

# 2025 International Conference on Global Innovation, Technology and Management Extended Abstract Submission Guidelines

## 1. Document Format

- File format: Microsoft Word (.doc or .docx)
- Font: Times New Roman, 12-point
- Line spacing: Single
- Margins: 2.54 cm on all sides
- Language: English only

## 2. Structure and Content

- Title (centered, bold)
- Authors (centered; maximum 5)
  - Full name, Title, Affiliation (mark corresponding author with asterisk (\*))
  - Contact email for corresponding author only
- Sections (Max. 200 words each): Introduction, Methodology, Results, Discussion
- Keywords: 4-6 keywords
- In-text citations strongly discouraged. Do not list references.
- No graphics, tables, figures, equations, or appendices
- Preliminary results instead of full results are acceptable if clearly indicated

## 3. Submission Process

- File name: LastName\_GITM2025\_Abstract
- Email subject: "GITM2025 Abstract - [First Author's Last Name]"
- Email message must include the abstract title and the corresponding author's name and affiliation.
- Email to: [icconf@mail.mcu.edu.tw](mailto:icconf@mail.mcu.edu.tw) by March 3, 2025.

## 4. Important Notes

- Maximum two submissions per author (as first author or co-author)
- Confirmation email will be sent within 3 business days. If not received, please check your spam folder. If still not found, please resend your submission with "RESUBMISSION" added to the email subject line.
- Submissions not following guidelines may be returned for revision

## 5. Key Dates

- Submission opens: January 15, 2025
- Submission deadline: March 3, 2025
- Notification of acceptance: March 17, 2025
- Full paper deadline: April 15, 2025

For questions: [icconf@mail.mcu.edu.tw](mailto:icconf@mail.mcu.edu.tw)

## **EXTENDED ABSTRACT FORMAT**

**Title of Your Extended Abstract (Times New Roman, Bold, 12pt, centered)**

Author 1, Title, Affiliation (Times New Roman, 12pt, centered)

Author 2, Title, Affiliation (Times New Roman, 12pt, centered)

Author 3, Title, Affiliation (Times New Roman, 12pt, centered)

Contact Email: [email address of corresponding author]

### **EXTENDED ABSTRACT (Max. 800 words)**

**Introduction** (Max. 200 words; include the background, research gap, research question(s))

**Methodology** (Max. 200 words; include clear and concise description of participants, materials, procedures and analysis)

**Results** (Max. 200 words; include concise statement of findings or preliminary findings)

**Discussion** (Max. 200 words; include a summary of key results, their theoretical and practical significance and the unique contribution of the study)

**Keywords** (Provide a list of 4-6 keywords)

## SAMPLE EXTENDED ABSTRACT

### The Impact of AI Patents on Small and Medium Enterprise Productivity: Evidence from Taiwan's Technology Sector

Yi-Ling Chen\*, Professor of Innovation Economics, Pacific Asia University of Technology  
Ming-Hui Wang, Research Fellow, Taiwan Innovation Research Center  
Shu-Fen Lin, Senior Economist, East Asian Institute of Technology and Management

\*Contact Email: [yilingchen@pau.edu.tw](mailto:yilingchen@pau.edu.tw)

## EXTENDED ABSTRACT

**Introduction:** The rapid advancement of artificial intelligence (AI) technologies has sparked intense debate regarding their economic impact, particularly on firm-level productivity. While existing literature has extensively examined the general relationship between technological innovation and productivity, empirical evidence specifically addressing AI's impact on small and medium enterprises (SMEs) remains limited. This study addresses this gap by investigating how AI patent portfolios influence labor productivity in SMEs compared to large enterprises. We examine whether smaller firms, with their potentially greater organizational flexibility, might derive different productivity benefits from AI innovations than their larger counterparts. Our research question asks: "Does the impact of AI patent development on labor productivity differ systematically between SMEs and large enterprises, and if so, what factors drive these differences?"

**Methodology:** We employ a unique dataset comprising 4,832 firms that filed at least one AI-related patent between 2005 and 2021, combining patent applications from the Global Patent Statistical Database with firm-level financial data from the World Business Registry. Our empirical strategy utilizes a dynamic panel data model estimated through System Generalized Method of Moments (GMM-SYS), derived from a knowledge-stock augmented production function. This approach allows us to control for endogeneity and persistent firm-level differences in productivity. The model specifically accounts for both AI and non-AI patent applications, employment growth, fixed capital growth, and firm size. We differentiate between SMEs (firms with fewer than 250 employees) and large enterprises, while controlling for industry-specific effects across manufacturing and service sectors. Initial data collection is complete and analysis is currently underway using this methodological framework.

**Results:** Based on preliminary data exploration and existing literature, we anticipate finding significant differential impacts of AI patents on labor productivity between SMEs and large enterprises. We expect to demonstrate that SMEs show approximately 5-6% increases in labor productivity for each doubling of their AI patent portfolio, while effects for large enterprises may be statistically insignificant. We anticipate this effect will be particularly pronounced in service-sector SMEs, where we expect the productivity increase may reach 7%. Our preliminary analysis suggests that while large enterprises likely show stronger productivity gains from non-AI patents, their AI patent productivity effects remain minimal. We expect our results will suggest that organizational agility and faster implementation capabilities allow SMEs to more effectively

translate AI innovations into productivity gains. Additionally, we anticipate finding that these effects became more pronounced after 2015, potentially indicating a learning curve in AI technology implementation.

**Discussion:** Upon completion, this study aims to make three primary contributions to the literature on technological innovation and firm productivity. First, we expect to provide novel empirical evidence of the heterogeneous impacts of AI innovation across firm sizes, challenging the assumption that larger firms are better positioned to benefit from advanced technologies. Second, our research seeks to identify a previously undocumented advantage for SMEs in translating AI patents into productivity gains, particularly in the service sector. These findings would have important implications for innovation policy and SME support programs. Third, our methodological approach, combining dynamic panel analysis with detailed patent classification data, offers a new framework for analyzing the productivity impacts of emerging technologies. These anticipated insights should provide valuable guidance for policymakers designing innovation support mechanisms and for managers making strategic decisions about AI investments. Final results will be available for presentation at the conference.

**Keywords:** Artificial Intelligence, Patent Analysis, SME Productivity, Innovation Economics