How to Build an Innovation Factory
“Whatever made you successful in the past won’t in the future.”
Lew Platt (CEO of Hewlett Packard)

"Value innovation is about making the competition irrelevant by creating uncontested market space. We argue that beating the competition within the confines of the existing industry is NOT the way to create profitable growth."
W. Chan Kim and Renee Mauborgne, Blue Ocean Strategy

"The only source of profit, the only reason to invest in companies in the future is their ability to innovate and their ability to differentiate."
Jeffrey Immelt, CEO of GE

"Never innovate to compete, innovate to change the rules of the game."
David O. Adeife
Knowledge is Useless...Without Action
“IMAGINATION is more important than knowledge”

Albert Einstein

“To invent, you need a goal, imagination and a pile of junk.”

Thomas Edison
"The practice of R&D involves making mistakes, realizations, corrections, and more mistakes. Trial and error is a fundamental part of the process. Too many managers in corporate America learn to avoid invention and new thinking because they have been convinced that their careers depend upon not making mistakes."

Tom Huff

"Where all think alike, no one thinks very much."

Walter Lippman

"I can't understand why people are frightened of new ideas. I'm frightened of old ones."

John Cage

"The greatest danger for most of us is not that our aim is too high and we miss it, but that it is too low and we reach it."

Michelangelo
Basic Requirements

- Dream
- Dare
- Differentiate
Innovation Process

Define innovation

Uncover patterns that lead to the largest innovations

Develop a systematic process for finding innovations based on the patterns

Develop organizational enablers to be sure we can make it happen
Innovation Examples

- Give me some examples of innovations that changed your life in the P5Y

- What do these innovations have in common?
What do we take for granted?
Can you imagine living without...?
Definition of Innovation

What is your definition of innovation?

What is the difference between innovation and creativity?
Definition of Innovation

- The process of making improvements by introducing something new; a new idea, method or device, a new dimension of performance
- The successful exploitation of new ideas.
- Both radical and incremental changes to products, processes or services.
- In business, something new must:
  - be substantially different, not an insignificant change,
  - increase value,
  - make someone better off.
- In the organizational context:
  - Innovation is linked to performance and growth through improvements in efficiency, productivity, quality, competitive positioning, market share.
  - Organizations that do not innovate effectively may be destroyed by those that do.
Innovation Learning

- We can *drive growth* by focusing on innovation efforts.
- Innovation does not occur randomly. There are *common patterns* to most big innovations.
- Innovations emerge indirectly. Therefore, *different processes and tools* are needed vs. typical initiative processes.
- Finding innovations is a *learnable skill*.
  - *Though certain personal profiles are more suited to doing innovation than others.*
- Innovation does NOT require invention.
Types of Innovation by function

- **Products and services** – involves the introduction of a new good or service that is new or substantially improved.
  - **Ex.**
    - Tivo
    - Chloraseptic strips
    - Clorox Bleach Pen
    - iPod
Types of Innovation by function

- **Packaging** – the development of new marketing methods with improvements in packaging
  
  - Ex.
    - Yogurt (Gogurt & Danimals)
    - Baby formula (Single packet powder)
    - Cereal bars (NutriGrain)
Innovation in Packaging:

Lunchables Example

CUSTOMER RESEARCH
- Polled working women to learn their biggest meal time hassles
- Found that making bagged lunches topped the list.
- Recognized that the prepared lunch category was a relatively untapped market

DEFINED OBJECTIVE
- Set out to create a product that would revolutionize the industry, create a solution for busy moms and help to boost company sales.

EXPLORED ALTERNATIVES
- Before launching the Lunchables sensation, the company first had to determine an effective way to keep the product fresh, intact and appealing to consumers on its way to market.
- Developed a novel design that helped ensure that the three separate Lunchables ingredients (meat, crackers and cheese) remained separate. Using a plastic tray with three recessed, sealed compartments, an exterior design intended to appear "gift-like," and viewing windows that allowed consumers to see the product inside, Oscar Mayer devised a highly successful packaging solution that transformed Lunchables into one of the best-selling products in its history.

