

Dynamic Content Generation

An intentional innovation journey towards a next-generation AI content strategy

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NCCA
An Chomhairle Náisiúnta Curaclaim agus Measúnachta
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ROYAL COLLEGE OF PHYSICIANS OF IRELAND

workday.

Building on a solid foundation

Our innovation journey was grounded in baseline desk research examining Generative AI's impact on two core pillars:

- **Digital Content Creation**
  (automating authoring and learning design)
- **Personalised Learning Pathways**
  (adaptive planning and dynamic sequencing)



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Our 6-Stage Innovation Journey

STAGE 1 ✓

Desk Research

State of the art mapping

STAGE 2

JTBD Workshop

Personas & prioritised jobs

STAGE 3

Solution Co-creation

Co-creating concepts with partners

STAGE 4

Conversational Prototype

User flow & software touchpoint mapping

STAGE 5

Prototype Validation

Semi-structured expert interviews

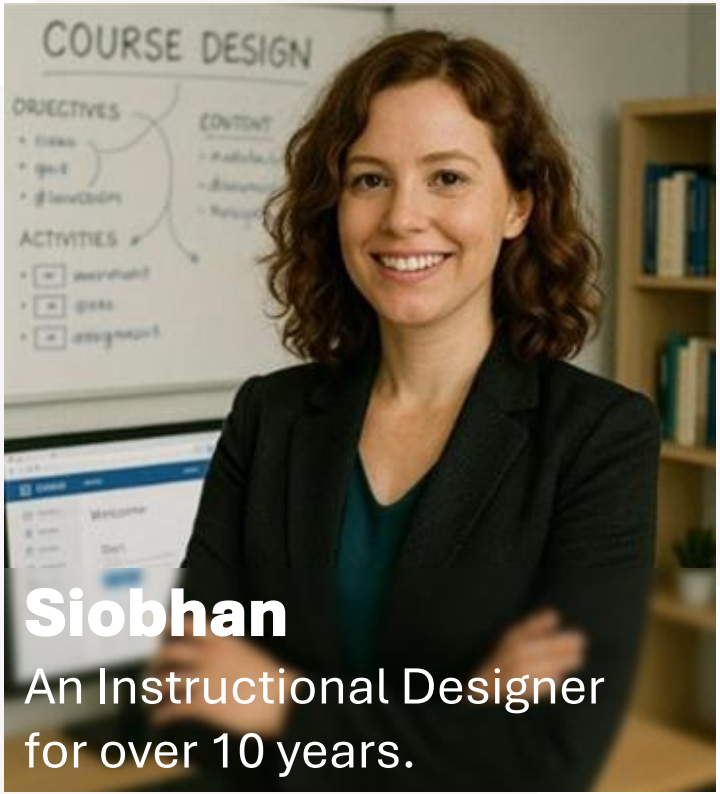
STAGE 6

Software POC

Core feature software build

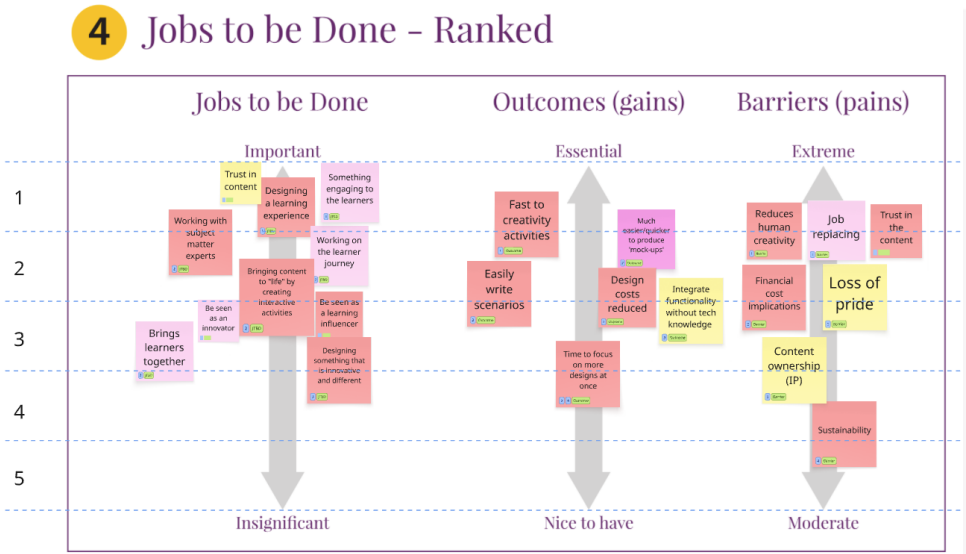
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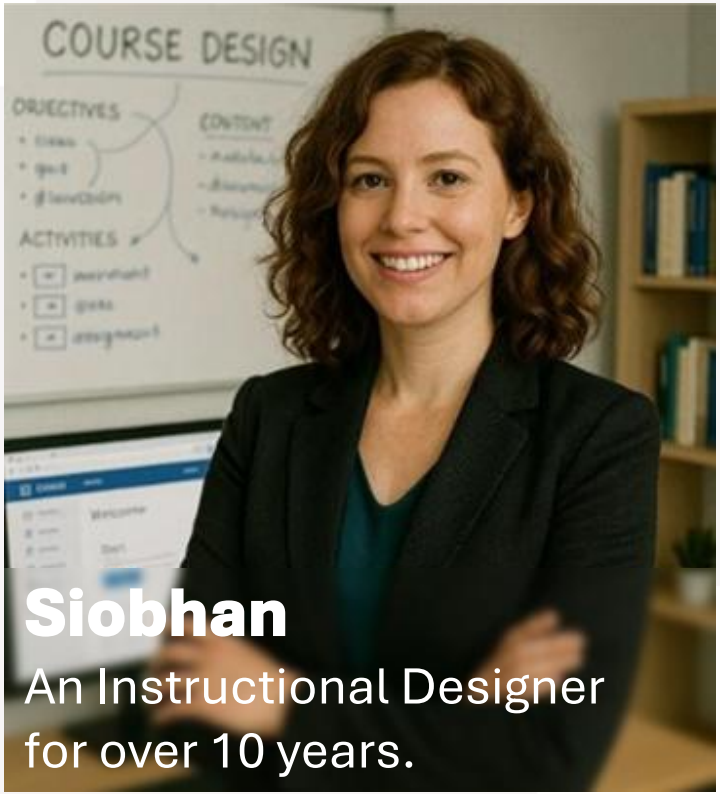
