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

By

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From a
Sopheon Sponsored Webinar

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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

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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*

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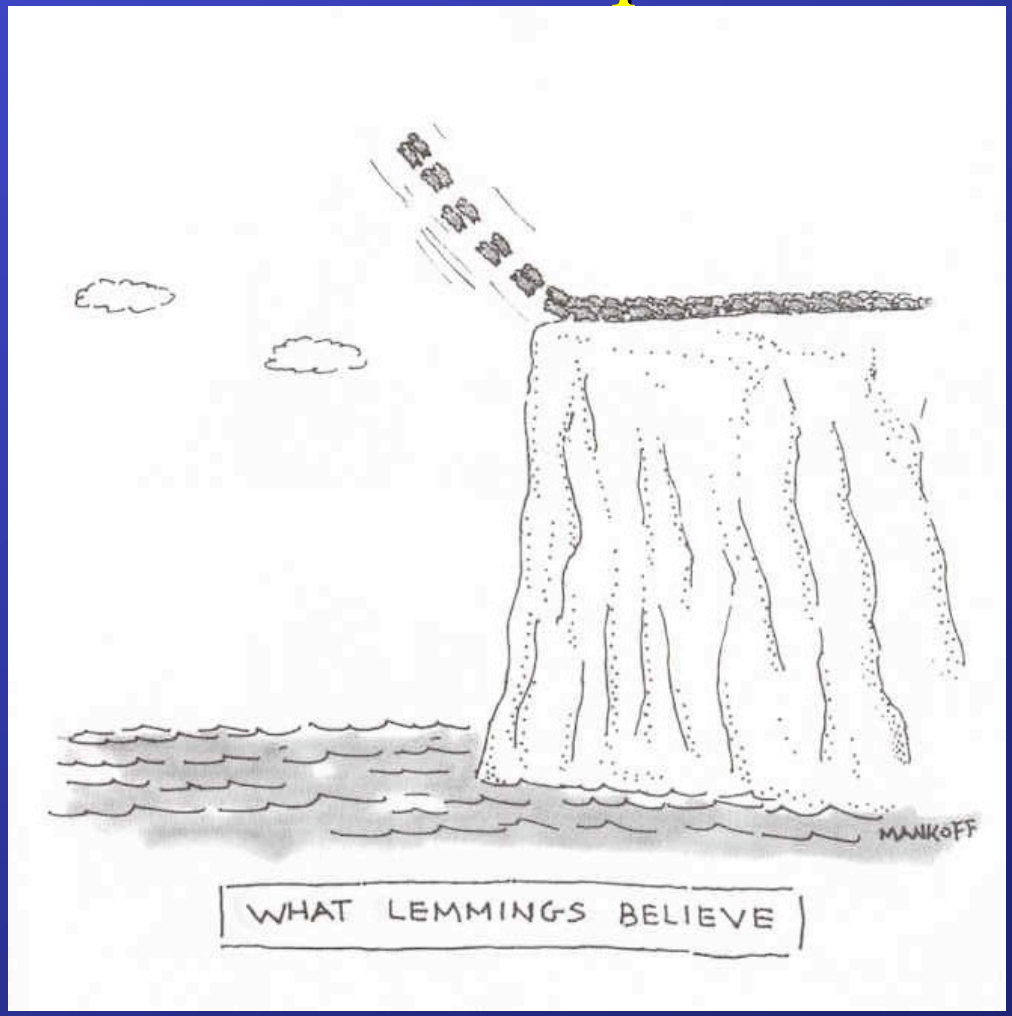
There is a Problem…

