Capturing the Upside While Avoiding the Downside

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The Innovator’s Solution

• Historically, less than 10% of companies have been able to sustain for more than a few years the growth that creates above-average shareholder returns.

• Once a company’s growth has stalled, the probability that it can successfully re-accelerate growth is only 6%.

• Historically, it has seemed impossible to predict which innovations will successfully create new waves of growth, and which will fail.
  ✓ Only 20% of venture capital – funded start-ups succeed
  ✓ Only 25% of new products launched by established companies succeed.

This need not be the case. Managers can use sound theories to guide the key decisions required to build successful growth businesses.
Ten questions in building new growth businesses

1. How can we beat the competition?
2. Which customers should we target?
3. What products will our customers want to buy?
4. How should we distribute to and communicate with our customers?
5. Which things should our company do, and which should our partners and suppliers do?
6. How can we avoid commoditization?
7. Who should be on our management team?
8. What is the best organizational structure for this business?
9. How can we know when to change course?
10. Whose investment capital will help, and whose might hurt?
Disruptive technologies are a driver of leadership failure and the source of new growth opportunities.
The Innovator’s Dilemma

Sustaining innovations to minicomputers

Disruptive technology: personal computers

- 60% on $500,000
- 45% on $250,000
- 40% → 20% on $2,000
Most value-creating growth businesses originated in disruption

<table>
<thead>
<tr>
<th>Yesterday</th>
<th>Today</th>
<th>Tomorrow:</th>
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<tbody>
<tr>
<td>Japan</td>
<td>Toyota</td>
<td>Embraer</td>
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<tr>
<td>Kodak</td>
<td>Wal-Mart</td>
<td>Veritas</td>
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<td>ZCMI</td>
<td>Intel</td>
<td>U. of Phoenix</td>
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<td>Ford</td>
<td>Southwest Air</td>
<td>RIM Blackberry</td>
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<td>Merrill Lynch</td>
<td>Microsoft</td>
<td>Salesforce.com</td>
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<td>AT&amp;T</td>
<td>Oracle</td>
<td>Linux</td>
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<td>Sears catalog</td>
<td>Cisco</td>
<td>E-Bay</td>
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<td>Swift; Armour</td>
<td>Sony</td>
<td>Sonosite</td>
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<tr>
<td>Black &amp; Decker</td>
<td>Bloomberg</td>
<td>Amazon.com</td>
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<tr>
<td>Xerox</td>
<td>Best Buy</td>
<td>Tensilica</td>
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Two strategies for asymmetric competition

- **New-market disruption: Compete against non-consumption**
- **Low-end disruption: Address over-served customers with a lower-cost business model**

Bring a better product into an established market.
Non-consumers are the ideal initial target

Disruptive technology: transistors vs. vacuum tubes

Major Established Electronics Markets:
Tabletop radios, floor-standing televisions, computers, telecomm. equipment, etc.

Path taken by established vacuum tube manufacturers
Non-consumers are the ideal initial target

Disruptive Technology: Voice Recognition Technology

Word Processing
Wireline e-mail

Path taken by IBM

Performance

Time

Standard phrases
Chat rooms
Wireless e-mail
Toy robots

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Powerful forces cause companies to target market segments that are irrelevant to the reasons why customers buy products.

Organizational structure, performance measurement systems, channel structure

Nascent idea

Focus on customer rather than job as the unit of analysis; demands for quantification; economics of communication

Segmentation based upon attributes of products

Job-based segmentation:
What are customers trying to get done in their lives?

Segmentation based upon attributes of customers
Facilitate priorities

Never compete against customers’ manifest priorities. Facilitate them.

Digital cameras

Electronic learning
Structuring the market in terms defined by data that are easily collected obfuscates the right targets for innovation.

Define the market as a class of products (wireless hand-held)

- Digital camera
- Word
- Excel
- Handwriting recognition
- Wireless e-mail
- Phone

Competition: Palm, Handspring, Sony, HP, Compaq, Nokia

Define the market in demographic terms (the business traveler)

- CRM software
- E-books, e-magazines
- Stock trading
- Travelocity
- E-mail
- Voice

Competition: wireline telecom and notebook computers

Define the market in terms of jobs that customers need to get done

- Voice phone
- News summaries
- Always on
- Simple, mindless games

Competition: Nokia, Wall Street Journal, CNN Airport News, boredom
Integrated firms have the advantage when products aren’t good enough. Focused firms overtake over-served markets.

