

MANAGEMENT AND TECHNOLOGY SESSION

MICROSOFT COPILOT AS A TRANSFORMATIVE TOOL IN BUSINESS: OPPORTUNITIES AND CHALLENGES

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Abstract:

Artificial intelligence (AI) is progressing rapidly while impacting various industries, changing how businesses operate, and how employees perform tasks. Microsoft Copilot, an AI-powered assistant, is one of the most important developments, designed to assist employees with improving productivity by fostering collaboration, decision making and automation through the organization. This paper explores how Microsoft Copilot integrates and benefits enterprises, and shows challenges and implications for the employees and the organizations.

This study examines how Microsoft Copilot integrates into business workflows, especially in the Microsoft 365 applications, and it analyzes its impact on productivity and innovation. It also shows the key challenges, including resistance of the employees to adopting AI, security of data, and ethical considerations related to AI-assisted decision-making. Also, the paper analyses the changes in employment that require new skill adaptation as AI technology is broadly used in business settings.

This research assesses Microsoft Copilot and its impact on AI integration within Microsoft's ecosystem through a case study and empirical analysis. The findings can help companies in using AI while reducing risk and complexity. This paper also discusses the implications of AI in the future of work strategies, along with human capital deployment and business management.

Keywords:

Microsoft Copilot, Artificial Intelligence, Business Automation, Workforce Transformation, AI Adoption.

INTRODUCTION

Artificial intelligence (AI) is transforming industries' operations and how employees perform their tasks. Microsoft Copilot, as a productivity AI-augmented tool, is capable of automating business processes, forecasting effective decisions, and making daily tasks and work more efficient. This AI tool is integrated into Microsoft 365 business applications, and it uses generative AI to automate business processes.

In this paper, we explore the influence of Microsoft Copilot on modern enterprises, assessing its benefits, difficulties and overall impact on the workforce. However, the tool demonstrates significant efficiency improvements, it also comes with data security risks, requires employee adaptation, and raises ethical issues.

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Through the case study and empirical data, this paper will try to help in understanding how companies can strategically implement Microsoft Copilot while minimizing the potential risk. [1]

2. THE ROLE OF MICROSOFT COPILOT IN BUSINESS

Microsoft Copilot is designed for organizations to smoothly integrate with Microsoft 365 apps such as Word, Excel, Outlook, and Teams. Employees can use it for automating repetitive tasks, collaborating with their teams and creating content faster. According to industry reports, 77% of users said that they didn't want to stop using Microsoft Copilot after trying it. [2]

2.1. KEY BENEFITS OF MICROSOFT COPILOT

Productivity and efficiency in Copilot can help in reducing the time spent on manual tasks, so employees can focus on higher-value work. Research shows that 64% of employees struggle with energy and time, while 70% delegate their tasks to AI. [3] [4] Copilot solves these challenges by:

- Real-time recommendations for data analysis and reporting.
- Automating workflows in PowerPoint and Excel. Generating content in Word, Teams, and Outlook.

Industry-specific and fostering creativity in Copilot, in addition to automating repetitive tasks, can also foster creativity, help with content creation, and assist with building strategies. As an industry-oriented it can help with:

- Finance Help with reporting and data validation.
- Sales Help with lead prioritization.
- Customer Service Help with monitoring of issues and faster answers.
- HR Simplify paperwork and assist with hiring.

2.2. KEY CHALLENGES OF AI IN BUSINESS

Microsoft Copilot and other AI tools have a lot of benefits and opportunities in the business world, but there are also a lot of challenges for their adaptation. In the real world, to benefit from AI, companies need to overcome key challenges such as data security concerns, employee resistance, complexity, and integration difficulties. [5]

1. Employee resistance and lack of skills

One of the biggest concerns for employees is whether AI will drastically change or replace their jobs in the future, and that is the first obstacle to adaptation. According to studies, 82% of company leaders believe that employees would need new skills for AI adaptation. [6] [7]

To have a smoother transition, companies should:

- Educate employees that AI is meant to supplement human work, not to replace it.
- Invest in education and training initiatives to gain new skills required for AI adaptation in daily work.
- Demonstrate to employees on real initiatives and show them how Copilot can increase productivity and help with creativity and innovation.