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

- They All Believe …



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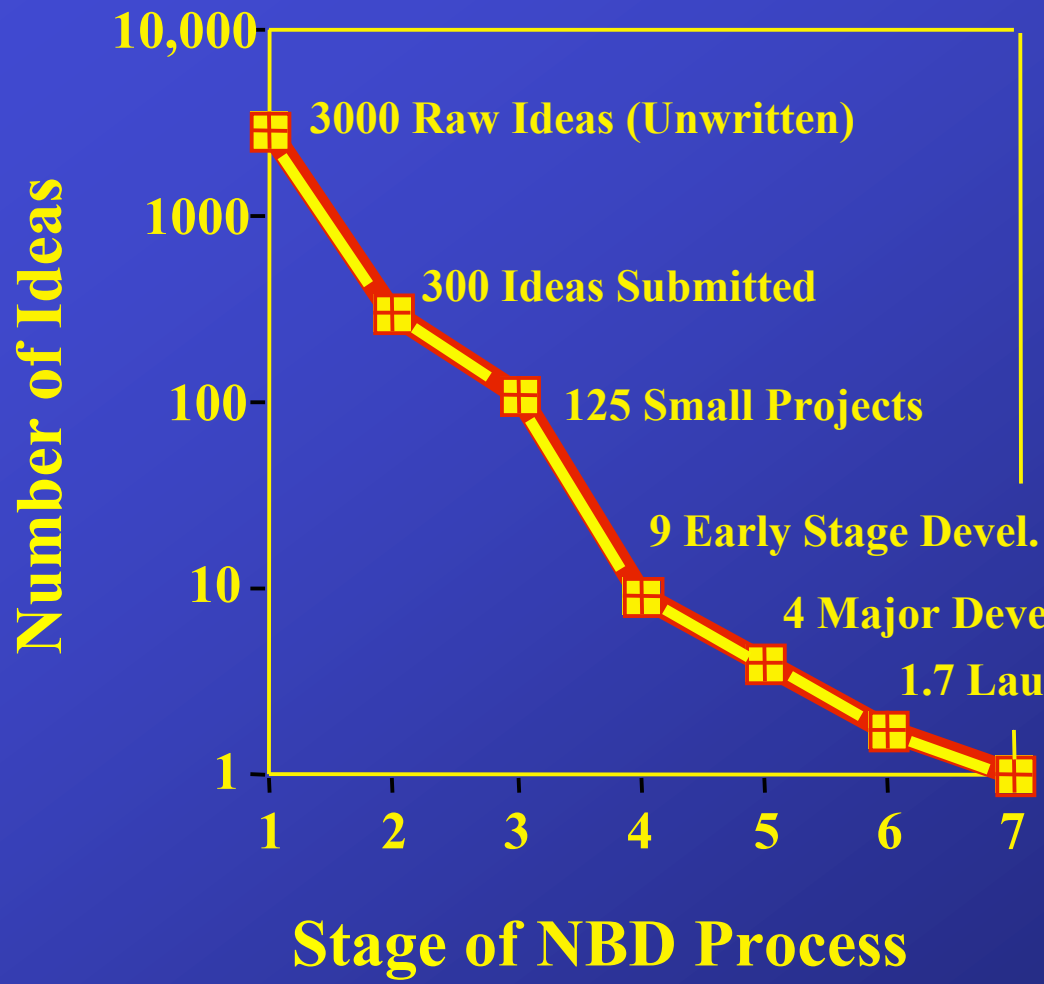
But - Universal Industrial Success Curve Shows Most NBD Efforts Unsuccessful*



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

*Reference: G. Stevens and J. Burley, "3000 Raw Ideas = 1 Commercial Success!" *Research•Technology Management,* 40(3): 16-27, May-June, 1997. Runner-Up, IRI "Best Paper of the Year."

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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?

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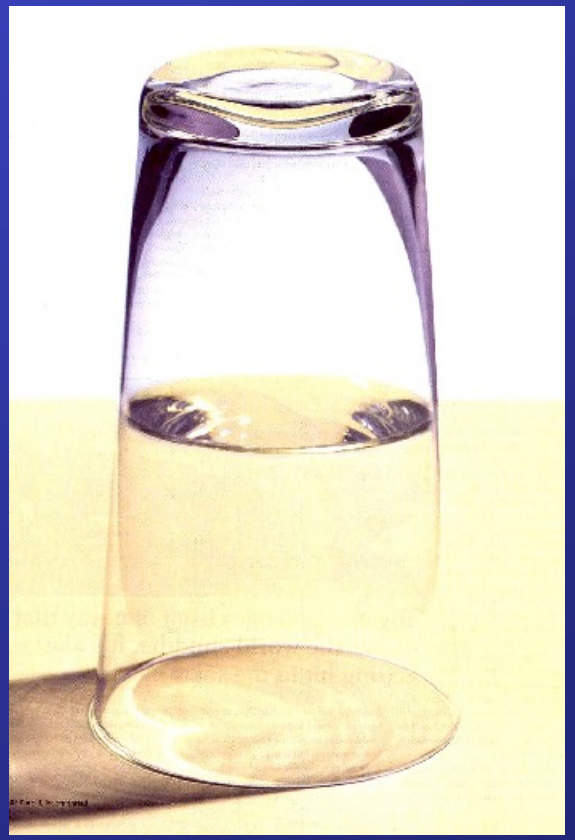
**A New Paradigm for Industrial Innovation from the Genetic Perspective of Creativity:* Stevens, Greg A., 1994, Central Michigan University, Thesis