Target Persona & Top Jobs-to-be-Done



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Target Persona & Top Jobs-to-be-Done





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Target Persona & Top Jobs-to-be-Done

Trust in content

[Address risk of] reduced human creativity

[Address risk of] replacing jobs

Work with subject matter experts

Integrate functionality without technical knowledge

[Address risk of] loss of pride in work



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Solution Workshop



Siobhan, an Instructional Designer for over 10 years.

JTBD
- Designing a learning experience
- Something engaging to the learners
- Trust in content
- Working with subject matter experts
- Working on the learner journey

Barriers
- Reduces human creativity
- Trust in the content
- Job replacing

Ideation Workshop

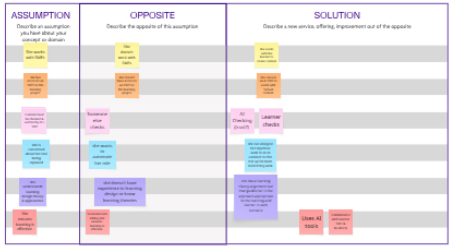
How might we..... support Learning Content Creators (Instructional Designers / LX Designers / Teachers) to create credible / trustworthy, engaging, effective (authentic), learning content.

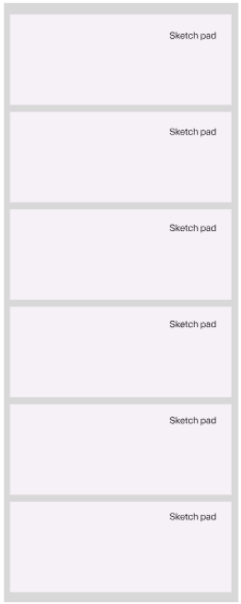
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Leading Learning Innovation

