



EXTENDED ABSTRACT



InViCCAD 2025
1ST INTERNATIONAL VIRTUAL COMPETITION OF CREATIVE
ARTS & INNOVATIVE DESIGN IN TEACHING & LEARNING



Design Innovation Academic Show 2025



Organized by



Fakulti
Seni Lukis & Seni Reka
Cawangan Kedah



اوسها تقوى موليا

Collaboration with



#perubahanluarbiasa
#ADpilihanpertama



**EXTENDED
ABSTRACT**

**Design
Innovation
Academic
Show 2025**





DIAS 2025 (Design Innovation Academic Show) is all about "Transcending the Boundaries of Creativity: Innovation in Art & Design for 21st Century Education." This vibrant program shines a spotlight on how creativity and innovation are reshaping modern education.

It consists of three key components. First up is the Mindareka Design Show, an exhibition that showcases students' final year projects and creative designs, giving them a chance to connect with industry professionals and the wider community. Next, we have the Northern Innovation Academic Tour (NIAT), which takes participants on an academic adventure to select institutions and innovation centers in the northern region, aimed at promoting knowledge sharing and building strong academic and professional networks.

Finally, there's the 1st International Virtual Competition of Creative Arts & Innovative Design in Teaching & Learning (InViCCAID), a global competition that recognizes outstanding practices in teaching and learning by blending art, technology, and innovative design. But DIAS 2025 is more than just a talent showcase; it's a powerful platform for empowering both students and educators, while also strengthening collaborations between universities, creative industries, and global communities. With its inclusive and interdisciplinary approach, this initiative strives to spark relevant, competitive, and impactful ideas and innovations that truly benefit society and push the future of education forward.



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Design
Innovation
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Show 2025



Prof. Dr. Roshima Haji Said
Acting Rector
UiTM Kedah Branch

Rector's Message

I am delighted to extend my heartfelt congratulations to the College of Creative Arts, UiTM Kedah Branch, for bringing MINDAREKA 2024 - Unleashing Your Visual Creativity to fruition. The triumphs of past MINDAREKA editions undoubtedly fueled the organization of this year's event, making MINDAREKA 2024 a reality.

MINDAREKA 2024 - Unleashing Your Visual Creativity stands as a testament to the dedication of students at the College of Creative Arts, UiTM Kedah Branch, providing them with a platform to showcase their final art projects. Beyond serving as a space for the exploration of fresh, innovative, and entrepreneurial concepts, this exhibition is poised to connect aspiring talents with potential clients and employers.

I extend my sincere gratitude to all participants whose enthusiasm and support have contributed to the success of MINDAREKA 2024 - Unleashing Your Visual Creativity. Their unwavering belief and commitment have truly brought this event to life, marking it as a resounding triumph!





Head of Faculty Message

It is an honour to introduce DIAS 2025 – Design Innovation Academic Show, held under the theme “Transcending the Boundaries of Creativity: Innovation in Art & Design for 21st-Century Education.” This significant event reflects the faculty’s ongoing commitment to fostering a culture of innovation, critical thinking, and creative exploration among our students and academic community. As we navigate the complexities of the 21st century, it becomes increasingly clear that education must go beyond traditional boundaries to embrace multidisciplinary approaches that are both relevant and future-forward.

The three core components of DIAS 2025, Mindareka Design Show, Northern Innovation Academic Tour (NIAT), and the 1st International Virtual Competition of Creative Arts & Innovative Design in Teaching & Learning (InViCCAID) which is serve as vital platforms to highlight the convergence of design, technology, and pedagogy. These initiatives not only empower our students to showcase their talents and ideas, but also create opportunities for engagement with industry leaders, academic peers, and global collaborators. The Mindareka Design Show celebrates student creativity and innovation through compelling final year projects. NIAT fosters knowledge sharing and institutional partnerships through academic visits and exchanges, while InViCCAID offers international recognition for excellence in integrating art and design into teaching and learning.

I would like to express my deepest appreciation to the organising committee, faculty members, students, and strategic partners who have worked tirelessly to bring this programme to life. Your dedication and collaborative spirit have made DIAS 2025 a reality and a reflection of our shared vision for transformative education. It is my hope that this platform will continue to inspire meaningful dialogue, cultivate groundbreaking ideas, and spark a new wave of innovation that enriches both education and society.



Mohamat Najib Mat Noor
Head of Faculty
Faculty of Arts & Design
UiTM Kedah Branch





***Industrial
Design
(Diploma)***





SERVMATE: OPTIMIZING THE USABILITY OF EMERGENCY CAPSULE KITS FOR CAPSULE HOTEL ENVIRONMENTS

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ABSTARCT

The **EZResQ** is a thoughtfully developed emergency safety kit designed to offer a compact, accessible, and user-friendly solution for capsule hotel environments. Recognizing the unique spatial and psychological challenges of these accommodations, the kit integrates essential safety tools such as panic buttons, fire blankets, and basic first aid items to improve guest safety and preparedness. It enables quick and effective response during emergencies without compromising the limited space, comfort, or accessibility typical in capsule hotels. Tailored for confined hospitality settings, the EZResQ is especially beneficial for solo travellers, elderly guests, and families, offering reassurance through intuitive functionality. The design also adheres to universal ergonomic principles and visual communication standards, ensuring that it remains effective across various user profiles and cultural backgrounds.

Keywords: capsule hotel, emergency kit, panic response, compact safety design, user-centered design

INTRODUCTION

Capsule hotels have increasingly gained popularity worldwide as an innovative, space-efficient, and affordable lodging option, particularly appealing to urban travelers, backpackers, and transit passengers. However, despite their growing demand, many capsule hotels still lack integrated emergency preparedness systems, which can pose serious risks in the event of incidents such as fire, injury, or electrical failure. The confined design of these units makes the use of standard emergency tools impractical, often leading to delays in response and a higher likelihood of confusion, especially among vulnerable users such as elderly guests, solo travellers, or international tourists unfamiliar with local protocols.

