

A New Professional

Design's Core Expertise, Broadly Applied

RECRUIT ID

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1. Overview

Nature of My Talk

- ▶ **Essence of the situation**
 - ▶ **Design's core competencies**
 - ▶ **Institute of Design's position**
 - ▶ **Opportunities**
-

1. Overview

Essence of the Situation

- ▶ **The desire to innovate is strong**
 - ▶ **Available, cost-effective technology is plentiful**
 - ▶ **There is a need for professionals skilled in navigating innovative work**
 - ▶ **No specific professional discipline owns this space**
 - ▶ **There is a lack of professionals who do this well**
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1. Overview

Innovative Work

- ▶ **Requires an open mind to discover opportunity**
- ▶ **Demands rigor to address many facets of the challenge**
- ▶ **Must leverage knowledge from many different areas**
- ▶ **Requires synthesis of the new**

- ▶ **Rewards success many times over**

1. Overview

Who Can Do It?

- ▶ **Business schools focus on the analytic**
- ▶ **Engineering focuses on the specific**
- ▶ **Design focuses on the visual**

- ▶ **A new kind of professional is needed**

Design's Core Competencies

The heart of design's value



2. Design's Core

Definition of Design

- ▶ **Broader than the traditional visual emphasis**
- ▶ **More like Herbert Simon's definition**
- ▶ **Paraphrasing, "Anyone designs who takes courses of action aimed at turning existing situations into preferred ones."**
- ▶ **The kind of skills required to effectively "turn existing situations into preferred ones" is my area of interest today**

2. Design's Core

It Ain't About Creativity, It Is:

- ▶ **An ability to understand context in a tangible way**
- ▶ **The ability to work productively without having all the information**
- ▶ **The ability to model solutions at any time**
- ▶ **A problem solving process that creates multiple alternatives**
- ▶ **An ability to create value as pieces are integrated into a whole – turns compromise into value**
- ▶ **The ability to use form to embody ideas in a quality manner**

2. Design's Core

Understanding Context

- ▶ **Research into aspects of users, business, and technology**
- ▶ **Make that research tangible, understandable to others**
- ▶ **Identify criteria that can actually lead to innovation**

- ▶ ***Essentially helps frame the problem for an innovative response.***

2. Design's Core

Working Without Perfect Information

- ▶ **Too many disciplines focus on completeness of information for solid decision-making**
- ▶ **Innovative situations lack concrete evidence**

- ▶ ***Generating early possibilities drives projects forward***

1. Design's Core

The Ability to Model

- ▶ **Related to the previous point, design creates tangible representations of things that do not yet exist**
- ▶ **Think about how Pixar or Industrial Light and Magic help us see possibilities**
- ▶ **Diagrams, drawings, prototypes are the reporting language of the designer**
- ▶ ***Provides a powerful means of assessment to support decision-making***



2. Design's Core

Creating Multiple Alternatives

- ▶ Few disciplines **emphasize** the need to come up with many possible ideas as a way to address one's problem
- ▶ Design understands that products and services are well-integrated systems of ideas and not an "answer"

- ▶ *Multiple alternatives increases the probability of success*

2. Design's Core

An Ability to Integrate

- ▶ **Innovation requires the integration of previously incompatible ideas**
- ▶ **The typical response to this is compromise**
- ▶ **Design excels at adding value as things come together**

- ▶ ***Turns compromise into value***



2. Design's Core

Using the Language of Form

- ▶ **The designer's medium is the same as your customer's and your customer's customer, that is, actual things**
- ▶ **Form, or the ability to embody ideas, is**

- ▶ ***A command of form reduces the risk of new product launches and adoption***

The Institute of Design

Targeting the Education of This New Professional

3. ID's Target

A Problem Solving Process

- ▶ **Understand the context**
- ▶ **Identify and frame the opportunity**
- ▶ **Explore alternative ideas**
- ▶ **Validate and deliver the solution**

- ▶ ***This approach is applicable across the enterprise***



3. ID's Target

A Collection of Methods

- ▶ **Ethnography**
- ▶ **Era analysis, action analysis**
- ▶ **Brainstorming**
- ▶ **Paper, behavioral, interactive prototyping**
- ▶ **Dynamic diagramming, visual data display**

- ▶ ***Tools to be used in strategy, marketing, R&D...***

3. ID's Target

Values & Principles

- ▶ **Human-centered, everyday life**
- ▶ **Systems orientation**
- ▶ **Working in teams**
- ▶ **Methods and tools to support**

- ▶ ***A new kind of professional for innovative work***



ID

Understanding people's physical and cognitive capabilities, social norms and emotional values leads to meaningful and successful innovations.

