



**THE SHEBA
MEDICAL CENTER
AT TEL HASHOMER**

Medical Research and Innovation Sheba Medical Center

Design Thinking for Innovation

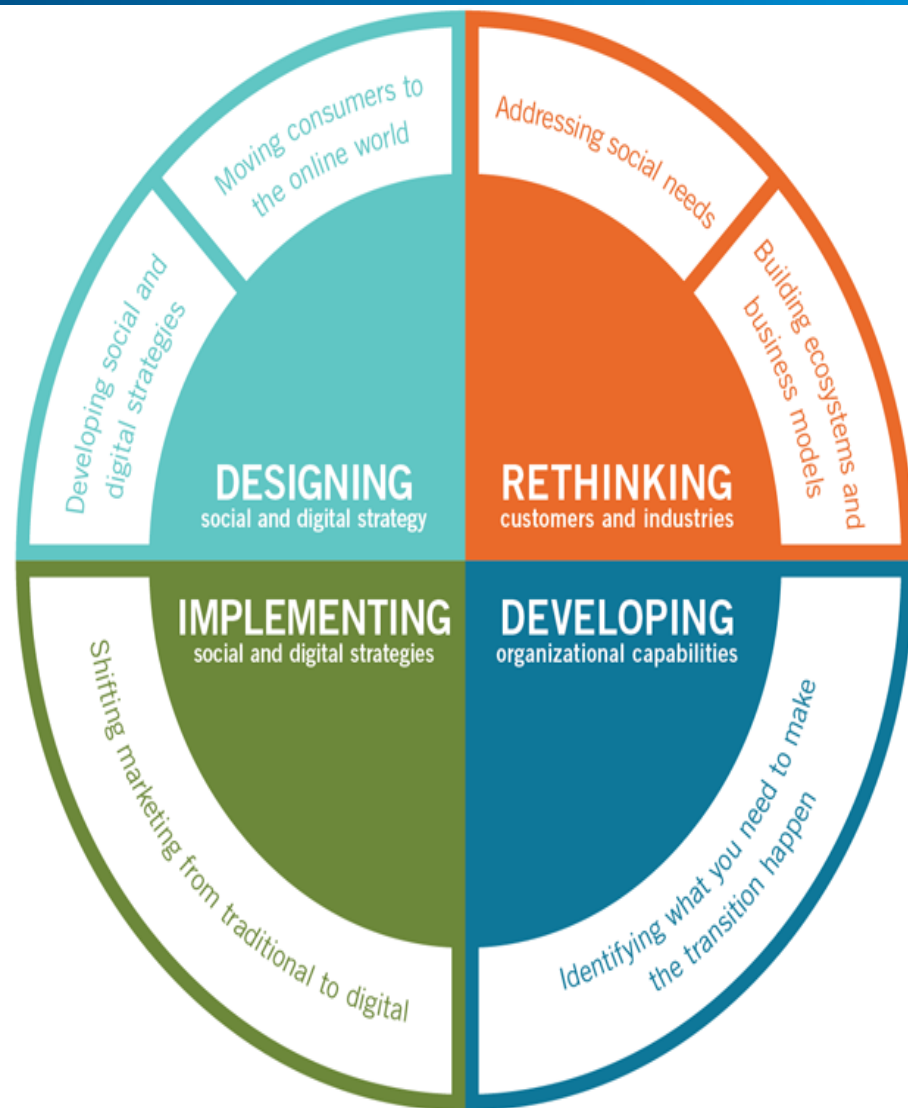


Design Thinking as a Strategy for Innovation

נושא	תאריך
<ul style="list-style-type: none"> ➤ Introduction – Prof. Noy ➤ Framework for Creativity and Innovation - Dr Sylvie Luria 	5 לינואר 2015
<ul style="list-style-type: none"> ➤ Introduction to the Innovation Process - Dr. Sylvie Luria ➤ Identifying Opportunity Areas - Dr. Sylvie Luria 	19 לינואר 2015
<ul style="list-style-type: none"> ➤ Innovations – personal experience – Dr. Yossi Gross 	2 לפברואר 2015
<ul style="list-style-type: none"> ➤ Idea Generation ➤ Patent Issues <p>Dr. Maier Fenster is Head of The Medical Devices Department at Ehrlich & Fenster , Dr. Gal Ehrlich</p>	16 לפברואר 2015
<ul style="list-style-type: none"> ➤ Concept Development - Dr. Sylvie Luria ➤ Managing Innovation – Dr. Gabi Zimmerman ➤ Innovation and Commercialization management – Dr. Sylvie Luria 	2 למרץ 2015
<ul style="list-style-type: none"> ➤ Creative thinking in electro-optics for medical application <p>Dr. Leizeron Ilya - Elbit</p>	16 למרץ 2015
<ul style="list-style-type: none"> ➤ Creative thinking in electro-optics for medical application <p>Dr. Leizeron Ilya - Elbit</p>	30 למרץ 2015
<ul style="list-style-type: none"> ➤ Personal Experience – Prof. Michael Belkin 	13 לאפריל 2015
<ul style="list-style-type: none"> ➤ Case Studies - Presentations by Participants 	27 לאפריל 2015

