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ARTIFICIAL INTELLIGENCE (AI) INTEGRATION AND WORKFORCE STABILITY IN CEBU CALL CENTERS: IMPLICATIONS FOR STRATEGIC WORKFORCE PLANNING

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ABSTRACT
This study examined the relationship between the extent of Artificial Intelligence (AI) integration and the perceived level of employment stability among employees in selected call centers in Cebu City. Specifically, AI integration was assessed across four dimensions: customer service operations, data processing and analytics, workforce management, and performance monitoring and evaluation. Results showed that AI tools are sometimes utilized across these operational areas, reflecting a moderate level of adoption. Despite common concerns about automation, employees generally reported neutral to positive perceptions of job security, clear opportunities for career advancement, and confidence in long-term employment. Correlation analysis further revealed significant positive relationships between AI integration and all three dimensions of employment stability, suggesting that higher AI adoption contributes to stronger feelings of security, skill development prospects, and future job confidence. These findings indicate that AI, when implemented strategically and ethically, can enhance workforce stability by complementing human roles rather than replacing them, and by providing avenues for continuous learning and professional growth.
KEYWORDS: *Artificial Intelligence, Workforce Stability, Call Centers, Job Security, Career Advancement, Employment Confidence, Automation, Cebu City*

INTRODUCTION

Artificial intelligence (AI) has become one of the most influential forces shaping industries worldwide. It is being applied in manufacturing, healthcare, finance, and service industries to streamline operations, improve decision-making, and reduce costs (Huang & Rust, 2018; Kaplan & Haenlein, 2019). In the Business Process Outsourcing (BPO) sector, particularly in call centers, AI applications such as chatbots, predictive analytics, and robotic process automation are transforming customer interactions and daily workflows. Cebu City, a central BPO hub in the Philippines, presents a unique context for examining how AI integration affects employment stability, considering the sector's central role in the country's economy and in providing livelihood for millions of Filipinos (IBPAP, 2023).

Despite a growing body of literature on the organizational advantages of AI adoption, there remains a gap in understanding its direct implications for frontline employees. Many studies emphasize efficiency and cost reduction but overlook workers' perspectives—specifically their perceptions of job security, opportunities for advancement, and long-term employment confidence (ILO, 2021). This gap is significant in the Philippine setting, where workers are vulnerable to automation but remain integral to sustaining the BPO industry's competitiveness. Addressing this gap is critical to formulating policies and strategies that protect employee welfare while enabling companies to innovate (Masriadi et al., 2023).

This study narrows its focus to the lived experiences of Cebu-based call center agents, providing insights into how AI adoption influences their employment stability. By identifying demographic patterns, types, and extent of AI use, and employee perceptions, the research aims to contribute to strategic workforce planning that balances technological advancement with human welfare. The findings are expected to benefit not only call center agents but also BPO management, policymakers, academic institutions, and communities that rely on the industry. Ultimately, this study seeks to provide evidence-based recommendations that promote both innovation and sustainable employment in Cebu's call centers.

This study aimed to assess the influence of artificial intelligence (AI) adoption on employment stability from the perspective of call center agents in Cebu City, recognizing that the increasing use of AI-driven tools in customer

service operations, data processing and analytics, workforce management, and performance monitoring may reshape workplace roles and affect employees' perceptions of job security. Specifically, the study seeks to determine the respondents' profile in terms of age, gender, civil status, educational attainment, and length of work experience; measure the extent of AI integration across key operational areas; assess perceived employment stability in relation to job security, opportunities for career advancement, and confidence in long-term employment; and explore agents' qualitative experiences regarding AI-related policies, training, and organizational support. Furthermore, the study aims to examine whether a significant relationship exists between the degree of AI integration and the level of employment stability among agents. The findings will serve as the basis for proposing a Strategic Workforce Stability Plan to assist BPO administrators and policymakers in addressing potential employment challenges brought about by AI adoption.

LITERATURE REVIEW

This study is anchored on the following legal bases: RA 11927 (Philippine Digital Workforce Competitiveness Act), RA 11293 (Philippine Innovation Act), RA 11337 (Innovative Startup Act), RA 10173 (Data Privacy Act of 2012), and the Labor Code of the Philippines (Presidential Decree No. 442, as amended). Consequently, it is also guided by several theoretical frameworks, including the Technology Acceptance Model by Davis (1989), Diffusion of Innovations Theory by Rogers (1962), Job Demand-Control-Support Model by Karasek & Theorell (1990), Strategic Human Resource Management (SHRM) Theory, the Resource-Based View (RBV) by Wernerfelt (1984) and Barney (1991), and Socio-Technical Systems Theory.

Structuration Theory by Giddens (1984). This theory emphasizes the duality of structure, explaining how social systems and individual actions continuously shape each other. In the BPO industry, call center agents are not passive recipients of AI-driven changes. Instead, they interpret, resist, or modify new technologies as part of their everyday work practices. The theory highlights workers' agency as they negotiate their roles and career trajectories in an AI-integrated environment.

Technology Acceptance Model by Davis (1989). This model explains how individuals adopt new technologies based on two key factors: perceived usefulness and perceived ease of use. In a call center setting, agents are more likely to adopt AI tools when they find them user-friendly and beneficial to their performance. This model helps clarify why some AI systems are embraced more readily than others.

Unified Theory of Acceptance and Use of Technology by Venkatesh et al. (2003). This theory expands on the Technology Acceptance Model by adding performance expectancy, effort expectancy, social influence, and facilitating conditions. It captures the complex ways in which organizational culture, peer attitudes, and technical support shape call center agents' willingness to integrate AI tools into their work routines.