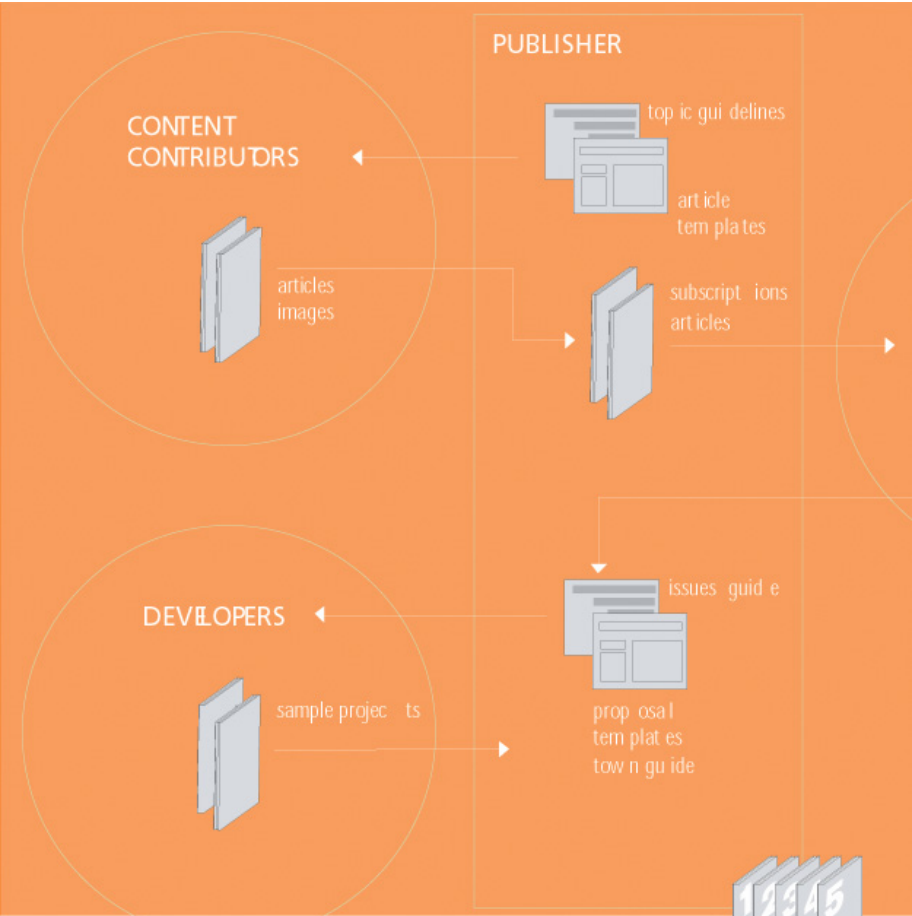
Principles Human-Centered



ID

Complex problems require systematic solutions that go beyond individual artifacts to include a collection of interacting products, services and messages.

Principles Systems Thinking





ID

System-level design requires working across boundaries. No single discipline, including design, can solve hard, complex problems alone.

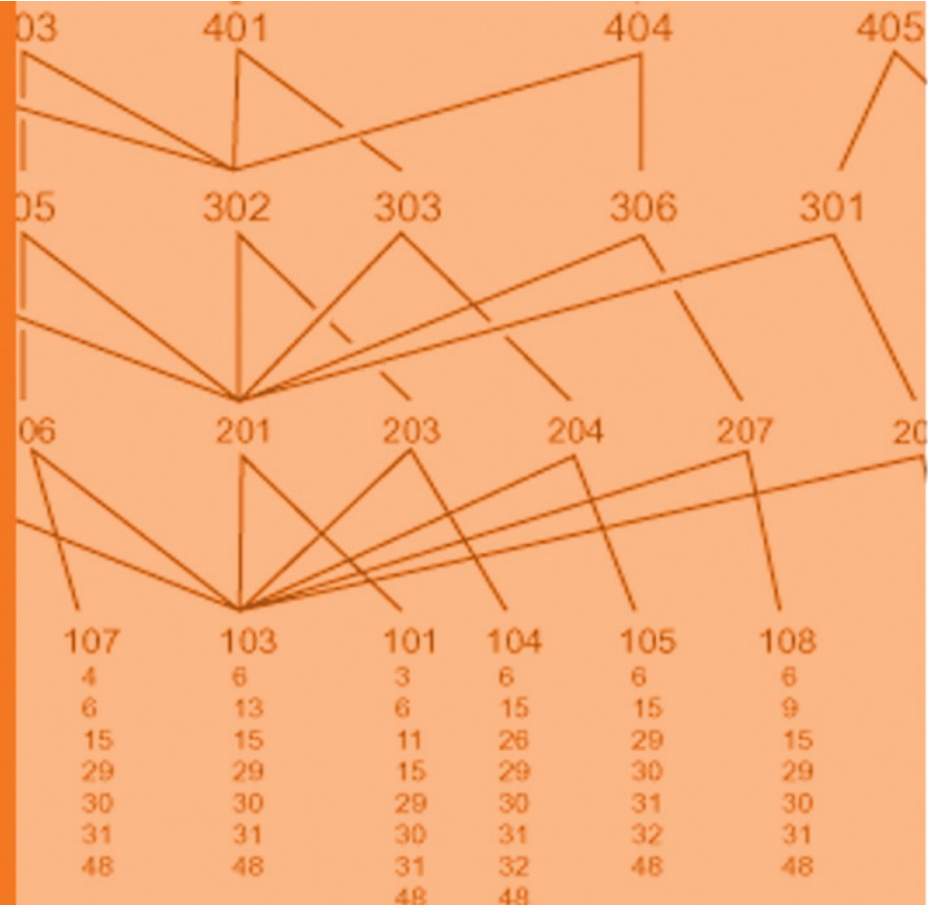
Principles Working in teams



ID

ID develops, teaches and applies a set of methods that together form the core of the professional design discipline.

Principles Tools & Methods





3. ID's Target

An Invitation

- ▶ **Participate today with a spirit of innovation**
- ▶ **Contribute to our understanding of this potential**
- ▶ **Help us understand the challenges**
- ▶ **Consider integration of this expertise in your own organization**

- ▶ ***Drive the development of a new kind of professional with design competence at its foundation***



Institute of Design

ILLINOIS INSTITUTE OF TECHNOLOGY

Thank you.

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