FACULTY OF SCIENCE
CHIANG MAI UNIVERSITY

Title :   UX/UI Design and Development for Betagro Lunch Community Application and Livestock Contract Payment System Phase 2

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Major :   Computer Science

Advisor(s) :   1.   Dr.   Sutasinee Thovuttikul

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☑ Cooperative Education   (กรณี นำเสนอผลงานสหกิจศึกษา)

ABSTRACT

This cooperative education project applied a structured user-centered UX/UI design process to improve two internal enterprise systems at Betagro Public Company Limited: the Betagro Lunch Community Application and the Livestock Contract Payment System (LCPS) Phase 2. The objective was to enhance workflow efficiency, reduce operational friction, and ensure alignment between system functionality and actual user behavior prior to full-scale development implementation.

The Betagro Lunch Community initiative was proposed to address employee mealtime constraints identified through user interviews and on-site observation. Findings revealed limited meal options, repetitive menus, high delivery waiting times during peak hours, and time inefficiencies when leaving the company premises. Informal food exchange among employees further indicated unmet needs within the organization. Through requirement gathering, persona development, user journey mapping, and iterative prototyping using Figma, a high-fidelity internal pre-order platform was designed. Usability testing conducted with representative users achieved over 90% task completion rate and demonstrated a potential 40–50% reduction in ordering time, validating the feasibility and usability of the proposed solution.

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LCPS Phase 2 extended the existing Phase 1 swine payment framework to support poultry contract payments. This project involved stakeholder interviews with finance, administrative, legal, and operational teams to analyze workflow complexity and identify system gaps. The redesign introduced structured workflow optimization, real-time calculation concepts, flexible incentive logic, and E-Sign functionality to support digital approval processes. High-fidelity prototypes were developed and evaluated through usability testing to validate clarity, efficiency, and task accuracy before handoff to the development team for implementation.

Overall, this project demonstrates that integrating Design Thinking principles and ISO 9241-210 Human-Centered Design methodology into enterprise system development can reduce implementation risks, improve usability, and strengthen alignment between business objectives and digital solutions. The validated prototypes establish a strong foundation for future system deployment and continuous usability enhancement within the organization.

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Title name guide.

ADVISOR title name / แปลไทย	
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Major name guide.

SCIENCE MAJOR name / แปล	
Biology	ชีววิทยา
Microbiology	จุลชีววิทยา
Zoology	สัตววิทยา
Biochemistry and Biochemical Technology or Biochemistry and Biochemical Innovation	ชีวเคมีและชีวเคมีเทคโนโลยี หรือ ชีวเคมีและชีวเคมีนวัตกรรม
Chemistry	เคมี
Industrial Chemistry	เคมีอุตสาหกรรม
Materials Science	วัสดุศาสตร์
Physics	ฟิสิกส์
Computer Science	วิทยาการคอมพิวเตอร์
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