

Shaping the Future of Work: How Artificial Intelligence Transforms Managerial Roles and Career Pathways

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Abstract: *The adoption of artificial intelligence (AI) is altering productivity and automation in business and redefining the skills needed for managerial positions more than any other technological advancement. Emerging research evaluating the implications of AI in business administration emphasize these changes without recognizing the managerial AI implications on social structures. This paper aims at exploring the impact AI is likely to have on the careers of the professional practitioners in business management. It is anchored in the Resource Based View (RBV) of the firm and the theory of Dynamic Capabilities and Knowledge Management. The paper attempts to analyze the disruptive and enabling impacts of AI on the composition, management, and organization of enterprises. The proposed design is sequential and mixes qualitative and quantitative approaches. The qualitative data is obtained through interviews with Chief Executive Officers (CEOs) and Human Resource (HR) managers. The quantitative data is obtained through a survey. It is analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique. The preliminary findings affirm that AI augments productivity by automating mundane managerial tasks, thus creating strategic avenues of expanding managerial influences. It is also evident that AI enables the emergence of new interdisciplinary managerial careers that combine innovation, technological leadership, and managerial skills. The addition to the paper is the comprehensive structure which consolidates the use of AI and the changing nature of work in business management as well as the implications on firms, employees, and policymakers in formulating strategies to adapt to an AI driven business ecosystem.*

Keywords: *Artificial intelligence, business management, future of work, career transformation, human resource strategy, dynamic capabilities*

1. Introduction

The current century and its associated technologies have been positively impacted due to AI and its complementary Dubey et al. (2020) and complementary technologies catechnologies with regards to business operations, employee training, and even the overall sustainability of the business model. Structures and data driven decision making processes along with predictive and algorithmic abilities are a big part of this phase the world economy is in. The World Economic Forum has documented the heavy degree of modification workplace suffers due to the AI and machine learning technologies, with a claim of creating new job opportunities while eliminating several. The use of AI has expanded from back office functionalities, to the important managerial approaches and strategies in business allocation resource, HR and Marketing analytics.

While operational efficiency and the capacity for innovation are the drivers of AI use in firms, management roles are increasingly abstract and no longer limited to administering. AI systems should be integrated into business decisions and management systems along with automated governance of ethics and corporate digital transformation. the ability to synthesize leadership, creativity, and cross-discipline technological literacy will become a more valued managerial skill.

The current literature examining adoption of AI in organizations tends to focus on the technology's application, or its disruptive impact on the labor market, in a siloed manner, which has led to a growing divide in how integrative studies analyze the impact of AI on the career progression of professionals. This divide can be delineated along the lines of:

- The majority of the literature on AI fails to successfully address the impact of the technology on the career progression of management professionals, as it remains overly focused on the efficiency gains that AI systems provide.
- Contextually, the literature fails to analyze how managerial functions have been transformed within AI powered enterprises, under the guise of a cross industrial managerial role analysis.
- In the sphere of business administration, there is little robust empirical data to suggest a direct link between the adoption of AI systems and the transformation of career pathways.

These issues point to a need for a multifaceted framework that analyzes AI technology as a dominant influence in shaping the professional identity, skills, and career development in managerial positions.

Research Objectives

To address the gaps discussed above, the study has defined the following objectives:

- To investigate the impact of AI systems on the functions, structure, and responsibilities of management in contemporary organizations.
- To analyze disruptive shifts in business management that are driven by the transformation of systems to be AI-enabled.
- This mixed-methods research aims to build and test an integrated AI capabilities to career outcomes framework.

Study Contributions

The work adds to both theory and practice in various ways:

- Theoretical contribution: AI is regarded as a capital asset strategically reconfigured, essentially changing managerial skills, thus ‘filling in’ the RBV and Dynamic Capabilities frameworks.
- Empirical contribution: The literature is enriched with field evidence that responds to the gap between constructive argumentation and practice through a sequential mixed-methods approach.
- Practical contribution: It prepares business leaders, HR professionals, and regulators for the future work environment shaped by AI with practical recommendations.

