Asia Pacific Science Press

Asia Pacific Economic and Management Review
ISSN(O):3005-9275
ISSN(P):3005-9267
Vol. 3 No.3 (2026)

Job Crafting Under the Intervention of Large Language Models: Skill Premium, Task Evolution, and Professional Identity Conflicts

Yijing Chen*

School of Management, Xi'an Polytechnic University, Xi'an, Shaanxi, 710048, China

Corresponding author: Yijing Chen, 3096536674@qq.com

Abstract: This paper aims to explore the deep mechanism of how knowledge employees reshape their work after the new generation of artificial intelligence technology represented by large language models intervenes in the workplace. This paper breaks the limitation of a single perspective and constructs a systematic analysis framework covering macro skill premium, meso-task evolution, and micro-occupational identity conflict. The research shows that large language models not only blur the physical and intellectual boundaries of traditional cognitive labor, but also trigger a drastic restructuring of the skills pricing mechanism in the labor market, resulting in the coexistence of the depreciation of traditional hard skills and the polarization of the premium of new soft skills. Under this dual impact, professionals are faced with profound deconstruction of expert authority and existential anxiety, and must repair the psychological contract through deep cognitive reshaping and identity recontextualization. This paper expands the theory of work reshaping in the intelligent era and provides a forward-looking theoretical basis for enterprises to reconstruct human resource management systems.

Keywords: Large Language Model; Work Reinvention; Skill Premium; Mission Evolution; Professional Identity; Human-Machine Collaboration

Published: May 11, 2026

DOI: https://doi.org/10.62177/apemr.v3i3.1417

1. Introduction

With the breakthrough of generative artificial intelligence represented by large language models in the fields of natural language processing, multimodal content generation, and complex logical reasoning, human society is experiencing a paradigm shift in computing power-driven work. Unlike previous technological revolutions aimed at liberating manual labor or replacing conventional computing tasks, large language models, as a general-purpose technology with high generalization capabilities, directly penetrate the core of complex cognitive labor [1]. It is not only a tool for passive execution of instructions, but also a non-human collaborator with the ability to adapt to situations and generate creativity. This fundamental shift in technical attributes constitutes a systematic subversion of the existing work design theory, labor market supply and demand structure, and employees' psychological contract.

In this grand context, the concept of "work reshaping" in organizational behavior has been given a new connotation of the times. Traditional job reinvention emphasizes that employees fine-tune their work characteristics within physical and interpersonal boundaries to match personal motivations; At the moment when large language models are fully involved, work

reshaping has evolved into a complex human-machine two-way empowerment and dynamic game. This paper aims to jump out of a single technology application perspective, combine technological impact with the endogenous evolution of individual behavior, and deeply analyze the core mechanism of work reshaping with the intervention of large language models. This article will demonstrate that technological change first triggers the drastic evolution of work tasks in the micro business flow, which then leads to the subversive restructuring of skill premium in the macro labor market, and finally triggers a deep professional identity conflict of knowledge employees at the micro psychological level. Unifying these three dimensions is the key path to understanding the underlying logic of human resource management in the intelligent era.

2. Task Evolution and Boundary Reconstruction in the Era of Large Language Models

The intervention of large language models first triggers profound structural shocks at the meso-scale process design and micro-level task execution. This shock is by no means a simple "machine replacing human", but is manifested in the fundamental alienation and reorganization of the nature of work tasks and the continuous dynamic evolution of the boundaries of human-computer interaction.

2.1 The Deconstruction of Cognitive Labor Tasks and the Blurring of Human-Machine Boundaries

In the traditional industrialization and early information management paradigms, the improvement of organizational efficiency is highly dependent on the scientific management principles of the Taylor system, that is, through rigorous process sorting, complex business objectives are disassembled into highly standardized, repeatable, and well-defined subtasks, and assigned to individuals with corresponding professional skills. However, with its powerful pattern recognition and cross-domain knowledge integration capabilities obtained from massive data pre-training, large language models can seamlessly take over the early exploration and foundation construction of a large number of cognitive tasks at a very low marginal cost. For example, in fields that rely heavily on intelligence, such as business consulting, legal due diligence, software code writing, or academic literature review, large language models can instantly retrieve vast information databases, build basic logical frameworks, and generate first-edition professional texts [2]. Employees' focus has been forced to shift from "how to complete specific tasks from zero to one" to "how to more effectively translate complex and ambiguous requirements into structured instructions that can be understood by algorithms". In this process of reconstruction, the physical form and cognitive attributes of the work task have undergone essential changes, and it is no longer a closed, linear execution process, but an open generation process that requires multiple rounds of iteration and trial and error with intelligent algorithms. This deconstruction completely breaks the static definition of task boundaries in traditional job descriptions.