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 ¿¿ …



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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*

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**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 MM Is Wasted Out of $100 MM Invested
$22 MM Returned, with 238 People in R&D

Spending Category	Today's "Universal Success Curve for NBD % of Total	
R&D Spending Up to Launch	46%	$46,000,000
Launch Spending	54%	$54,000,000
	0%	$0
Total Spending	100%	$100,000,000
Wasted R&D Spending	79%	$36,478,000
Wasted Launch Spending	40%	$21,600,000
Total Wasted Spending	58%	$58,078,000
Effective R&D Spending	21%	$9,522,000
Effective Launch Spending	60%	$32,400,000
Total Effective Spending	42%	$41,922,000
Return on Effective Spending	54%	$22,637,880
Return on *Total* Spending	23%	$22,637,880

$42 MM *Effective* Spending

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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**

Spending Category	Today's "Universal Success Curve for NBD		Achievable 95% Success Rates & Same *Effective $$* Spent (But Less Total $$)		Profit (ie Savings) from Early Stages "Done Right"
	% of Total				
R&D Spending Up to Launch	46%	$46,000,000	22%	$9,998,100	
Launch Spending	54%	$54,000,000	76%	$34,020,000	**Savings**
Additional Spending on Analysis	0%	$0	2%	$1,000,000	
Total Spending	100%	$100,000,000	100%	$45,018,100	**$54,981,900**
Wasted R&D Spending	79%	$36,478,000	5%	$476,100	
Wasted Launch Spending	40%	$21,600,000	5%	$1,620,000	
Total Wasted Spending	58%	$58,078,000	5%	$2,096,100	
Effective R&D Spending	21%	$9,522,000	95%	$9,522,000	
Effective Launch Spending	60%	$32,400,000	95%	$32,400,000	
Total Effective Spending	42%	$41,922,000	93%	$41,922,000	
Return on Effective Spending	54%	$22,637,880	54%	$22,637,880	

$55 MM Less Wasted Spending

Same $42MM Effective Spending

Over 2X the ROI

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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

Spending Category	Today's "Universal Success Curve" for NBD		Achievable 95% Success Rates & Same *Total $100 MM* Spent		Added Earnings from Early Stages "Done Right"
	% of Total				
R&D Spending Up to Launch	46%	$46,000,000	46%	$46,000,000	
Launch Spending	54%	$54,000,000	53%	$54,000,000	
Additional Spending on Analysis	0%	$0	1%	$1,000,000	
Total Spending	100%	$100,000,000	100%	$101,000,000	
Wasted R&D Spending	79%	$36,478,000	5%	$2,300,000	
Wasted Launch Spending	40%	$21,600,000	5%	$2,700,000	
Total Wasted Spending	58%	$58,078,000	5%	$5,000,000	
Effective R&D Spending	21%	$9,522,000	95%	$43,700,000	
Effective Launch Spending	60%	$32,400,000	95%	$51,300,000	
Total Effective Spending	42%	$41,922,000	94%	$95,000,000	
Return on Effective Spending	54%	$22,637,880	54%	$51,300,000	

Less Wasted Spending

Over Double the *Effective Spending*

***New* Profits**

Over 2X the ROI

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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

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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%)

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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

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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

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Would Be Like Having Your Cake, *and Eating It Too*

- It is Possible to Have
  - 50% Less Spending on NBD
  - *And* 400% Higher Profits

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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