Theory of Technological Augmentation by Brynjolfsson and McAfee (2014). This perspective suggests that technology can complement rather than replace human labor. In call centers, AI can take over repetitive and low-value tasks, allowing agents to focus on complex problem-solving, customer relationship building, and other higher-order responsibilities. This theory presents an optimistic view of AI adoption.

Disruptive Innovation Theory by Christensen (1997). In contrast, this theory warns that new technologies often begin in niche applications but eventually displace established practices. Applied to call centers, it suggests that while AI may initially support agents, it could later replace entire functions as the technology matures. This raises concerns about agents' long-term employment security.

Transitional Labor Market Theory by Schmid (2008). This theory emphasizes the role of continuous skills development and institutional support in helping workers adapt to technological change. It underscores the importance of training and reskilling programs to help agents transition into evolving job roles as AI adoption increases.

Human Capital Theory by Becker (1964). This theory highlights how investments in education and training enhance worker productivity and employability. In the context of AI adoption, call center agents who develop digital and analytical skills are more likely to remain competitive in a shifting labor market.

Job Demand-Control-Support Model by Karasek (1979). This model explains how job demands, employee autonomy, and workplace support influence stress and performance. AI integration can increase workload or surveillance pressure, potentially heightening stress, but supportive policies and autonomy can mitigate adverse effects.

Self-Determination Theory by Deci and Ryan (1985). This theory posits that motivation is highest when people experience autonomy, competence, and relatedness. AI systems that support skill development and teamwork may boost motivation, while poorly implemented AI systems can undermine it.

Theory of Planned Behavior by Ajzen (1991). This theory suggests that attitudes, subjective norms, and perceived control shape behavior. It explains differences in how agents choose to adapt or resist AI integration.

Expectancy Theory by Vroom (1964). This theory states that employees are motivated when they believe their effort leads to performance and valued rewards. It helps explain how perceptions of career advancement affect agent motivation in an AI-enhanced workplace.

Institutional Theory by DiMaggio and Powell (1983). This theory emphasizes that organizations adopt practices not only for efficiency but also to align with industry norms and competitive pressures. In BPOs, AI adoption is often influenced by institutional expectations and the need to remain competitive.

Together, these theories create a multi-dimensional lens for analyzing how AI adoption influences employment stability. They highlight the interplay of technology, psychology, and organizational structures. This theoretical foundation directly informs the next section, the Theoretical Framework, where the study variables and their interconnections are formally illustrated.

Legal Bases

RA 11927 – Philippine Digital Workforce Competitiveness Act. This law strengthens the country's capacity to compete in the global digital economy by promoting workforce upskilling and digital readiness. It is directly relevant to this study since call center agents must be equipped with new competencies to adapt to AI-driven processes.

RA 11293 – Philippine Innovation Act. This act declares innovation as a vital component of national development. It encourages industries to adopt emerging technologies, including AI, while also mandating support for workers and organizations in the transition. It provides a framework for understanding AI adoption within a national development strategy.

RA 11337 – Innovative Startup Act. This law fosters innovation-driven entrepreneurship and strengthens the Philippine startup ecosystem. Its relevance to this study lies in the fact that startups and innovation-led firms develop many AI tools and systems used in BPOs. The law thus supports the integration of new technologies into the industry.

RA 10173 – Data Privacy Act of 2012. This law protects personal and sensitive information in digital systems. Its relevance to this study is crucial, as AI in call centers often processes large volumes of customer and employee data. Ensuring data privacy safeguards both clients and employees is crucial as companies automate their operations.

Labor Code of the Philippines (PD 442, as amended). The Labor Code ensures workers' rights, job security, and fair labor practices. This study provides the statutory basis for analyzing the stability of call center employment amid technological disruptions. It ensures that technological advancements do not erode fundamental labor rights.

METHODOLOGY

This study employed a quantitative, descriptive-correlational research design to determine how artificial intelligence (AI) integration influences employment stability among call center agents in Cebu City. The descriptive component focused on profiling respondents and identifying the extent of AI use in customer service operations, data analytics, workforce management, and performance monitoring. Meanwhile, the correlational aspect examined whether AI adoption is significantly associated with agents' perceptions of job security, career advancement, and long-term employment prospects. Guided by an Input–Process–Output (IPO) framework, the methodology ensured a structured

and logical flow from identifying key variables, gathering data, and analyzing results to developing a Strategic Workforce Stability Plan. Cebu City served as the study environment due to its status as one of the Philippines' primary BPO centers, where AI-driven tools are increasingly embedded in daily work processes, making it an ideal setting for understanding technology–workforce dynamics.

The respondents consisted of sixty (60) call center agents—equally distributed between males and females—selected purposively to include only those with direct experience using or interacting with AI systems in their workplace. Data were collected using a structured survey questionnaire adapted from the Technology Acceptance Model (TAM) and previous studies on AI and workforce perceptions. The instrument was divided into four major parts: demographic profile, extent of AI integration, perceived employment stability, and respondents' qualitative insights regarding organizational policies and support systems. Items were measured on a five-point Likert scale and underwent expert validation and pilot testing to ensure clarity, relevance, and reliability. The instrument's internal consistency was assessed through Cronbach's Alpha, with coefficients of 0.70 and above considered acceptable for research use.

Data gathering was carried out in three phases: pre-data collection, actual data collection, and post-data collection. During the preparatory stage, permissions from BPO companies were secured, and the instrument was validated and tested for reliability. The actual data collection involved administering the questionnaires in compliance with ethical standards, including informed consent, voluntary participation, and respondent confidentiality. After retrieval, responses were tallied, encoded, and analyzed using both descriptive and inferential statistics. Means, percentages, and standard deviations summarized respondent demographics and perceptions, while Pearson's r tested the significance and direction of the relationship between AI integration and employment stability. Weighted means were interpreted using predetermined Likert scale ranges to classify the extent of AI adoption and levels of perceived job stability. These systematic procedures ensured the methodological rigor necessary to produce reliable results and formulate a practical Strategic Workforce Stability Plan for BPO organizations in Cebu City.

