MEDICAL JOURNAL CLUB

INNOVATION



INTRODUCTIONS

• Let's get to know each other:

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Clinical Professional Development Educator





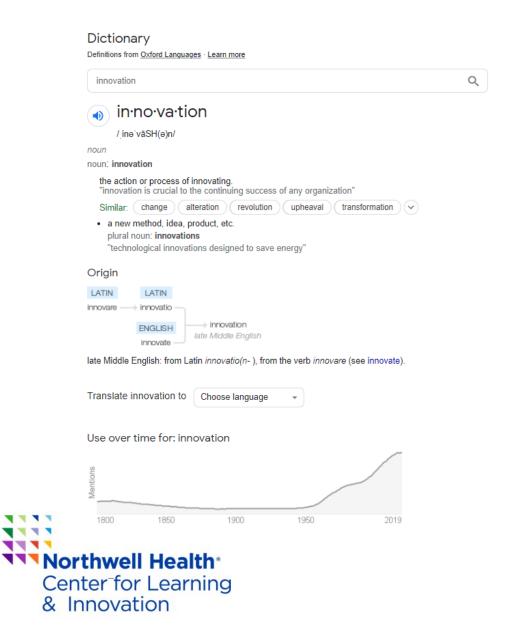












Truly Innovative

Be actively curious

We're solution seekers

We're optimistic

Empower every team member

We need game changing ideas – big and small - and we understand ideas come from everywhere. We empower all team members to share their expertise, ideas, and to innovate.

We create a safe environment for those ideas to be heard, an environment where it's safe to make mistakes and to learn from them.

4 Types of Innovation

BREAKTHROUGH INNOVATION SUSTAINING INNOVATION **Mavericks** Roadmapping **Skunk Works** Open innovation/prizes **Design thinking HOW WELL IS THE** PROBLEM DEFINED? **BASIC RESEARCH DISRUPTIVE INNOVATION** Research divisions VC model Academic partnerships **Innovation labs** Journals and conferences 15%/20% rule Lean launchpad Not well Well

HOW WELL IS THE DOMAIN DEFINED?

Northwell Health

Center for Learning
& Innovation

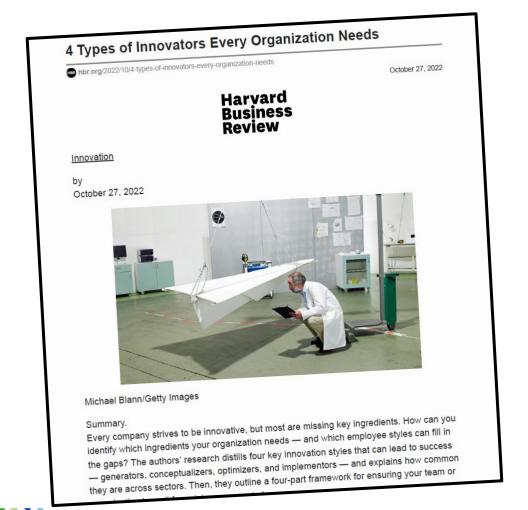
SOURCE GREG SATELL © HBR.ORG

SIGNIFICANCE

Northwell Health

& Innovation

Center for Learning



HBR has defined **four innovation styles** and then outlined a four-part framework to have all four styles represented in your organization

- Research collected between October 2006 and January 2021
- Over 100,000 people, nearly equal parts men and women
- Respondents came from 84 countries and a wide variety of companies/industries
- Each respondent answered the survey addressing what they like to do and what they do well, as well as their dislikes when they work to solve problems

4 Types of Innovators

Generators – Find new problems and ideate based on their own direct experience

Conceptualizers – Define the problem and prefer to understand it through abstract analysis rather than through direct experience

Optimizers — Evaluate ideas and suggest solutions. Prefer to systematically examine all possible alternatives in order to implement the best solution among the known options

Implementers — Put solutions to work enthusiastically (and sometimes impatiently) and take action, experimenting with new solutions before mentally testing them and then adjust based on the outcome of these experiments



SMRT Innovation Framework

Structure — Achieving the right ratio of innovation styles

- We often get stuck when attempting to solve complex, ill-defined problems because there are several "solutions"
- To improve innovation we need to ask: During which stage of the innovation process do our teams get stuck?
- Identify and amplify the missing innovation style

Model – Demonstrating importance of an innovation style top-down

- Elon Musk

 generator to optimizer style
- Senior leaders have a challenge (and opportunity) to demonstrate the importance of needed-at-the moment style
- Specific style is less important than their ability to shift during the flow of the innovation process

