



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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PREFACE

It is with great pleasure that we present the e-proceedings of International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), which compiles the extended abstracts submitted to the International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), held on 23 January 2025 at **PTDI, Universiti Teknologi MARA (UiTM) Cawangan Johor, Kampus Pasir Gudang**. This publication serves as a valuable resource, showcasing the intellectual contributions on the invention and innovation among students, academics, researchers, and professionals.

The International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), organized under the theme "Fostering a Culture of Innovation and Entrepreneurial Excellence," is designed to inspire participants at various academic levels, from secondary students to higher education students and professionals. The competition emphasizes both innovation and entrepreneurship, encouraging the development of product prototypes that address real-world problems and have clear commercialization potential. By focusing on technological and social innovations, i-TIEC 2025 highlights the importance of turning creative ideas into viable, market-ready solutions that can benefit users and society. The extended abstracts in this e-proceedings book showcase the diverse perspectives and depth of research presented during the event, reflecting the strong entrepreneurial element at its core.

We extend our sincere gratitude to the contributors for their dedication in sharing their innovation and the organizing committee for their hard work in ensuring the success of the event and this publication. We also appreciate the support of our collaborators; Mass Rapid Transit Corporation Sdn. Bhd. (MRT Corp), Universitas Labuhanbatu, Indonesia (ULB), Universitas Riau Kepulauan, Indonesia (UNRIKA) and IEEE Young Professionals Malaysia, whose contributions have been instrumental in making this event and publication possible.

We hope that this e-proceedings book will serve as a valuable reference for researchers, educators, and practitioners, inspiring further studies and collaborations in both innovation and entrepreneurship. May the knowledge shared here continue to spark new ideas and market-ready solutions, advancing our collective expertise and fostering the growth of entrepreneurial ventures.

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A-SS121: APPLICATION: LADYLINE

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ABSTRACT

LadyLine is a web-based app designed for women, by women. The app addresses challenges women face in accessing safe services and creates opportunities for women in male-dominated industries. LadyLine stands out by prioritizing safety and inclusivity while empowering women economically and fostering gender equality. With significant socioeconomic potential and a strong value proposition, LadyLine aims to transform how women access and deliver services globally.

Keywords: Women, Service, web-based app

1. Product Description

The app provides e-hailing, home services such as plumbing, cleaning, and repairs, childcare, healthcare, and wellness solutions—all delivered by verified women service providers. LadyLine prioritizes user safety with features such as real-time tracking, background-checked providers, and a dedicated emergency support system. With its user-friendly design, LadyLine allows women to book multiple services seamlessly in one place, saving time and ensuring peace of mind. The platform also empowers women economically by creating job opportunities and fostering a supportive environment for female professionals. Whether you need a ride, reliable childcare, or a wellness coach, LadyLine ensures that every service is tailored to meet the unique needs of women. By focusing on safety, trust, and inclusivity, LadyLine redefines how women access essential services, offering a community-driven approach that puts women at the center of its mission. LadyLine isn't just an app; it's a trusted companion for women, built to make their lives easier, safer, and more empowered.

