Real-Win-Worth

a valuable tool for reducing risks when introducing innovative products

Don McClure
3M Corporate Research, retired

AIMCAL – October 25, 2011
Five questions

• How many like to make money?
• How many like to make lots of money?
• How many realize the making lots of money often requires innovative approaches?
• How many realize that the risk of failure increases as the level of innovation increases?
• How many want to reduce the risk of failure while being innovative?
Real-Win-Worth

a valuable tool for reducing risks when introducing innovative products
A note on sources

• 3M uses Real-Win-Worth tools
• Getting permission to use 3M sources: iffy!
• I sought other sources . . .
Is It Real? Can We Win? Is It Worth Doing?
Managing Risk and Reward in an Innovation Portfolio


George S. Day is the Geoffrey T. Boisi Professor, Professor of Marketing and co-Director of the Mack Center for Technological Innovation at the Wharton School of the University of Pennsylvania
Before Real-Win-Worth . . .

some thoughts on innovation.
Innovations: “Big I” versus “little i”

- Incremental innovations (small, safe changes to your product offerings) are a large fraction of a typical development portfolio.
- "Little i" projects rarely produce large returns or competitive advantage.
- "Big I" innovations – offerings new to your organization or the world – are risky, but may be needed to secure your company's growth.

➤ Increase the proportion of major innovations in your portfolio while managing the associated risks.
Risk and probability of failure

• Depend on:
  – Proximity of new product and technology . . . to your current offerings
  – Proximity of new market . . . to your current market
New to the company
Adjacent to current offerings
Same as current offerings

Intended market

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AIMCAL 2011
Probability of failure

New to the company

Adjacent to current offerings

Same as current offerings

Same as present

Adjacent to present

New to the company

Intended market
## Intended Market

<table>
<thead>
<tr>
<th>Customer’s behavior and decision making processes will ...</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our distribution and sales activities will ...</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The competitive set (incumbents or potential entrants) will ...</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>...highly relevant</th>
<th>...somewhat relevant</th>
<th>...not at all relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our brand promise is ...</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Our current customer relationships are ...</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Our knowledge of competitors’ behavior and intention is ...</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL**
### Product/Technology

<table>
<thead>
<tr>
<th></th>
<th>...is fully applicable</th>
<th>...will require significant adaptation</th>
<th>...in not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our current development capability ...</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Our technology competency ....</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Our intellectual property protection ...</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Our manufacturing and service delivery system ...</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>...are identical to those of our current offerings</th>
<th>...overlap somewhat with those of our current offerings</th>
<th>...completely differ from those of our current offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>The required knowledge and science bases ...</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>The necessary product and service functions ...</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>The expected quality standards ...</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL
Innovation

• The world leaders in innovation and creativity will also be world leaders in everything else.
  - Harold R. McAlindon

• Innovation distinguishes a leader and a follower.
  - Steve Jobs
Innovation

Research is the transformation of money into knowledge.

Innovation is the transformation of knowledge into money.

- Geoff Nicholson, VP, 3M
Innovation

_Invention_ is thinking of new things.

_Innovation_ is making them happen.

Sign in a 3M office – circa 1982
Innovation

Google Labs shuts down

Fortunately for Google's engineers, Google's well-known “20 percent time” isn't dying out either. For one day a week, engineers get to spend their time working on a project of their choosing that's not in their job description. The death of innovation? Hardly.

3M continues it’s “15 percent time.”
Entrepreneurship:

. . . taking capital from one area to apply elsewhere to get a bigger return
. . . by putting it to more productive use.

Milton Chang, Laser Focus World, August 2011, pg 32
Innovation

Can we reduce our risks as we “take capital from one area to apply elsewhere to get a bigger return?”

Real-Win-Worth is one tool to do that!
<table>
<thead>
<tr>
<th><strong>Is it real?</strong></th>
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<td><strong>Is the market real?</strong></td>
<td><strong>Can the customer buy it?</strong></td>
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<tr>
<td><strong>Is there a clear concept?</strong></td>
<td><strong>Is the size of the potential market adequate?</strong></td>
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<tr>
<td><strong>Is the product real?</strong></td>
<td><strong>Will the customer buy the product?</strong></td>
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<td><strong>Can the product be made?</strong></td>
<td><strong>Will the final product satisfy the market?</strong></td>
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<tr>
<td><strong>Can we win?</strong></td>
<td><strong>Does it have a competitive advantage?</strong></td>
</tr>
<tr>
<td><strong>Can the product be competitive?</strong></td>
<td><strong>Can the advantage be sustained?</strong></td>
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<tr>
<td><strong>Can our company be competitive?</strong></td>
<td><strong>How will competitors respond?</strong></td>
</tr>
<tr>
<td><strong>Do we have superior resources?</strong></td>
<td><strong>Do we have appropriate management?</strong></td>
</tr>
<tr>
<td><strong>Can we understand and respond to the market?</strong></td>
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<tr>
<td><strong>Is it worth doing?</strong></td>
<td><strong>Will the product be competitive at an acceptable risk?</strong></td>
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<td><strong>Does launching the product make strategic sense?</strong></td>
<td><strong>Are the forecasted returns greater than costs?</strong></td>
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<td><strong>Does the product fit our overall growth strategy?</strong></td>
<td><strong>Are the risks acceptable?</strong></td>
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Is it real?