RESULTS AND DISCUSSION

Profile of the Respondents

The profile of the respondents provides a comprehensive demographic overview that contextualizes how variations in age, gender, civil status, educational attainment, and work experience shape their perspectives on AI integration and employment stability.

The *age* distribution in the table shows a predominantly young workforce, with the largest group in the 21–30 age range (41.7%), followed by those aged 31–40 (30%). This concentration of respondents in early and middle adulthood indicates a labor force that is both adaptable and open to technological changes, including AI integration in call-center operations. The presence of younger employees, along with a smaller share of older individuals (only 3.3% aged 51–60), suggests that the industry continues to attract a youthful demographic. This may reflect the fast-paced, skills-focused nature of call-center work, where cognitive flexibility, digital literacy, and adaptability are highly valued.

Gender distribution shows a notable predominance of female respondents, accounting for 70% of the sample. This aligns with trends in the customer service and call-center sectors, which often attract more women due to competencies such as communication skills, empathy, and service-oriented dispositions. The gender imbalance may influence workplace dynamics and the design of workforce stability programs, particularly in areas such as work-life balance, retention strategies, and employee support systems. The male respondents, comprising 30%, represent a significant minority, indicating that while the industry is inclusive, it remains female-majority.

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Table 2
Profile of the Respondents

Age	**Frequency**	**Percent**
18-20	8	13.30
21-30	25	41.70
31-40	18	30.00
41-50	7	11.70
51-60	2	3.3.00
Total	**60**	**100.00**
Gender	**Frequency**	**Percent**
Female	42	70.00
Male	18	30.00
Total	**60**	**100.00**
Civil Status	**Frequency**	**Percent**
Married	14	23.30
Single	46	76.70
Total	**60**	**100.00**
Educational Attainment	**Frequency**	**Percent**
College Graduate	36	60.00
College Level	14	23.30
High School Graduate	7	11.70
Postgraduate	2	3.30
Vocational/Certificate	1	1.70
Total	**60**	**100.00**
Length of Work Experience	**Frequency**	**Percent**
1–3 years	16	26.70
4–6 years	13	21.70
7–10 years	9	15.00
Less than 1 year	10	16.70
More than 10 years	12	20.00
Total	**60**	**100.00**

Civil status is another important dimension of the respondents' profile. A substantial majority (76.7%) are single, while only 23.3% are married. This demographic pattern suggests a workforce with fewer family-related constraints, which can influence work scheduling flexibility, willingness to take on shifting schedules, and adaptability to AI-driven workflow changes. Single employees may be more mobile and open to role transitions. In contrast, married employees might value job stability and predictable work arrangements more strongly, factors that are crucial to consider in strategic workforce planning.

Educational attainment data indicate that the workforce is generally well educated, with 60% being college graduates and an additional 23.3% having completed some college. This high level of educational attainment signals a talent pool capable of understanding and working alongside AI-enhanced systems. Meanwhile, smaller proportions completed high school (11.7%), vocational training (1.7%), or postgraduate education (3.3%). The dominance of college-educated respondents implies that upskilling programs, AI literacy initiatives, and technological adaptation strategies can be implemented at a relatively advanced level, facilitating smoother AI integration in call-center workflows.

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Finally, the *length of work experience* distribution reveals a diversified workforce in terms of tenure. Respondents are relatively evenly spread across categories: 26.7% have 1–3 years of experience, 21.7% have 4–6 years, 20% have more than 10 years, and 16.7% have less than 1 year. This mix of new, mid-career, and long-tenured employees suggests a dynamic environment where institutional knowledge coexists with fresh perspectives. Importantly, the presence of 20% of workers with over a decade of experience signifies a core group likely to hold deep operational knowledge, critical for mentoring and stabilizing the workforce amid AI-driven changes. Conversely, newer employees may be quicker to adopt automation tools but may also require more structured onboarding to ensure retention.

Overall, the respondent profile reflects a relatively young, highly educated, and predominantly female workforce with diverse levels of experience, which has important implications for AI integration and workforce stability. Strategic workforce planning in this context must balance technological innovation with employee support systems, skill development initiatives, and retention strategies tailored to Cebu's unique demographic composition in the call-center industry.

EXTENT OF ARTIFICIAL INTELLIGENCE ADOPTION IN THE BPO INDUSTRY

The extent of artificial intelligence adoption in the BPO industry reflects how deeply AI-driven tools and systems are embedded in operational processes, influencing daily workflows and shaping employee experiences across key functional areas.

Use of AI in Customer Service Operations

The use of AI in customer service operations highlights how automation and intelligent systems support or augment frontline interactions, influencing efficiency, responsiveness, and overall service delivery in the BPO setting.

Table 2
Extent of Artificial Intelligence Adoption in the BPO Industry in terms of *Use of AI in Customer Service Operations*

Indicator	Mean	Std. Deviation	Interpretation
1. AI-powered chatbots are used to handle basic customer inquiries.	3.40	1.392	Sometimes
2. Voice assistants are deployed for call routing or automated answering.	3.37	1.507	Sometimes
3. Customers are often assisted without human involvement.	2.92	1.510	Sometimes
4. AI tools are integrated into live customer support systems.	3.23	1.477	Sometimes
AI in Customer Service Operations	**3.23**	**1.260**	**Sometimes**

The table on *AI in Customer Service* provides a clear picture of how AI-enabled systems are currently being used in customer service operations. Overall, the composite mean of 3.23 (SD = 1.260) indicates that AI is sometimes integrated into customer service processes. This suggests that while AI adoption is evident, it has not yet reached a level of consistent or widespread use. Instead, the findings reflect an environment where AI tools complement human agents rather than fully automate service interactions.