2. Literature Review

Artificial Intelligence and Business Management

Now, AI is starting focus on a multitude of tasks within business management. Previous works limited AI application to increased productivity and automation of repetitive and mundane activities (Brynjolfsson & McAfee, 2017; Davenport & Ronanki, 2018). More recent studies argue that AI and humans are collaborative partners, thus managers are not assumed to be replaced, but rather complemented by AI systems (Wilson & Daugherty, 2018). This alters managerial work from administrative control to strategic orchestration.

Resource Based View and Dynamic Capabilities

In business, a Resource Based View argues that a competitive edge comes from resources that are valuable, one of a kind, and extremely hard to copy (Barney, 1991). AI poses as a resource, however, the value of AI is contingent to the integration with humans (D Dubey et al., 2020). The Dynamic Capabilities enhances RBV by emphasizing on an ability to detect, capture, and rearrange to fit the ever-changing environment (Teece, 2007). AI capabilities enhances sensing and seizing through predictive insights, however, the reconfiguration is based on managerial decision. Thus, the roles that managers in business adopt are those that involve flexible learning and aligning the technology with business objectives.

Knowledge Management in the Era of Artificial Intelligence

Knowledge Management (KM) theory concerns the creation and usage of organisational knowledge (Nonaka & Takeuchi, 1995). In KM, artificial intelligence captures and automates knowledge and allows knowledge to be shared at a far greater speed than otherwise possible. Some forms of tacit knowledge like ethical reasoning and creativity, however, remain within the domain of human beings (Dwivedi, 2021). This duality indicates that managers need to acquire what has been termed “meta-knowledge” skills: the capacity to evaluate, integrate and govern insights derived from artificial intelligence.

Artificial Intelligence and Human Resource Management

In what has been termed the fourth industrial revolution, artificial intelligence is progressively becoming integrated into the human resource functions, ranging from the use of recruitment prediction systems to customized training systems (Tursunbayeva ., 2018). The rewards of artificial intelligence within human resource management are obvious, but the potential pitfalls of bias and opacity are chief concerns (Binns, 2018). This means the set of skills managers need to have is changing: they need to have a combination of technological skills and ethical reasoning to bring balance between productivity and social justice in workforce management.

AI and the Future of Work

The future of work continues to be a hot topic. On one hand, Frey and Osborne (2017) predicted large-scale automation risks. On the other hand, subsequent research underlined the emergence of new roles (hybrid) (Manyika., 2017). As for management, evidence shows elimination of routine supervising tasks and increase in demand for AI strategists, AI ethicists, and leaders in digital transformation. The relentless pace of change constantly requires reskilling and redefining one’s career path, where hybrid (technical, strategic, and interpersonal) competencies become the focus of advancement.

Research Gap

These three gaps, however, are yet to be filled. To begin with, most research regards AI as a driver of organizational efficiency from a process perspective. Or, in the same breath, regards it as a disruptor of employment. Relatively few studies integrate the domains of managerial career and professional AI usage. Second, AI's impact on career outcomes in management is a conceptual area. Work on it is scarce and the few studies that exist do not strive for high levels of empirical validation. Finally, there is lack of contextual variety as, from much of the evidence, emerging markets remain unexplored and, in contrast, developed economies are the focus. To fill these gaps, a new approach is needed which views AI as both a strategic resource and a professional identity, and skill evolution determinant, underpinned by rigorous empirical work.

3. Conceptual Framework and Hypotheses Development

Conceptual Framework

To build a conceptual framework that integrates AI technology and its impact on changing AI business management careers, this study extends the Resource Based View, Dynamic Capabilities, and Knowledge Management KM theories. Furthermore, this framework captures how artificial intelligence (AI) technology impacts the profound change in the competencies, capabilities, and even the careers of the managers and the organizations in which they work.

In particular, Ai implementation in a business organization affects:

- **Managerial Decision-Making (MDM):** Artificial intelligence systems facilitates MDM AI relies on a set of algorithms to reason with the data, thus making the process of decision making much faster.
- **Organizational Efficiency (OE):** Operational processes can also be made more efficient and effective by the use of AI driven automation and predictive analytics.
- **Human Resource Development (HRD):** AI systems facilitate the conduct of training and skill development on a more personalized basis.
- **Ethical and Strategic Oversight (ESO):** There are also other AI applications that ensure equity and fairness even in the workplace.

All the above factors contribute immensely to the booming of careers transformed (CT) in the business management industry. Transformation is most distinct in the new career hybrid pathways as well as the shifts in the business managerial position.