2.2 The Dynamic Evolution of Human-Machine Deep Collaboration Workflow

Along with the deconstruction of task boundaries comes the dynamic evolution of deep human-machine collaborative workflows, which has given birth to a large number of new and implicit work content. Despite their amazing common sense reserves and language generation capabilities, large language models still have obvious limitations in dealing with the extreme long-tail problem of lack of training data, understanding implicit rules in the context of specific corporate cultures, and making complex ethical trade-offs, accompanied by unpredictable "hallucinations". As a result, in the new workflow, employees must learn to find the sweet spot between their unique experiential intuition and the standardized solutions of model generation. This finding of fit itself translates into a new core task that takes up a lot of employees' cognitive resources, namely prompt engineering and system alignment. Employees need to spend a lot of brain energy to accurately anchor the business context, define strict ethical constraints, set a specific tone of the output, and be extremely keen to identify, criticize, and correct logical fallacies or common sense deviations generated by the model. This marks a shift from "manipulating physical objects or directly processing basic data" to "tuning, managing, and controlling high-dimensional intelligent algorithms." In this process, the definition of ownership and contribution of work results has become confusing. To what extent does a strategic plan that perfectly fits the pain points of the market owe the business insights of human employees, and to what extent does it rely on the data fitting power of artificial intelligence?

2.3 Adaptability and Complexity Challenges in Task Reshaping

In the face of the profound evolution of tasks, the task reshaping behavior shown by employees shows a high level of complexity and differentiation. Adaptive employees tend to see large language models as an external extension of their

cognitive abilities, and by actively divesting routine information processing labor that is time-consuming and rapidly decreasing, they devote their energy to core links that require a high degree of creativity, cross-departmental resource scheduling, and strategic coordination. They continue to expand the boundaries of tasks and take on emerging roles such as "AI ethics examiners" and "cross-system logic architects", thus occupying an irreplaceable node position in the human-machine symbiotic network [3]. However, it cannot be ignored that the fragmentation and automation of tasks have also brought a strong sense of deprivation and adaptability to some employees. When professional tasks that once required a lot of effort and time to polish are completed by algorithms in an instant, employees may lose control of the whole picture and become marginal data annotators or passive instruction executors in huge algorithm systems. Therefore, task reshaping in the era of large language models is not only a test of employees' learning ability, but also an extreme challenge to their ability to reconstruct work meaning and regain work autonomy in a highly uncertain environment.

3. Labor Market Skill Premium Reconstruction Under Technological Shock

With the profound evolution of micro job tasks, the skills supply and demand curve and the return on investment of human capital in the macro labor market are undergoing a historic restructuring. Traditional human capital theory exposes obvious explanatory deficits when explaining the differences in salary structure in the era of large language models.

3.1 The Dissolution of Traditional Knowledge Barriers and the Depreciation of Conventional Skills

The classical skill-biased theory of technological change generally believes that the introduction of new technologies will automatically increase the market demand for high-skilled labor, thereby widening the wage gap between high-skilled and low-skilled workers at the macro level. However, as a cognitive automation tool, the impact of large language models presents nonlinear characteristics that are completely different from the previous physical and mechanical automation. Large language models have completely democratized massive general knowledge and basic professional skills through extremely low marginal costs. This makes a large number of junior and intermediate knowledge-based positions that have long relied on information retrieval, standardized text generation, basic logic deduction and standard code writing facing unprecedented depreciation risks. The so-called "hard skills" that used to require job seekers to invest a lot of money to learn and repeatedly hone in long-term workplace practice, such as grammatical proficiency in specific computer languages, the accuracy of multilingual translation, the standard writing paradigm of commercial documents, and the ability to chart and analyze primary financial data, are instantly broken through in the labor market. When any ordinary employee without professional background can invoke a large language model to generate a logical and flawless legal document or business plan draft through simple natural language interaction instructions, the market premium space attached to these traditional professional skills is sharply compressed or even completely reduced to zero.