The first indicator, "*AI-powered chatbots are used to handle basic customer inquiries,*" has a mean of 3.40 (SD = 1.392), indicating "sometimes." This is the highest average in the set, showing that chatbots are the most established AI tool in customer service. Chatbots are generally designed to handle predictable, repetitive questions, and their moderate use suggests that organizations are using them to improve response times and reduce the workload of human agents. However, the high standard deviation reveals considerable variability in adoption levels among respondents, indicating uneven implementation across departments or companies (Andrade & Tumelero, 2022).

Similarly, the second item, "*Voice assistants are deployed for call routing or automated answering*," has an average score of 3.37 (SD = 1.507), indicating that this is sometimes the case. Using voice assistants for call routing represents an important step toward automation, helping to streamline customer interaction processes. The high standard

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deviation reveals significant differences in exposure or usage frequency among employees, which may reflect varying levels of technological maturity across call centers. This inconsistency highlights the need for standardized workforce training and clearer integration strategies to maximize the benefits of these tools (Inavolu, 2024).

The indicator "*Customers are often assisted without human involvement*" has a mean of 2.92 (SD = 1.510), the lowest in the table, but is still interpreted as "sometimes." This suggests that customer interactions with fully automated systems occur less frequently than with hybrid human-AI approaches. The relatively low mean may reflect operational hesitations toward full automation, concerns about service quality, or customer preference for human agents in complex or sensitive interactions. The high standard deviation again signals diverse experiences among respondents, possibly reflecting differing policies across call centers (Anozie et al., 2024).

The fourth indicator, "*AI tools are integrated into live customer support systems,*" records a mean of 3.23 (SD = 1.477), also interpreted as sometimes. This indicates that hybrid service models are relatively standard, with AI tools supporting human agents through suggestions, automated data retrieval, and workflow optimization. This reinforces that AI currently functions more as an augmentation tool than a replacement for human labor. The moderate mean and high variability highlight the uneven pace of AI adoption across service environments (Spring, 2022).

Taken together, the overall mean of 3.23 indicates a moderate but meaningful presence of AI across customer service operations. While AI tools are indeed being used, the high standard deviations across all indicators suggest inconsistent implementation, highlighting a transitional phase in which organizations are experimenting with AI without fully integrating it into standard operations. These findings have important implications for workforce stability: organizations will need targeted training, clear communication strategies, and structured change management approaches to ensure that employees can adapt smoothly as AI becomes more central to customer service delivery (Wang et al., 2023).

Use of AI in Data Processing and Analytics

The use of AI in data processing and analytics reflects how intelligent systems enhance real-time information handling, predictive insights, and decision support within BPO operations.

The results under *AI in Data Processing and Analytics* illustrate how call centers are adopting AI-driven tools to support data handling, real-time decision-making, and analytical functions. The overall composite mean of 3.23 (SD = 1.315), interpreted as sometimes, suggests that while AI plays an active role in analytics, its integration remains partial rather than fully institutionalized. This level of adoption indicates that call centers are in a transitional phase, moving steadily toward AI-assisted operations while still relying heavily on traditional, manual processes.

Table 3
Extent of Artificial Intelligence Adoption in the BPO Industry in terms of *Use of AI in Data Processing and Analytics*

Indicator	Mean	Std. Deviation	Interpretation
5. AI systems are used to analyze customer behavior and preferences.	2.88	1.497	Sometimes
6. Real-time data analysis tools assist agents during calls.	3.43	1.430	Often
7. Predictive analytics are used to anticipate customer issues.	3.30	1.510	Sometimes
8. Data-driven AI tools are used to generate performance reports.	3.28	1.439	Sometimes
AI in Data Processing and Analytics	**3.23**	**1.315**	**Sometimes**

The indicator "*AI systems are used to analyze customer behavior and preferences*" has a mean of 2.88 (SD = 1.497), which falls under the sometimes category. This suggests that although AI tools capable of customer segmentation and behavior analysis are available, their usage is not yet consistent or widespread. This relatively lower mean may reflect

organizational hesitancy, limited access to advanced analytics tools, or insufficient training among agents in interpreting AI-generated insights. The high standard deviation highlights significant variability among respondents, suggesting that some departments or companies use these tools actively, while others use them rarely (Nesterov, 2024).

In contrast, the indicator "*Real-time data analysis tools assist agents during calls*" shows the highest mean at 3.43 (SD = 1.430), indicating that this is often the case. This result indicates a more substantial reliance on AI tools that provide real-time prompts, call scripts, sentiment analysis, or customer history summaries. Such tools help agents make faster, more accurate decisions during live interactions. The "often" interpretation suggests that this function is one of the more established uses of AI in call center analytics, likely due to its direct impact on efficiency, call handling time, and customer satisfaction. The relatively high standard deviation still indicates varying levels of implementation across centers (Eboigbe, 2023).

The statement "*Predictive analytics are used to anticipate customer issues*" yields a mean of 3.30 (SD = 1.510), interpreted as "*sometimes*." This indicates that predictive tools, such as models for forecasting call volume, identifying potential churn, and predicting complaint escalation, are available but not consistently used. The high variability suggests that while some call centers invest heavily in predictive capabilities, others may lack the infrastructure or technical expertise to do so. Predictive analytics represent a more advanced form of AI use, and the moderate mean suggests organizations are still building capacity in this area (Ravichandran et al., 2022).

