How to foster innovation in your business

Presentation on the occasion of the Credit Suisse event
7th September 2013, Zurich

Dr. Reto Müller
Chairman of the Board of Directors
Helbling Holding AG
Helbling - a Leader in Technological Innovation and Business Consulting

Helbling Group

- We are unique through our ability to integrate a spectrum of professional know-how, experience and skills.
- Our ability to link technological expertise with business competence results in entrepreneurial success for our clients.

Key figures 2012

- 458 employees
- Revenues CHF 110.9m
- Companies in Switzerland, Germany, USA and China
- International Network Offices (Corporate Finance International)
- Owned by 25 managing partners
Examples of innovations at Helbling

Extract out of some thousand innovation projects in more than 50 countries

Innovation leaders collaborating with Helbling: Nestlé, Roche, ABB, Airbus, Siemens, Medtronic, Schindler, Pfizer, Novartis, Sonova, Google, BSH, Geberit, Sika, V-Zug, Qiagen, Tecan and many others

Source: Helbling
### Strategic innovation management – selected Helbling references

#### Companies

- Audi
- Qiagen
- Volkswagen
- Holcim
- Ziemer
- UVEX
- BUCHI
- TMS
- Roche
- Diagnostics
- ifm electronic
- SWISSLOG
- Thomas Cook
- LOOSER Holding
- ThyssenKrupp
- Finanzielle Sicherheit neu definiert
- Schuler
- Schöck
- ERGO

#### Why Helbling?

- We measure ourselves - e.g. on the increase of the value of your innovation pipeline
- We are senior experts with over 15 years consulting experience and a focus on the topics "Increasing innovation success and increasing the power of innovation»
- We use self-developed tools and instruments
- We practice entrepreneurial thinking
- We have the "up to date" knowledge and high level of expertise through research, teaching and project management - We write books

Source: Helbling
How to foster innovation in your business

1. What is innovation?
2. Innovation champions
3. Innovation as success factor
4. R&D and economic prosperity
5. Concept to foster innovation
6. Different ways to innovation success
7. Innovation process and networks
8. Checklist for innovation success
9. Celebrate innovations
What is innovation?

Innovation means:

- New product/service
- Customer acceptance
- Efficient use of resources
- Leading market position
- Business expansion
- Profitability

Source: Helbling
How customer needs can be understood

Source: learnlogic.net
Innovation strategy - «Strategic Guidelines for Innovation Activities»

**Strategic Corridor**
How do we define our business?

**Innovation Need**
How innovative do we want to be?

**Innovation Goals**
What is our commitment to the innovation output?

**Innovation Definition**
Do we have a common understanding of innovation?

**Strategic Searchfields**
Which fields of activity do we select?

Source: Helbling
How to foster innovation in your business

1. What is innovation?
2. Innovation champions
3. Innovation as success factor
4. R&D and economic prosperity
5. Concept to foster innovation
6. Different ways to innovation success
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8. Checklist for innovation success
9. Celebrate innovations
Innovation champions thrive everywhere

Source: Helbling
# The most innovative companies generate sales growth and total returns of c30%

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Sector</th>
<th>Country</th>
<th>12-months sales growth (%)</th>
<th>5-year annualized total Return (%)</th>
<th>Innovation Premium (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Salesforce</td>
<td>Technology</td>
<td>United States</td>
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<td>29.7</td>
<td>73</td>
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<td>Alexion Pharma.</td>
<td>Healthcare</td>
<td>United States</td>
<td>46.5</td>
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<td>Amazon</td>
<td>Services</td>
<td>United States</td>
<td>34.9</td>
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<td>58.3</td>
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<td>4</td>
<td>Red Hat</td>
<td>Technology</td>
<td>United States</td>
<td>22.6</td>
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<td>5</td>
<td>Baidu</td>
<td>Technology</td>
<td>China</td>
<td>73.9</td>
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<td>6</td>
<td>Intuitive Surgical</td>
<td>Healthcare</td>
<td>United States</td>
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<td>54</td>
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<td>7</td>
<td>Rakuten</td>
<td>Retail / Internet Services</td>
<td>Japan</td>
<td>18.3</td>
<td>25.8</td>
<td>51.5</td>
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<tr>
<td>8</td>
<td>Edwards Lifesciences</td>
<td>Healthcare</td>
<td>United States</td>
<td>13.1</td>
<td>33.7</td>
<td>46.9</td>
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<td>9</td>
<td>Larsen &amp; Toubro</td>
<td>Industrial Goods</td>
<td>India</td>
<td>19</td>
<td>-0.5</td>
<td>46.1</td>
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<tr>
<td>10</td>
<td>ARM Holdings</td>
<td>Technology Hardware &amp; Equipment</td>
<td>United Kingdom</td>
<td>16.9</td>
<td>27.3</td>
<td>45.4</td>
</tr>
</tbody>
</table>

| Ø Top 10 | Ø 31.1 | Ø 28.5 | Ø 56.3 |

1) The Innovation Premium is a measure of how much investors have bid up the stock price of a company above the value of its existing business based on expectations of future innovative results (new products, services and markets). Members of the list must have $10 billion in market capitalization, spend at least 2.5% of revenue on R&D and have seven years of public data.

Source: World's most innovative companies 2012, Forbes.com
Other innovative companies generate sales growth and total returns of c20-25%

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Sector</th>
<th>Country</th>
<th>12-months sales growth (%)</th>
<th>5-year annualized total Return (%)</th>
<th>Innovation Premium (%)</th>
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</thead>
<tbody>
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<td>Hindustan Unilever</td>
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<td>43.9</td>
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<tr>
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<td>FMC Technologies</td>
<td>Basic Materials</td>
<td>United States</td>
<td>29.8</td>
<td>18.4</td>
<td>40.7</td>
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<tr>
<td>14</td>
<td>Cerner</td>
<td>Technology</td>
<td>United States</td>
<td>24.6</td>
<td>20.3</td>
<td>39.2</td>
</tr>
<tr>
<td>15</td>
<td>Pernod Ricard</td>
<td>Consumer Goods</td>
<td>France</td>
<td>7.9</td>
<td>4.3</td>
<td>39</td>
</tr>
<tr>
<td>16</td>
<td>Monsanto</td>
<td>Basic Materials</td>
<td>United States</td>
<td>18.6</td>
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<td>Perrigo</td>
<td>Healthcare</td>
<td>United States</td>
<td>15.2</td>
<td>38.3</td>
<td>38.3</td>
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<tr>
<td>18</td>
<td>Kweichow Moutai</td>
<td>Consumer Goods</td>
<td>China</td>
<td>56.2</td>
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<td>37.9</td>
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<td>Infosys</td>
<td>Technology</td>
<td>India</td>
<td>12.7</td>
<td>0.4</td>
<td>37.7</td>
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<td>20</td>
<td>Wuliangye Yibin</td>
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<td>China</td>
<td>36.5</td>
<td>5.9</td>
<td>37.6</td>
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</tbody>
</table>

Ø Top 11-20: Ø 26.9, Ø 18.5, Ø 39.7

1) The Innovation Premium is a measure of how much investors have bid up the stock price of a company above the value of its existing business based on expectations of future innovative results (new products, services and markets).

