Treating the Early-Stages of New Business Development as a Profit Center

By

Greg Stevens, President
WinOvationsSM, Inc.,

Thursday, May 15, 2003
From a
Sopheon Sponsored Webinar
Background and Introduction

- Thinking Grew from Challenge of “Six-Sigma”
  - Programs with Hundreds of Individuals Getting Trained
    - “Black Belts”
    - I Asked: Imagine If This Was Done with NBD?!
      - But: Not Happening with NBD Processes. WHY??
  - Six Sigma: “Viewed as Providing Faster Returns vs. New Business Development (NBD)”

- Conclusion:
  - Financial Returns from Doing NBD Better Need Documentation
  - Before “NBD Improvement” Is Widely Sought
NBD Is Typically Viewed as a Cost Today, Not as a Profit Center

- Over $350 Billion Spent *Per Year* In USA
  - For R&D: 46% of Total
  - & Launch: 54% of Total

- & Failure Rates Are High
There is a Problem...

What Do Lemmings Have In Common With Most New Business Developers??

- They All Believe …
But - Universal Industrial Success Curve Shows Most NBD Efforts Unsuccessful*

60% Success Rate from Launch Unchanged in 40 Yrs. In Spite of All the “Improvements”***


Success Rates With Standard Structured NBD Processes Are Too Low*

- 21% of Spending Goes to Successful Projects on Average for Stages 1-5 (Pre-Launch)
  - 79% Waste!
- 60% of Spending Goes to Successful Launches on Average for Stage 6
  - 40% Waste

- Only 42% of Overall Innovation Spending Is Effective
  - 58% Waste! Over $200 Billion Wasted per Year!
  - An Opportunity to Raise Profits?

*A New Paradigm for Industrial Innovation from the Genetic Perspective of Creativity: Stevens, Greg A., 1994, Central Michigan University, Thesis
If NBD Waste Was Decreased, Profits Could Increase Immediately…
Over $200 Billion/Year In USA

- That Sounds Better!
  - A Different Way of Looking At It!

- Is It Possible ?? …
Consider the Following Innovation Spending Scenario

- $100 Million = Total R&D + Commercial-Launch Budget
  - 46% R&D
  - 54% Commercial Launch
  - The Average Split Across US Industry*

- Assume the Average Standard Success Rates Per Universal Success Curve, for All NBD Processes:
  - 79% Waste Up to Launch
  - 40% Waste After Launch
  - 58% Avg. Combined Waste (Prework + Launch)*

- Assume the Average 54% Return to Corporations for Successful Innovation Spending*

*A New Paradigm for Industrial Innovation from the Genetic Perspective of Creativity: Stevens, Greg A., 1994, Central Michigan University, Thesis
Using Standard NBD Approaches:
$58 \text{ MM Is Wasted Out of } $100 \text{ MM Invested}
$22 \text{ MM Returned, with 238 People in R&D}

<table>
<thead>
<tr>
<th>Spending Category</th>
<th>Today's &quot;Universal Success Curve for NBD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Total</td>
</tr>
<tr>
<td>R&amp;D Spending Up to Launch</td>
<td>46% $46,000,000</td>
</tr>
<tr>
<td>Launch Spending</td>
<td>54% $54,000,000</td>
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<tr>
<td>Total Spending</td>
<td>100% $100,000,000</td>
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<tr>
<td>Wasted R&amp;D Spending</td>
<td>79% $36,478,000</td>
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<tr>
<td>Wasted Launch Spending</td>
<td>40% $21,600,000</td>
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<tr>
<td>Total Wasted Spending</td>
<td>58% $58,078,000</td>
</tr>
<tr>
<td>Effective R&amp;D Spending</td>
<td>21% $9,522,000</td>
</tr>
<tr>
<td>Effective Launch Spending</td>
<td>60% $32,400,000</td>
</tr>
<tr>
<td>Total Effective Spending</td>
<td>42% $41,922,000</td>
</tr>
<tr>
<td>Return on Effective Spending</td>
<td>54% $22,637,880</td>
</tr>
<tr>
<td>Return on Total Spending</td>
<td>23% $22,637,880</td>
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$22 \text{ MM Returned, with 238 People in R&D}$

$42 \text{ MM Effective Spending}$
With 95% Success Rates, & **Less Total Spending**, Can Achieve Same Output ($22.6 MM Return):