Similarly, the indicator "*Data-driven AI tools are used to generate performance reports*" shows a mean of 3.28 (SD = 1.439), categorized as sometimes. This reveals that performance reporting, a time-consuming administrative task, is increasingly being automated through AI. These tools may generate dashboards, summarize agent productivity, or track customer satisfaction metrics. The "*sometimes*" interpretation likely reflects variation in the availability of such automated reporting systems, with some call centers leveraging them regularly while others continue to rely on manual reporting practices (Himeur et al., 2023).

Overall, the composite score of 3.23 suggests a moderate but growing adoption of AI for data processing and analytics. The findings demonstrate that while real-time analytics tools are used frequently, more advanced applications, such as customer behavior analysis and predictive modeling, have yet to be fully integrated. These patterns underscore the need for enhanced AI literacy, targeted investments in analytics infrastructure, and more substantial alignment between human expertise and AI-driven insights to strengthen organizational decision-making and workforce performance.

Use of AI in Workforce Management

The use of AI in workforce management demonstrates how automated systems optimize scheduling, staffing, and operational efficiency to support organizational productivity in the BPO industry.

Table 4
Extent of Artificial Intelligence Adoption in the BPO Industry in terms of *Use of AI in Workforce Management*

Indicator	Mean	Std. Deviation	Interpretation
9. AI is used for employee scheduling and shift planning.	2.65	1.424	Sometimes
10. Automated tools monitor agent adherence to schedules.	3.27	1.448	Sometimes
11. AI helps forecast staffing requirements.	3.07	1.425	Sometimes
12. Workload allocation is optimized using AI.	2.88	1.474	Sometimes
AI in Workforce Management	**2.97**	**1.322**	**Sometimes**

The results for *AI in Workforce Management* show a developing, yet still moderate, level of AI adoption for managing human resources and operational workflows in call centers. The overall mean of 2.97 (SD = 1.322), interpreted as 'sometimes,' suggests that AI is used intermittently rather than consistently in workforce-related functions. This indicates a transitional stage where traditional HR and operations processes still dominate, and AI serves only as supplementary support rather than a fully integrated system. The moderate usage reflects organizational caution, varying technological maturity, and differing readiness levels across call centers.

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The first indicator, "*AI is used for employee scheduling and shift planning*," has the lowest mean at 2.65 (SD = 1.424), indicating it is sometimes used. This suggests that automated scheduling systems have not yet become standard practice. Many call centers may still rely on manual or semi-automated scheduling methods, potentially due to concerns about fairness, accuracy, or system complexity. The relatively high standard deviation indicates substantial variability in the use of AI for scheduling, suggesting that while some companies have adopted sophisticated scheduling tools, others still use traditional workforce planning approaches. This inconsistency may affect scheduling efficiency, employee satisfaction, and the organization's ability to respond to fluctuating call volumes (Saeed et al., 2025).

The second item, "*Automated tools monitor agent adherence to schedules,*" shows a mean of 3.27 (SD = 1.448), still within the sometimes interpretation but representing the highest mean in this category. This suggests that monitoring tools, such as AI-enhanced adherence trackers, are more commonly used than other workforce management applications. These tools typically help supervisors track login times, break adherence, and call handling consistency. The relatively higher adoption may be attributed to the direct impact of adherence monitoring on operational outcomes such as service level, workload distribution, and productivity. Nonetheless, the high variability again underscores that the level of automation differs significantly across centers (Yanamala, 2024).

The third indicator, "*AI helps forecast staffing requirements,*" records a mean of 3.07 (SD = 1.425), indicating "sometimes." This reflects moderate use of AI-driven forecasting models, which are crucial in predicting call volumes, workload surges, and resource needs. While some call centers evidently employ forecasting tools to optimize staffing, others may still rely on historical data trends or managerial intuition. The moderate mean suggests that organizations recognize the value of AI forecasting but may lack the infrastructure, training, or data quality needed for full implementation (Venugopal et al., 2024).

Similarly, the indicator, "*Workload allocation is optimized using AI*," has a mean of 2.88 (SD = 1.474), indicating that it sometimes occurs. This points to partial adoption of AI systems that distribute tasks based on agent performance, availability, or skill specialization. Optimizing workload allocation is critical to reducing burnout, improving efficiency, and ensuring customer satisfaction. The variability in responses reflects inconsistent implementation, suggesting that some call centers have begun experimenting with these tools while others continue to use traditional methods of task distribution.

Overall, the composite mean of 2.97 illustrates that AI integration in workforce management remains emerging rather than mature. While some automated monitoring and forecasting tools are available, many workforce management activities still rely on manual decision-making. This moderate adoption points to significant opportunities to improve workforce stability, reduce operational inefficiencies, and enhance the employee experience by using AI-driven tools more consistently and strategically.

Use of AI in Performance Monitoring and Evaluation

The use of AI in performance monitoring and evaluation demonstrates how automated analytics and intelligent feedback systems assess employee efficiency, identify areas for improvement, and support data-driven performance management in the BPO sector.

