



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)***





STABLE-LIFT | TROLLEY TO LIFT CONTAINER

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ABSTRACT

StableLift is a specially designed trolley to help workers at the horse stable in Madad, Sungai Petani, Kedah. Every day, these workers need to lift and carry heavy feed containers to feed the horses, also a task that can cause back pain, sore hands, and even injuries over time. This project was created to solve that problem by making their job easier and safer. Through observations and interviews with the workers, we found that the containers were not only heavy but also had to be carried over a distance, which made things even harder. Therefore, I've designed a strong, easy-to-use trolley that helps move the containers with less effort. The trolley has a strong frame, smooth-rolling wheels for stable ground, and space to place containers safely without risk of falling. By using StableLift, workers can feed the horses faster, more comfortably, and with less risk of injury. This simple solution doesn't just save time; it improves their daily work life. In the future, this idea can also help other farms and stables that face the same challenges.

KEYWORDS: Ergonomic, Horse Stable, Lifting Trolley, Worker Safety, Feed Transport

INTRODUCTION

Feeding horses might look easy from the outside, but for the workers at the horse stable in Madad, Sungai Petani, it's a tiring and repetitive task. Every day, they must carry and lift heavy feed containers by hand, sometimes from far away. Over time, this can cause serious pain in their backs and hands, making their job even



harder. This project was started to help solve that problem. The idea is to create a trolley that can help lift and carry the containers, so the workers don't have to strain their bodies. With this trolley, the feeding process can become quicker, easier, and much safer. It's a small change, but it can make a big difference in their daily work and comfort.

MATERIALS AND METHODS

To design a trolley that truly helps the workers at the horse stable, I started by understanding their daily tasks and the challenges they face. I visited the stable and observed how the workers lift and carry heavy feed containers during feeding time. The work was physically demanding, especially on their backs and hands, as shown by their movements and effort. I also spoke directly with some of the workers through casual interviews. They shared their experiences, the pain they sometimes feel, and how helpful it would be to have a tool that could make the job easier. After gathering this information, I began sketching different trolley ideas based on their needs. I focused on creating something simple, strong, and easy to use. A basic prototype was then built using a metal frame for durability, rubber wheels for smooth movement on stable ground, and a flat platform to hold the feed buckets securely. The trolley also includes a handle at a comfortable height so it can be pushed or pulled without much effort. Throughout the project, I used a Gantt chart to plan and manage my time, making sure each step from research to design was done properly. This process helped ensure the final design was not only practical but also user-friendly for the stable workers.





Figure 1 The picture of final body structure

RESULT AND DISCUSSION/FINDINGS

After building and testing the prototype, it was clear that the trolley design made a real difference in how the workers handled their tasks. The StableLift trolley reduced the need for workers to bend down and lift heavy buckets with their hands, which helped lessen the strain on their backs and arms. The workers could now move the feed containers more quickly and safely across the stable area, without worrying about dropping them or getting exhausted too fast. The large wheels made it easier to roll the trolley over uneven ground, and the open platform made it simple to load and unload buckets without much effort.

Overall, the results show that StableLift is a valuable and practical solution for daily stable work, and with further development, it could benefit even more people in similar working environments.

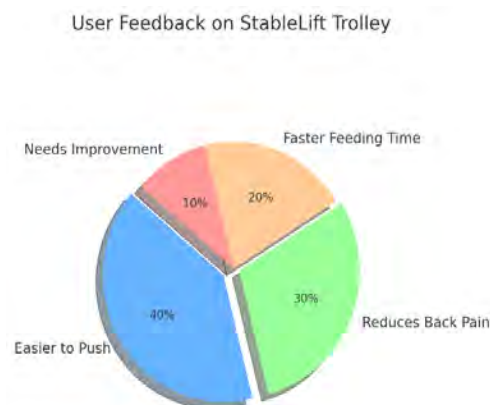


Figure 1 observing



As in the result from the chart Figure 1 observing. During the testing and feedback session, most of the workers responded positively to the StableLift trolley. Around **40% of users said the trolley was much easier to push** compared to carrying the feed containers by hand. They mentioned that the wheels rolled smoothly, even on uneven ground, and the handle made it easier to control. About **30% of the workers felt that the trolley helped reduce back pain**, as they no longer needed to lift heavy loads manually. Another **20% appreciated how the trolley sped up the feeding process**, allowing them to complete their tasks faster and with less effort. However, **10% of the feedback indicated that some improvements were still needed**, such as adjusting the handle height or improving bucket access. Overall, the response showed that the trolley was helpful and effective, but like any early design, there's room for refinement based on user needs.

CONCLUSION AND RECOMMENDATION

In conclusion, the StableLift trolley successfully solves a real problem faced by workers at the horse stable: the physical strain of lifting and carrying heavy feed containers every day. What may seem like a small task can lead to long-term pain and discomfort, especially for workers who repeat this activity multiple times. With the help of this trolley, the feeding process becomes faster, safer, and much more comfortable. It reduces the risk of injuries, saves time, and helps workers focus more on caring for the horses rather than struggling with heavy loads. This project shows how even a simple design can make a meaningful impact on people's daily work life. Testing the trolley over a longer period with different workers could also provide more feedback to improve the design. With further improvements and proper support, this product has the potential to be used in more stables, farms, or even animal shelters that face similar challenges. StableLift is just the beginning of a more worker-friendly and efficient approach to daily stable routines.



Figure 2 The picture of Environment (StableLift)

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