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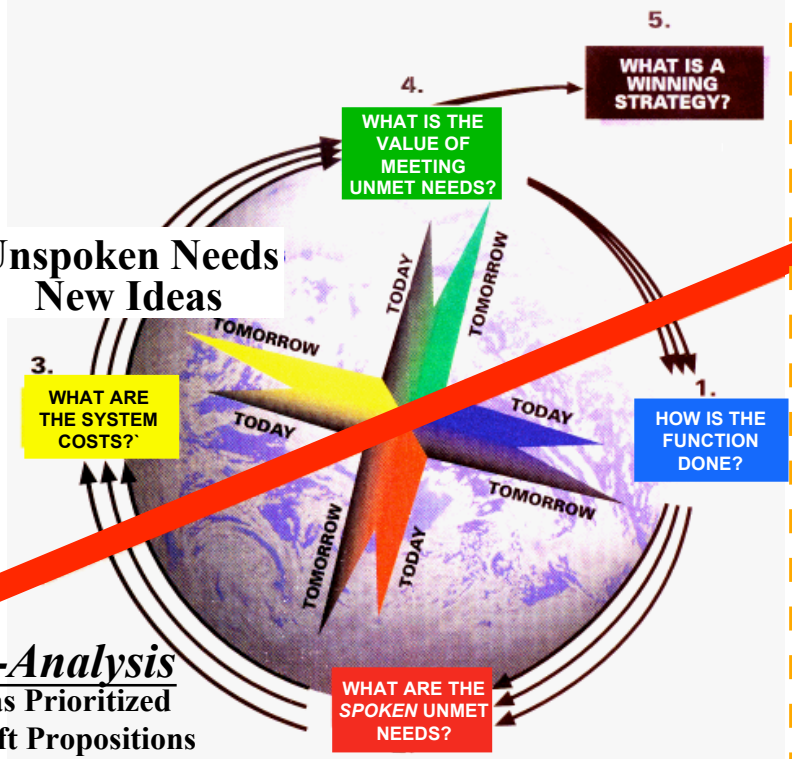
Early-Stages of NBD Process:

End of *Individual's* Analysis

Profits

Winning Actions

Winning Tactics



Gap-Analysis
Ideas Prioritized
Draft Propositions

Idea Management

Gut-Level-Screen

Success-Wheel

Stages:	Ideation	Shaping	Analysis	Validation	Develop & Implement

Individual Analyst Predominates | ***Teams Predominate***

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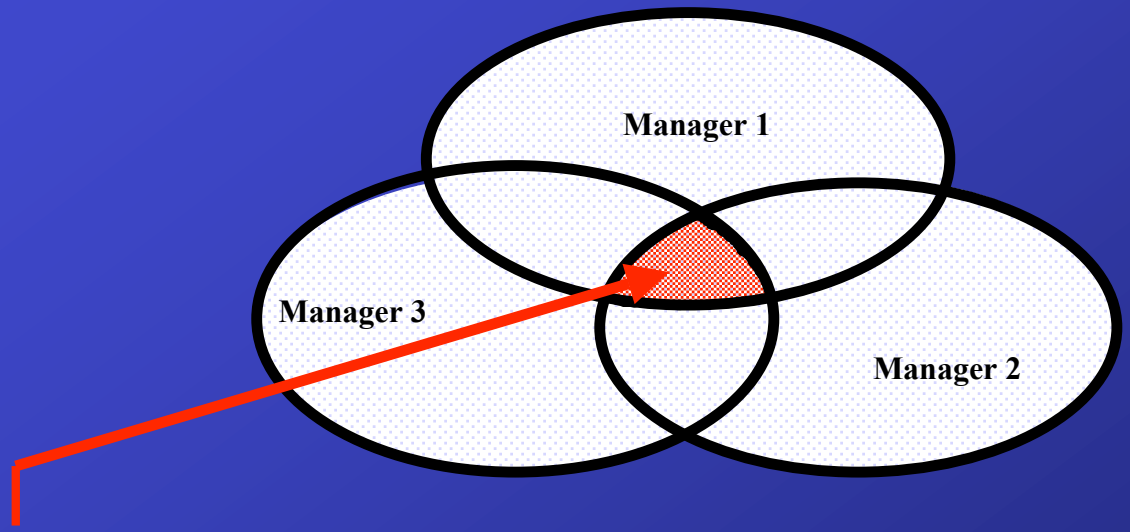
Process Step 1: Determine Top Management's ***Gut-Level-Screen***[SM]



- "Group" Zone of *Agreement & Excitement*
  - Their ***Gut-Level-Screen***

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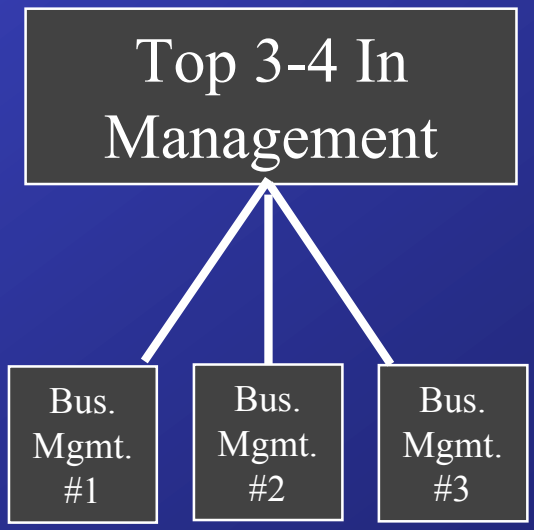
Step 1: Documenting Top Management's & Immediate Businesses *Gut-Level-Screens*