In such environments, the absence of clear visual instructions and easily accessible emergency tools can result in panic and hesitation—both of which may compromise safety outcomes. Therefore, there is a critical need for a compact, highly visible, and user-friendly emergency kit that addresses these spatial and behavioral challenges. This project introduces the **EZResQ**, a built-in emergency capsule kit that not only meets safety, ergonomic, and visual communication requirements but also responds effectively to the diversity of users and operational constraints of capsule hotel environments.

MATERIALS AND METHODS



Figure 1.1 The picture of final body structure



The EZResQ product is specially designed for the capsule hotel environment, considering the factors of space impact, safety, and ease of use. The main materials used include ABS plastic as the outer structure due to its fire-resistant and lightweight properties, and translucent acrylic to allow the contents of the kit to be easily seen. The mounting system uses a combination of magnets and Velcro to ensure that the kit can be installed and removed without damaging the capsule structure. The components in the kit consist of a fire blanket, basic first aid kit, fire extinguisher, chemical mask, and panic button.

In terms of method, the approach used involves user observation in real capsule hotels, questionnaires to tourists and hotel staff, and analysis of existing products from related sectors. Prototypes are produced in the form of CAD and physical models to test the suitability of size and function. Finally, usability tests are conducted through emergency simulations to assess the level of understanding, access, and effectiveness of using this kit in practice.

RESULT AND DISCUSSION/FINDINGS

The survey showed that 87% of capsule hotel guests were unaware of the location of emergency equipment, while 91% were concerned about safety instructions being unclear or not being provided in multiple languages. This highlights a lack of usability and accessibility of safety equipment in the capsule environment. As a solution, the final design of the emergency kit proposed a modular layout with clear compartments, an easily identifiable panic button, and pictorial instructions. The kit was installed near the sleeping area for quick access and was designed to be accessible from a sitting or lying position. The materials used were lightweight, safe, and durable.

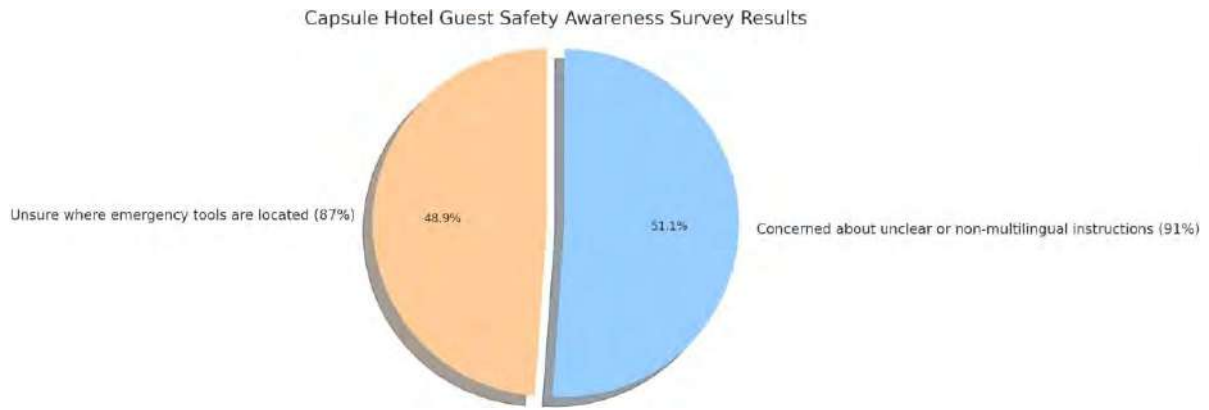


Figure 1.2 Pie chart showing survey results related to capsule hotel guest safety awareness.

The survey found that 87% of capsule hotel guests were unaware of the location of emergency equipment, while 91% were concerned about the lack of clear safety instructions or multiple languages. This finding highlights the lack of visibility of the equipment and user understanding of its functions, especially among international travelers. Lack of location and confusion about instructions can delay emergency response, especially in the limited space of the capsule. Therefore, emergency kit design should emphasize strategic placement, the use of universal icons, and simple and easy-to-understand visual guidance without relying on specific text or language.

CONCLUSION AND RECOMMENDATION

The MADAD EZResQ is a practical and space-saving safety solution, designed specifically for capsule hotel users. Combining a compact form factor and intuitive design, it enhances users' preparedness in emergency situations.

The product is intended for implementation in high-impact urban capsule hotels, particularly those hosting international tourists. Future enhancements could include the integration of smart features such as automatic alarms or connection to the building's security system.

The design significantly contributes to guest safety and supports the advancement of universal and inclusive safety standards in the hospitality sector.



Figure 1.3 The picture of Environment (EZResQ)

REFERENCES

Research / references on problem identification.

Carayon, P., et al. (2006). *Work system design for patient safety: The SEIPS model*. *Quality and Safety in Health Care*, 15(Suppl 1), i50–i58.

<https://doi.org/10.1136/qshc.2005.015842>

Du, B., et al. (2020). *Applied Ergonomics*, 88, 103144.

<https://doi.org/10.1016/j.apergo.2020.103144>

Fan, Y., et al. (2022). *Simulation-based evaluation of signage systems*. *Fire Technology*, 58, 2067–2093.

<https://doi.org/10.1007/s10694-021-01194-w>

Zhao, J., et al. (2023). *Safety Science*, 164, 106108.

<https://doi.org/10.1016/j.ssci.2023.106108>

International Organization for Standardization. (2019). *ISO 7010:2019*.



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