Table 5
Extent of Artificial Intelligence Adoption in the BPO Industry in terms of *Use of AI in Performance Monitoring and Evaluation*

Indicator	Mean	Std. Deviation	Interpretation
13.AI tools evaluate agent performance metrics (e.g., call quality, handling time).	3.07	1.550	Sometimes
14. Feedback or coaching suggestions are generated automatically.	2.63	1.530	Sometimes
15. Agent evaluations rely partly on AI-generated analytics.	2.63	1.461	Sometimes
16. AI is used to identify top-performing or at-risk agents.	2.83	1.553	Sometimes
AI in Performance Monitoring and Evaluation	**2.80**	**1.388**	**Sometimes**

The results under *AI in Performance Monitoring and Evaluation* indicate a moderate level of AI integration in assessing, supporting, and tracking employee performance in call centers. The overall mean of 2.80 (SD = 1.388), interpreted as sometimes, suggests that AI is present but not consistently used in performance management systems. This suggests that call centers may still rely heavily on human supervisors for evaluations, coaching, and performance analytics, with AI serving primarily as a supplementary tool rather than a primary driver of evaluation processes.

The first indicator, "*AI tools evaluate agent performance metrics (e.g., call quality, handling time),*" has a mean of 3.07 (SD = 1.550), indicating "*sometimes*." This demonstrates that AI-assisted performance monitoring is used sporadically, likely in contexts where automated scoring or speech analytics tools are available. The high standard deviation indicates considerable variation in adoption levels, implying that while some call centers utilize AI consistently for performance metrics, others still rely entirely on manual assessment. This inconsistency may stem from differences in technological investment, data readiness, or comfort levels with automated evaluation (Varma et al., 2024).

The second indicator, "*Feedback or coaching suggestions are generated automatically,*" records a mean of 2.63 (SD = 1.530), indicating "*sometimes*" but on the lower end of the scale. This suggests that AI-supported coaching systems, such as tools that recommend improvement strategies or generate post-call feedback, remain underutilized. The relatively low mean may reflect supervisors' preference for personalized human coaching, concerns about the accuracy of automated recommendations, or limited exposure to advanced AI training platforms. The substantial variability across responses again highlights uneven access to these tools (Nyathani, 2023).

Similarly, the statement, "*Agent evaluations rely partly on AI-generated analytics,*" also has a mean of 2.63 (SD = 1.461), reinforcing the limited and inconsistent integration of AI-generated insights into formal evaluation processes. While AI has the potential to provide objective and data-driven assessments, organizations may still be adjusting to balancing AI input with human judgment. The moderate variability indicates differing levels of trust in AI-generated analytics across workplaces, shaping how frequently such tools are incorporated into decision-making (Chukwuka & Dibie, 2024).

The final indicator, "*AI is used to identify top-performing or at-risk agents,*" has a mean of 2.83 (SD = 1.553), interpreted as "*sometimes*." This suggests that AI is occasionally used for talent identification and early detection of performance issues. Tools capable of identifying performance patterns, predicting attrition risk, or highlighting training needs are still not consistently implemented. The high standard deviation reflects wide disparities in usage, indicating that some centers may actively use these tools as part of talent management strategies. In contrast, others lack the systems needed to support such analytics.

Overall, the composite mean of 2.80 reveals that AI adoption in performance monitoring and evaluation is still in its early stages. While automated metrics and analytic tools are present in some environments, they are not yet deeply integrated into evaluation systems. This moderate usage signals important implications for workforce development: call centers may benefit from expanding AI capabilities to enhance objectivity, reduce supervisory workload, and support more data-driven coaching. However, this must be complemented with clear guidelines, proper training, and safeguards to ensure fair, transparent, and ethical use of AI in performance management.

RESPONDENTS' PERCEIVED EMPLOYMENT STABILITY

The respondents' perceived employment stability reflects their confidence, security, and career outlook amid the growing presence of AI technologies in the BPO workplace.

Job Security

Job security reflects the respondents' sense of workplace stability and confidence in retaining their roles despite the increasing integration of AI technologies in the BPO industry.

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Table 6
Respondents' Perceived Employment Stability in terms of *Job Security*

Indicator	Mean	Std. Deviation	Interpretation
17. I feel secure in my current job position despite the integration of AI.	3.37	1.551	Neutral
18. My company has not reduced manpower due to AI tools.	3.20	1.582	Neutral
19. I believe my role will remain relevant in the next 3–5 years.	3.58	1.430	Agree
Job Security	**3.38**	**1.382**	**Neutral**

The results in *Job Security* provide important insights into how employees perceive the impact of AI integration on their professional stability. The overall composite mean of 3.38 (SD = 1.382), interpreted as Neutral, suggests that respondents neither strongly feel threatened nor fully assured about their job security. This neutral stance reflects a workforce that is aware of ongoing technological changes but has not yet experienced direct or significant negative consequences from AI adoption. The moderate standard deviation indicates variability in perceptions, likely influenced by differences in role types, tenure, exposure to AI tools, and organizational communication strategies.

The statement "*I feel secure in my current job position despite the integration of AI*" has a mean of 3.37 (SD = 1.551), indicating a Neutral response. Employees do not explicitly feel unsafe, but they also do not express strong confidence in their job stability. The high variability suggests that some respondents feel significantly more secure than others, likely depending on their degree of interaction with AI tools. For example, agents whose tasks are augmented rather than automated by AI may feel more secure than those working in highly automatable areas. This finding underscores the importance of transparent communication and structured transition plans to minimize perceived threats associated with automation (Alananzeh et al., 2023).

The second indicator, "*My company has not reduced manpower due to AI tools,*" shows a mean of 3.20 (SD = 1.582), also interpreted as Neutral. This reflects employees' uncertainty about whether AI implementation has led to workforce resizing. The high standard deviation indicates that experiences vary widely among respondents; some may have witnessed staff reductions, while others may not have. The neutral rating suggests that although employees may not have directly experienced layoffs or redundancy due to AI, they remain cautious about the possibility. This uncertainty may affect organizational trust, workplace morale, and employees' long-term career planning (Aman-Ullah et al., 2022).

