Case Studies & Examples

Detailed descriptions of the faculty innovations mentioned in the presentation.

Shyam's Assessment Evolution

Discipline: Entrepreneurship (MGMT3004)
Faculty: Shyam (Sam) Cholayil
Challenge: Traditional assessments became AI-completable in minutes
Timeline: Redesigned for Semester 2, 2025

The Problem

Traditional assignment format: - **Annotated Bibliography:** Students research 5+ articles per course topic, write 200-word summaries, and connect to course concepts - **Reality check:** "Could be done in no time using AI" - Student could input topics → AI finds articles → AI generates summaries → AI makes connections - Time required: 5-10 minutes - **Result:** Assessment no longer measured student learning or research skills

The Transformation

Rather than fighting AI with detection tools, Shyam redesigned the entire unit structure:

New Assignment 1: Integrated Knowledge Checks - Quizzes embedded after each lecture segment and entrepreneur interview - Tests comprehension and application, not just recall - Cannot be completed without actually engaging with content - AI can't substitute for watching videos and making connections

New Assignment 2: In-Class Collaborative Application - Group worksheets with fictitious startup scenarios - Real problems requiring real-time application of concepts - Examples: "Your startup has 3 months of cash. Co-founder wants to pivot. Lead investor is nervous. What do you do?" - Students must: - Apply lecture concepts - Draw on entrepreneur interview insights - Collaborate with teammates - Negotiate solutions - Defend reasoning under questioning

AI's Role - Supporting Faculty, Not Replacing Students

Shyam uses AI extensively for instructor efficiency: - **Generates quiz questions** - AI creates variations, Shyam evaluates and refines - **Creates startup scenarios** - AI develops diverse, realistic cases for worksheets - **Produces assessment materials** - Faster content creation = more time for facilitation

Critical distinction: AI helps instructor create materials; students' AI use (if any) is for preparation, not completion of assessment.

The Evolution Journey

Before 2025: - Used AI generically for "ideas on tute execution" - Traditional assessment structure vulnerable to AI completion

Semester 2, 2025: - Recognized AI made traditional format obsolete - Proactively redesigned entire unit - Moved from prevention mindset to strategic design

Key Innovations

1. **Flipped classroom enhanced** - Chunked lectures + entrepreneur interviews + immediate knowledge checks
2. **Assessment redesign** - From individual, AI-completable work to collaborative, in-class application
3. **Strategic AI use** - Instructor efficiency tool, not student shortcut
4. **Authentic skills** - Students practice entrepreneurship skills (collaboration, real-time problem-solving, presenting under pressure)

Outcomes

- **Assessment is "AI-proof" by design**, not detection
  - Group work eliminates isolated AI use
  - In-class format requires real-time thinking
  - Oral defense component reveals understanding
- **Students develop authentic capabilities**
  - Collaboration under time pressure
  - Application of concepts to ambiguous problems
  - Negotiating solutions with diverse perspectives
  - Defending reasoning under questioning
- **Instructor efficiency improved**
  - AI handles content generation busywork
  - More time for facilitation and feedback
  - Better variety in scenarios and questions
- **Higher engagement**
  - Active learning replaces passive bibliography compilation
  - Real startup scenarios more relevant than abstract articles
  - Peer interaction increases motivation

Lessons for Other Disciplines

When AI makes your assessment completable:

1. **Don't fight it** - Detection is an arms race you'll lose
2. **Ask:** "What can students NOT do with AI alone?"
3. **Redesign around:**
    - Group collaboration
    - Real-time application
    - In-class demonstration
    - Oral defense/explanation
    - Negotiated consensus
4. **Use AI yourself** - Create better materials faster
5. **Raise the bar** - Authentic tasks are harder, not easier

Questions to guide redesign: - Can this be completed sitting alone with AI? - Does it require human collaboration? - Must students demonstrate thinking in real-time? - Is there negotiation or consensus-building required? - Would this mirror real workplace challenges?

Connection to Assessment 2030

Shyam's redesign embodies Assessment 2030 principles:

50/50 Principle: - 50% can involve AI (quiz prep, scenario research, brainstorming) - 50% demonstrates individual/group thinking (in-class work, collaboration, defense)

Demonstration over Prevention: - Students can use AI for preparation - Assessment structure ensures AI reveals, not hides, their capabilities - Focus on what they DO with information, not just whether they found it

Authentic Context: - Mirrors real entrepreneurship: collaboration under pressure, ambiguous problems, negotiated solutions - Prepares for workplaces where AI is tool, not crutch

Takeaway for Industry

This is the same challenge organisations face: When AI can automate individual tasks, value shifts to: - Collaboration and coordination - Judgment in ambiguous situations - Real-time problem-solving - Negotiating solutions across stakeholders

Shyam's students practice exactly these skills. They graduate prepared for AI-enabled workplaces where tools are powerful but human judgment remains essential.

Partnership opportunity: What if the startup scenarios came from your actual business challenges? Students work through real problems, you provide feedback, we create learning experiences grounded in industry reality.

Tony's Test Bank Experiment

Discipline: Information Systems
Challenge: Creating revision questions is time-consuming
AI Application: Used AI to generate test bank questions
The Twist: AI got some answers wrong
Pedagogical Innovation: Gave questions to students WITH disclaimer - "Some answers may be wrong. Find them."
Outcome: Transformed error into learning opportunity; students must understand content deeply enough to catch mistakes
Key Insight: AI limitations can be pedagogical features, not just bugs

Takeaway for Industry: This models critical evaluation - exactly what employees need when working with AI-generated analysis or recommendations.