Hypotheses Development

AI Adoption and Managerial Decision-Making

Davenport and Ronaki (2018) explain that AI enhances an executive's ability to analyze data and improves the quality and the precision of operational and strategic decisions. Therefore:

1. H1: AI adoption has a positive effect on managerial decision-making.
AI Adoption and Organizational Efficiency
AI decreases costs, speeds up workflows, and improves operational precision (Brynjolfsson & McAfee, 2017). This productivity derives from the remodeling of managerial tasks, optimizing tech- driven workflows instead of manual task supervision.
2. H2: AI adoption positively influences organizational efficiency.
AI Adoption and Human Resource Development
AI's ability to streamline learner development by customizing training and targeting skills gaps suggests a new angle towards managerial behavior by expecting more progressive and higher-level competencies from them.
3. H3: AI adoption enhances the development and upskilling of managers.
AI Adoption and Ethical/Strategic Oversight
With AI Systems, managers not only hold more responsibility, but also carry the burden of ethical governance, accountability, and transparency (Binns, 2018). This tends to manifest as a principal dimension concerning the metamorphosis of a career.
4. H4: AI adoption amplifies the expectation of ethical and strategic managerial governance.
Career Transformation in Business Management
Collectively, AI implementation in decision making, workflow automation, and ethical training on AI and HR systems enhances the effectiveness of decision making and the development of human resources, career paths, and skills in managerial positions.
5. H5: Manager AI Decisions, Org Effectiveness, AI HR Ethics, and Training AI Mediate the Impact of AI on Business Management Career Change.

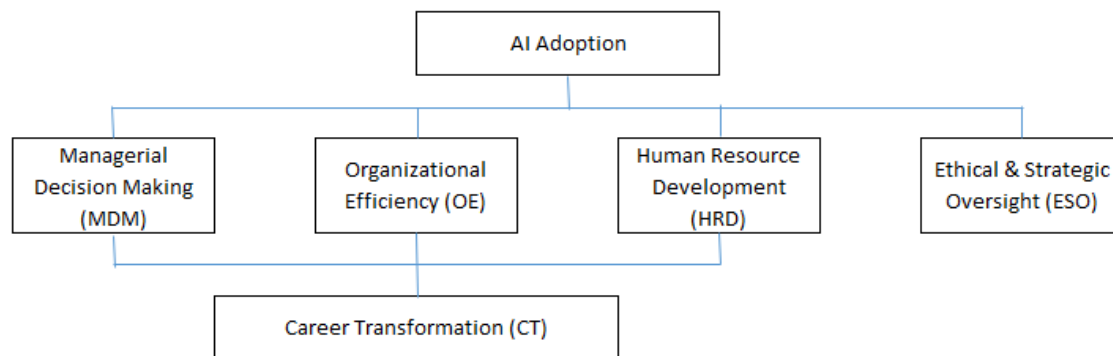


Figure 1. Conceptual Model of AI-Driven Career Transformation in Business Management

4. Research Methodology

This study utilizes a sequential mixed-methods approach to attain the depth and breadth of the impacts of AI on managerial careers. The qualitative phase was explorative in nature and drew on semi-structured interviews with 15 executives, HR personnel, and mid-level managers in the finance, retail, and technology industries. The interviews, which were 45- to 60-minutes long, were subjected to thematic analysis using NVivo. This phase illuminated several emergent managerial AI-related challenges, e.g., decision support systems, human-machine interface collaboration, and the ethics of autonomous technology. This phase also helped in the development of metrics for the subsequent survey.

The quantitative phase aimed to test the proposed framework. A total of 312 completed surveys was collected from business managers across different industries in a cross-sectional study using stratified random sampling at different managerial levels and a variety of organizational settings. This sample is well beyond the thresholds for PLS-SEM, and is therefore, more than adequate for the analysis as posited by Hair, 2019.

