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# PROCEEDINGS OF JOHOR INTERNATIONAL INNOVATION INVENTION COMPETITION AND SYMPOSIUM 2024 (JIICaS 2024)



*“Flourish and Nurturing Sustainable  
Innovation for a Prosperous Nation”*

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## **Preface**

**In the name of Allah, the Almighty who gives us the enlightenment, the truth, the knowledge and with regards to Prophet Muhammad (peace be upon him) for guiding us to the straight path. We thank to Allah for giving us guidance and strength to write this e-book.**

**This e-book compiles the extended abstracts that submitted to Johor International Innovation Invention Competition and Symposium 2024 (JIIICaS2024), where JIIICaS2024 is a virtual platform for all creative minds to share and present their invention and innovation. Each abstract gives a brief background on the innovation or project.**

**We hope that this e-book will help the readers to get to know the innovation done by the students and get some ideas to develop future innovation products.**

## Foreword Rector



Assalamualaikum warahmatullahi Wabarakatuh,  
Salam Sejahtera, Salam Malaysia MADANI and  
Salam UiTM Dihatiku.

In the name of Allah, the Most Gracious, the Most  
Merciful.

It is a great honor to welcome you to the Johor  
International Innovation, Invention, Competition, and  
Symposium 2024 (JIICaS 2024). This event

connects various disciplines, focusing on education and engaging educators,  
students, researchers, and innovators from all walks of life.

Innovation is not just about ideas; it demands perseverance, creativity, and  
determination to turn those ideas into reality. The remarkable projects  
showcased today highlight the dedication and spirit of all participants.  
Initiatives like this not only explore new technologies but also cultivate skills  
and leadership among our youth. At Universiti Teknologi MARA (UiTM) Johor  
Branch, we are fully committed to fostering a dynamic culture of innovation,  
promoting the commercialization of new products, and encouraging  
meaningful collaborations with industry and society.

As we celebrate this event, I would like to extend my heartfelt gratitude to all  
sponsors, judges, the College of Computing, Informatics and Mathematics,  
UiTM Pasir Gudang Campus as the event organizer, as well as to the  
researchers and participants for their hard work in making this event a  
success. Let us continue striving for innovation and excellence. May the  
ideas presented today inspire us and lay the groundwork for future  
achievements.

Thank you.

**Associate Professor Dr. Saunah Zainon**  
**Rector**  
**Universiti Teknologi MARA (UiTM)**  
**Johor Branch**

## **(A-SS056) SMART INTERACTIVE LOGISTICS DICTIONARY (SILD)**

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### **ABSTRACT**

This innovation proposed the creation of a smart and interactive digital dictionary for logistics can be a valuable resource for professionals in the field. This will help them to quickly find definitions, understand processes, and access relevant information. Features for the Smart Interactive Logistics Dictionary (SILD) consist of search functionality, categorization and tags, interactive elements that allow users to navigate easily, multimedia integration, user contributor, personalization, Interactive quizzes to test the user understanding and real-time updates on logistics terms and concepts. The development ideas are on the mobile version of the dictionary that can be easily accessible and on the go. By incorporating these features and development ideas, the Smart Interactive Logistics Dictionary can become an invaluable tool for professionals, students and anyone interested in the logistics field.

#### **Features of SILD :**

##### **1. Search Functionality**

- Autocomplete: As users type, suggestions appear based on common search terms.
- Advanced Filters: Users can filter results by categories like terms, acronyms, processes, and regulations.

##### **2. Categorization and Tags:**

- Categories: Group terms into categories such as shipping, warehousing, inventory management, supply chain, and customs.
- Tags: Assign multiple tags to each term for better searchability.

##### **3. Interactive Elements:**

- Hyperlinks: Link related terms within definitions to allow users to navigate easily.
- Interactive Diagrams: Visual representations of processes, flowcharts, and diagrams that users can click on for detailed explanations.

##### **4. Multimedia Integration**

- Videos: Short explanatory videos for complex terms and processes.
- Images: Include relevant images, such as equipment, documents, and workflow charts.

**5. User Contributions:**

- Community Editing: Allow users to suggest edits and add new terms, moderated by experts.
- Comments and Discussions: Enable users to discuss terms and share practical insights.

**6. Personalization:**

- Bookmarks: Users can save frequently used terms for quick access.
- Notes: Allow users to add personal notes to each term.

**7. Interactive Quizzes and Assessments:**

- Quizzes: Regular quizzes to test users' knowledge on logistics terms and concepts.
- Certificates: Offer certificates for completing specific learning modules or achieving high scores in quizzes.

**8. Real-time Updates:**

- News and Trends: Integrate a feed of the latest news and trends in logistics.
- Regulatory Updates: Automatic updates on changes in regulations and compliance requirements.

**9. Multi-language Support:**

- Translations: Provide definitions in multiple languages to cater to an international audience.
- Language Toggle: Easy switch between languages for users.

**The development ideas will be based on a few ways as following:**

**1. Mobile App:**

- Develop a mobile version of the dictionary for easy access on the go.
- Include offline functionality for users in areas with poor internet connectivity.

**2. Voice Search:**

- Implement voice recognition for hands-free searching of terms.
- Voice output to read definitions aloud.

**3. Augmented Reality (AR):**

- Use AR to provide interactive experiences, such as visualizing logistics processes in a real-world setting.

**4. Gamification:**

- Introduce elements like badges, leaderboards, and challenges to encourage regular use and engagement.

**5. Integration with Learning Management Systems (LMS)**

- Provide modules that can be integrated into corporate LMS for employee training programs.