Design Thinking is Everywhere

❄ **Services**
❄ **process**
❄ **Communication**
❄ **Strategies**



IT HAS A BIG IMPACT



IT CREATES THE FUTURE



- innovation
- inspiration
- ideation
- implementation

the rewards are golden





Design Thinking as a Strategy for Innovation

Design thinking is a human centered approach to problem solving.

Its a process built from People - inspiration gained by looking & listening to them.

Prototyping - ideating quickly to make things real.

Stories - getting things implemented by selling compelling narratives not "concepts".



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What is Design Thinking?

it's not just about **differentiation**



it's about
pervverting
the norm.

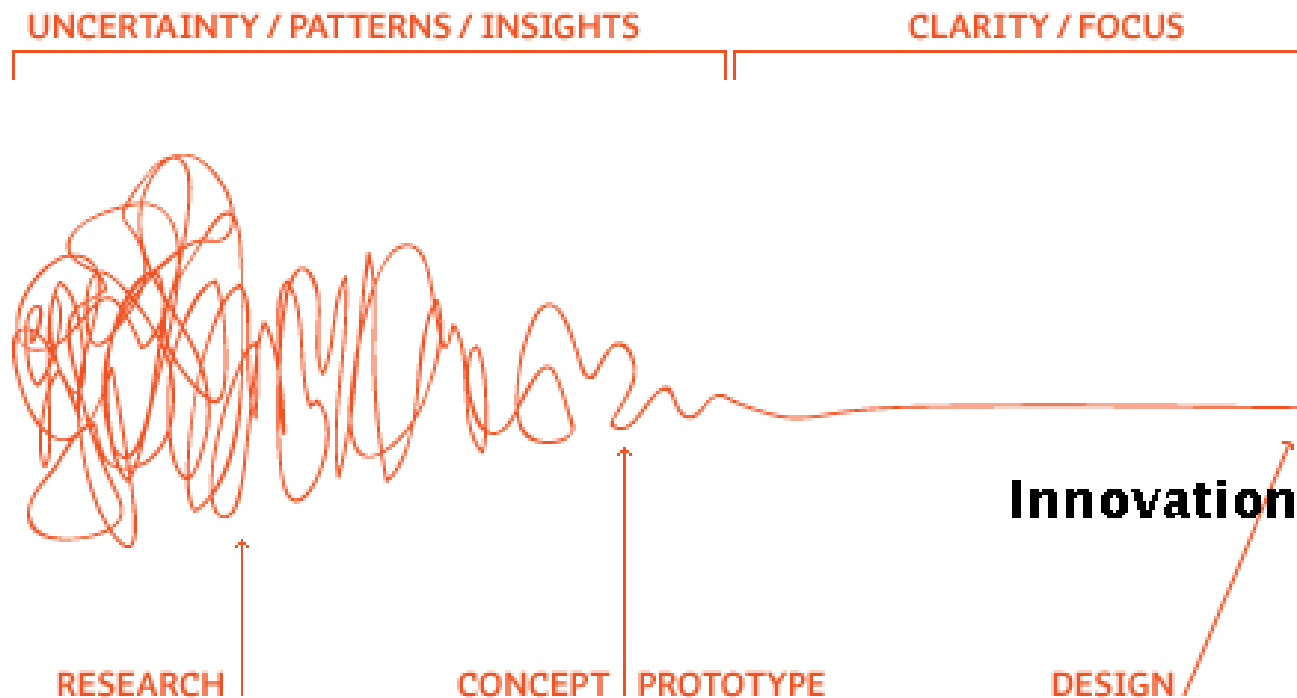


What is Design Thinking?

- Herbert Simon, in the *Sciences of the Artificial* has defined "design" as the "transformation of existing conditions into preferred ones".
- Design thinking is, then, always linked to an improved future..
- Unlike critical thinking, which is a process of analysis and is associated with the 'breaking down' of ideas, design thinking is a creative process based around the 'building up' of ideas.
- There are no judgments in design thinking. This eliminates the fear of failure and encourages maximum input and participation. Wild ideas are welcome, since these often lead to the most creative solutions.

Design Thinking as a Strategy for Innovation

The Process of generating an Idea





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What is Design Thinking?