2. Ladyline App Services

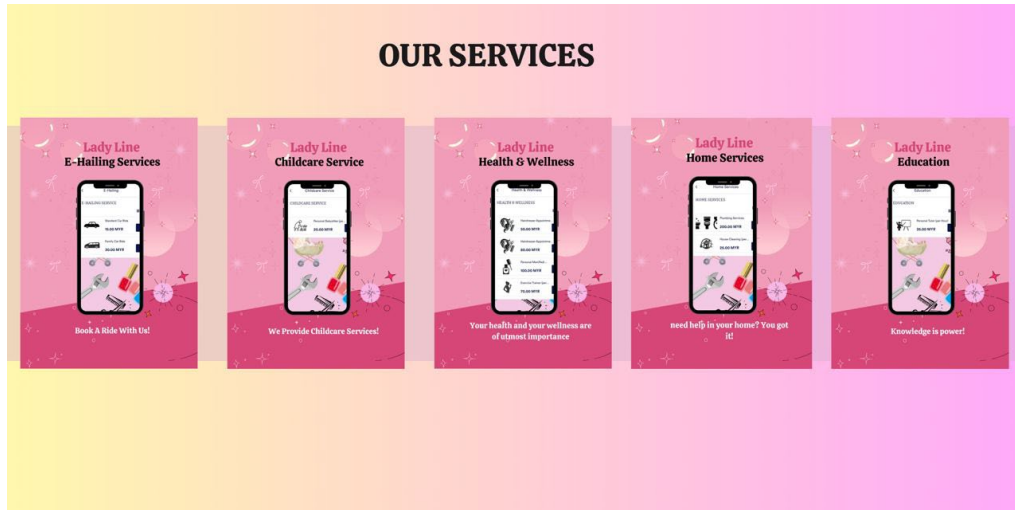


Figure 1 : Screenshots of the Ladyline App Services

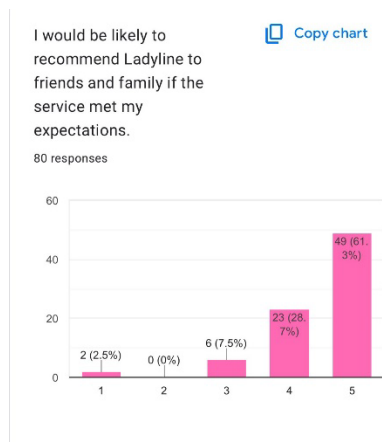


Figure 2 : LadyLine marketing research regarding marketing and adoption

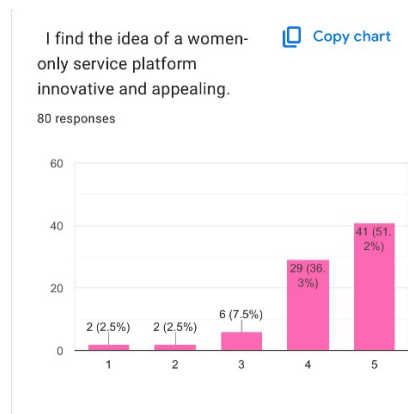


Figure 3 : LadyLine marketing research regarding marketing and adoption

3. Novelty and uniqueness

The novelty and uniqueness of LadyLine lie in its distinct approach to service delivery, focusing on women's safety, empowerment, and community-building. Unlike traditional platforms, LadyLine exclusively connects women with verified female service providers across various sectors, including e-hailing, home services, childcare, healthcare, and wellness. This focus on women-only providers creates a safe and trusted environment, addressing the unique concerns women face when accessing services. LadyLine stands out by integrating essential safety features such as background checks, real-time tracking, and an emergency support system, prioritizing users' peace of mind. Furthermore, the app fosters economic empowerment by creating job opportunities for women in male-dominated industries, allowing them to work independently and thrive professionally. This combination of safety, empowerment, and inclusivity, alongside its focus on women-centric services, makes Ladyline a truly innovative and unique platform in the service industry, creating opportunities for both users and service providers in a way that's not seen in mainstream apps

4. Benefit to mankind

LadyLine offers significant benefits to mankind by promoting gender equality, safety, and economic empowerment. It empowers women by creating job opportunities in male-dominated industries, enabling financial independence and fostering equal access to professional opportunities. By focusing on services tailored to women's unique needs, such as childcare, healthcare, and wellness, LadyLine makes essential services more accessible and comfortable. Additionally, the platform encourages the empowerment of female professionals, breaking down traditional gender roles. LadyLine not only contributes to individual well-being but also supports a sense of community, connecting women with trusted providers and creating a more inclusive environment. Ultimately, LadyLine drives social and economic progress by enabling women to thrive, positively impacting society by fostering equality and enhancing women's roles in the workforce.