1 Idea Alphabet

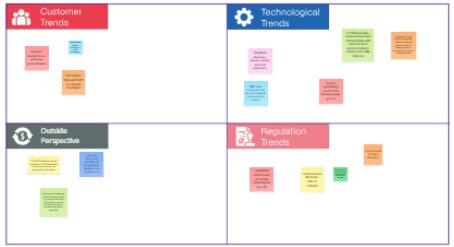


2 Opposite Thinking

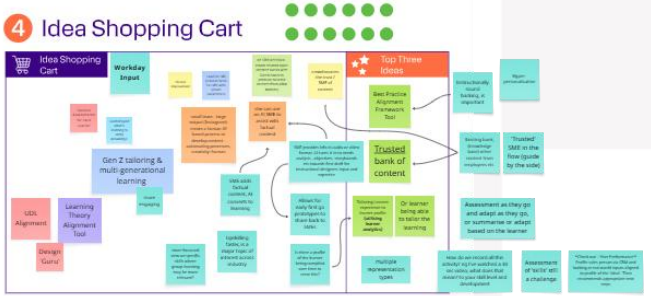




3 Brainstorm Cards



4 Idea Shopping Cart



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Solution Workshop

Trusted bank of content

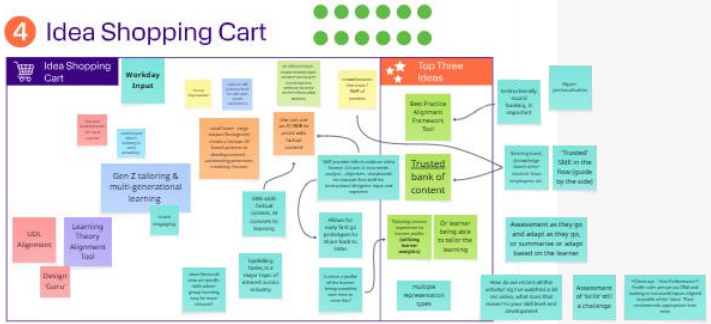
Best Practice Alignment Tool

Trusted SME in the flow (guide by the side)