3.2 The Rise of New Compound Human Capital and the Polarization of Premiums

While traditional conventional skills have been depreciated, the widespread application of large language models has also acted as a catalyst, which has quickly spawned an extreme thirst for a new compound skill matrix in the labor market, thus triggering a violent premium polarization phenomenon within the knowledge worker community. The core competitiveness of this new type of human capital no longer depends on the capacity of information stored in the individual brain or the accuracy of implementing established rules, but is highly focused on high-order cognition and meta-learning capabilities that transcend the boundaries of the current capabilities of machine intelligence [4]. The most significant source of new premium is "human-machine collaborative metacognitive ability". This ability requires individuals to not only be able to gain insight into the underlying probability generation logic and operating mechanism of large language models, but also have extremely strong abstract generalization capabilities, be able to transform vague business requirements into structured and binding prompt frameworks, and keenly deconstruct, criticize and sublimate the preliminary results output by the machine. "Super employees" who can seamlessly weave advanced AI tools into their complex business flows, resulting in exponential leaps in individual productivity, are reaping excess compensation returns in the labor market, far exceeding the industry average.

3.3 The Value of Cross-Border Integration Ability and Emotional Intelligence Is Highlighted

In addition to human-machine collaborative metacognitive capabilities, two other soft skills that have been neglected for a long time have ushered in a comprehensive reassessment of value in the era of large language models. The first is cross-

border integration and complex system thinking ability. When the basic content generation for single-dimensional problems no longer constitutes a business bottleneck, it can jump out of the limitations of a single discipline, deeply couple multi-dimensional knowledge such as economics, psychology, and engineering, accurately define the primary and secondary contradictions in the blurred business environment from the macro system level, and put forward innovative talents with strategic forward-looking and highly feasible solutions, which has become a scarce resource for enterprises to compete for. The second is the unique social emotional intelligence and ethical judgment of human beings. With the increasing automation of a large amount of analytical and logical cognitive labor, human beings are becoming more and more valuable in deep empathy, extreme negotiation skills in the face of complex interpersonal conflicts of interest, subtle emotional perception and empathy in cross-cultural communication, and the ability to adhere to ethical and moral bottom lines in business decisions in gray areas. It can be seen that the skill premium in the era of large language models shows significant polarization and restructuring characteristics, and employees must completely abandon the traditional path dependence and carry out profound skill reshaping to adapt to this cruel intergenerational transformation of human capital [5].

4. Recontextualization of Professional Identity Conflict and Meaning

When external work tasks are ruthlessly deconstructed and the core skills that make a living are repriced by the labor market, the micropsychological crisis lurking in the depths of technological change inevitably surfaces. Knowledge employees, especially those professional groups that have long been highly recognized by society, are experiencing a professional identity conflict that touches the soul.

4.1 Existential Anxiety Caused by the Deconstruction of Expert Authority

Professional identity is by no means just a sociological classification label, it is a long-term psychological construction of employees' in-depth confirmation of self-concept and social existence value based on their specific professional attributes, as well as a sense of belonging to their professional group. For a long time, the rock-solid professional identity of doctors, actuaries, senior software architects, senior text creators and other professionals is deeply rooted in the absolute monopoly of complex knowledge in specific verticals, long and rigorous professional training, and independent and exclusive solutions to difficult non-standard problems. However, the emergence of large language models and the illusion of omniscience and omnipotence directly and crudely deconstruct this expert authority based on knowledge monopoly. When an award-winning senior copywriter who has been in the industry for more than ten years is horrified to find that the creative inspiration he has outlined after days of hard thinking can generate dozens of alternatives that meet or even exceed the top human level in terms of logical rigor and rhetorical beauty in just a few seconds, the shock he suffers in his heart is by no means limited to the fear of skill depreciation at the economic level. This is a profound existential anxiety that hits the bottom line of human dignity.

4.2 The Tearing of Defense Mechanisms and Professional Self-Concepts

This profound identity crisis caused by the crackdown on dimensionality reduction often leads to psychological tears in employees and spontaneously activates a series of complex psychological defense mechanisms. In the face of strong uncertainty, a considerable number of employees may show deliberate disparagement, resistance and alienation from new technologies. They will scrutinize every mistake of large language models in their daily work, overmagnify the machine's incompetence in handling extremely rare long-tail cases, or repeatedly emphasize the inherent flaws of algorithms in emotional resonance and ethical temperature. This defensive resistance is essentially a psychological compensation for the professional's shaky professional dignity and past sunk costs. while others go to the other extreme, they may fall into deep technological nihilism, completely abandoning independent thinking and the ultimate pursuit of excellent work quality in the face of powerful machine intelligence. They willingly degenerate into passive porters and mechanical process auditors of AI output, thus completely losing the subjectivity, critical spirit, and internal drive of continuous innovation in the profession.