2. Data security and privacy

Microsoft Copilot, like other AI tools, is processing a lot of business data daily. Besides that, Microsoft Copilot runs under the Microsoft 365 security framework, companies have a lot of concerns about data security and privacy, and they need to implement additional security measures to prevent:

- Access to data by unauthorized employees.
- Potential errors and bias in AI-generated content.
- Non-compliance with data protection standards such as GDPR.

Companies should implement and establish AI governance to reduce these potential risks:

- Controlled access and the ability to use AI insights.
- Strict and clear rules for using AI with sensitive personal data.
- Clear procedures for managing security threats and mitigating risks.

3. Potential compliance and ethical issues in business

The popularity of AI technology in business also increases ethical concerns for all companies. Data confidentiality, accountability, and transparency stand out as the biggest problems. Artificial intelligence models, especially those used in Microsoft Copilot, can inadvertently create problems with the accuracy of the data they deliver to the end user. One very important segment is that organizations need to properly manage risks, as well as consider local and global market regulations.



To improve business and avoid potential concerns with the use of AI technologies, companies should:

- Introduce modern mechanisms whose role is to verify the reliability and accuracy of the data obtained by artificial intelligence.
- Create ethical guidelines internally related to artificial intelligence. This way, companies improve the quality of decisions made.
- Harmonize artificial intelligence systems with regulatory authorities in the country and around the world. By harmonizing systems, companies reduce legal risks that can potentially cause very significant damage.

4. Technical challenges of company systems

A major challenge for all companies, regardless of whether they are small or large, is organizing and managing the integration of artificial intelligence into current operations. By analyzing companies that have begun the process of introducing AI technologies into their systems, we conclude that 75.2% of companies are struggling with the integration of artificial intelligence. Some of the problems are:

- The existing infrastructure is outdated and not ready or compatible with the process automation offered by artificial intelligence.
- Staffing problem, lack of education of engineers.
- The problem of company management is not trendy and does not follow the world of artificial intelligence.

For companies to overcome these challenges, it is necessary to conduct a detailed analysis of the readiness of the entire infrastructure. After completing the analysis, it is necessary to establish plans and phases for incorporating artificial intelligence into current operations.

5. Cost and ROI considerations

Although artificial intelligence is expected to reduce costs and increase system efficiency, companies must carefully create plans for financing such projects.

Based on information obtained from many companies that have introduced artificial intelligence into their systems, it is estimated that the expected return on investment is \$3.5 for every dollar invested. The following items also affect ROI:

- Quality of the strategy plan.
- Detailed education of employees who will use AI tools daily.
- Continuous improvement of AI systems to improve the current system.

One way to measure success with the introduction of artificial intelligence is to establish KPIs. Their role is to monitor current productivity, efficiency, and cost reduction.

6. Change management and user adoption

The introduction of artificial intelligence is changing company culture. Many organizations make mistakes by making incorrect assessments about the successful integration of AI systems within their business. Key obstacles include the following:

- Lack of trust in artificial intelligence. Employees spend too much time relying on artificial intelligence systems.
- 56% of employees report having problems adopting new technologies. The problems cited include finding the time and energy to learn.
- 64% of employees use artificial intelligence tools on their accounts instead of their business accounts. This compromises data security.

For organizations to successfully adopt artificial intelligence systems, they need to:

- Provide quality and professional training to all employees.
- Find employees who are best at using these tools and appoint them as team leaders whose role will be to educate other employees.
- Improve employee culture regarding artificial intelligence systems.

3. THE FUTURE OF ALIN BUSINESS

In parallel with the development of artificial intelligence and the introduction of Microsoft Copilot, companies must create strategic approaches to ensure the highest quality integration. The following key steps stand out:

- Understanding the current system. Companies need to assess their current business and, based on the results obtained, find areas where AI can provide the most value.
- Establishing proper policies for the ethical use of artificial intelligence. It is necessary to ensure data protection, which is one of the most important items for maintaining trust and compliance in companies.

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CASE STUDY – USE OF MICROSOFT COPILOT FOR 4 MONTHS

To write this scientific paper, a case study was conducted on an employee working in the IT industry. The case study presented the employee's daily activities. The results obtained were very good and confirmed that the use of artificial intelligence in the right way can greatly facilitate various daily activities.