Interestingly, the statement "*I believe my role will remain relevant in the next 3–5 years*" has the highest mean of 3.58 (SD = 1.430), indicating agreement. This indicates a more optimistic outlook on the medium-term relevance of jobs despite AI advancements. Employees appear confident that their roles will continue to require human skills such as empathy, communication, judgment, and problem-solving, competencies that AI tools cannot fully replicate. This sense of role relevance may be strengthened by the hybrid nature of current AI adoption, in which AI primarily serves as an assistive technology rather than a replacement. The moderately high variability suggests that while many employees feel optimistic, some still harbor concerns about future displacement (Peltokorpi & Allen, 2024).

Taken collectively, the composite mean of 3.38 suggests a balanced but cautious view of job security. Employees do not feel immediately threatened, yet uncertainty remains about the long-term impacts of AI integration. This neutrality indicates an important opportunity for organizations to strengthen psychological safety by providing clear communication about AI strategies, offering reskilling and upskilling programs, and demonstrating commitment to maintaining human roles alongside technological tools. Strengthening these supports can enhance workforce stability and ensure that AI integration is perceived not as a threat but as a pathway to improved job performance and career sustainability.

Opportunities for Career Advancement
Opportunities for career advancement capture respondents' perceptions of skill development, role advancement, and upward mobility amid the evolving demands arising from AI integration in the BPO workplace.

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Table 7
Respondents' Perceived Employment Stability in terms of *Opportunities for Career Advancement*

Indicator	Mean	Std. Deviation	Interpretation
20. AI provides opportunities to learn new skills or take on higher roles.	3.42	1.221	Agree
21. I am encouraged to upgrade my skills to align with AI-related tasks.	3.48	1.347	Agree
22. I see potential career growth in my company despite increasing automation.	3.58	1.344	Agree
Career Advancement Opportunities	**3.51**	**1.172**	**Agree**

The results for *Career Advancement Opportunities* reveal a generally positive perception among respondents regarding the professional benefits associated with AI integration. The overall composite mean of 3.51 (SD = 1.172), interpreted as Agree, indicates that employees believe AI creates avenues for skill development, role expansion, and future career growth. This optimistic view contrasts with the more neutral perceptions of job security, suggesting that while employees may be uncertain about long-term stability, they also recognize AI as a driver of new professional opportunities.

The statement, "*AI provides opportunities to learn new skills or take on higher roles,*" has a mean of 3.42 (SD = 1.221), indicating agreement. This demonstrates that employees perceive AI as an enabler of continuous learning and upward mobility. The relatively low standard deviation, compared to other constructs, indicates greater consistency across respondents, reflecting a shared awareness that AI requires human workers to acquire upgraded competencies, such as data literacy, technology navigation, analytical reasoning, and system troubleshooting. These learning opportunities are often seen as stepping-stones to supervisory, specialist, or hybrid tech-support roles (Abu-Tineh et al., 2023).

The second indicator, "*I am encouraged to upgrade my skills to align with AI-related tasks,*" records a mean of 3.48 (SD = 1.347), also interpreted as Agree. This suggests that organizations are actively encouraging employees to adapt to technological shifts through training programs, workshops, or self-paced learning modules. The moderate standard deviation indicates some variability, possibly reflecting differences in organizational policies and access to training resources. Nonetheless, the consensus suggests that employees feel supported, or at least motivated, to remain competitive and relevant in an increasingly AI-augmented work environment (Khalid & Zahrani, 2024).

The third statement, "*I see potential career growth in my company despite increasing automation*," has the highest mean at 3.58 (SD = 1.344), again interpreted as Agree. This indicates a strong belief among employees that automation does not diminish career prospects; instead, it may create new opportunities. Many employees may perceive AI as reshaping job roles rather than eliminating them, leading to more specialized positions, cross-functional responsibilities, and leadership roles that require AI oversight, interpretation, or decision-making. The moderate variability suggests that while some employees are highly confident about career advancement, others remain cautiously optimistic (Tee, 2022).

Overall, the composite mean of 3.51 indicates a forward-looking mindset among employees regarding AI's role in shaping career trajectories. This positive outlook has important implications for strategic workforce planning: organizations can leverage this openness by expanding reskilling initiatives, creating AI-related career pathways, and introducing competency-based promotion systems. By aligning employee development with technological transformation, companies can strengthen retention, promote internal mobility, and cultivate a workforce that sees AI not as a threat but as a catalyst for long-term professional growth.

Confidence in Long-term Employment

Confidence in long-term employment reflects the respondents' outlook on the sustainability of their roles and their continued relevance within the organization as AI-driven technologies become more prominent in BPO operations.

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Table 7
Respondents' Perceived Employment Stability in terms of *Confidence in Long-term Employment*

Indicator	Mean	Std. Deviation	Interpretation
23.I am confident that I will still have a job in this company in the future.	3.77	1.370	Agree
24. AI implementation has not negatively affected my employment outlook.	3.45	1.443	Agree
25. I believe that my company values human agents even with AI systems in place.	3.68	1.334	Agree
Confidence in Long-Term Employment	**3.63**	**1.268**	**Agree**

The results for *Confidence in Long-Term Employment* reflect a notably positive perception among respondents regarding their future within the company, despite the increasing integration of AI technologies. The overall composite mean of 3.63 (SD = 1.268), interpreted as Agree, indicates that employees generally feel secure about their long-term employment prospects. This suggests that AI adoption, rather than being perceived as a threat, is viewed as part of an organizational transition that still values and retains human contributions. The relatively moderate standard deviation also reflects a more consistent belief across respondents, signaling broad confidence about job continuity.