Members of the list must have $10 billion in market capitalization, spend at least 2.5% of revenue on R&D and have seven years of public data.

Source: World’s most innovative companies 2012, Forbes.com
Technology and telecom industries dominate innovator rankings in 2012

<table>
<thead>
<tr>
<th>#</th>
<th>Company</th>
<th>Change from 2010 (places moved)</th>
<th>Industry</th>
<th>Market Cap. (09.08.13) in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Apple</td>
<td>No change</td>
<td>Technology and telecom</td>
<td>413 bn.</td>
</tr>
<tr>
<td>2</td>
<td>Google</td>
<td>No change</td>
<td>Technology and telecom</td>
<td>297 bn.</td>
</tr>
<tr>
<td>3</td>
<td>Samsung¹</td>
<td>8 ↑</td>
<td>Technology and telecom</td>
<td>158 bn.</td>
</tr>
<tr>
<td>4</td>
<td>Microsoft</td>
<td>No change</td>
<td>Technology and telecom</td>
<td>272 bn.</td>
</tr>
<tr>
<td>5</td>
<td>Facebook</td>
<td>43 ↑</td>
<td>Technology and telecom</td>
<td>94 bn.</td>
</tr>
<tr>
<td>6</td>
<td>IBM</td>
<td>2 ↓</td>
<td>Technology and telecom</td>
<td>206 bn.</td>
</tr>
<tr>
<td>7</td>
<td>Sony</td>
<td>3 ↑</td>
<td>Technology and telecom</td>
<td>20 bn.</td>
</tr>
<tr>
<td>8</td>
<td>Haier¹</td>
<td>20 ↑</td>
<td>Consumer and retail</td>
<td>4.4 bn.</td>
</tr>
<tr>
<td>9</td>
<td>Amazon</td>
<td>3 ↓</td>
<td>Consumer and retail</td>
<td>136 bn.</td>
</tr>
<tr>
<td>10</td>
<td>Hyundai¹</td>
<td>12 ↑</td>
<td>Automotive</td>
<td>51 bn.</td>
</tr>
</tbody>
</table>

¹Diversified conglomerate; categorized by primary industry

Source: 2010 BCG/Business Week Senior Executive Innovation Survey; 2012 BCG Global Innovators Survey

Note: Rankings are based on a combination of survey responses (80% weighting), three-year shareholder returns (10% weighting), three-year revenue growth (5% weighting) and three-year margin growth (5% weighting).
Automotive companies close to the top 10 positions

<table>
<thead>
<tr>
<th>#</th>
<th>Company</th>
<th>Change from 2010 (places moved)</th>
<th>Industry</th>
<th>Market Cap. (09.08.13) in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Toyota</td>
<td>6 ↓</td>
<td>Automotive</td>
<td>202 bn.</td>
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<tr>
<td>12</td>
<td>Ford</td>
<td>1 ↑</td>
<td>Automotive</td>
<td>67 bn.</td>
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<tr>
<td>13</td>
<td>Kia Motors</td>
<td>New entered</td>
<td>Automotive</td>
<td>23 bn.</td>
</tr>
<tr>
<td>14</td>
<td>BMW</td>
<td>4 ↑</td>
<td>Automotive</td>
<td>63 bn.</td>
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<td>15</td>
<td>HP</td>
<td>1 ↑</td>
<td>Technology and telecom</td>
<td>52 bn.</td>
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<tr>
<td>16</td>
<td>GE</td>
<td>7 ↑</td>
<td>Industrial Products and Processes</td>
<td>247 bn.</td>
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<td>17</td>
<td>Coca Cola</td>
<td>2 ↑</td>
<td>Consumer and retail</td>
<td>178 bn.</td>
</tr>
<tr>
<td>18</td>
<td>Dell</td>
<td>17 ↑</td>
<td>Technology and telecom</td>
<td>24 bn.</td>
</tr>
<tr>
<td>19</td>
<td>Intel</td>
<td>7 ↓</td>
<td>Technology and telecom</td>
<td>112 bn.</td>
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<tr>
<td>20</td>
<td>Wal-Mart</td>
<td>1 ↑</td>
<td>Consumer and retail</td>
<td>252 bn.</td>
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</tbody>
</table>

Note: Rankings are based on a combination of survey responses (80% weighting), three-year shareholder returns (10% weighting), three-year revenue growth (5% weighting) and three-year margin growth (5% weighting).

1) Diversified conglomerate; categorized by primary industry

Source: 2010 BCG/Business Week Senior Executive Innovation Survey; 2012 BCG Global Innovators Survey
## The 20 companies with the largest R&D investments worldwide

<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
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<td>▲</td>
<td>6</td>
<td>Toyota</td>
<td>Japan</td>
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<td>2</td>
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<td>3</td>
<td>Novartis</td>
<td>Switzerland</td>
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<td>1</td>
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<td>Switzerland</td>
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<td>2</td>
<td>Pfizer</td>
<td>USA</td>
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<td>▼</td>
<td>4</td>
<td>Microsoft</td>
<td>USA</td>
<td>9,043</td>
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<td>7</td>
<td>Samsung</td>
<td>South Korea</td>
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<td>Merck</td>
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<td>GM</td>
<td>USA</td>
<td>8,124</td>
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<td>10</td>
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<td>Nokia</td>
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<td>7,813</td>
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Source: Booz&Company: The global innovation 1000 (2011)
## The 20 companies with the largest R&D investments worldwide

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<td>10</td>
<td>NOKIA</td>
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<tr>
<td>11</td>
<td>Volkswagen</td>
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<tr>
<td>12</td>
<td>Johnson &amp; Johnson</td>
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<tr>
<td>13</td>
<td>SANOFI</td>
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<td>14</td>
<td>Panasonic</td>
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<td>15</td>
<td>Honda</td>
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<td>GlaxoSmithKline</td>
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<tr>
<td>17</td>
<td>IBM</td>
</tr>
<tr>
<td>18</td>
<td>CISCO</td>
</tr>
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<td>19</td>
<td>DAIMLER</td>
</tr>
<tr>
<td>20</td>
<td>AstraZeneca</td>
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<table>
<thead>
<tr>
<th>Country</th>
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<tr>
<td>Japan</td>
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<td>Switzerland</td>
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<th>2010</th>
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<table>
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<tr>
<th>R&amp;D budget in US$ bn.</th>
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<td>7,813</td>
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<td>5,823</td>
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<table>
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<td>10</td>
<td>26</td>
</tr>
<tr>
<td>11</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Booz&Company: The global innovation 1000 (2011)
The top 10 innovators outperformed on all three performance measures, especially on EBITDA as a percentage of revenues.