5. Innovation and Entrepreneurial Impact

LadyLine promotes innovation by creating a unique platform that combines safety, inclusivity, and empowerment, addressing gaps in traditional service industries. By focusing on women-only service providers, the app fosters an entrepreneurial ecosystem that encourages women to become business owners, freelancers, and professionals in sectors historically dominated by men. This entrepreneurial spirit not only promotes economic independence but also encourages the growth of new businesses, empowering women to innovate and shape their own careers. LadyLine's user-friendly platform allows women to easily manage and expand their services, providing opportunities for scalability. Additionally, the app encourages a culture of collaboration by connecting women service providers with a supportive community of users and professionals. By prioritizing women's needs and creating a safe, trustworthy environment, LadyLine drives innovation, opening doors for women to create and lead businesses, thus contributing to a more inclusive and diverse entrepreneurial culture in the industry.

6. Potential commercialization

LadyLine presents significant potential for commercialization by addressing a critical market gap: providing women-centric services with a focus on safety, inclusivity, and empowerment. Its diverse offerings—e-hailing, home services, childcare, healthcare, and wellness—delivered exclusively by verified women service providers, cater to a growing demand for trusted, gender-specific platforms. The app's unique safety features, such as real-time tracking, background checks, and emergency support, position it as a reliable choice for women seeking peace of mind. Moreover, LadyLine's commitment to economic empowerment through job creation in male-dominated sectors offers an appealing social value proposition. By integrating a user-friendly design with high-impact features, LadyLine is well-suited for global expansion. Its innovative approach fosters a sense of community and trust, distinguishing it from mainstream platforms. With the rising focus on gender equality and safe digital ecosystems, LadyLine holds the promise of becoming a sustainable and profitable venture while advancing social progress.

7. Acknowledgment

The project is done under Prof Madya Dr Faiz Izwan Anuar guidance and support for our subject Tourism Product Design and Innovation at Faculty of Hotel and Tourism Management, Univesiti Teknologi Mara, Puncak Alam Campus, Selangor, Malaysia.

8. Authors' Biography



Ahmad Shazwan Ahmad Baidzawi is a Master's student in Tourism Management, currently in his second semester and enrolled in the Tourism Product Design and Innovation class. With a focus on creating impactful and user-centered solutions, he aims to design innovative services that address the needs of underserved communities. His vision for this app reflects his dedication to empowering women through safe, reliable, and women-led services. By combining his academic expertise with a passion for innovation, Ahmad Shazwan is committed to developing platforms that prioritize inclusivity, safety, and convenience in today's service industry.



Siti Sabihah Ismail is an experienced Event Practitioner with over 10 years in the industry. Holding a BA (Hons) in Event Management, she has worked across diverse sectors, including corporate, start-up companies, and even NGO. Her career spans major events such as LIMA Langkawi and SBK Bike Week. As a dedicated event planner, Siti Sabihah has honed her skills mostly in the Corporate Communications Department. Currently pursuing a Master's in Tourism Management, she is in her second semester and is now working on an application for an innovation project called LadyLine.



Nurfarhana Lakim is a dedicated Master's student in Tourism Management, currently in her second semester with a keen interest in exploring the intersection of tourism and innovation. Her academic journey is driven by a vision to create transformative solutions that enhance the tourism experience while preserving cultural and environmental integrity. Passionate about fostering sustainable development, she aims to design initiatives that empower communities and contribute to the growth of Malaysia's tourism industry. Nurfarhana's approach combines creative thinking with a deep understanding of tourism trends, reflecting her commitment to shaping a responsible and inclusive future for the sector.



Putri Nur Adriana Amirah Mohammad Salihin Siew Hin is a Master's student in Tourism Management, currently in her second semester, specializing in Tourism Product Design and Innovation. Her academic journey is driven by a passion for creating unique and inclusive solutions in the tourism and service industries. With a focus on addressing real-world challenges, she is dedicated to designing products that prioritize safety, accessibility, and empowerment. Through her involvement in this app, she aims to support women by offering services run exclusively by women, showcasing her commitment to innovation, community well-being, and impactful product development.