$1 MM in Analysis Yields **$55 MM Less Spending**

Now Just 48 People in R&D vs. 238. **$55 MM Profit Straight to Bottom Line**

<table>
<thead>
<tr>
<th>Spending Category</th>
<th>Today's &quot;Universal Success Curve for NBD</th>
<th>Achievable 95% Success Rates &amp; Same Effective $$ Spent (But Less Total $$)</th>
<th>Profit (ie Savings) &quot;Done Right&quot;</th>
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<td><strong>$54,981,900</strong></td>
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<td>Launch Spending</td>
<td>54% $54,000,000</td>
<td>76% $34,020,000</td>
<td></td>
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<tr>
<td>Additional Spending on Analysis</td>
<td>0% $0</td>
<td>2% $1,000,000</td>
<td></td>
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<td>Wasted R&amp;D Spending</td>
<td>79% $36,478,000</td>
<td>5% $476,100</td>
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gstevens@winovations.com www.winovations.com
Tel: 1-989-779-7790*
With 95% Success Rates, & ~Equal $100MM Spending, Can Achieve $29 MM Greater Return - $1 MM in Analysis Yields $29 MM More Profit
With Same 238 People in R&D as Initially

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<tr>
<td></td>
<td>% of Total</td>
<td>Added Earnings from Early Stages</td>
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Less Wasted Spending
Over Double the Effective Spending
New Profits
Over 2X the ROI
Doing Early-Stage NBD Analyses Well Provides Better Financial Returns than Most Six-Sigma Projects

- Result of $1 MM Spent on Early-Stage Analysis:
  - If Match *Returns* of Earlier $100 MM Spending Efforts:
    - $1 MM Opportunity Analysis Spending
      - Yields $55 Million Less Spending, Overall, I.e. $55 Million More Profit/Year
      - **5,500% Return - in One Year!**
      - Plus a 50% Overall Return on Innovation
    - If Match Same $100 MM Spending Level
      - $1 MM Opportunity Analysis Yields $29 Million More Profit/Year
      - **2,900% Return!**
      - Plus a 50% Overall Return on Innovation
What Happens if You “Split the Difference?”

- Conducting 50% Less R&D
  - Immediate Profit Boost Every Year
- And Also Make the Remaining R&D 95% Effective (vs. Typical 11%)
Project-Level Example Based on $10 MM R&D Spending

- Typically Waste $8.9 MM (89%) from End of Early Stages of NBD
  - Now: Eliminate 50% of R&D (Largely Wasted)
    - Save $5 MM/Yr Immediately, Goes Straight to Bottom Line
  - Fix Remaining R&D Spending So It Yields Significantly More Profits (95% vs. 11% Typically)
    - Applying Average 54%/Yr Return for Successful Innovations on $5 MM Remaining Effective Spending x 95% Success rates =
      - $2.6 MM Profit/Yr.
      - Over 4X Higher Vs. $0.6 MM typically:
        - Normal Expected Return from 11% Success on $10 MM Spent = $1.1 MM Spent Effectively x 54% Return = $0.6 MM/yr profit
Summary of Prior NBD Example Spending
$10 MM: 50% Less R&D *But* With Higher Quality
Results (95% vs. 11%)

- **Less R&D Spending:**
  - $5 MM/Year Savings

- **Over 4X More Profit from Better R&D**
  - $2.6 MM Now - $0.6 MM Then =
  - $2.0 MM/Year Benefit

- **Net Benefit: $7.0 MM/Yr. Profit**
Would Be Like Having Your Cake, *and* Eating It Too

- It is Possible to Have
  - 50% Less Spending on NBD
  - *And* 400% Higher Profits
To Achieve a Different Result, i.e.
Higher Quality Results from Early Stages of NBD

*Must Do Things Differently*

- Standard Market-Research Tools Used in Early Stages of NBD Provide a Broad Market Overview
  - Comparing Many Segments,
  - Usually From Secondary Market Research,
  - Followed by a Decision About What to Develop
  - Then Teams Are Formed, & Opportunity Pursued
    - But Without *Knowing* If Will Win

- **What Is Different** About Recommended Approach?
  - Direct Customer Interviews & In-depth Analysis Regarding Need & Value
  - Clear Cost-performance Models
    - Show Segments Will Win In
      - & Where Will Lose
**Early-Stages of NBD Process:**

**Gut-Level-Screen**

**Idea Management**

**Gap-Analysis**

<table>
<thead>
<tr>
<th>Stages:</th>
<th>Ideation</th>
<th>Shaping</th>
<th>Analysis</th>
<th>Validation</th>
<th>Develop &amp; Implement</th>
</tr>
</thead>
</table>

**Success-Wheel**

Unspoken Needs

New Ideas

WHAT ARE THE SPOKEN UNMET NEEDS?

WHAT IS THE VALUE OF MEETING UNMET NEEDS?

WHAT ARE THE SYSTEM COSTS?

HOW IS THE FUNCTION DONE?

WHAT IS A WINNING STRATEGY?

