How to Manage the Innovation Cycle

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Project Manager
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Agenda

• What is CIRAS?

• Innovation Cycle
  – How to manage the innovation cycle to improve profitability
Since 1963, we have delivered proven services that improve the profitability of businesses. Our approach, Engage – Educate – Embed, creates a specific solution that allows each business, along with its community, to prosper and grow. Coupled with a satisfaction guarantee, our typical client has achieved a 200% return on investment.

A vast network of university and industry experts brings years of professional experience to CIRAS, making us a leading integrator of solutions in Iowa. Clients have reported an economic impact of more than $1.8 billion over the past five years.
Improving the profitability of businesses through...

Proven Services
Our customizable services are rooted in applied research and established best practices.

Our approach ensures we deliver a service that is specific to your business. We focus on making the improvement stick and support you even after a project ends.

Return on Investment
Our commitment to permanent improvement is backed up by a satisfaction guarantee. A typical client achieves a 200% ROI – $2 return for every $1 invested.

Vast Network
Our partnerships stretch across ISU and beyond. Relationships with public and private experts enable us to deliver a solution that meets your needs.
Our network extends across ISU and nationally

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Innovation

Creation of a novel process, product, service or business model that has business value......

Something new that somebody else will pay for.
Challenging
Risky
Advantage or Disadvantage?

How can a company deliver profitable, innovative solutions quickly and cost effectively?
The Innovation Cycle

1. Discovery
2. Definition
3. Development
4. Delivery

Key: Ideas, Business Model, Process, Product, Service, Marketing
Symptoms of Breakdown

• Lack of clarity of real customer needs/problems
• Lack of ideas
• Innovation vs. innovation
• Low management or employee support

Potential Solutions

• Idea stimulation training
• Concept refinement training
• Customer and market research
• Technology research
Symptoms of Breakdown

- High percentage of new products/services fail to meet expectations
- Overloaded product development/under-resourced projects
- “Flavor of the month”
- Unclear “why” we are considering concept

Potential Solutions

- Formal decision framework
- Customer and market research
- Technology research
- Financial analysis
- Competitive analysis
Symptoms of Breakdown

- Delayed releases
- High costs
- Long development cycles
- Solutions don’t satisfy market needs
- Poor team morale / motivation

Potential Solutions

- Project management / planning
- Development systems
- Prototyping
- Design for “X”
- Simulation and modeling
- Failure mode analysis
Symptoms of Breakdown

- Many engineering changes after commercialization
- High manufacturing costs
- Quality problems
- Solutions don’t satisfy market needs
- Team confusion

Potential Solutions

- Improvements to Definition, Discovery, and Development
- Integrated product teams
- Postmortem analysis
- Collect customer feedback
How can a company deliver profitable, innovative solutions quickly and cost effectively?

• Utilize a systematic process for innovation
• Understand phases and where symptoms of breakdown exist.
  – Identify opportunities for improvement
• Focus on improving process to:
  – Minimize time to market
  – Minimize development costs
  – Quickly identify solutions the customer will actually pay for
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Reference
Why invest with CIRAS?

Years of professional experience and a vast network of experts enable us to find proven solutions.

Our approach Engage. Educate. Embed. ensures we deliver a service that is specific to your business. We focus on making the improvement stick and support you even after a project ends.

Typical client achieves a 200% return on investment – $2 of value for $1 invested.

Our mission is to help YOU improve.

– Funding determined by value realized
– 100% satisfaction guarantee
CIRAS Programs

Manufacturing Extension Partnership (MEP)
- Technical assistance for Iowa Manufacturers
- Apply research-based practices and tools
- Fee-based assistance with high ROI
- Expertise:
  - Engineering & Innovation
  - Productivity
  - Supply Chain
  - Sustainability
  - Human Capital

Procurement Technical Assistance Program (PTAP)
- Assist Iowa businesses in breaking down the barriers to contracting with federal, state, or local governments

Iowa Advanced Manufacturing Innovation Network
- Connect manufacturers, entrepreneurs, and researchers
- 2014 Focus: Plastics Industry