With due consideration to the qualitative aspects, the constructs were framed through pre-existing scales. The constructs of AI Adoption were taken from Dubey *et al* (2020), managerial decision-making from Davenport and Ronanki (2018), organizational efficiency from Brynjolfsson and McAfee (2017), human resource development from Tursunbayeva . (2018), and ethical oversight from Binns (2018). Career transformation, derived from the interviews, was treated as a multidimensional construct comprising hybrid skill acquisition, role redefinition, and new career paths. The survey relied on a 5-point Likert Scale with the anchors of, 'strongly disagree (1)' to 'strongly agree (5).' Content validity and reliability of the survey instrument were verified through a pilot test conducted with 30 managers, achieving a Cronbach's alpha value over 0.70.

The two-step process using Smart PLS 4 first evaluates the reliability and validity sufficiency of the measurement model using the Cronbach's alpha, composite reliability, average variance extracted (AVE) and the discriminant validity as per the Fornell-Larcker and HTMT criteria. The second step involves the structural model which is tested using bootstrapping and 5,000 resamples. The assessment includes the importance of path coefficient evaluation process wherein significance levels have been established, the variance explained (R²), and model fit metrics inclusive of the SRMR. This is the process of measurements versus the rigor of the hypothesis, aiming to confirm the measurements and the framework of the concept do indeed overlap.

5. Results

Qualitative Findings

The interviews revealed that AI managerial work transformations happen in four areas. First, in regard to predictive analytics, the strategic plan, and HR forecasting, decision-making has become more data-driven, and managers more appreciative of analytics. Second, automation of repetitive tasks has changed supervision to process innovation and design and orchestration of human-machine collaboration. Third, AI-driven learning platforms facilitate more persistent and individualized reskilling, although a few respondents voiced the concern of automated recommendation systems. Lastly, ethical concerns surfaced across the board, and managers in particular, emphasized the importance of the need for transparency, fairness, and accountability in algorithmic systems. These findings served as the basis for constructing the survey and the metrics of the conceptual framework.

Quantitative Findings

The model's elements had satisfactory reliability and validity of the measurement model demonstrated the model's components. For all constructs, cronbach's alpha and composite reliability exceeded 0.80, while AVE values crossed 0.50, confirming convergent validity. Discriminant validity was established using Fornell–Larcker and HTMT criteria as well.

Table 1. Results of Measurement Model (CFA)

Construct	Cronbach's Alpha	Composite Reliability	AVE
AI Adoption (AIA)	0.83	0.88	0.59
Managerial Decision-Making (MDM)	0.85	0.9	0.62
Organizational Efficiency (OE)	0.82	0.87	0.58
Human Resource Development (HRD)	0.84	0.89	0.61
Ethical & Strategic Oversight (ESO)	0.81	0.86	0.55
Career Transformation (CT)	0.87	0.91	0.64

Structural Model and Hypothesis Testing

Analysis was conducted on the structural model using bootstrapping techniques involving 5,000 samples. The model's coefficient of determination, $R^2(CT)$, was 0.58, showing the model accounts for 58% of the variance in the managerial construct of career transformation. Model fit was adequate, with SRMR = 0.062, the cutoff of 0.08.

Table 2. Results of Structural Model (SEM) and Hypothesis Testing

Hypothesis	Path	β (Coefficient)	t-value	p-value	Supported
H1	AIA $\rightarrow$ MDM	0.42	7.85	<0.001	Yes
H2	AIA $\rightarrow$ OE	0.37	6.92	<0.001	Yes
H3	AIA $\rightarrow$ HRD	0.34	6.11	<0.001	Yes
H4	AIA $\rightarrow$ ESO	0.29	5.47	<0.001	Yes
H5	MDM, OE, HRD, ESO $\rightarrow$ CT (mediated)	0.51	9.22	<0.001	Yes

Hypothesis five, just like the rest, is also confirmed. The impact of AI adoption on decision making, organizational effectiveness, human resource capacity, and ethics supervision is profoundly positive. The above-mentioned constructs also, in summation, mediated the impact of AI adoption on career transformation, which validates the primary focus of the research.