Performance of top 10 innovators vs. top 10 R&D spenders compared to their industry peers in the “global innovation 1000”

- Revenue Growth 5-Yr. CAGR: Innovators 51%, Spenders 40%
- EBITDA as % of Revenue, 5-Yr. Avg.: Innovators 76%, Spenders 54%
- Market Cap Growth 5-Yr. CAGR: Innovators 52%, Spenders 40%

Source: According to Booz&Company
The emphasis on innovation is rising in most regions

![Bar chart showing the emphasis on innovation and product development rank among your company’s top strategic priorities.](chart.png)

**Sources:** 2009–2010 BCG/BusinessWeek Senior Executive Innovation Survey; 2012 BCG Global Innovators Survey; BCG analysis.

**Note:** BCG did not publish a survey in 2011.
Innovate with services – the Easy Jet approach

EasyJet
- looked at the traditional elements of an airline’s service model and
- subtracted all the inessentials (like printed tickets or free cup of tea or coffee)

Then they started adding back services and charged separately for them, e.g.
- Speedy boarding and the chance to choose your seat
- Extra baggage
- Beverages on the flight

Key Facts 2012

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Revenue in CHF million</td>
<td>5'838</td>
</tr>
<tr>
<td>Profit in CHF million</td>
<td>480</td>
</tr>
<tr>
<td>Employees</td>
<td>8'200</td>
</tr>
</tbody>
</table>

Source: British Quality Foundation, http://www.bqf.org.uk; Amadeus – Bureau van Dijk
myTaxi goes global with an intelligent app’s disruptive strategy

myTaxi

- Founded 2009
- Creates a direct connection between the driver and the passenger. No interposed office necessary
- Simply book the nearest taxi by
  - Enter your desired booking details
  - View driver profile and track the arrival live
  - Pay by Smartphone after the trip

Source: myTaxy website
Growth through innovation and steady global expansion

Key Facts 2012

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue in CHF m</td>
<td>4’829</td>
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<tr>
<td>Profit in CHF m</td>
<td>393</td>
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<tr>
<td>Employees</td>
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</tbody>
</table>

Sika

- Technological innovation
- Multiplication and worldwide sales and distribution
- Exploit all market segments and customer potentials
- Acquisitions

Source: Sika Website und Sika IR-Presentation January 2012; Amadeus – Bureau van Dijk
Growth thanks to emerging markets and rising demand in the field of energy efficiency and renewable energy (1/4)

Key Facts 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue in CHF million</td>
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<tr>
<td>Profit in CHF million</td>
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<td>EBITDA in CHF million</td>
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<tr>
<td>Employees</td>
<td>146’100</td>
</tr>
</tbody>
</table>

Source: ABB, Q4 and full year 2010 results, February 2011

ABB

Success factors for growth
- Flexible and competitive cost structures (Lean)
- Dynamic and customer focused project portfolio
- World-leading technology
- Global network

Strong growth potential predicted
- in the "Emerging Markets"
- through the climate change, demand for energy efficiency and renewable energies
- though continued investment in infrastructure
Stable EBIT margin and sales growth also during the time of economic slowdown

- EBIT margin in 2010 of 12.1% lies within the specified target range of 11-16%
- EBIT 2011: US$ 4’058 million (EBIT margin 10.3%)
- EBIT 2012: US$ 4’667 million (EBIT margin 12.3%)

Source: ABB, Q4 and full year 2010 results, February 2011
About 50% of ABB’s sales are generated in "emerging markets"
Orders in "emerging markets" have risen twice as strong as those from the mature economies
More investment in R&D

- Local market presence throughout the value chain to identify market signals in time and to take advantage of local cost advantages

- Strong "Targeted Product Development," in order to maintain leading market positions and open up new markets

- Increased revenues through services

Source: ABB investor presentation September 2012
The big success story of Google (1/3)

Google
- Established in 1998
- Founders Larry Page and Sergey Brin
- IPO (NASDAQ) on 19 August 2004
- US$ 50 billion revenues in 2012
- US$ 10.7 billion profit in 2012
- US$ 265 billion market capitalization (2012)
- Around 54,000 employees worldwide
- 66% market share (Search Engines)

yearly revenues

Source: Google
Google – the secret of the success is innovation (2/3)

Google: Approach to faster innovation

- Ideas come from everywhere
- Focus on the user - please the user and everything will follow
- Share everything
- 20% free time
- Iteration, not instant perfection: Beta thinking - Release in beta status - Invite users to help make it better
- Think big
- Google news
- Google scholar
- Google alerts
- Google mail
- Flight simulator
- Google labs

Source: Google
Secrets of success: Google’s policies (3/3)

**Beta thinking:**
- open your process
- open to improvements & suggestions innovate faster than the others
- open source
- creativity-fostering environment

**People**
- hire the best
- attract other people as well
- entrepreneurial spirit
- passion
- get-involved-feedback
- bottom-up goal setting (per quarter)
- fluid career paths

**Collaboration**
- small teams < 10
- flat hierarchies
- open communication / transparency
- speed matters

Quelle: Google
Switzerland's No. 1 success story: Nespresso (1/4)

Coffee quality, innovative product development and marketing foster high growth

Nespresso

- Best coffee quality and a wide selection of coffee qualities
- Innovative capsules and espresso machines
- Excellent marketing
- The first "Grand Cru" of coffee
- Club System
- Service
- Sponsorship / advertising
- Nespresso Boutique
- International roll-out
- "Economies of scale" (today about 8 billion capsules)

Source: Nespresso and Helbling
Nespresso: in 12 years to more than CHF 4 billion in sales (2/4)

Nespresso revenues worldwide in CHF m

The Nespresso Roadmap for Sustainable Growth (3/4)

The Nespresso 3 Key Growth Drivers

- Creating highest quality Grand Cru Coffees
- Creating long-lasting consumer relationships
- Creating sustainable Business success

The Nespresso 6 Core Competencies

- Unsurpassed coffee quality and deep coffee expertise
- Unstoppable drive for innovation, distinctive design and in-house R&D expertise
- Passionate global brand community with direct consumer relationships
- Aspirational, global super-premium brand
- Unique Business Model/route to market and exclusive client services
- Unique holistic approach to sustainable quality development