Renée's Graphic Image Novels

Discipline: Human Resource Development (Master's level)
Challenge: Traditional text-based assessments don't engage students or test higher-order thinking
AI Application: Students used AI image generation to create graphic novel-style assessments
Innovation: First time in Australian university
Outcomes:

- Increased student engagement
- Better knowledge retention
- Published research in *Education Sciences* journal (July 2025)

Key Insight: AI enabled assessment format that was previously impossible due to technical barriers; raised the bar rather than lowered it

Published Research: Haywood, S., Padurean, L., Ralph, R., & Mortlock, J. T. (2025). From Intimidation to Innovation: Cross-Continental Multiple Case Studies on How to Harness AI to Elevate Engagement, Comprehension, and Retention. *Education Sciences*, 15(7), 902.

Takeaway for Industry: AI can enable more ambitious work, not just automate existing work.

Tomayess's Feedback Mechanisms

Discipline: Business Project Management, Green IT, Corporate Sustainability
AI Applications:

- Students use AI for brainstorming in research reports and project plans
- In-class activities comparing AI results with traditional database searches
- Currently exploring Claude Opus 4 for feedback mechanisms (Assessment 2030 grant)

Key Insight: Explicit comparison between AI and traditional methods helps students understand AI's strengths and limitations

Takeaway for Industry: Don't hide AI use - make it transparent and teach evaluation skills.

Katharina's Crisis Simulations

Discipline: Business (Crisis Management focus)
Challenge: Creating realistic simulation artifacts (social media posts, phone calls, news bulletins) is time-intensive
AI Application: Uses AI to generate realistic crisis simulation materials
Outcome: More varied, realistic scenarios without hours of manual creation
Key Insight: AI excels at generating plausible content for training scenarios

Takeaway for Industry: Similar application in corporate training - AI can create realistic scenarios for practice without real-world risk.

Michael's Virtual Company

Discipline: Information Systems
AI Application:

- Created virtual company staffed by AI chatbot "employees" (finance director, HR manager, IT support)
- Students navigate workplace, extract information, make decisions
- **Assessment innovation:** Marks the conversations, not just outcomes
- Evaluates: quality of questions, ability to follow up, critical evaluation of responses

Key Insight: AI creates practice environment for workplace skills; assessment focuses on student's interaction process

Takeaway for Industry: This directly prepares students for AI-enabled workplaces where they'll interact with AI systems and colleagues.

Farveh's Research Applications

Discipline: Business
AI Applications:

- **Research tool:** Coding, sentiment analysis, thematic analysis, literature review
- **Teaching tool:** Creating podcasts, case studies, games, scenarios, voice clones
- Students use Gen-AI in workshop activities

Key Insight: AI used across both research and teaching; different tools for different contexts

Takeaway for Industry: Shows breadth of AI application - from analysis to content creation to student engagement.

Common Patterns Across All Examples

1. Domain Expertise Remains Essential

- Faculty evaluate, refine, contextualize AI outputs
- Students must demonstrate understanding to use AI effectively
- Quality control requires subject-matter knowledge

2. AI Handles Scale and Speed

- Repetitive tasks (quiz generation, scenario creation)
- Data compilation and initial analysis
- Content variation and customization
- Administrative busywork

3. Humans Handle Judgment

- Pedagogical decisions (what to assess, how to assess)
- Quality evaluation (what's accurate, what's appropriate)
- Ethical considerations (when AI use is helpful vs. harmful)
- Strategic direction (learning outcomes, skill development)

4. Transparency in Use

- Most faculty openly discuss AI use with students
- Clear guidelines about when/how AI can be used
- Explicit teaching of AI evaluation skills
- Honest about both benefits and limitations

5. Iterative Implementation

- All started small (single assignment, one unit)
- Refined through experimentation and feedback
- Shared lessons with colleagues
- Scaled what worked, abandoned what didn't

6. Assessment Redesign is Key

- Traditional formats often AI-completable
- New formats require collaboration, real-time thinking, demonstration
- Focus shifts from content generation to application and judgment
- Assessment 2030 principles in practice

For Advisory Board Members

These patterns mirror effective AI adoption in industry:

Efficiency Without Loss of Control: - AI for repetitive tasks → Humans for strategic decisions - Exactly what successful businesses do

Quality Through Expertise: - Domain knowledge as filter → Not blind trust in AI - Your organisations face same challenge

Transparent Integration: - Not hidden or avoided → Open discussion and skill development - Better than underground use

Iterative Pilots: - Start small, prove value, scale → Not "big bang" implementations - De-risks adoption

Focus on Uniquely Human Skills: - Collaboration, judgment, ethics → What AI can't replace - Exactly what you need in graduates

Partnership Opportunities

Based on these case studies, we could collaborate on:

1. **Real-world scenarios** - Provide actual business challenges for student application (Shyam's worksheets with your company problems)
2. **Case study development** - Share your AI implementation stories (successes AND failures) for teaching
3. **Internships** - Students work in AI-enabled environments with structured learning
4. **Guest input** - Industry speakers on AI transformation challenges you're navigating
5. **Collaborative assessment** - Students solve your problems, you evaluate their solutions
6. **Research partnerships** - Study AI adoption patterns, skill development, organisational change

The value proposition: Students get authentic experience, you get fresh perspectives and potential future employees who are AI-literate, critical thinkers prepared for your reality.

Questions for discussion: - Which of these patterns resonates with your experience? - Where do you see gaps between what we're teaching and what you need? - What would meaningful partnership look like for your organisation?