CHANGED THE RULES OF THE GAME
- The packaging was considered so innovative, Food & Drug Packaging magazine named Lunchables "Snack Food Package of the Year."
Types of Innovation by function

- **Organizational** – involves the creation or alteration of business structures, practices, and models, and may therefore include process, marketing, and business model innovation
  - Ex. Implementation of six sigma at 3M and GE

_Six Sigma_ is a proven disciplined approach for improving measurable results for any organization. _Six Sigma_ project success stories exist from organizations including manufacturing, service, nonprofit, government, research and healthcare.
Types of Innovation by function

- **System and processes** – involves the introduction of a new or significantly improved production or delivery methods
  
  Ex. From typewriters to computers

  Ex. From memos to e-mails
Types of Innovation
by function

- Distribution/Supply chain – innovation occurs in the outsourcing of input products from suppliers and the delivery of output products to customers
  - Ex.
    - Location of certain items in supermarkets
      - Zip locks now also located near certain foods
    - Movie theaters now selling ice cream
Types of Innovation by business role

**Sustaining**
- **What:**
  - Incremental/minor improvement to established benefit.
  - Consistent with how the category is evolving.
- **Role:**
  - Hold volume, build incremental share.
  - Predictable, often not sustained.
- **Example:**
  - Scent/form extensions, packaging upgrades, color phones, mini-phones, Chk+Sav+Res

**Breakout**
- **What:**
  - Step function change in delivering benefit.
  - Greatly improved performance, convenience, price/value.
  - Create subcategory, command price premium.
- **Role:**
  - Significant, sustainable share gain.
- **Example:**
  - Slider bag, toothpaste w. whitening, TelePago, e-bills

**Disruptive**
- **What:**
  - Totally new perceived customer benefit. Allows customer to do something new.
  - Disrupts category evolution.
- **Role:**
  - Create new business that drives total company growth.
  - Builds excitement; new experience
- **Example:**
  - Mobile phones, microwaves, minivans, e-banking, IPod
To create a step change in top line growth, innovation efforts should focus in either breakout or disruptive innovation.

- **Disruptive innovations** should be done at the Corporate level (need collaboration enterprise-wide).
- Focus on **breakout innovations** at the brand level.
- Do not stop doing **sustaining innovations** given their role. However, focus on developing and launching them efficiently.
Size correlates to degree of disruption

- Disruptive innovations create new product/service categories and remain #1.
- Breakout innovations create sub-categories (e.g. pre-paid) and sustain growth.
- Sustaining innovations if not first, don’t become #1, struggle to grow.
Patterns that lead to the LARGEST innovations
Disruptive innovations result from satisfying needs that customers are not yet aware of.

- **Product fully meets need**
  - High customer satisfaction
  - **Core Performance Needs**
    - Key functional benefits of category.
    - Satisfaction goes up in proportion to how well need is met.
    - If repeatedly solve these needs, can out-innovate competition.

- **Product doesn’t meet need**
  - Low customer satisfaction
  - **Expected Needs**
    - "Do or Die"
    - Base functionally, so expected, unspoken.
    - We don’t get credit for serving these needs, but if we don’t deliver we loose the customer.

- **Exciting needs**
  - "Didn’t miss it until I saw it"
  - Needs and benefits the customer didn’t know they could have.
  - Unarticulated, but highly desired when customer is made aware.
  - If we solve these, we change the competitive rules and build categories.
"One should never impose one's views on a problem; one should rather study it, and in time a solution will reveal itself."