**Modular Architectures**
- Beat competitors with speed, responsiveness and customization

**Interdependent Architectures**
- Beat competitors with functionality

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Performance

Time
Changes in integrality/modularity have profoundly changed the structure of the computer industry

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<tr>
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<tbody>
<tr>
<td>Equipment</td>
<td>Teradyne, Nikon, Canon, Applied Materials, Millipore, etc.</td>
<td>Intel, Micron, Quantum, Komag, etc.</td>
<td>Microsoft</td>
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<tr>
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<td>Compaq, Dell, Gateway, Packard Bell</td>
<td>Microsoft</td>
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<tr>
<td>Components</td>
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<td>Compaq</td>
<td>CompUSA</td>
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<td>Product design</td>
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<td>Control Data</td>
<td>Dell</td>
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<tr>
<td>Assembly</td>
<td>IBM</td>
<td>Digital Equipment</td>
<td>Independent contractors</td>
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<td>Operating system</td>
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<td>Applications software</td>
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<td>Sales &amp; distribution</td>
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<td>Field service</td>
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Beat competitors with asymmetry of motivation
Over-shooting precipitates reciprocal processes of commoditization and de-commoditization.

Retailing is undifferentiable

Components are undifferentiable commodities

Design & assembly of proprietary products is highly profitable.

Retail/distribution that addresses speed and convenience is attractive

Design & assembly of modular systems is commoditized.

Performance-defining subsystems are very profitable

Functionality

Speed & responsiveness

Time
Disruption enables less-skilled people to do more sophisticated things

Disruptive innovations enable a larger population of less-skilled, less-wealthy people to do things in a more convenient, lower-cost setting, which historically could only be done by specialists in less convenient settings. Disruption has been one of the fundamental causal mechanisms through which our lives have improved.

- Computers
- Xerography
- Angioplasty

Almost always, disruptive innovations such as these have been ignored or opposed by the leading institutions in their industries for perfectly rational reasons.
Disruption is facilitated by sophisticated technology that makes things foolproof.

- Complex
  - Experimentation & problem-solving
  - Pattern Recognition
  - Rules-Based

- Simple
Scientific understanding, built upon the ability to diagnose unambiguously, shifts the method used to diagnose and treat disorders from an unstructured, experimental problem-solving process, towards a rules-based regime.
How can I know what my organization is capable and incapable of accomplishing?

<table>
<thead>
<tr>
<th>Resources</th>
<th>Processes</th>
<th>Values</th>
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<tbody>
<tr>
<td>People</td>
<td>Hiring &amp; Training</td>
<td>The criteria by which prioritization decisions are made</td>
</tr>
<tr>
<td>Technology</td>
<td>Product development</td>
<td>• Ethics</td>
</tr>
<tr>
<td>Products</td>
<td>Manufacturing</td>
<td>• Cost structure/income statement</td>
</tr>
<tr>
<td>Equipment</td>
<td>Planning &amp; Budgeting</td>
<td>• Size of opportunity</td>
</tr>
<tr>
<td>Information</td>
<td>Market Research</td>
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<tr>
<td>Cash</td>
<td>Resource allocation</td>
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<tr>
<td>Brand</td>
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<td>Distribution</td>
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The criteria by which prioritization decisions are made:
- Ethics
- Cost structure/income statement
- Size of opportunity
The strategy-making processes that are good at planning sustaining innovations, are bad at guiding disruptive ones.

**Intended strategy**

**Resource allocation process**

**Emergent strategy**

**Strategic Actions:**
- New products, services, processes, acquisitions

**Actual Strategy**

- Improved understanding of what works and what doesn’t
- Unanticipated opportunities, problems and successes

**The Organization’s values**
J&J’s Professional Division has grown much faster than its Consumer Division over the last decade.

Source: Johnson and Johnson 10-K
New disruptive growth businesses account for nearly all of this growth

*Adjusted for revenues from Cordis, Ethicon Endo Surgery, LifeScan and Vistakon

Source: Johnson and Johnson 10-K
Disruption amongst healthcare institutions is well underway.
Disruptions amongst healthcare professionals

- **Complexity of diagnosis and treatment**
  - **Simple**
  - **Complex**

- **Performance that the marketplace needs or utilizes**
  - Specialist & sub-specialist physicians
  - Family/personal care physicians
  - Nurse practitioners
  - Self-care