Reward — Creating incentives for problem-finding

- Employees are rewarded for doing their job well because of this they tend to go out of their way to avoid avoid problems which are outside of their job description
- 3M example 15% rule
- Results are tracked and celebrated on a regular basis

<u>Irain</u> — Creating opportunities to learn about all styles

- Expose team members to problem-dense environments
- Shift perspective from solving problems to learning about the problems

KEY TAKEAWAYS

The innovation process requires all four innovation styles, or organizations risk succeeding in one area of innovation while failing in another

Change the narrative:

It is critical for leaders to recognize, protect, encourage, and reward employees who are generators

Rather than viewing problems as negative obstacles – leaders can help employees see problems as opportunities for innovation

Be self aware of your innovation style that you lean into naturally and bring that out in your team as well – with the ability to shift as needed during the process.



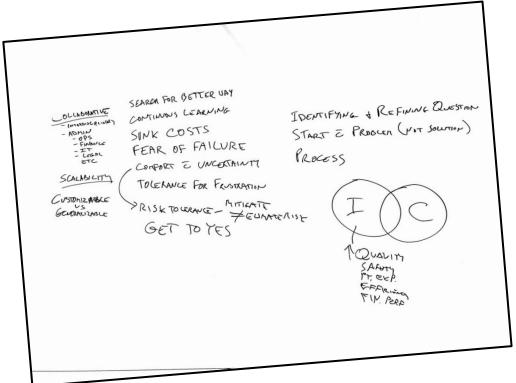
ADDITIONAL RESOURCES



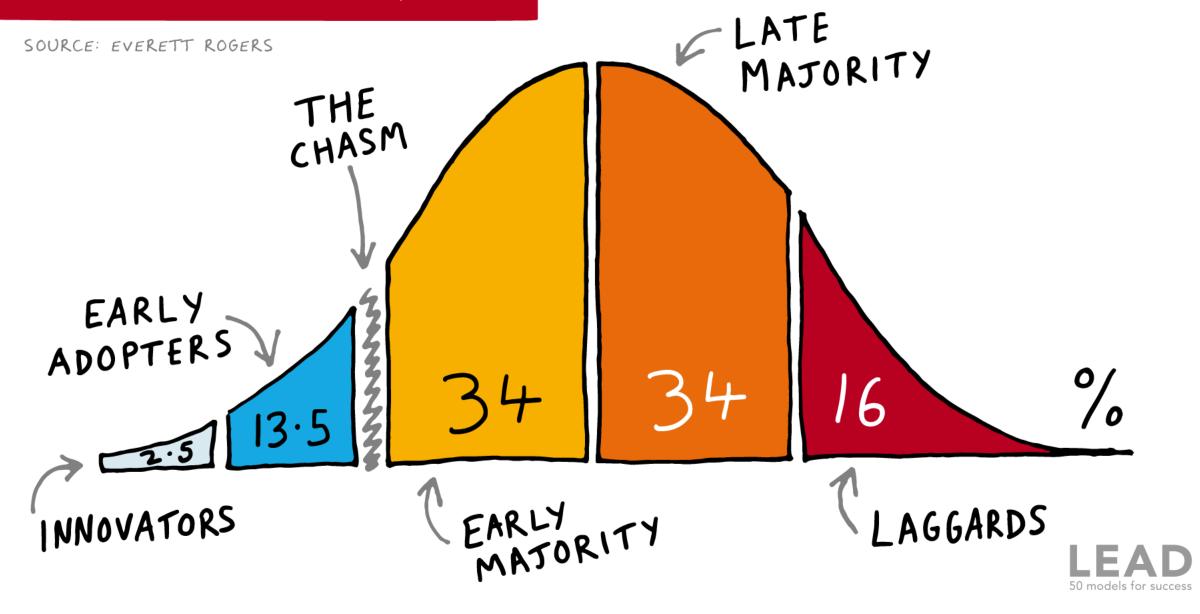
CURRICULUM DEVELOPMENT

- Start with the problem (not the solution)
- Search for a better way
- Continuous Learning
- Sink Costs
- Fear of Failure
- Comfort with Uncertainty
- Tolerance for Frustration
- Risk Tolerance we mitigate risk instead of eliminating
 it
- Get to Yes
- Identifying and Refining the Question
- Northwell Health®
 Center for Learning
 & Innovation

- Collaborative (Interdisciplinary Admin, ops, finance, IT, legal, etc)
- Scalability
- Customizable vs Generalizable