The key factors used to write this scientific paper are:

- The Microsoft Copilot tool was used. The testing lasted 4 months. The data included are those collected during working weeks (Monday-Friday).
- Microsoft Copilot was used only for basic daily tasks.
 Information or documentation was searched through Copilot chat. A segment of composing email or meeting summaries, making various corrections was also included. The list of software used is Microsoft Excel, Microsoft Outlook, Microsoft PowerPoint, Microsoft Teams, and Microsoft Word.
- Three metrics are tracked:
 - Time Saved Obtaining an estimate of how long a task would take to solve without the use of artificial intelligence.
 - Time Spent Obtaining an estimate of how long it took to solve a task using artificial intelligence.

- Time Gained - The difference between time saved and time spent (Time Spent - Time Saved).

To achieve the best possible results, negative values have also been introduced. In the case where Microsoft Copilot was unable to help, a negative value is recorded. In this case, the result obtained gives us information that more time was spent than originally estimated. To correct grammatical errors and email structure, the maximum time is 1 minute. In this case, the tasks improved the result because Microsoft Copilot improved the overall quality of the text. The tested candidate was not a native English speaker. While using Microsoft Copilot, the candidate improved the clarity of his writing all the time.

4.1. GRAPHICAL DISPLAY OF THE RESULTS OBTAINED

Table 1 shows information about Copilot Tasks.

Figure 1 shows information about the Number of Prompts per Day.

Figure 2 shows information about the Sum of gained time in minutes.

Table 1. Copilot Tasks

Application	Task	Sum of Time (minutes)
	Searching for information	60
	Composing a Summary of bullet points	44
	Correcting Text	25
	Composing the Agenda for the events	15
Copilot	Correcting Emails	12
Chat	Searching Inbox	9
_	Searching for people in the org.	8
	Chatting with Copilot	0
_	Searching for a PPT File	-4
_	Searching for documents	-5
	Copilot Chat Total	164
Excel	Creating visuals out of the Excel Table	20
	Excel Total	20



Application	Task	Sum of Time (minutes)
Outlook		62
	Outlook Total	62
PowerPoint	Creating Slides from the Word document	50
	Creating Footnotes from a PPT presentation	35
	Arranging the Presentation	30
	PowerPoint Total	115
Teams Meetings	Meeting Recap	427
	Meeting Catch-up	25
	Creating notes from the meeting	0
	Teams Meetings Total	452
Word	Composing a Word document out of a website with comments	55
	Word Total	55
	Grand Total	868



Figure 1. Number of Prompts per Day

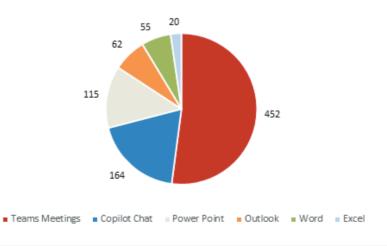


Figure 2. Sum of gained time (minutes)



4.2. KEY FINDINGS AFTER THE CASE STUDY

- Microsoft Copilot gave excellent results in most cases. Based on the results, Copilot was successful in 92.54% of the tasks received. In 41.26% of cases, it gave better results than the user himself. In this case, not only is time saved, but the quality of work is also improved.
- Microsoft Copilot performed very well in advanced document searches.
- The biggest time savings were shown within the meeting recap. The user did not need to watch the entire video. In this case, a comparison was made with watching the video at 2x speed. Examples: if the meeting lasted 90 minutes, it took 15 minutes to view the summary. In this case, 30 minutes were saved. In case of overlapping meetings, this option is very useful.
- During the testing period, the candidate did not create many Word and PowerPoint documents.
 The impact of Copilot on these applications is not fully reflected.
- The candidate who was tested is very proficient in Microsoft Excel software and the results showed that within that software, Microsoft Copilot was not significantly useful.

The following limitations existed during testing:

- At the beginning of the testing, the candidate worked only in Microsoft Excel Online.
- The candidate worked only within an Excel spreadsheet.
- The candidate could not process large amounts of data (20,000+ rows).