Is there a need or desire for the product?

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Is the size of the potential market adequate?

Will the customer buy the product?

Is there a clear concept?

Can the product be made?

Will the final product satisfy the market?

Is the market real?

Is the product real?
Can we win?

Can the product be competitive?

Does it have a competitive advantage?
Can the advantage be sustained?
How will competitors respond?

Can our company be competitive?

Do we have superior resources?
Do we have appropriate management?
Can we understand and respond to the market?
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<td>Are the forecasted returns greater than costs? Are the risks acceptable?</td>
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<td>Is it real?</td>
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| **Is the product real?** | Can the product be made?  
Will the final product satisfy the market? |

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| **Does launching the product make strategic sense?** | Does the product fit our overall growth strategy?  
Will top management support it? |
Doing the ratings

• Who’s on the team?
  – R&D, marketing, manufacturing, management

• How do we build consensus?
  – Facilitator: knowledgeable but not invested in the outcome

• What scoring system can we use?
  – Keep it simple
    • Red, Yellow, Green
    • Numeric: say . . . 1, 4, 10

• Do we really believe these ratings?
The Ratings Game

• Level 1 answers
  – Back-of-an-envelope ideas and numbers
  – Gut feelings and common sense

• Level 2 answers
  – A few hard numbers, a few “guesstimates”
  – Personal experience with specific components of the project

• Level 3 answers
  – Detailed marketing research, modeling, and financial analysis
  – Extensive personal experience with very similar projects
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Comments

• Use the color coding
  – Invest in moving the reds to yellows and the yellows to greens
  – Don’t invest in making greens greener!
• Use the numbers
  – Take products of “rating” and “trust in rating” to get “composite” score
  – Don’t take the numbers too seriously until you’ve done the ratings a few hundred times
• Remember “GEMO”
  – Good Enough, Move On
More Comments

• Think of the ratings as a communication tool not as a calibrated score card
• Add new ratings categories to suit your particular products and/or markets
Risk

• Using the Real-Win-Worth tool reduces risk.
• It does not eliminate risk.
• If you wait until all ratings are GREEN, you may end up “late to market,” having missed the opportunity window.
• Leadership means taking “good risks”
Risk

• Real-Win-Worth helps focus our efforts
  – especially when the technical team
    wants to keep adding features
• The quality of the input data, positioning
  strategy, design and implementation are up to
  the user.
Real-Win-Worth sites

• www.bnet.com/cp/is-it-real-can-we-win-is-it-worth-doing/181658
  – Precis of and link to Day’s Harvard Business Review article

• www.amazon.com/Treasure-Chest-Growth-Methods-Practices/dp/0132300214
  – Book on Six Sigma Methods including Real-Win-Worth
Innovation Insights

The Innovator's DNA:
Mastering the Five Skills of Disruptive Innovators

Jeff Dyer, Hal Gregersen, and Clayton M. Christensen
Five traits common to the disruptive innovators:

• questioning
• experimenting
• observing
• associating
  – the ability to make idea-producing connections by linking concepts from different disciplines: intellectual mash-ups.
• networking
  – less about career-building relationships than a search for new ideas
Five traits common to the disruptive innovators:

This bundle of characteristics echoes the ceaseless curiosity and willingness to take risks noted by other experts.

“Innovators engage in these mental activities regularly.”

“It’s a habit.”

- questioning
- experimenting
- observing
- associating
- networking
Innovative companies . . .

typically enjoy higher valuations in the stock market, an “innovation premium.”

It is calculated by estimating the share of a company’s value that cannot be accounted for by its current products and cash flow.

The innovation premium tries to quantify investors’ bets that a company will do even better in the future because of innovation.
Real-Win-Worth

can help you succeed
at becoming more innovative!
Questions?
Comments!