Design Thinking draws upon logic, imagination, intuition, and systemic reasoning, to explore possibilities of what could be, and to create desired outcomes that benefit the end user (the customer).

A design mindset is not problem-focused, it's solution focused, and action oriented. It involves both analysis and imagination.

THINKING OF DESIGN

To Imaging, Visualize,
Dream-up, New
Understanding, New Practice
and New Applications

THINKING ABOUT DESIGN

To Consider, Expectations,
Capabilities, Collaborations

THINKING THROUGH DESIGN

The ability to Use Design
Methods and Principles
to Address Uncertainty
and Complexity



Design Thinking

- The value of design is huge :
 - Better standard of life
 - Adapting technologies for consumption
 - Innovation and competitiveness
 - Improving processes and performance.
 - Better strategies
 - Sustainability
- Why?!!
 - **IT IS ALL ABOUT DEVELOPING SKILLS**

An informal discussion of research methodology And Innovative Thinking

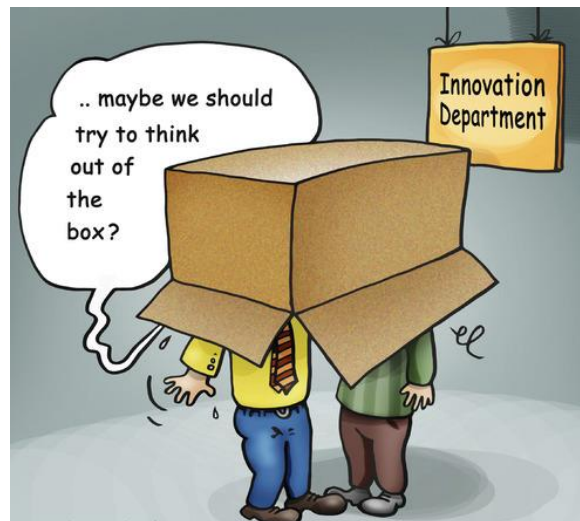
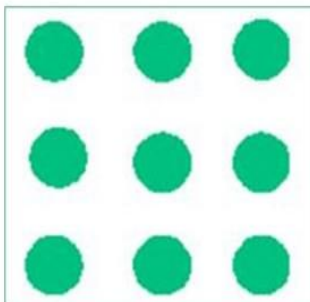
In Research, there is a tension between:

Natural Repetition Required for Learning

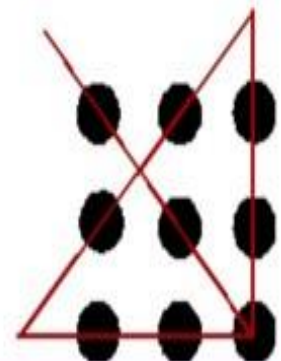
Mastery of “Standard” Techniques

Application/Development of New ideas

Connect these 9 dots with 4 straight lines, without lifting the pen from the paper or going back on yourself



Solution



What important ideas or strategies can be derived from this exercise?



Inspiration → Idea → Implementation

- Ideation
- Building to think is essence of the prototyping process.
- Prototypes can be very rough but they should always enable engagement & discussion. Prototypes don't have to be physical but do need to be tangible.
- Designers might go through hundreds of iterations of prototypes so they need to be quick and easy to build.



Design Thinking for Innovation

Design thinking provides a consistent approach to defining challenges

Employing Design Thinking:

- ✓ **Inspiration**, during which the problem that motivates solution-finding is identified.
- ✓ **Ideation**, the process of generating and developing ideas.
- ✓ **Implementation**, the activities that enable a creative idea to move from the drawing board to the marketplace.



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Design Thinking for Innovation

The Number One Key to Innovation: Scarcity



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Design Thinking for Innovation

Module 4: Idea Generation

In this module we will explore various approaches to innovative thinking and techniques for idea generation from a range of sources. In addition to Nominal Group Technique, Round Robin, and Creative Matrix, we will cover the Systematic Inventive Thinking (SIT) approach and its tools. (SIT is a rigorous approach to problem solving that evolved from the TRIZ engineering tradition.)



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Design Thinking for Innovation

Module 5: Concept Development

This module will focus on the critical role that prototyping, experimenting, and iteration play in the development of ideas. From the designer's perspective, failure - when designed to occur early and cheaply - can be a rich source of learning that often reveals new options and nearly always leads to a better final outcome. A wide variety of tools will be introduced in this module.



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Module 6: Implementation

Until an idea is implemented, it remains just that-an idea. This module will focus on tools and approaches for thinking creatively (and strategically) about implementing ideas and bringing innovative ideas to the marketplace.



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Design Thinking for Innovation

Module 7: Managing Innovation

This module addresses the question:

"What does it mean to manage innovation?"



Design Knowledge - Design Thinking Solving problems..

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