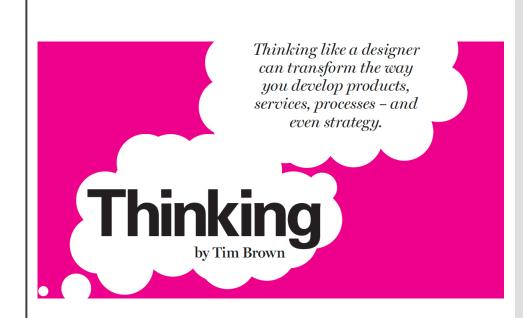
DIFFUSION OF INNOVATION



LinkedIn Learning – Managing Innovation

- 3 main questions:
- What is the value?
- How frequent is the need?
- What risks arise by pursing or not pursuing this goal?
- Low Level Innovation improving existing product process or solution along an existing measure of success
- **Medium Level** optimizing existing process which maintains its initial form but instead considers new ways of delivering value
- **High Level** focuses solely on delivering highest value (ideal final result) nothing is protected from being maintained
- In its simplest terms:
- What is the problem, What is the value? in other words how does solving it benefit you and your customers?







Design Thinking or *Human*-Centered Design

Alice Fornari, EdD, RDN, FAMEE, HEC-C Journal Club, 5/18/23

Connection of Design Thinking to Innovation

- Innovation is powered by a thorough understanding, through direct observation, of what people want and need in their lives and what they like or dis-like about the way particular products are made, packaged, marketed, sold, and supported.
- Designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity.





A Design Thinker's Personality Profile

Empathy

Integrative Thinking

Optimism

Experimentalism

Collboration

Who has these qualities and would be described by others as...?

SUMMARY

ROOTED IN EMPATHY FOR PROBLEM & END USERS

COMPLEX PROBLEMS WITH A FOCUS ON UNDERSTANDING

HUMAN DYNAMICS UNDERLYING A PROBLEM,

RATHER THAN FOCUS ON WHY THE PROBLEM EXISTS

PROMOTE DEEP UNDERSTANDING

DIVERGENT THINKING

RAPID TESTING OF IDEAS

MORE INNOVATIVE SOLUTIONS

CHAOTIC TO THOSE EXPERIENCING IT FOR THE FIRST TIME.



A method for human-centered problem solving where designers work closely with end users to inform new innovations.

Applying this approach to medical education, design thinking in curriculum reform would engage students, as end users, in the co-production of learner-centered education.

Identify ways that design thinking may enable opportunities for **students and faculty to collaborate** toward learner centered, medical education.

Design Thinking is collaboration throughout all of the phases.

Design thinking is a cognitive and analytic approach to problem solving

Emphasis on end user's learning experience & enables innovations designed with the student in mind



Think Out-Loud ACTIVITY

IDENTIFY IDENTIFY AN EDUCATION ISSUE

CONSIDER

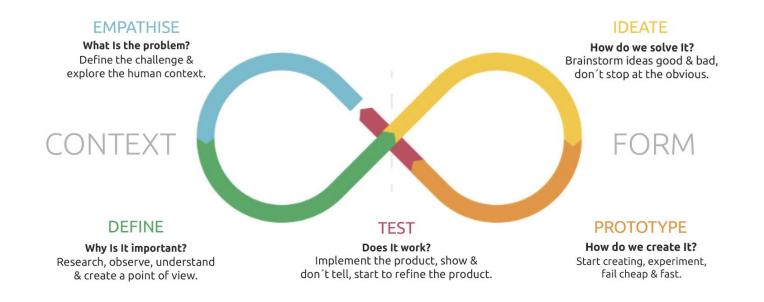
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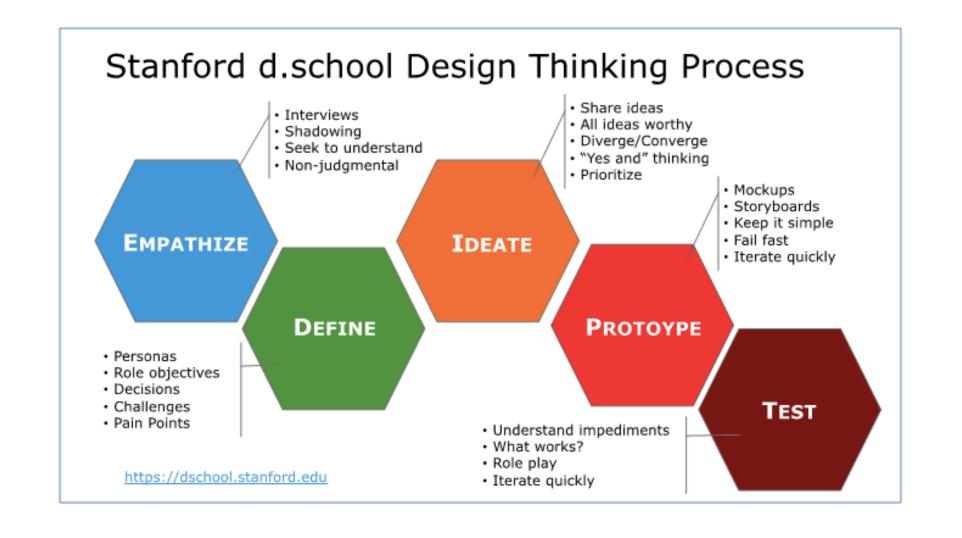
SHARE