Source: nespresso.com
Above-average growth in comparison to other Nestlé brands (4/4)

Billionaire Brands: 7.1% organic growth

<table>
<thead>
<tr>
<th>Growth Range</th>
<th>Brands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 20%</td>
<td>NESPRESSO.</td>
</tr>
<tr>
<td>10.1 to 20%</td>
<td>Nestle, NIDO, Gerber, NAN, NESTEA, MILO, GALDERMA</td>
</tr>
<tr>
<td>7.6 to 10%</td>
<td>Beneful, Nestle, Nestle Nutrition, Maggi</td>
</tr>
<tr>
<td>5.1 to 7.5%</td>
<td>NESCAFE, DOG CHOW, Nestle, ONE, PURINA</td>
</tr>
<tr>
<td>3.1 to 5%</td>
<td>Friskies, KitKat, Nesquik, Carnation</td>
</tr>
<tr>
<td>0.0 to 3%</td>
<td>Stouffer's, Herta</td>
</tr>
<tr>
<td>Below 0%</td>
<td>Dreyers, HOT POCKETS, LEAN CUISINE</td>
</tr>
</tbody>
</table>

Source: Nestle, 2010 Full Year Results
Success story of an Indian IT firm: Growth and profit margin c25% p.a.

Infosys
- Founded in 1981 with $ 250 investment and 7 employees
- Infosys is a global technology and IT consulting company
- Infosys serves over 2,000 global companies with IT developments and business solutions:
  - Business and Technology Consulting, Application Services, Systems Integration, Product Engineering, Custom Software Development, Maintenance and Re-engineering, IT Infrastructure services, Business Process Outsourcing
- 67 outlets and 74 development centers in over 32 countries
- 155,629 employees
- Revenue FY 2012: US$ 7 billion
- FY net profit 2012:1.7 billion US$ (24% of sales)
- Market capitalization of US$ 30 billion

Source: Infosys; Corporate Factsheet, December 2012; Annual report 2012; Bloomberg
Success story of a mid-sized US company (1/2)

Vistaprint

- Vistaprint was founded 1995 by current President and CEO Robert Keane
- 8 million customers
- 3 production sites (Canada, Australia and Netherlands and India) and 12 offices (one in Switzerland)
- about 4'100 employees
- Annual sales in 2012 of US$ 1,020 million
- Market capitalization US$ 1.75 billion

Source: Corporate Fact Sheet, Vistaprint; Financial and Operating Metrics, Q2 FY13
An innovative business model as a key success factor (2/2)

Vistaprint’s «disruptive» Business Model

Through aggregation of many small orders Vistaprint achieved large lot sizes and low unit costs within the micro-marketing market. Market potential of US$ 25 billion in Europe and North America.

The secret of the Business Modell:
- Win thousands of small orders
- Produce large volumes
- Sell in small volumes
- Wide range of applications (customers and products)

Source: Corporate Fact Sheet, Vistaprint
Innovative strength as key success factor

Sonova (hearing aid devices)

Success factors for the growth in all regions
- Leading technology
- High rate of innovation, i.e. by platform concept
- Advanced marketing tools
- Creative PR and marketing
- Global Network
- Expanding the market segment to everybody

Key Facts 2012

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue in CHF m</td>
<td>1’620</td>
</tr>
<tr>
<td>Profit in CHF m</td>
<td>282</td>
</tr>
<tr>
<td>Employees</td>
<td>8’223</td>
</tr>
</tbody>
</table>

Source: Sonova and Helbling
Characteristics of innovation champions

Innovation champions:

... have a vision for the future market

... are mavericks and dissenters

... have the conviction to persist against heavy odds

... are willing to take extraordinary risks

Source: www.innovationmanagement.se, Helbling
Technological Innovation as success factor # 1 for most of the world market leaders

The success factors of the world market leaders from Switzerland and Germany:

- **100%**
  - Technological innovation
  - Quality
  - Knowledge base
  - Excellence of employees

- **90%**
  - Superior knowledge of the real customer needs and corresponding innovations / product development

- **80%**
  - Ability to translate customer requirements into services: availability, solution package, service etc.

- **70%**
  - Presence in key markets, "Think global, act local"

- **40%**
  - Image as a market leader
  - Historic lead

Source: Survey Helbling of 289 Companies and Divisions with world leading position
World Leaders with the highest returns

Market Leader:
- Far higher: 44%
- Higher: 40%
- Industry average: 16%
- Lower: 0%

Top 2 -5:
- Far higher: 4%
- Higher: 42%
- Industry average: 29%
- Lower: 25%

Number of responses in percent

Source: Survey Helbling of 289 Companies and Divisions with world leading position
How to foster Innovation in your business

1. What is innovation?
2. Innovation champions
3. Innovation as success factor
4. R&D and economic prosperity
5. Concept to foster innovation
6. Different ways to innovation success
7. Innovation process and networks
8. Checklist for innovation success
9. Celebrate innovations
First Mover Advantage

Reduced R&D costs

Time to market: active product lifecycle management is a key to success

Increased profitability

Increased Business volume

Economies of Scale

Company A with twice as high business volume, jobs and profit

Company B without active product lifecycle management

Increased market share

Shorter Time-to-Market

Source: Helbling

Cumulated profit within product lifecycle

Cumulated loss within product lifecycle
The strategic dilemma of western world market leaders

Market segmentation in emerging countries (e.g. China)

- **Low cost segment**: 10 – 30%
- **"Good enough" segment**: 30 – 80%
- **Top (Premium) segment**: 80 – 100%

Dual brand-/product-strategy?

Source: Helbling
Until 2013 a revenue of EUR 329 million must be achieved additionally through innovations and/or acquisitions.
"Best Innovator" in German SMEs in 2012 – superior innovation management increases growth, market share and services

<table>
<thead>
<tr>
<th>Share of innovations and innovative improvements in the last 3 years in % of sales:</th>
<th>Savings through process innovations:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOP-Innovators:</strong> 42.6%</td>
<td><strong>TOP-Innovators:</strong> 8.3%</td>
</tr>
<tr>
<td>Ø KMU: 8.6%</td>
<td>Ø KMU: 2.5%</td>
</tr>
</tbody>
</table>

% of the Top 100 are...:

<table>
<thead>
<tr>
<th>National market leaders:</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>World market leaders:</td>
<td>20%</td>
</tr>
</tbody>
</table>

Average growth of the Top 100 innovators above the industry average: 15% points

Source: compamedia GmbH, Helbling
The results of successful innovations

- Increased value of the innovation pipeline
- Innovation portfolio 100% aligned to the corporate strategy
- Increased rate of innovation
- Market offers with “wow” factor
- Improved innovation image
- Superior "time-to-market"
- Reduced spending on innovation