**Profits**

Winning Actions

Winning Tactics

End of Individual’s Analysis
Process Step 1: Determine Top Management’s *Gut-Level-Screen*™

- “Group” Zone of *Agreement & Excitement*
  - Their *Gut-Level-Screen*
Step 1: Documenting Top Management’s & Immediate Businesses Gut-Level-Screens

- 1-1.5 Hour Interviews
  - One-on-One
- Predetermined Set of Questions
  - How Big
    - Platform, Group & Individual Project
  - How Fast?
  - What Excites?
    - What Does Not?
  - % Growth by Acquisitions vs. Internal Growth?
  - Other Specific Questions

Top 3-4 In Management

- Bus. Mgmt. #1
- Bus. Mgmt. #2
- Bus. Mgmt. #3
Step 2: Prioritize Platforms, Groups & Projects

Vs. *Gut-Level-Screen*

Use *Success-Wheel* on These Projects First, & Leverage Findings Across Entire Group

Platform A

**Group 1**
- Project 1
- Project 2
- Project 3
- Project 4
- Project 5
- Project 6
- Project 7
to
Project “n”

Platform B

**Group 2**
- Project 1
- Project 2
- Project 3
- Project 4
- Project 5
- Project 6
to
Project “n”

Platform C

**Group 3**
- Project 1
- Project 2
- Project 3
- Project 4
- Project 5
- Project 6
to
Project “n”

Functional Groupings

Specific New Product Level Ideas
Step 3: Conduct *Gap-Analyses On Top Projects:* Useful in Prioritizing Portfolios of Projects

5 “*Essential Vitamins*” for NPD Growth

Must Have Solid Answers for *All* of These (100%):
If One Is a Zero, the Project May Be Too

A. Fit in Your Company Vs. Gut Level Screen
   - Size and Margin, Timing, Type of Business

B. Customer Need

C. System *Cost Models* Vs. Competing Approaches
   - Needed to Know What the Maximum Value Is, and If It’s Real

D. Value to the Customer, and to Your Company

E. Sustainable Competitive Advantage

♀ Other Things That Are Nice to Have, but Not Essential:
   - Positive Growth, Positive Trends, Specific Marketplace Openings
Steps 4 & 5: **Success-Wheel** Project Analysis

4. Create, Test and Analyze *Draft Propositions*,
5. at Customers, & Morph Project As Needed

A. Internally Tested Propositions:
   - Fit Vs. *Gut-Level-Screen* &
   - Sustainable Competitive Advantage

B. Marketplace Tested Propositions via “Success-Wheel”
   - Test Via Customer Visits:

C. *Iterative-Propositions™*:
   - Unspoken Needs, New Ideas,
     Creative Rainmakers: Morph Starting Idea Into Winning Way in World
     - *When Know How to Win, ONLY Then Is It Time for Commercial Development*
Early Customer Visits & Analysis Critical

- First Customer visit – on coached project

Final Early-Stage NBD Analysis Step:
Cost Per Unit Performance
*In The Customer’s Eyes Is Key* ($/Part, or $/Ft. Bonded: *Not* $/Lb. Sold)

- In This Example, the Highest Cost Per Pound Raw Material Still Wins Vs. The Best Global Competitors
- Vs. Today’s Processes... And More Importantly *Tomorrow’s*
- *Then Go!! Activate Teams, Develop & Commercialize*
  - 95% Success Rates *Only* When Have Developed This Knowledge

![Wins!](chart.png)

*Best Global Approaches*
Training and Coaching NBD Personnel In Use of New Tools Is Critical

Suggested Managerial Metrics to Measure & Ensure System Implementation

### Organizing for Success

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Awareness</th>
<th>Understanding</th>
<th>Management</th>
<th>Group Pre</th>
<th>% Whole Group</th>
<th>Creating</th>
<th>% Working Group</th>
<th>% Working Group</th>
<th>% of Top</th>
<th>NBD Process</th>
<th>NBD</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>Low</td>
<td>More Effective</td>
<td>NBD System</td>
<td>For New</td>
<td>2-3 Day Group</td>
<td>Working Group</td>
<td>Training</td>
<td>Group with &gt;40</td>
<td>Managers</td>
<td>In Place</td>
<td>In Place</td>
<td>Organizational</td>
</tr>
<tr>
<td>10 &gt; High</td>
<td>NBD System</td>
<td>Half Day</td>
<td>NBD System</td>
<td>NBD System</td>
<td>Training Class</td>
<td>Rainmaker</td>
<td>Screen</td>
<td>WebCentric</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Effectiveness:**
- Yes
- Follow Up
- Building
- Building
- 0%
- Not Yet
- 0%
- 56%
- 80%
- 80%
- Remaining

