



# E-PROCEEDINGS

## INTERNATIONAL TINKER INNOVATION & ENTREPRENEURSHIP CHALLENGE (i-TIEC 2025)

"Fostering a Culture of Innovation and Entrepreneurial Excellence"



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**23 January 2025**  
**PTDI, UiTM Cawangan Johor**  
**Kampus Pasir Gudang**

### **ORGANIZED BY:**

Electrical Engineering Studies, College of Engineering  
Universiti Teknologi MARA (UiTM) Cawangan Johor  
Kampus Pasir Gudang  
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## **A-SS071: CPI2E: AN INTERACTIVE SIMULATION GAME**

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### **ABSTRACT**

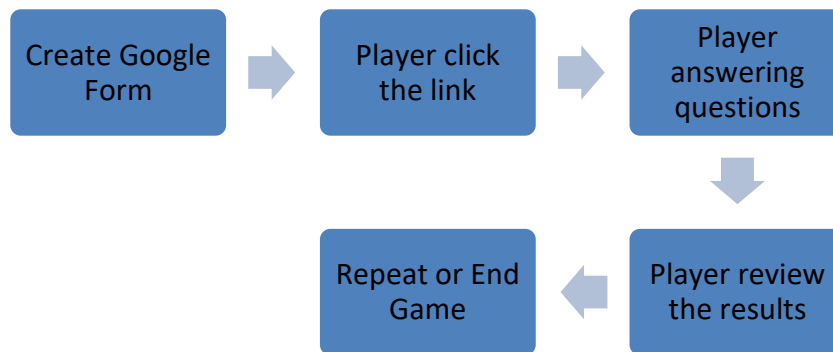
CPI2E is an interactive learning tool where it will be conducted as a simulation game. CPI2E is an engaging and fun way for students to learn how the Consumer Price Index (CPI), imports, exports, and GDP are connected. The game was made to make finance and economic ideas more interesting by modeling real-life situations in which students have to make choices based on changes in inflation and trade prices. The game stands out because it lets students learn by doing it in a fun and easy way that helps them understand how economic decisions affect the economy. It also teaches students how to think critically and solve problems, and generates an early interest in business by showing them how economic factors affect business choices. The game could be sold as an educational tool for schools or online learning sites. It would be a great way to teach finance and economic ideas in a more fun and interactive way.

**Keywords:** CPI2E, CPI, Export, GDP, Import.

### **1. Product Description**

CPI2E is a simulation game where it is a cool and interactive tool for students to dive into how trade dynamics influence a country's economy, with a focus on the Consumer Price Index (CPI), imports, exports, and GDP. The game mimics real-world economic situations where players take on the roles of policymakers or economists. They make decisions based on shifts in the prices of key imports and exports and forecast how these changes, along with fluctuations in the Consumer Price Index (CPI), affect the country's GDP. Each scenario includes multiple-choice questions that test understanding of the connections between trade, inflation, and economic performance. Getting quick feedback on their choices helps learners understand economic concepts through practical experience. The game is made to be easy to understand, user-friendly, and fun, utilizing tools such as Google Forms or Google Sheets. It promotes active learning and critical thinking, allowing for a deeper understanding of how global trade and inflation affect economic growth. This tool is designed to help us connect with economics better, sparking more interest in the subject and building important skills for those of us who want to be entrepreneurs and policymakers in the future.

## 2. The Simulation Game



**Figure 1.** The flowchart of the CPI2E simulation game.

## 3. Novelty and uniqueness

The novelty and uniqueness of this CPI2E Simulation Game lie in its interactive and hands-on approach to teaching complex economic concepts. Unlike traditional learning methods, the CPI2E Simulation Game allows students to make decisions based on real-world scenarios where changes in imports, exports, and CPI directly influence GDP. It is unique in that it teaches how these factors are interconnected, helping students understand the broader economic impact of trade. The CPI2E Simulation Game also offers a chance for students to simulate policy decisions and observe their effects on the economy, enhancing their learning experience. Built using accessible tools like Google Forms or Google Sheets, the game simplifies these concepts and makes them engaging, providing a practical way for students to grasp how trade and CPI affect GDP.

## 4. Benefit to mankind

This CPI2E Simulation Game benefits mankind by improving economic literacy among students, making complex concepts like CPI, trade, and GDP easier to understand. It helps students develop critical thinking and decision-making skills, which are valuable for future policymakers, entrepreneurs, and business leaders. By simulating real-world economic scenarios, the game prepares students to make more informed decisions that can positively impact the economy. Additionally, it fosters an interest in entrepreneurship and provides a hands-on way to understand how trade and inflation influence economic growth, benefiting both individuals and society.

## 5. Innovation and Entrepreneurial Impact

This CPI2E Simulation Game can positively influence innovation and entrepreneurship by helping students develop essential skills. It teaches decision-making, problem-solving, and risk management, which are crucial for entrepreneurs. By simulating how imports, exports, and CPI affect the economy, students learn about market dynamics and the impact of external factors on business. The game encourages creative problem-solving, as students devise strategies to manage economic changes, fostering innovative thinking. It also sparks early interest in entrepreneurship by demonstrating how to adapt to economic shifts. By identifying opportunities in fluctuating trade or inflation, students gain insight into creating

solutions or new business strategies. The CPI2E Simulation Game's interactive learning helps build economic awareness and teamwork skills, providing a platform for inspiring future entrepreneurs and innovators.

## 6. Potential commercialization

This CPI2E Simulation Game has strong commercialization potential. It can be sold to schools and universities as an interactive tool for teaching finance and economics. The game could also be adapted for online learning platforms, making it accessible to students worldwide. Additionally, it can be developed into a mobile app for self-paced learning. The CPI2E Simulation Game could be used in corporate training to help employees understand economic factors affecting business decisions. It also has the potential for financial literacy programs run by governments or NGOs, offering a fun way to educate the public on economic topics like inflation and trade.

## 7. Acknowledgment

I would like to express my sincere gratitude to everyone who has supported and contributed to this project. Special thanks to Dr Suhana Mohamed for her invaluable help and guidance. Without her encouragement and expertise, this would not have been possible. I am truly grateful for her assistance.

## 8. Authors' Biography



Nur Aniera Alieana Mohamad Zani is studying for a Master of Science in Business Management, focusing on Finance, at UiTM Pasir Gudang. She has authored multiple publications, such as *The Decline of Malaysia's Trade and GDP during COVID-19*, featured in the *International Journal of Research and Innovation in Social Science*, and *Resipi Kek Coklat Kukus & Gula Aising*, published in *Buletin Masmed 2023 3<sup>rd</sup> Edition*. She also presented her paper at the 4th AAGBS International Conference on Business Management.



Dr. Suhana Mohamed is a Senior Lecturer and Research Lead at the UiTM, specializing in Finance. Dr. Suhana has twenty-five (25) years of experience in academia and industry, where she has pioneered several works relating to Finance and Education. Dr. Suhana has been actively involved in investment research, mainly real estate finance, where she concentrated on real estate investment research. Recognizing her outstanding contributions to research and community services, Dr Suhana received several prestigious awards from UiTM and the Johor State Government. She devoted her passion and life to knowledge transfer, human capital development, training young minds, and supporting many exciting projects for UiTM, Johor Darul Takzim, Malaysia, and international collaborations.