Increased value-oriented growth, increased earnings

Source: Helbling
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8. Checklist for innovation success
9. Celebrate innovations
R&D intensity correlates with higher growth rates

Exhibit 1: We find a strong relationship between R&D and Sales Growth, R&D expenditure and Sales growth (8 year CAGR: 2004-12)

Source: businessinsider.com; Goldman Sachs
Ensuring the prosperity of an economy with high R&D expenditures

Source: data.worldbank.org; economic-growth.eu; Eurostat
Dataset shown from 2007-2011 depending on availability
## High returns thanks to significant R&D spending

<table>
<thead>
<tr>
<th>Companies (selection)</th>
<th>Country</th>
<th>Revenue 2012 in millions</th>
<th>R&amp;D spending in % of revenue</th>
<th>EBIT in % of revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medtronic</td>
<td>USA</td>
<td>US$ 16’184</td>
<td>9.2%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Qiagen</td>
<td>USA/CH</td>
<td>US$ 1’254</td>
<td>9.8%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Roche</td>
<td>CH</td>
<td>CHF 45’499</td>
<td>18.3%</td>
<td>37.7%</td>
</tr>
<tr>
<td>Phonak/Sonova</td>
<td>CH</td>
<td>CHF 1’795</td>
<td>6.3%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Stryker</td>
<td>USA</td>
<td>US$ 8’657</td>
<td>5.4%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Straumann</td>
<td>CH</td>
<td>CHF 686</td>
<td>7%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Nespresso</td>
<td>CH</td>
<td>&gt;CHF 4’000</td>
<td>n.a</td>
<td>n.a</td>
</tr>
</tbody>
</table>

Source: Annual reports, Research Helbling
Swiss companies looking for innovation

Roche - We innovate healthcare

Logitech - A Leader in Innovation and Design

Novartis - Innovation is the essence of our mission

Sika strives for market leadership through technology leadership in all it's target markets

ABB - Innovation: Investing in the future

Nestle – Consumer at the heart of our research

Kaba - Innovation is the central driver behind Kaba’s business

Sonova- Leadership driven by innovation

Source: Research Helbling
R&D net investment: US$ 15 billion per annum to Asia

Source: http://www.globalinnovationindex.org (2011)
Switzerland keeps on leading WIPO’s «Global Innovation Index 2013»

Criteria of study:
- Institutions
- Human capital and research
- Infrastructure
- Market sophistication
- Business sophistication
- Knowledge and technology output
- Creative outputs

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Score</th>
<th>Score View</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Switzerland</td>
<td>66.6</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sweden</td>
<td>61.4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>United Kingdom</td>
<td>61.2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Netherlands</td>
<td>61.1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>United States of America</td>
<td>60.3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Finland</td>
<td>59.5</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Hong Kong (China)</td>
<td>59.4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Singapore</td>
<td>59.4</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Denmark</td>
<td>58.3</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Ireland</td>
<td>57.9</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Canada</td>
<td>57.6</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Luxembourg</td>
<td>56.6</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Iceland</td>
<td>56.4</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Israel</td>
<td>56.0</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Germany</td>
<td>55.8</td>
<td></td>
</tr>
</tbody>
</table>

Source: http://www.globalinnovationindex.org
Future Needs – cycles of Innovation

Source.: Nikolai D. Kondratieff, Die langen Wellen der Konjunktur, 1926; Leo A. Nefiodow, „Der Sechste Kondratieff“, 1996
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Where do most ideas for successful innovations really come from?

Customers contribute more than 50% of the ideas for successful innovation:

- Ideas from customers 60%
- Ideas from inside the company 25%
- Ideas from third parties 15%

Why customers are predestined?

1. Best knowledge of their own needs and requirements of the products
2. Practical idea on price / performance ratio (how much pays the market for what?)

Source: Research Helbling
In which environment do people come up with creative Ideas?

<table>
<thead>
<tr>
<th>Outside the company (76%)</th>
<th>Within the company (24%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoors</td>
<td>In strenuous meetings</td>
</tr>
<tr>
<td>Club</td>
<td>In boring meetings</td>
</tr>
<tr>
<td>Sport</td>
<td>With creativity techniques</td>
</tr>
<tr>
<td>Bathtub</td>
<td>At one’s desk</td>
</tr>
<tr>
<td>TV</td>
<td>During breaks</td>
</tr>
<tr>
<td>Eating</td>
<td></td>
</tr>
<tr>
<td>Hobbies</td>
<td></td>
</tr>
<tr>
<td>Vacation</td>
<td></td>
</tr>
<tr>
<td>Company trips</td>
<td></td>
</tr>
<tr>
<td>Other places</td>
<td></td>
</tr>
</tbody>
</table>

Source: Manager Magazin
Can innovations be procured externally?

Reasons for the increasing trend of external R&D:
- External know-how ("open innovation")
- Shorter time to market
- Flexible resources
- Lower total cost (products, R&D)

Sourcing innovation
- Ideas for real innovations
- Technology competence
- Project management (especially for complex interdisciplinary projects)
- Resources to shorten the time to market
- "World class" - innovation process know-how
- Development tools (CAD, CASE, with PLM / PDM, etc.)
- Methodologies (e.g. product cost reduction know-how)
- Supplier network

Examples of companies procuring innovation externally:
Nestlé, Thyssen Krupp, Roche, Pfizer, Airbus, Siemens, Ciba, Novartis, Medtronic, Phonak, Schindler, Geberit, ABB, many companies in the machinery, equipment and electrical industry, SMEs and start-ups
**Allocation of resources to R&D, Marketing and Services**

Successful companies invest less in infrastructure, production and maintenance and more in R&D, Marketing/Sales and Services.

**Stagnation and high costs**

- Production
- Infrastructure / Buildings
- Maintenance
- Service
- Marketing / Sales
- R&D

**Future-oriented company**

- Production
- Infrastructure / Buildings
- Maintenance
- Service
- Marketing / Sales
- R&D

«Classic» company

Source: Research Helbling
Many ideas never make it …

1919 initial ideas

524 preliminary projects

369 board projects

176 launched products

52 products accepted by the market

11 successful products in the market

Source: Kienbaum, Research Helbling
Six Levers for successful innovation management

1. **Innovation Strategy**
   - Innovation capability as goal
   - Fields of interest
   - Common understanding

2. **Innovation Tools**
   - Competence in methods
   - Trainings
   - Idea management
   - Idea competition

3. **Innovation Structures**
   - Innovation Manager
   - Network of experts
   - Steering committee
   - Innovation teams
   - Commitment of employees

4. **Innovation Process**
   - Innovation as permanent task
   - Customer integration
   - Cross functional

5. **Innovation Culture**
   - Risk taking
   - Individual initiative
   - Open mind
   - Curiosity
   - Willingness to change

6. **Innovation Output**
   - Seamless
   - Innovation as permanent task
   - Cross functional
   - Customer integration
   - Commitment of employees
   - Innovation teams
“50% of our ideas, technologies and products come from outside the company.”