Recap of the Results

The combination of qualitative and quantitative aspects on the case provides strong evidence for the proposed framework. Qualitative aspects for this case provided evidence on the role of AI in transforming the managerial function, while the quantitative data showed the existence of significant interrelationships among the constructs. These outcomes illustrate that with the adoption of

AI, managerial decision making and managerial efficiency is positively enhanced, alongside ethical supervision, which in turn aids in reengineering career pathways in business management

6. Discussion and Implications

Theoretical Contributions

Positioning artificial intelligence (AI) as a transformative catalyst rather than a centerpiece technology, this study adds to the debates in scholarship concerned with business management and the use of technology. Unlike previous studies which tend to focus either on the efficiency increases yielded by automation (Brynjolfsson & McAfee, 2017) or the negative consequences of automation on employment (Frey & Osborne, 2017), this study attempts to embrace both sides of the debate by utilizing the Resource-Based View and Dynamic Capabilities frameworks. The results of the study also confirmed that AI adoption increases decision-making, efficiency, human resource development, and ethical oversight, all of which constitute a substantial portion of the variance in transformation of management careers. The study thus contributes to theory by showing that managerial careers themselves become strategically positioned AI resources that constantly call for skill renewal and seamless integration of changes in accelerator business organizational change.

Managerial Implications

The findings yield critical takeaways for business strata. Primarily, while enhancing strategic agility AI-enabled decision support systems are value added, managers need to foster data literacy to mitigate data blindness. Therefore, training in data-driven leadership is critical. Secondly, AI-driven productivity necessitates managers to divert their attention from supervision to innovation by restructuring workflows for human-machine collaboration. Thirdly, AI-driven learning systems brings to attention the necessity for enduring educational pursuits. Organizations need to formalize systematic, tailored training initiatives and focus on motivating managers to acquire skills to integrate rigorous, divergent, and social thinking. Finally, the ethical and strategic warden responsibilities for the AI systems being employed emphasizes the managers role as the custodian of equity and ethical accountabilities. Ethical AI management will require the technological competency with leadership of the practitioner focused on AI for business value.

Suggested Changes to Existing Policies

The research further outlines changes attempting to streamline policies and regulations. There is a need for governments and sector unions to provide aid for reskilling digital skill gaps and enabling career mobility. There are also subsidies to corporations for investment AI literacy and training to reduce displacement. More so, there is a need for regulators to control the unregulated governance of AI adoption to enhance trust. There is also need to add emerging managerial positions like digital AI project strategists, AI project managers, and AI ethicists to the occupational standard, this will enhance organizational mobility in a market where there is skill deficiency in the emerging positions.

Gaps and Areas for New Research

In spite of such efforts, this study is plagued with a number of gaps. For example, the sample size used for the PLS-SEM is for a certain sector and this narrows the scope for generalizability. Including data across varying sectors and nations AI-driven career changes would provide breather insight. The cross sectional nature also dwells on causation of the shifts and changes, by employing a longitudinal approach, research would indicate the changes to managerial positions which occur over a given time. Other layers of context such as organizational culture, leadership style, and surrounding institution warrants further studies. It is vital that the next studies identify patterns in AI impact not only on managerial careers, but also non managerial and entrepreneurial pursuits to address the gap in comprehending the future of work.

7. Conclusion

Directing its focus on AI and its impact on business managerial occupations, this study attempts to assess how professional managerial practices in the business sector are likely to evolve in the wake of the pervasive introduction of AI in modern industry. In doing so, the paper integrates the Resource-Based View and Dynamic Capabilities, and Knowledge Management perspectives and formulated and empirically tested a framework that, through decision-making, organizational productivity improvement, personnel training, and ethics, attempts to capture the transformational career shift impact of AI on its adoption's impact. The results of the study, based on a sequential mixed-methods approach, all point to the same conclusion that AI adoption goes beyond the automation of tasks to the complete redefinition of managerial functions and the emergence of new, hybrid managerial careers that combine technological, strategic, and ethically based management decision-making.

The contribution of the study is strategic in nature, defining AI as a resource that, together with human skills, potentials, and abilities, dynamically works, and embraces a wide range of theoretical perspectives. The contribution is also practical as the study advances the framework using the PLS-SEM technique and offers straightforward, sustainable practices to managers, executives, and policymakers in anticipation for the emerging AI landscape in business. The study is also not devoid of limitations with its cross-sectional approach and range considered which raises prospects for future studies investigating longitudinal, and possibly cross-country, contextual moderators of organizational culture.

Fundamentally, the argument that AI is a menace to managerial occupations, diminishing and even eliminating the need for managers is misconstrued. The adoption of AI in business is likely to free managers from mundane operational work, allowing for more innovative and strategic-ethical business management.

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