The first indicator, "*I am confident that I will still have a job in this company in the future*", has the highest mean of 3.77 (SD = 1.370), indicating Agree. This strong agreement highlights a prevailing sense of stability among employees. They appear to believe that, despite technological changes, the demand for human labor in customer service contexts remains essential. Such confidence may be rooted in their experiences with hybrid AI, human systems, where AI primarily augments rather than replaces human tasks. The moderate variability suggests that while most individuals feel optimistic, a smaller group remains uncertain, likely shaped by role type or personal exposure to AI automation (Rostamkalaei et al., 2022).

The second item, "*AI implementation has not negatively affected my employment outlook*", records a mean of 3.45 (SD = 1.443), also interpreted as Agree. This indicates that employees do not perceive AI as having harmed their career trajectory or job security thus far. It implies that AI-driven changes have been introduced in ways that do not directly displace employees—or that organizations have effectively communicated how AI will function within daily operations. The high standard deviation, however, suggests that perceptions vary; some individuals may have experienced structural changes that introduced uncertainty, while others view AI as neutral or beneficial to their work environment (Devine & Valgarðsson, 2024).

The statement, "*I believe that my company values human agents even with AI systems in place*," has a mean of 3.68 (SD = 1.334), indicating an Agree response. This outcome reveals a strong perception that human roles remain important despite automation. Employees appear confident that qualities such as empathy, judgment, communication, and problem-solving skills, which AI cannot fully replicate, remain valued by the organization. Such perceptions are crucial for workforce morale, suggesting that companies have either communicated or demonstrated that AI is intended to support, not substitute, human labor. The moderate variability again indicates some distinction in experience, possibly influenced by differences in management communication or role type (Pun et al., 2024).

Overall, the composite score of 3.63 indicates high confidence in long-term employment, even in an environment that adopts AI technologies. This perception reflects a workforce that does not view AI as a direct threat but rather as a tool that can coexist with human skills. For organizational leadership, this presents an opportunity to reinforce trust further by strengthening communication about AI strategies, investing in employee development, and ensuring transparent workforce planning (Secretaria, et.,al, 2025). Maintaining this level of confidence is vital in sustaining engagement, reducing turnover intentions, and fostering a workforce that embraces AI-driven innovation while remaining assured of their long-term role within the company.

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Relationship between the Extent of AI Integration and the Perceived Level of Employment Stability

The relationship between the extent of AI integration and the perceived level of employment stability examines whether increasing technological adoption within BPO operations significantly influences how secure agents feel about their current roles and future career prospects.

Table 8

Relationship between the *Extent of AI Integration* and the *Perceived Level of Employment Stability*

	Job Security		Career Advancement Opportunities		Confidence in Long-Term Employment	
	r-value	p-value	r-value	p-value	r-value	p-value
AI in Customer Service Operations	.548**	0.000	.455**	0.000	.355**	0.005
AI in Data Processing and Analytics	.566**	0.000	.554**	0.000	.400**	0.002
AI in Workforce Management	.544**	0.000	.518**	0.000	.415**	0.001
AI in Performance Monitoring and Evaluation	.542**	0.000	.582**	0.000	.403**	0.001

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficients reveal consistently positive and statistically significant relationships ($p < .01$) between all dimensions of AI integration and the three indicators of employment stability, job security, career advancement opportunities, and confidence in long-term employment. This suggests that, in Cebu call centers, higher levels of AI adoption are associated with increased perceptions of stability rather than threats to employment.

This dimension shows moderate positive correlations with job security ($r = .548$), career advancement opportunities ($r = .455$), and long-term employment confidence ($r = .355$). These results indicate that employees generally perceive AI-enabled customer service tools, such as chatbots, voice assistants, and automated routing, as enhancing their work rather than replacing them. The strongest association is with job security, implying that employees may see AI as supporting efficiency and reducing workload pressure (Presbitero & Teng-Calleja, 2023).

This category yields some of the strongest correlations across the table, especially with job security ($r = .566$) and career advancement ($r = .554$). Employees who interact with AI-driven analytics (e.g., real-time dashboards, automated reporting, sentiment analysis) tend to feel greater stability in their roles. This may be due to the perception that AI tools create new skill requirements, giving employees opportunities to upskill and remain relevant (Burhan, 2025).

AI-powered scheduling, forecasting, and agent allocation systems also show significant moderate correlations with job security ($r = .544$), career advancement ($r = .518$), and long-term confidence ($r = .415$). These findings suggest that optimized shift scheduling and workload balancing reduce burnout and improve perceptions of fairness, thereby contributing to a stable workforce (Kim et al., 2024).

This dimension shows the strongest link with career advancement opportunities ($r = .582$). Employees appear confident that AI-supported performance evaluation systems, often viewed as more objective and consistent, improve their chances for fair recognition and promotion. Job security ($r = .542$) and long-term confidence ($r = .403$) also show notable positive correlations. This indicates that transparent, AI-assisted performance monitoring may reduce anxiety about job loss or biased evaluation.

CONCLUSION

The findings reveal that the extent of AI integration in Cebu call centers is positively and significantly associated with employees' perceptions of job security, career advancement opportunities, and confidence in long-term employment, indicating that AI is viewed not as a threat but as a driver of stability and professional growth. Across all dimensions—customer service operations, data processing and analytics, workforce management, and performance monitoring—higher AI adoption corresponds to stronger feelings of stability, suggesting that employees recognize the value of AI

in enhancing efficiency, reducing workload burdens, ensuring fair performance evaluation, and opening new avenues for skills development. Overall, the results underscore that strategic AI implementation, when aligned with supportive organizational practices, can strengthen workforce stability by empowering employees, fostering adaptability, and reinforcing confidence in their long-term role within the industry.

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