4.3 Realize the Sublimation and Repair of Identity through Cognitive Reshaping

In the face of such a deep professional identity conflict, traditional task hierarchy adjustment and skills training are no longer helpful, and employees must reshape the cognitive boundaries that touch the soul under the active guidance of the organization to realize the recontextualization of professional identity and work meaning. Cognitive reshaping requires employees to fundamentally innovate the mental model of the relationship between their own existential value

and artificial intelligence, and complete the leap from zero-sum game thinking that regards AI as a competitor to the concept of symbiotic evolution that regards it as a powerful external brain. Successful reconstruction of meaning is often accompanied by substantive sublimation of the definition of professional identity. Employees need to be brave enough to transform their professional roles from "hands-on people of specific mental work" and "isolated knowledge producers" to "strategic navigators of the grand intelligent ecosystem" and "ultimate gatekeepers defending human core values". For example, in medical clinical practice, modern physicians need to calmly accept the reality that AI surpasses humans in massive pathological image recognition, no longer limiting their own value to simple physiological disease diagnosis, but with the help of data support provided by machines, they can turn into life caregivers who can keenly understand the deep psychological demands of patients, provide all-round emotional comfort, and formulate personalized lifestyle intervention plans. In the field of software engineering, visionary programmers are no longer adhering to mere code writers, but actively transforming into system architecture planners who understand complex business logic, ethical referees who ensure the security of algorithmic data, and project commanders who coordinate human-robot collaboration processes.

5. Conclusion

In summary, the widespread application of large language models has triggered a systematic reconstruction of the workplace from task boundaries, skill premiums to professional identity. This process requires employees to transition from traditional task-performers to intelligent system masters and value gatekeepers to reinvent work dignity in the technological wave.

In the face of this profound change, enterprise management should not be limited to short-term cost reduction and efficiency increase, but need to comprehensively upgrade human resources strategy. In terms of performance and incentive system, we should abandon the traditional assessment based on conventional task output and turn to evaluation standards centered on human-machine synergy efficiency, complex problem-solving ability and cross-border integration and innovation, and reward employees who master new compound skills. In terms of talent training, the focus of training needs to shift from programmatic hard skills to the development of high-level metacognitive and soft skills such as prompt word engineering, algorithmic logic understanding, systematic thinking, and business ethics. More importantly, enterprises must build an organizational culture with a high degree of psychological security, face up to and actively intervene in employees' identity anxiety during the transition period, and guide employees through psychological assistance, career redesign and community mutual assistance to guide employees through the painful period of identity tearing. Only by transforming algorithmic computing power into human-machine co-creation that empowers employees can enterprises establish an indestructible core competitive advantage in the intelligent era.

Funding

No

Conflict of Interests

The authors declare that there is no conflict of interest regarding the publication of this paper.

Reference

[1] Mayer, A. S. (2025). Generation AI: Job Crafting by Entry-Level Professionals in the Age of Generative AI.

[2] Brynjolfsson, E., Li, D., & Raymond, L. R. (2023). Generative AI at Work (NBER Working Paper No. 31161). National Bureau of Economic Research. https://www.nber.org/papers/w31161

[3] Bloom, D. E., Prettner, K., Saadaoui, J., & Veruete, M. (2024). Artificial intelligence and the skill premium (NBER Working Paper No. 32430). National Bureau of Economic Research. https://www.nber.org/papers/w32430

[4] Ledingham, A., Hollins, M., Lyon, M., Gillespie, D., Yunis-Guerra, U., Siviter, J., Duncan, D., & Hauser, O. P. (2025). Beyond automation: Redesigning jobs with LLMs to enhance productivity. arXiv preprint arXiv:2512.05659. https://arxiv.org/pdf/2512.05659

[5] Oh, E., Lee, S., Choi, J. Y., Park, S., & Lim, Y.-k. (2026). "Oops! ChatGPT is temporarily unavailable!": A diary study on knowledge workers' experiences of LLM withdrawal. In Extended Abstracts of the 2026 CHI Conference on Human Factors in Computing Systems (CHI EA '26). https://doi.org/10.1145/3772363.3798382