Innovation
Inside the Box

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“Think Outside the Box”

A Myth!
"As usual, for these co-written things, John often had just the first verse, which was always enough: it was the direction, it was the signpost and it was the inspiration for the whole song. I hate the word but it was the template."

Paul McCartney
The Method

• **Systematic Inventive Thinking** is a new innovation method developed by Dr. Jacob Goldenberg (Columbia University).

• Innovation follows a set of patterns that can be re-applied to any product, service, or process.
Surprisingly, most innovative products follow one of only five patterns: 

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Subtraction</strong></td>
<td>The elimination of core components rather than an addition of new systems and functions</td>
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<td><strong>Task Unification</strong></td>
<td>The assignment of new tasks to an existing resource within the vicinity of the problem</td>
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<td><strong>Multiplication</strong></td>
<td>A multiplication of elements already existing in the product along with a qualitative change</td>
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<td><strong>Division</strong></td>
<td>The division of a product and/or its components either physically or functionally</td>
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<td><strong>Attribute Dependency</strong></td>
<td>The creation/removal of dependencies between existing product properties.</td>
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Problem

Solution
Function Follows Form
Brainstorming Dates Back to the 1940’s
Control Group
The Challenges of Brainstorming

- Productivity Loss
- Free Riding
- Distraction
- Lack of Direction
- Fear of Assessment
- Consensus Seeking
- Competition
- Undermining
- Fear of Theft
- Fear of Risk
A Flawed Tool

“Fifty years of research shows brainstorming does not simply kill ideas, but disproportionately eliminates better ideas and the very best ideas.”

What Do These Items Have in Common?
Subtraction

1. List internal components.
2. Remove one essential component.
3. Visualize the resulting *virtual product*.
4. Identify potential user needs.
5. If necessary, replace function with something from Closed World.
6. Modify new product to improve it.
The Johnson & Johnson Experience

- 12-16 team members
- Cross functional, diverse
- Duration:
  - 4-5 days for new product workshops
  - 2-3 days for strategy workshops
  - 1-3 days for training programs
- Frequency: Once per month
Implications for Leaders

• Adopt the Function Follows Form mindset
• Foster constraints
• Find your fixedness
• Innovate from your core
• Innovate across business units
• Link innovation to strategy
• Force non-obvious connections
Adopt Function Follows Form
Foster Constraints
“People are very open-minded about **new** things – so long as they are exactly like the **old** ones.”

–Charles F. Kettering
Find Your Fixedness
Innovate From Your Core

1. Consumer insights: understanding what customers want
2. Design: making things easy to use
3. Innovation: coming up with new ideas routinely
4. Systems integration: making things work
5. Customer relationships: forming and maintaining customer loyalty
6. Imaging science: color management, sharpening, and calibration
7. Organic chemistry: deep knowledge of silver and its uses
8. Photography: "It's in our DNA."
Innovate Across Business Units
Link Innovation to Strategy
Force Non-Obvious Connections
“Never, ever, think outside the box.”
INSIDE THE BOX
A Proven System of Creativity for Breakthrough Results
by Drew Boyd and Jacob Goldenberg

A Method to Innovate
This counterintuitive and powerfully effective approach to creativity demonstrates how every corporation and organization can develop an innovative culture.

“...What’s Inside the Box? In this case, a remarkably original way of thinking about and implementing creativity in the workplace. If you’re interested in gaining a competitive edge over your rivals, open this package (of truly impressive insights) first.”

—Robert B. Cialdini, author of Influence: Science and Practice and Professor Emeritus of Psychology and Marketing at Arizona State University
For More Information

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