*Alan G. Lafley, CEO Procter & Gamble*

Use of NineSigma\(^1\) jointly with other companies

Result:

- 10‘000 ideas generated/sourced
- 500 ideas result in technical improvements
- 100 ideas result in new products per year

\(^1\) NineSigma is an open innovation services provider that connects organizations with external innovation resources to accelerate innovation in private, public and social sectors.

Source: Helbling
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Instruments to foster innovation

Scouting „Find the right things“
- Gap analysis
- Trendscouting
- Mega trend analysis
- Customer benefit analysis
- Industry dogma analysis
- Customer monitoring
- Process mapping
- Progressive abstraction

Ideation „Do the right things“
- Brainstorming
- Brainwriting
- Brainwalking
- Stimulus word analysis
- Headstand technique
- Mind Mapping
- Osborn Checklist
- Idea screening
- Cost-benefit analysis

Source: Helbling
In practice: Different ways to innovation success

### Apple-way vs. Google-way

**Apple-way**
- Autocratic
- Design driven
- Person-centred
- Innovation top-down

**Google-way**
- Democratic
- Technology driven
- Company-centred
- Innovation bottom-up
- Unique team culture

<table>
<thead>
<tr>
<th></th>
<th>Apple</th>
<th>Google</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Cap (09.08.13)</td>
<td>US$ 413 bn.</td>
<td>US$ 297 bn.</td>
</tr>
<tr>
<td>Employees 2012</td>
<td>&gt; 50’000</td>
<td>&gt; 30’000</td>
</tr>
</tbody>
</table>

Source: Handelsblatt.com; ycharts.com; Helbling
Benchmarking Days at leading companies

- Visits and discussions with companies from other sectors
- Inspiration for innovations and approaches of innovation management
Learning from companies in other industries...

- The wheel does not need to be reinvented. Many successful companies are showing us possible paths for innovation success...

- What are the building blocks of a successful business?
- How would another company operate the own business?
- What does that mean for the own business? What design principles for the innovation process can be taken from that?

Source: Helbling
Increasing innovation success through high quality tools

Megatrends, Driver

Markets / customers
- define
- Tasks/ requirements
  - realize
Market offer
- define
- Functions
  - realize
Technology / Competencies

New knowledge

Basic concepts (to classify and link)
- Kano-Modell
- «Hidden Needs»
- Customer process / use matrix
  - "Business model best practice"
- Technology radar
  - Core competencies

Tools/ methods (to detect opportunities)
- customer observation
- customer workshops
- Lead user approach
- Industry dogma analysis
- Business model confrontation
- Customer activity analysis
- Creativity techniques
- Scouting
- Competency-based search for innovation
- supplier workshops

Source: Helbling
Increasing innovation success through differentiation of the market supply

Examples of Helbling tools to measure innovation with "WOW" effect

Industry dogma analysis

- Manufacturing activities
- Sales activities

In which areas there is no difference between us and our competitors? Can we break these dogmas?

Customer process analysis

- Customer activities
- Customer benefits

How can we redefine the customer experience in our industry? Can we eliminate problems of customers with innovations?

Uncover "Hidden Needs“, business model variations, deals with "WOW" effect

Source: Helbling
Focused strengthening innovation by tools and methods

- "Stop the wrong things" – Portfolio adjustment
- "pragmatic" roadmapping
- Business model database
- Culture Analysis Tool
- 50 individual measures to improve the innovation culture
- Courses and training modules for innovation managers, decision makers, "Innovation Professionals", project manager, employees
- Promoter model for basic structuring
- Task profiles ("long lists") for innovation managers, decision-making committee, “Innovation Professionals”, experts
- Training for the qualification of the participants and preparation to perform the tasks
- "Macro Design": segmentation, cascading and integration process for radical innovations
- Gate checklists
- Decision criteria and classifications
- Templates (Search Box / sketches of ideas, specification book / functional specifications, etc.)
- "Innovation agenda"

Source: Helbling
A customer specific „Innovation Management Roadmap“

**Phase 1**
Strategic setting and mobilization

- Developing "strategic directions and barriers"
- Kick-off & mobilization TOP 150 „Case for Change“

**Phase 2**
Innovation system and competency of staff

### Design the innovation system
- Innovation process
- Innovation structures, roles and responsibilities
- Tools and techniques of a "state of the art" innovation management

### Empowerment of managers and employees
- Workshop "enthusiasm for innovation"
- Train the Trainer Seminar "opportunities for innovation in business processes, products, services and business models"
- 2-day workshop on "Innovation Management - my contribution as an employee"

### Creating an innovation friendly culture
- Package of measures (communication plan, change plan)
Open up new business areas

Business model innovations

Innovations in the area of the core product
- Confrontation method: variation of particular elements within the value chain
- Cooperation method: additional services market along the customer process
- Innovations based on core competencies: new field of application for competencies

Business model confrontation

Process innovation
- Completely new business model
- New process
- Optimized process
- Real product improvements
- New products

Innovations of core products
- Osborn checklist: "New additional purpose"
- Megatrend-analysis: scale down products

Source: Helbling
Customer needs - Kano-Model

- **Performance Needs**: articulated, expected
- **Excitement Needs**: Non-articulated, unexpected
- **Basic Needs**: Non-articulated, expected

**Degree of feature implementation**

- **Customer satisfaction**
  - **Immediate happiness**
  - **Not unhappy**
  - **Disappointed**

**Example**: Car

- **Equipment**
  - **Passenger airbag**
  - **Back seats**
  - **Brakes**

Source: N. Kano
Innovation strategy at Audi production: cross-discipline search boxes

10 strategic search boxes provide guidance for the search of innovation

Source: Helbling
Non-articulated needs – observation of customers work processes via video

Technologically simple, low competition

Improvement potential: 20%

Example: Installation of cable conduits

Measuring and marking 28%
Drilling 17%
Placing dowels 10%
Hanging brackets 10%
Hanging consoles 14%
Mounting of pallets/guides 21%

Technologically advanced, intense competition

Improvement potential: 4 %

Source: Helbling
### Structured search for innovation along the value chain: New business models