**Houchens:**
- Houchens
- Houchens & Managers

**Fall, 2002:**
- 11/26/2002

### Implementing for Success

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>% of Projects</th>
<th>Manager of Working Group</th>
<th>% of Analysts</th>
<th>% of Customer</th>
<th>% of Projects</th>
<th>% of Projects</th>
<th>% of Analysts</th>
<th>% of &quot;Yes&quot;</th>
<th>% of &quot;No&quot;</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>Low</td>
<td>Being Analyzed Meeting</td>
<td>Coached on</td>
<td>At Least One</td>
<td>Coached on</td>
<td>With Coach</td>
<td>With Final Report</td>
<td>Certified</td>
<td>Analyses</td>
<td>Analyses</td>
</tr>
<tr>
<td>10 &gt; High</td>
<td>NBD System</td>
<td>Gut-Level-Screen</td>
<td>At Least One</td>
<td>Full Project</td>
<td>Coached by Certified</td>
<td>Trainer</td>
<td>Completed</td>
<td>Certified</td>
<td>Analyses</td>
<td>Analyses</td>
</tr>
</tbody>
</table>

**Effectiveness:**
- Unknown
- No
- Zero
- None
- None
- None
- None
- None Done
- None Done
- None Done
- Not Yet Started

**Houchens:**
- Houchens
- Houchens & Managers

### You Have to Really **Do It** to Gain the Benefits

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Tel: 1-989-779-7790
The New NBD System Provides More Than a Six-Sigma Improvement Vs. The “Universal” NBD Success Curve

95% Success Rates From Stage 4 Are Achieved vs. the Benchmark for Traditional Stage-Gate Processes of 11% (1 in 9). This Represents More than a Six Sigma Improvement.

Ref: Stevens & Burley, May-June 1997, Research•Technology Management
But Is This Really Achievable?

i.e. 95% Success vs. 11% Success at the End of the Early Stages of NBD?? Sounds Too Good to Be True…

✓ Yes: True, & Well Quantified
✓ Dow Chemical Case Example:
  - Achieved >95% Success Rates on Commercialization Rates from 267 NBD Early-Stage Analyses Spanning 10 Years
    - Returned Far-In-Excess of 10X Cost of Early-Stage NBD Analyses
      - Quantified Earnings of Over $220 Million from This Approach
  - Dow Recently Applied Thinking to an Entire R&D Organization
    - Led to Formation of More Creative Culture, FAST
    - Created Financial Returns Exceeding 1/3 of Total Shareholder Equity (“Book Value”)
✓ Lear, Donnelly Mirror, Johnson Controls ASG
  - Many Others*
Summary of New Tools Enabling Success Rates of Over 95%

1. Top Management *Gut-Level-Screen*
3. Use of Creative “Rainmaker” Personality Types to Conduct Early-Stage Analyses (MBTI® Based Personality Index)
   - Top Third of Rainmakers Out-earn Bottom Third:
     - 95 to 1
     - A 9,500% Improvement, With Same Process, Training and Coaching
4. Early Customer Interviews, & Use of *Success-Wheel* to “Morph” Starting Ideas Into Winners
5. Early Use of System Cost-Performance Models to Prove You Have a Winner vs. Best in World Tomorrow…
   - From Your Customer’s Perspective

- New Tools & Thinking Can All Be Incorporated into NBD Software
  - Like *Accolade*
The Answer Seems Clear to the Challenge of “Faster Returns” from Six Sigma…

- Incorporate Early-Stage NBD into Six-Sigma Thinking!
- Prioritize Early-Stage NBD Work Based on Financial Returns vs. Any and All Other Six-Sigma Projects
  - 2,900% to 5,500% Returns Are Indeed Typical
    - 29X to 55X Cost of Opportunity Analyses, per This Analysis
    - Above Numbers Are Conservative: Closer to 100X Over Time, In Actuality
- Train a Cadre of Analysts in “Six-Sigma” NBD Thinking
  - & Get to Work -

- *Raising Your Returns on Innovation, By Treating Early-Stage Analyses as a Profit Center*
### Appendix 1: WinOvations References

1. Stevens, Greg A. “Shattering Myths and Achieving Higher Profits Faster from Six Sigma Improvements in New Business Development.” Technology Transfer and Innovation ’99 Conference, September 29, 1999, Melbourne, Australia. Also at the Project Management Institute (PMI) 9-00, Houston, TX.


10. Others Listed in the Body of the Presentation. Many are at website: www.winovations.com
Appendix 2:

References from Dow Chemical Polyolefins and Elastomers
Who Have Used This Approach To Quickly Raise the Creativity of their Group
Culture and Add Remarkable Value