

# PROJECT PROFILE ASETS-CA INC.

## **PROJECT BACKGROUND**

ASETS-CA Inc., headquartered in Fredericton, NB, is at the forefront of web-based design platforms, specifically targeting early-stage engineering in heavy industrial construction through its proprietary Integrated Design Suite (IDS). The company envisions expanding its market share by exploring the adoption of IDS among Canadian engineering firms. ASETS-CA Inc. also contemplates enhancing its platform by incorporating a construction management module. To achieve these objectives, the company has partnered with UNB OCRC, and Dr. Zhen Lei and his team spearheaded a detailed technology and market assessment of IDS.

# METHODOLOGY

To achieve the desired outcomes of the project, the research methodology included:

- 1. **Market research:** Understand the market demand for IDS within Canadian engineering firms
- 2. Gap analysis of IDS: Identify areas for further development within IDS
- 3. Stakeholder engagement & knowledge mobilization: Share research findings and insights with the broader engineering community
- 4. **Roadmap creation:** Develop a strategic roadmap for the next steps of IDS within the Canadian market

#### **RESULTS**

Market research: In total, 22 software solutions were identified, and categorized based on what project phases they support or provide solutions for. These project phases included: feasibility and concept to detailed design, analysis, procurement, construction, commissioning & startup, and concluding with the handover and closeout stages. This formed the basis for further analysis, enabling us to discern trends, gaps, and opportunities to identify the positioning of the Integrated Design Suite (IDS) within it.

**Gap analysis of IDS:** The identified gaps in the assessed software highlight areas for improvement to enhance overall functionality, user experience, and adaptability to diverse project needs. These gaps present market opportunities for software that can address these needs, which is where the new software proposed by ASETS-CA with their Integrated Design Suite (IDS) may come into the market as a solution.

**Stakeholder engagement & knowledge mobilization:** In pursuit of enhancing the capabilities and usability of the Integrated Design Suite (IDS) developed by ASETS-CA Inc., a dedicated feedback session was hosted with industry stakeholders. In this project, a comprehensive analysis of the feedback gathered during the session, offering insights into the strengths, weaknesses, and areas for improvement within IDS as identified by industry stakeholders was provided.

**Roamap creation:** This roadmap outlines key milestones, deliverables, dependencies, objectives, risks, and purposes aimed at enhancing the capabilities, usability, and market competitiveness of IDS. Each roadmap item is strategically designed to address specific areas of improvement identified through user feedback, industry research, and stakeholder engagement sessions.

### RECOMMENDATIONS

Based on the insights generated from the project, the strategic roadmap prioritizes the following recommendations:

- Incorporating Canadian codes and standards into IDS to ensure regulatory compliance.
- Enhancing functionalities for generating engineering drawings to bridge existing gaps.
- Improving structural design and analysis tools to cater to diverse engineering needs.
- Exploring options for enhancing collaboration between different disciplines through features like automatic notifications and integrated design tools.

• Additionally, the roadmap outlines initiatives for user support and training, feedback integration, integration and interoperability, quality assurance and testing, and documentation and reporting to ensure the ongoing success and development of IDS.

If you are interested in getting involved in this initiative or other research and development projects, please contact the Off-site Construction Research Centre at: **offsiteconstruction@unb.ca** 

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