<table>
<thead>
<tr>
<th>Value chain</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>Supply chain</td>
<td>Development</td>
<td>Production</td>
<td>Product architecture</td>
<td>Search for customers</td>
<td>Point of Sales</td>
<td>Transport/Delivery</td>
<td>Assembly</td>
<td>Service</td>
<td></td>
</tr>
</tbody>
</table>

#### Comparison of the competitors

**A - IKEA**
- Big local warehouse
- Warehousing program
- Own designer network
- Kit system
- Transportable in flat packages ("Design-to-transport")
- Functional, "well-designed" low cost policy
- Nonrecurring products, only at IKEA
- PAX spatial planning IKEA style advice
- "Shop in the shop"-concept
- Classic

**B - Classical furniture dealers**
- Classic
- Sub-supplier
- Sub-supplier
- "Shop in the shop"-concept
- Classic (Flyer, Radio etc.)
- Classic

---

*Source: Dr. Beat Birkenmeier, Helbling*
Innovation Cells at Hella working as autonomous teams

Example: Development of Bi-Xenon-Head-Light-Systems

- One temporary team – 6 persons
- One innovative task – specific risks
- One room – Accessability and Creativity
- One deadline – no-go option!
- 9 month – progress monitoring
- Opportunity! – Platform for further prominence

Source: Research Helbling
People are the driving force of Beyond! – Qiagen’s full-time InnoVenture Manager

- The InnoVenture Team: 4 full-time employees (2011)
- Responsibilities for large opportunities and one task: to convert the unknown into facts
- Shaping an opportunity and working out its “game changing” potential. Solutions are proposed in a later stage, in order to realize the full potential of an opportunity

Source: Qiagen, Research Helbling
open innovation and related concepts

Open innovation: “Open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation....” - Henry Chesbrough¹

Crowdsourcing: Services, ideas or content created by a large group of people

Open software/hardware: Computer software with its source code or design information made available for the public

¹ Henry Chesbrough invented the term open innovation and is the author of Open Innovation: The New Imperative for Creating and Profiting from Technology (HBS Press, 2003)
Open Innovation – the different way for innovation

The idea behind open innovation:

- R&D activities may be discovered and developed externally
- The company has to work with smart people outside the own company – “not all smart people work for us”
- The company should benefit from others – “license out”
- The company should buy third party intellectual property whenever it advances the business
- Partnership with different sources for knowledge e.g. universities


New products
New markets
New companies
New technologies
New technologies
New products
New markets
Ideas from outside
Outlicensing
Technology spin-offs
Technology insourcing
Research
Development
Closed Innovation
Open Innovation
How to foster Innovation in your business

1. What is innovation?
2. Innovation champions
3. Innovation as success factor
4. R&D and economic prosperity
5. Concept to foster innovation
6. Different ways to innovation success
7. Innovation process and networks
8. Checklist for innovation success
9. Celebrate innovations
The stages of a seamless innovation process

1. Identify innovation potential
2. Generate innovation ideas
3. Develop Innovation projects
4. Develop/implement innovations
5. Roll-out

Effectiveness
„Do the right things“

Decisiveness
„Stop the wrong things“

Efficiency
„Do the things right“

Filters: Selection of promising ideas based on transparent criteria

Approx. 100 initial ideas are necessary in order to end up with 1 successful innovation. (Source: various studies)

Source: Helbling
Innovation structures

- Innovation management tasks are established as essential tasks of the line management
- Structures are reduced to the minimum
- Create a common understanding among all employees that innovation is not limited to certain functions, but a work element of every employee.

Source: Helbling
### Innovation Process at a world class company

No.1 world wide market position (EBIT: 25% of sales)

#### Key Issues

<table>
<thead>
<tr>
<th>Stage</th>
<th>Key Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Marketing</td>
</tr>
<tr>
<td></td>
<td>Ideas</td>
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<tr>
<td></td>
<td>Portfolio, Roadmap</td>
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<tr>
<td></td>
<td>Feedback After Sales, Prod. Supp. and Life Cycle</td>
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<td></td>
<td>Innovation area</td>
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</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>Decision</th>
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<thead>
<tr>
<th>Stage</th>
<th>Deliverables</th>
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<tbody>
<tr>
<td>0</td>
<td>Markets situation</td>
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<tr>
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<td>Trends/ Changes</td>
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<tr>
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<td>Competitors</td>
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<td>Customer value chain and benefits</td>
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<td>Applications</td>
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<tr>
<td></td>
<td>PM, techn. PM, R+D, TT</td>
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<td></td>
<td>others</td>
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#### Innovation Process Stages

<table>
<thead>
<tr>
<th>Stage</th>
<th>Front End Phase</th>
<th>Project Phase</th>
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<tbody>
<tr>
<td>0</td>
<td>Idea Creation</td>
<td>Marketing</td>
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<tr>
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<td>Idea Evaluation</td>
<td>PO</td>
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<td>1</td>
<td>Business Opp. Verification</td>
<td>EC</td>
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<tr>
<td>2</td>
<td>Definition</td>
<td>PO</td>
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<td>3</td>
<td>Concept</td>
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<td>Design</td>
<td>PO</td>
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<td>Launch Preparation</td>
<td>PL</td>
</tr>
<tr>
<td>6</td>
<td>Market Introduction</td>
<td>PL</td>
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<td>7</td>
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<td>PL, PM</td>
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#### Project Phase

<table>
<thead>
<tr>
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<th>Decision</th>
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<tbody>
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<tr>
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<td>G3</td>
<td>EC</td>
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<td>G6</td>
<td>EC</td>
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<td>G7</td>
<td>EC</td>
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#### Key Deliverables

<table>
<thead>
<tr>
<th>Stage</th>
<th>Key Deliverables</th>
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<tbody>
<tr>
<td>0</td>
<td>Evaluated Idea with possible business prospect</td>
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<tr>
<td></td>
<td>Project plan → G3</td>
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<tr>
<td></td>
<td>Verified business opportunities (first draft business plan)</td>
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<tr>
<td></td>
<td>Project plan detailed → G4 first version → G6</td>
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<tr>
<td></td>
<td>Market requirement specification</td>
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<tr>
<td></td>
<td>Business plan</td>
</tr>
<tr>
<td></td>
<td>Detailed plan → G6</td>
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<tr>
<td></td>
<td>Product solution: System spec, Financial targets, Investments</td>
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<td>Verification of product solution</td>
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<tr>
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<td>Q-tests</td>
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<td>Drawings</td>
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<td>Specifications</td>
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<td>Tooling release</td>
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<td>System tests</td>
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<td>Q-serial product</td>
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<td>Market introduction</td>
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<td>Supply chain</td>
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<td></td>
<td>Service</td>
</tr>
<tr>
<td></td>
<td>Documented customer feedback</td>
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<td></td>
<td>GAP analysis</td>
</tr>
<tr>
<td></td>
<td>Project documentation</td>
</tr>
</tbody>
</table>