During the testing period, Microsoft Copilot saved more than 14 hours of active work (almost two full working days). As already noted, the meeting recap option gave the best results. The results obtained highlight the potential of artificial intelligence and Microsoft Copilot, which directly affects quality improvement, process simplification, and work quality improvement. [8]

5. CONCLUSION

To 'survive' in today's advanced world, and progress together with technology, we must accept that AI is no longer an option, but something that will follow us everywhere. Microsoft Copilot is an AI business tool that provides an excellent example of how AI can transform and facilitate decision-making, productivity and creativity as well as teamwork and collaboration. However, as we described, the adoption of such tools is one of the most difficult barriers that companies need to overcome. Data security concerns, as well as employee resistance and their fear that AI tools may replace their positions in the future, are among the main barriers to adoption. [9]

Key findings of this study show what the advantages and opportunities are, as well as the obstacles that companies face when implementing solutions based on artificial intelligence. The most important steps for the successful integration of AI tools are, first the assessment of the company, based on which a well-planned implementation approach will be made that includes training of personnel as well as clear policies of artificial intelligence. The study clearly shows us through the results that AI-based tools can significantly save time and improve efficiency, which primarily depends on how well it is aligned with user needs and existing business flows. [10]

What is clear to all of us is that companies that strategically embrace and follow the advancement of AI technology have a competitive advantage over companies that avoid it.

Companies must proactively adapt to the advancement of AI-based tools to be better equipped to develop and navigate in a changing business environment and not fall behind as the business evolves.

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REFERENCES

- [1] F. O. Olatoye, K. F. Awonuga, N. Z. Mhlongo, C. V. Ibeh, O. A. Elufioye and N. L. Ndubuisi, "AI and ethics in business: A comprehensive review of responsible AI practices and corporate responsibility," *International Journal of Science and Research Archive*, vol. 11, no. 1, pp. 1433-1443, 2024. doi: 10.30574/ijsra.2024.11.1.0235.
- [2] B. Wiseman, "What Can Copilot's Earliest Users Teach Us About Generative AI at Work?," 2023. [Online]. Available: https://www.microsoft.com/en-us/worklab/work-trend-index/copilots-earliest-users-teach-us-about-generative-ai-at-work. [Accessed 31 03 2025].
- [3] P. Hemmer, M. Westphal, M. Schemmer, S. Vetter, M. Vössing and G. Satzger, "Human-AI Collaboration: The Effect of AI Delegation on Human Task Performance and Task Satisfaction," in *Proceedings* of the 28th International Conference on Intelligent User Interfaces, Sydney, 2023. doi: 10.48550/arXiv.2303.09224.
- [4] C. Vasilescu and M. Gheorghe, "Improving the Performance of Corporate Employees through the Use of Artificial Intelligence: The Case of Copilot Application," in *Proceedings of the International Conference on Business Excellence*, Warsaw, 2024. doi: 10.2478/picbe-2024-0153.
- [5] G. Ismail, R. Paavo, A. Ahmad, M. Brad and A. Imran, "Confronting and alleviating AI resistance in the workplace: An integrative review and a process framework," *Human Resource Management Review*, vol. 35, no. 2, p. 101075, 2025. doi: 10.1016/j.hrmr.2024.101075.
- [6] L. Zuowei, "AI Ethics and Transparency in Operations Management: How Governance Mechanisms Can Reduce Data Bias and Privacy Risks," *Journal of Applied Economics and Policy Studies*, vol. 13, no. 1, pp. 89-93, 2024. doi: 10.54254/2977-5701/13/2024130.
- [7] C. Ikegwu, N. S. Uzougbo and A. O. Adewusi, "Legal accountability and ethical considerations of AI in financial services," *GSC Advanced Research and Reviews*, vol. 19, no. 2, pp. 130-142, 2024. doi: 10.30574/gscarr.2024.19.2.0171.
- [8] L. Perne, "How I saved more than 14 hours in a month by using Copilot for M365!," 2024. [Online]. Available: https://www.linkedin.com/pulse/how-i-saved-more-than-14-hours-month-using-copilot-m365-luka-perne-yfwgf/. [Accessed 31 03 2025].
- [9] M. Mravik, T. Vetriselvi, K. Venkatachalam, M. Sarac and N. Bacanin, "Diabetes Prediction Algorithm Using Recursive Ridge Regression L2," *Computers, Materials & Continua*, vol. 71, no. 1, pp. 457-471, 2022. doi: 10.32604/cmc.2022.020687.

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[10] M. Šarac, M. Mravik, J. Dijana, Š. Ivana, Ž. Miodrag and B. D. Nebojša, "Intelligent diagnosis of coronavirus with computed tomography images using a deep learning model," *Journal of Electronic Imaging*, vol. 32, no. 2, pp. 1-10, 2022. doi: 10.1117/1. JEI.32.2.021406.