Tailoring Learner experience to learner profile

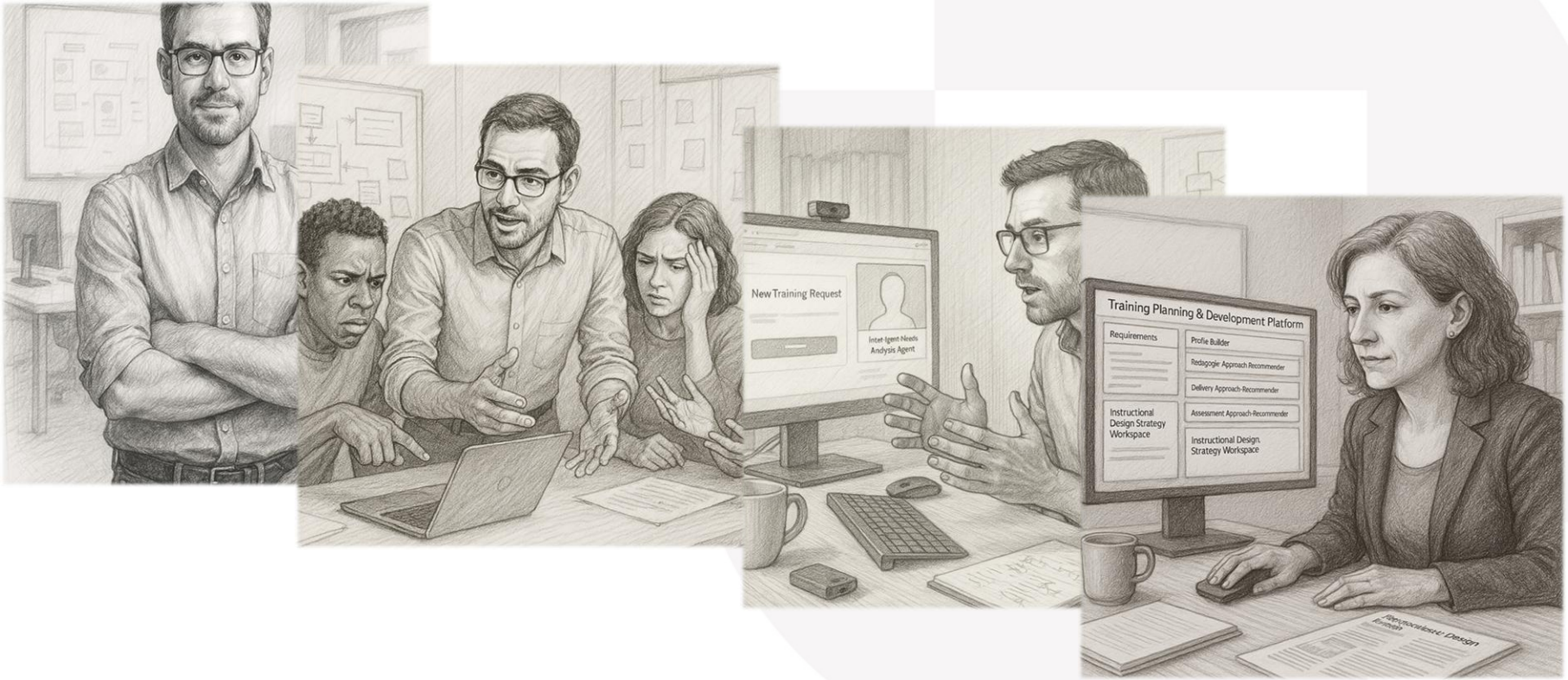
Hyper personalisation

Multiple representation types



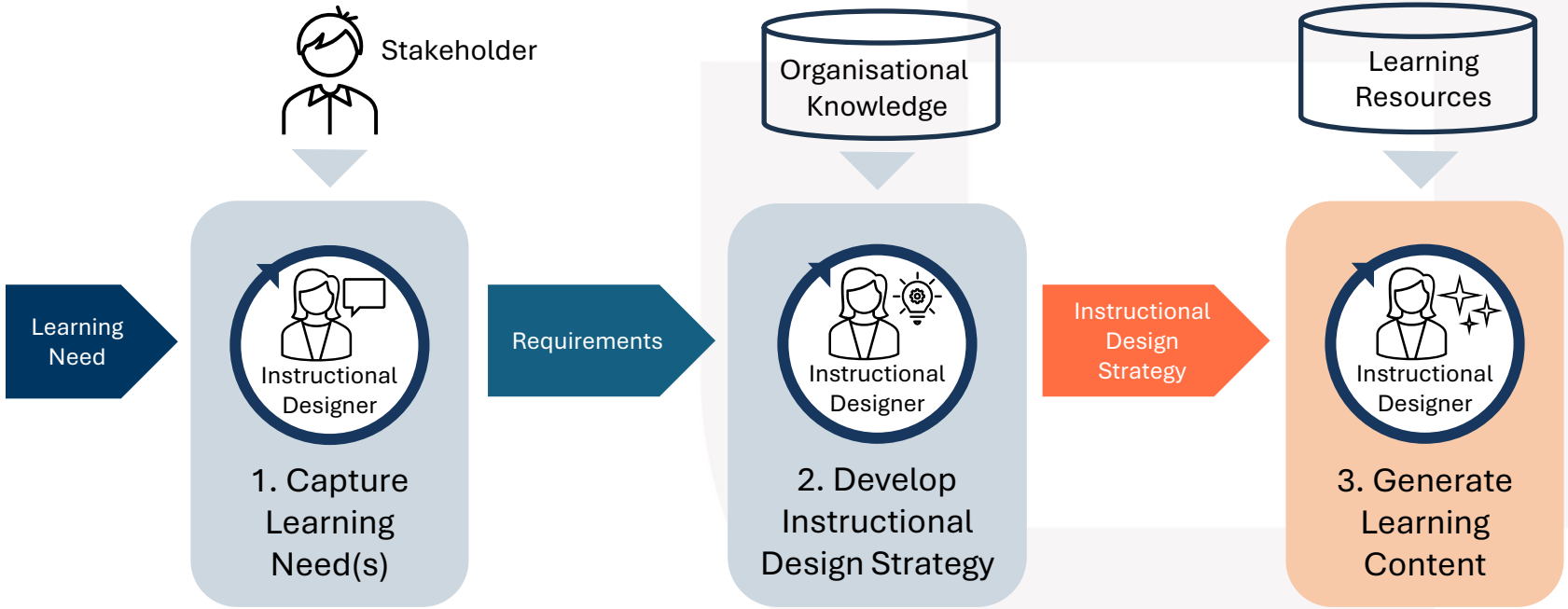
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Conversational Prototype



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Conversational Prototype



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Partner Validation & Focus Areas



Semi-Structured Interviews

Video walkthroughs of the narrative prototype with industry members to capture empirical feedback.

10
Interviews

7
Organisations

Positive Feedback

Ensuring Rigor, Trust & Control

Balancing high-speed AI output with essential expert oversight and risk mitigation.

Bridging Strategy and Content Generation

Turning high-level learning strategy into structured, ready-to-edit course drafts.

Supporting Multi-Domain Pedagogy

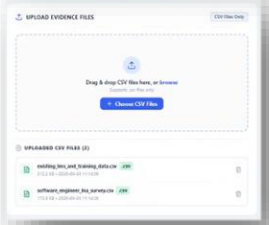
Tailoring AI capabilities for both analytical skills and collaborative, reflective learning.

Proof of Concept Development

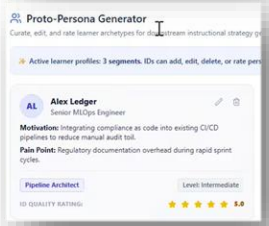
Learning Needs Analysis ‘Bot’



Learning Design Brief Generator



Design Strategy Workspace



Key Principles

- Human-led, AI-amplified
- Designed for human agency
- Explainability Evidence Pack
- Adapts to your workflow

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Thank you!
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