SHARE ONE IDEA THAT DESIGN THINKING CAN IMPACT POSITIVELY

DESIGN THINKING

A FRAMEWORK FOR INNOVATION





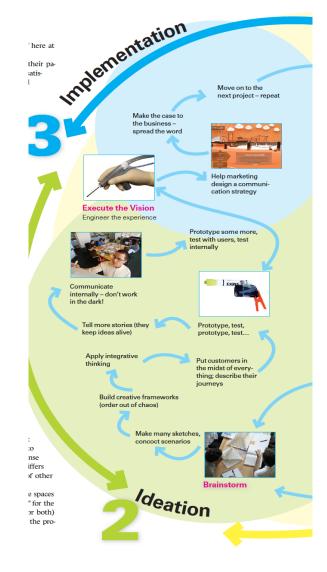
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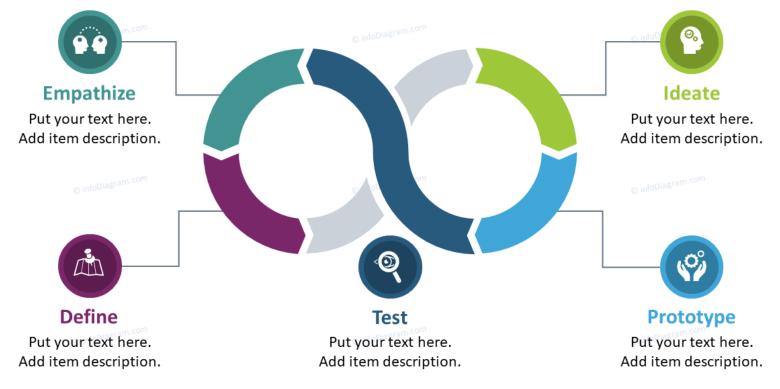


Inspiration **Expect Success Build implementation** resources into your plan What's the business problem? Where's the opportunity? What has changed (or soon may change)? Look at the world: Observe what people do, how they think, what they need and want What are the business con-Involve many disciplines straints (time, lack of resources, from the start (e.g., engiimpoverished customer base, neering & marketing) shrinking market)? Pay close attention to "extreme" users such as children or the elderly Have a project room where you can share insights, tell stories How can new Are valuable ideas, astechnology help? sets, and expertise hiding inside the business?

Organize information and synthesize possibilities

(tell more stories!)

Non-linear Design Thinking Process Loop Diagram



Get these slides & icons at www.infoDiagram.com

IDENTIFY

IDENTIFY AN EDUCATION ISSUE

Think Out-Loud ACTIVITY

Human-centered design thinking — especially when it includes research based on direct observation — will capture unexpected in-sights and produce innovation that more precisely reflects what consumers want.

CONSIDER

CONSIDER DT STEPS TO WORK THROUGH A DT PLAN TO APPORACH EDUCATION ISSUE IDENTIFIED

SHARE

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Design Thinking Article Scopus

No data available for Innovation Article

Metrics Details	
CITATIONS	2,221
Citation Indexes	2,221
Scopus <i></i>	2,221
PubMed Central ↗	100
CAPTURES	22,600
Readers	22,600
Mendeley	22,600

- 4 types of innovators every organization needs
- ZSOM Link: https://my.hofstra.edu/hofapps/applications/ezproxy/indexMed.jsp?db_proxy=m&&db_url=search_ebscohost.com/login.aspx?direct=true%26db=heh%26AN=159940820%26site=ehost-live
- Northwell Link (Must access via myRemoteAccess or Northwell campus): https://web.s.ebscohost.com/ehost/detail/detail?vid=2&sid=beed6ee9-d644-4186-b626-f9d889d7281b%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#AN=159940820&db=heh
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Thank You

Will the results of these articles impact your future practice?

Survey Link: https://www.surveymonkey.com/r/52TSZMX



If you are interested in presenting on a topic, please contact Alice Fornari at afornari@northwell.edu