Acemoglu, D., & Autor, D. (2011). Skills, tasks and technologies: Implications for employment and earnings. In *Handbook of labor economics* (Vol. 4, pp. 1043-1171). Elsevier.
3. Acemoglu, D., & Restrepo, P. (2018). The race between man and machine: Implications of technology for growth, factor shares, and employment. *American economic review*, 108(6), 1488-1542.
4. Acemoglu, D., & Restrepo, P. (2019). Automation and new tasks: How technology displaces and reinstates labor. *Journal of economic perspectives*, 33(2), 3-30.
5. Aghion, P., & Howitt, P. (1998). A Schumpeterian perspective on growth and competition. In *New theories in growth and development* (pp. 9-49). London: Palgrave Macmillan UK.
6. Aghion, P., Akcigit, U., & Howitt, P. (2015). The Schumpeterian growth paradigm. *Annual review of economics*, 7(1), 557-575.
7. Aghion, P., & Howitt, P. (1990). A model of growth through creative destruction.
8. Alcouffe, A., & Kuhn, T. (2004). Schumpeterian endogenous growth theory and evolutionary economics. *Journal of Evolutionary Economics*, 14(2), 223-236.
9. Andersen, S. K., & Maitland, M. (2005). The Danish flexicurity model. Compiled for the Danish Ministry of Employment, Copenhagen.
10. Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of economic perspectives*, 29(3), 3-30. <http://dx.doi.org/10.1257/jep.29.3.3>
11. Autor, D. H., & Dorn, D. (2013). The growth of low-skill service jobs and the polarization of the US labor market. *American economic review*, 103(5), 1553-1597.
12. Autor, D. H., Dorn, D., & Hanson, G. H. (2016). The China shock: Learning from labor-market adjustment to large changes in trade. *Annual review of economics*, 8(1), 205-240.
13. Autor, D., & Salomons, A. (2018). Is automation labor-displacing? Productivity growth, employment, and the labor share (No. w24871). National Bureau of Economic Research.
14. Brynjolfsson, E., Chandar, B., & Chen, R. (2025). Canaries in the Coal Mine?: Six Facts about the Recent Employment Effects of Artificial Intelligence.
15. Calvino, F., Reijerink, J., & Samek, L. (2025). The effects of generative AI on productivity, innovation and entrepreneurship. *OECD Artificial Intelligence Papers*.
16. Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2024). GPTs are GPTs: Labor market impact potential of LLMs. *Science*, 384(6702), 1306-1308.
17. Fung, M. (2020). Developing a robust system for upskilling and reskilling the workforce: Lessons from the SkillsFuture movement in Singapore. In *Anticipating and preparing for emerging skills and jobs: Key issues, concerns, and prospects* (pp. 321-327). Singapore: Springer Singapore.
18. Hosseini Maasoum, S. M., & Lichtinger, G. (2025). Generative AI as seniority-biased technological change: Evidence from US resume and job posting data. Available at SSRN 5425555.
19. Ilsøe, A., & Larsen, T. P. (2023). Flexicurity and the future of work: Lessons from Denmark.
20. Klein Teeselink, B. (2025). Generative AI and labor market outcomes: Evidence from the United Kingdom. Available at SSRN.
21. Lim, Z. Y., Yap, J. H., Lai, J. W., Mokhtar, I. A., Yeo, D. J., & Cheong, K. H. (2024). Advancing lifelong learning in the digital age: A narrative review of Singapore's SkillsFuture programme. *Social Sciences*, 13(2), 73.
22. Lin, L., & Parker, K. (2025, February 25). U.S. workers are more worried than hopeful about future AI use in the workplace. Pew Research Center. <https://www.pewresearch.org/?p=200013>
23. Millington, A. K. (2017). How changes in technology and automation will affect the labour market in Africa.
24. McGowan, K., & Geobey, S. (2022). "Harmful to the commonality": the Luddites, the distributional effects of systems change and the challenge of building a just society. *Social Enterprise Journal*, 18(2), 306-320.
25. Ryberg, P. N. (2025). Manufacturing automation and its implications for local employment outcomes: Evidence from Sweden. *Papers in Regional Science*, 104(5), 100112. <https://doi.org/10.1016/j.pirs.2025.100112>
26. Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. Harper & Brothers.
27. World Bank (2025). Kenya Can Create More Jobs and Enhance Productivity by Adopting Procompetitive Reforms. World Bank Group. <https://www.worldbank.org/en/news/feature/2025/11/24/kenya-can-create-more-jobs-and-enhance-productivity-by-adoptingprocompetitive-reforms>
28. Ziemnowicz, C. (2020). Joseph A. Schumpeter and innovation. In *Encyclopedia of creativity, invention, innovation and entrepreneurship* (pp. 1517-1522). Cham: Springer International Publishing.