Albert Einstein
New categories originate on the outside

- Typically from:
  - application of a technology created for another use
  - related industries
  - entrepreneurs, extreme users -> vanguards
  - regional or international businesses -> worldliness
  - Ex: Securities, Insurance, Telecommunications mixing with traditional banking

- Therefore:
  - Check available technology
  - Check trends
  - Check other industries
  - Check what other countries are doing
  - Check what outliers are doing
Disruptive innovations don’t just come from invention

Pattern 3

Invented → Applied → Mainstreamed → Refined

Invented
- Technology invented
- Typically outside the industry.

Applied
- Business proposition developed for the first time.
- Often outside of our market, or at the edge of our market.
  - Non customer market
  - Outside the U.S.
  - Another category.
  - Niche, entrepreneur.
  - Regional
  - Wide variance in how transferable the model is.

Mainstreamed
- Significant improvement or expansion of what's been developed.
- Marketing investment increases.
- Mass market success achieved in customer market.

Refined
- Large companies enter.
- Shift to competing on sustaining innovations.
- Growth slows.

Category gets created → Category gets reinvented

Business model not developed → Business model highly developed
We need to enter the evolution of business at the most advantageous stage.

<table>
<thead>
<tr>
<th>Business Model Development Stage</th>
<th>Invent</th>
<th>Refine</th>
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<tbody>
<tr>
<td>Model not developed</td>
<td>Model being optimized</td>
<td></td>
</tr>
<tr>
<td>Mindset Required</td>
<td>Imagining</td>
<td>Analytic, logical</td>
</tr>
<tr>
<td>Expertise Required</td>
<td>Basic science</td>
<td>Basic management</td>
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Disruptive innovations are born from discontinuities and challenge orthodoxies

- New needs and an openness to new solutions are created by **discontinuities**.
- New market space is created by **challenging rules** and paradigms.
Discontinuity examples

Change the rules of the game

Starbucks
From food provider to experience provider.

BRITA
From trusting others to trusting myself to ensure safety.

Kinkos
From home as home to home as office.

Miss Clairol
Social emancipation of women in the 1950s.
Orthodoxy examples

Question the assumptions

Clean Shower
Cleaning products have to clean.

Southwest
People want to pay for service.

Evian
Water should cost less than sodas.

Swiffer
Chemicals are the best solution.
Disruptive innovations come about in indirect ways

- Satisfy needs consumers are unaware of
- Originate outside of the business
- Emerge from discontinuities
- Break orthodoxies
Fortune’s Most Admired
Innovative Companies

- Apple
- Google
- Toyota Motor
- GE
- Microsoft
- Procter and Gamble
- 3M
- Walt Disney
- IBM
- Sony
- Wal-Mart
- Honda Motor
- Nokia
- Starbucks
- Target
- BMW
- Samsung Electronics
- Virgin Group
- Intel
- Amazon

What do they have in common?

• Innovation Culture
  ✓ Purposefully Organized
  ✓ PEOPLE
Imaginator

- Like risk taking
- Think in synthesizing, simultaneous manner
- See random associations
- Like to flit between projects
- Bored with details
- Visionaries
- Decide with intuition
- Ask if questions
Analyzer

- Thinks sequentially and logically
- Good with #'s
- Critical
- Intrigued by facts and credible information
- Interested in quantity and numerical comparison
- Love a good debate
- Enjoy questioning everything
- Prefer tangible results
- Value efficiency and high performance
- Decisions based on logic, never intuition
- Ask what and how questions
Implementor

- Doers
- Meticulous list keepers
- Punctual
- Well organized
- Value procedure, order, and consistency
- Details count
- Methodical
- Like to see action plans, structure, and systems
- Look for quality and reliability
- Decisions based on practicality, predictability, usefulness, and precise methodology
- Asks how questions
Collaborator

- Like gatherings
- Take care of people’s feelings
- Love working in teams
- Are popular
- Think simultaneously
- Doers
- Aim to produce harmony
- Sensitive to emotions
- Empathizers
- Decide with intuition
- Ask why questions
- Take information through their senses and integrate their experiences