#### Source

Helbling
Role / function model in innovation management – promoting the decentralization of innovations at Audi

**Power promoter**

Set fields of interest and goals, decisions, responsibility for resources

**Process promoter**

Networking inside & outside, driving the innovation process / management

**Field promoter**

Expert role: roadmaps, technical networking, scouting

Technology control circle P = Production leader circle (PLK)

Field promoter

Production expert circle (for each strategic field of interest)
The „Innovation Champions“ shape a worldwide Innovation Network

Innovations Champions:

- are able to **identify customer needs**, fields of opportunities and their innovations and are able to evaluate them
- **form a pool** of innovation champions – As trained tool specialists, they are able to hand on their knowledge to other employees – they push new ideas
- serve as **accelerators for innovations** in order to inspire the 7000 Zimmer employees to be innovative - encourage & challenge the employees - assure management support
- **promote innovation** and innovation management
- independently **organize workshops**, based on defined fields of interest, with interested teams or units
- are able to locate **professional and technical knowledge** or have it themselves (mediator) - take part in cross-functional know–how-networks and develop them
- exchange once a year as **Innovation Champion Pool** their experiences concerning their work.

Source: Zimmer, Helbling
Network solutions for high quality and fast product innovation

External expert organisations

Consumer / customer / evtl. distribution partner

Industrial design

External innovation partner e.g. Helbling Technik
- Market research / surveys
- Idea creation
- Technology and innovation management
- Product development (electronics, mechanics, software, calculations, micro technology, clean technology, optics, sensor technology)
- Supplier evaluation
- Prototype construction
- Functional tests
- Product / production cost management

Patent agents

Rapid prototyping company

Supplier mechanical parts

Supplier electronics

Supplier plastics

Further technology services

others

Customer team e.g.
- Entrepreneur / head of division
- Product management
- Marketing
- Sales
- Engineering
- Purchasing
- Logistics
- After sales services
- Controlling

Manufacturing partner

Source: Helbling
How to foster Innovation in your business

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9. Celebrate innovations
Parallel work on the implementation of the elements to strengthen the innovation

„Case for Change“

• Identify need
• Set priorities

Implement first innovation quickly

• Pick „low hanging fruits“
• Look for innovation potential
• Conduct innovation competitions

Boost ability to innovate over the long term

• Redesign innovation management concept
• Train employees
• Change innovation culture sustainably

Source: Helbling
Not invented here syndrom

"This really is an innovative approach, but I'm afraid we can't consider it. It's never been done before."

Source: monkeybreadblog.com/
New business areas - assessment and prioritization of business opportunities

Case insurance company

Profits

- «careful» case 33 millions
- «optimistic» case 59 millions

<table>
<thead>
<tr>
<th>Attractivity (volumes, profits)</th>
<th>Time to market</th>
<th>Profits</th>
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</thead>
<tbody>
<tr>
<td>Game changer longterm</td>
<td>1</td>
<td>x mil.</td>
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<tr>
<td>#13</td>
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<tr>
<td>postpone</td>
<td>2</td>
<td>0.5 mil.</td>
</tr>
<tr>
<td>#1</td>
<td></td>
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<tr>
<td>drop</td>
<td>3</td>
<td>3.2 mil.</td>
</tr>
<tr>
<td>#6</td>
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<tr>
<td>Middle priority</td>
<td>1</td>
<td>4.8 mil.</td>
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<tr>
<td>#4</td>
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<tr>
<td>postpone</td>
<td>2</td>
<td>5 mil.</td>
</tr>
<tr>
<td>#7</td>
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<tr>
<td>Quick win candidates</td>
<td>3</td>
<td>20 mil.</td>
</tr>
<tr>
<td>#8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Helbling
The early stages are crucial

What are innovation champions doing differently?

- Relocation of resources and scope of development towards the early phase (idea generation, experiments, clarification of facts)
- Systematic design of the conception phase as a separate sub-process (making it a repeatable sequence of activities)
- Establish staged decision processes in the conception phase, adapted according to the available level of knowledge and information
- Cross divisional cooperation during the conception phase
- Systematic deployment of dedicated tools supporting the conception phase

Source: Helbling
In practice innovation projects often failure due to:

- Customer is not asked about
  - Benefits
  - Functionality
  - Price / Surcharge

- Unclear ideas regarding target customers (segments, regions)

- Lack of integration of modern technologies

- Excessive product specifications

- Missing product cost management, too high costs/prices

- Unprofessional project management

- Lack of monitoring (cockpit, MIS) of the innovation project

- Insufficient involvement of top management

- Delayed time to market

- Quality management not installed

Source: Helbling
Which values are the most important ones according to CEOs?

„Innovation Champions“

1. Humour
2. Image of innovation
3. Pleasure of intellectual experiments
4. Participative process of decision making
5. Individual initiative, proactivity
6. Low conflict level
7. Flexible rules
8. Mutual trust

Source: Kienbaum
Strategic Issues to foster innovation (1/3)

CEO level:
- Elaborate a business model
- Define targets (Revenue, EBIT, ROCE,…) and strategy for innovation
- Set priorities
- Define business portfolio
- Clear market and customer segmentation
- Allocate financial and human resources
- Foster an innovation culture (e.g. Google)
- Top Management support:
  - Attend personally R&D meetings, informal communication
- Hire out-of-the-box-thinkers

Source: Helbling
Strategic Issues to foster innovation (2/3)

**Executive Management level:**

- Stimulate innovation enthusiasm by listening to innovation champions
- Develop innovation leaders
- Interact with customers to source input
- Develop your unique innovation process
- Timely innovative marketing & sales
- Stimulate open and collaborative innovation
- Top Management support
- Establish cross divisional cooperation

Source: Helbling
Strategic Issues to foster innovation (3/3)

Operational Management level:
- Manage time to market and business plan
- Superior customer needs identification and development
- Time to market and innovative Product Lifecycle Management
- Intrapreneuring: identification and commitment
- Use of modern technologies
- Effective and efficient use of IT and methodologies
- Comprehensive product cost management
- Management support
- Win-win external partnership management as a competitive advantage
- Monitor innovation activities and success

Source: Helbling
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8. Checklist for innovation success
9. Celebrate innovations
Implemented ideas at an innovation day

- Presentation of ideas implemented by 13 teams in exhibitions and theater performances
- Awards by the CEO for the «best» implemented idea
- Workshops on creativity techniques
- Innovation Think Tanks
Thank you for your attention!

Dr. Reto Müller, Partner
Executive Chairman

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