- 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***



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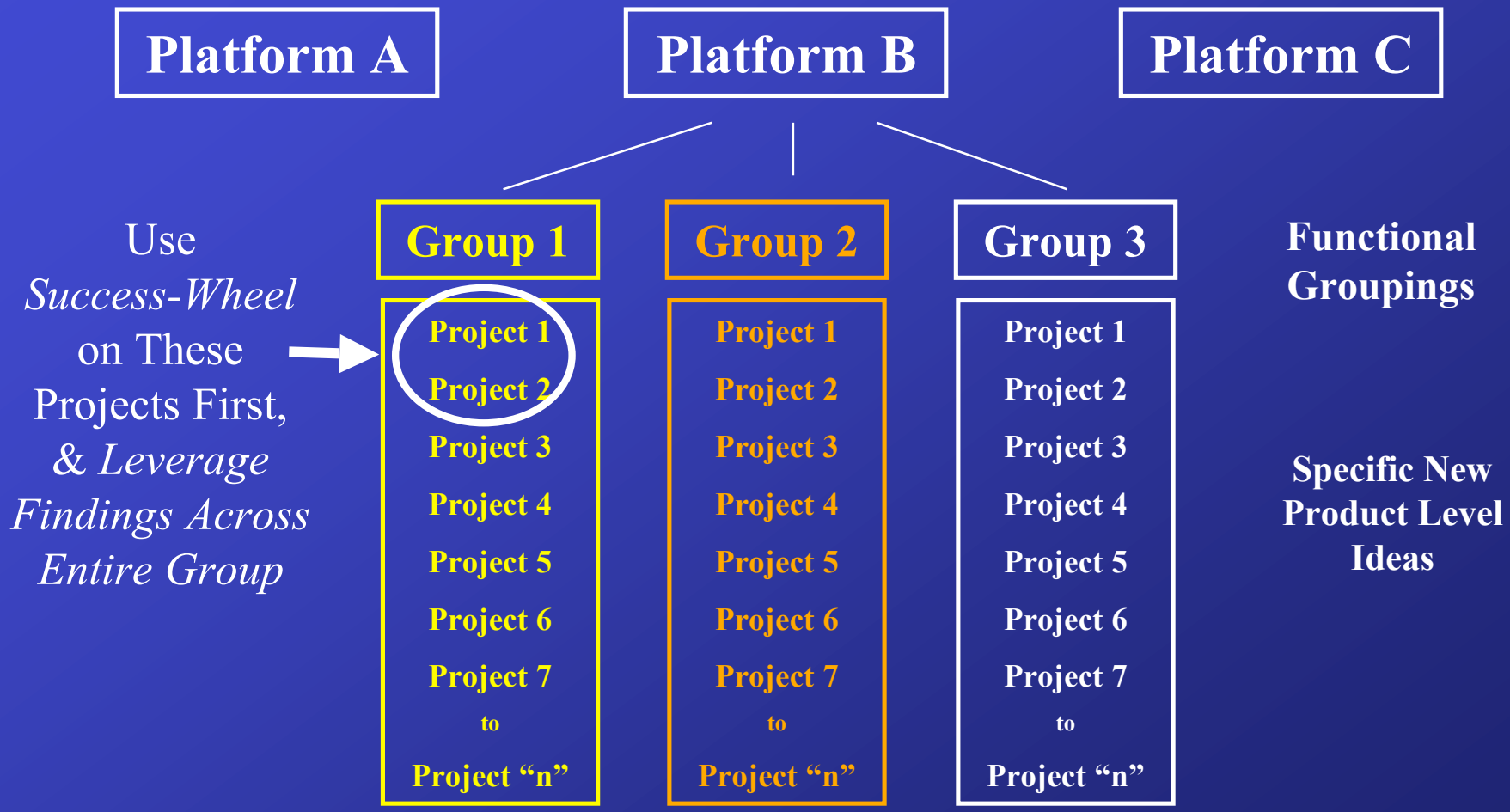
Step 2: Prioritize Platforms, Groups & Projects Vs. *Gut-Level-Screen*



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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

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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:
  - 1. How Done, 2. Spoken Customer Needs, 3. Cost/Performance, 4. Value to Customer

C. ***Iterative-Propositions***[SM]:
- 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*

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Early Customer Visits & Analysis Critical

20 pp. Report – Project Already "Morphing" Toward Higher Value Concepts

- First Customer visit – on coached project

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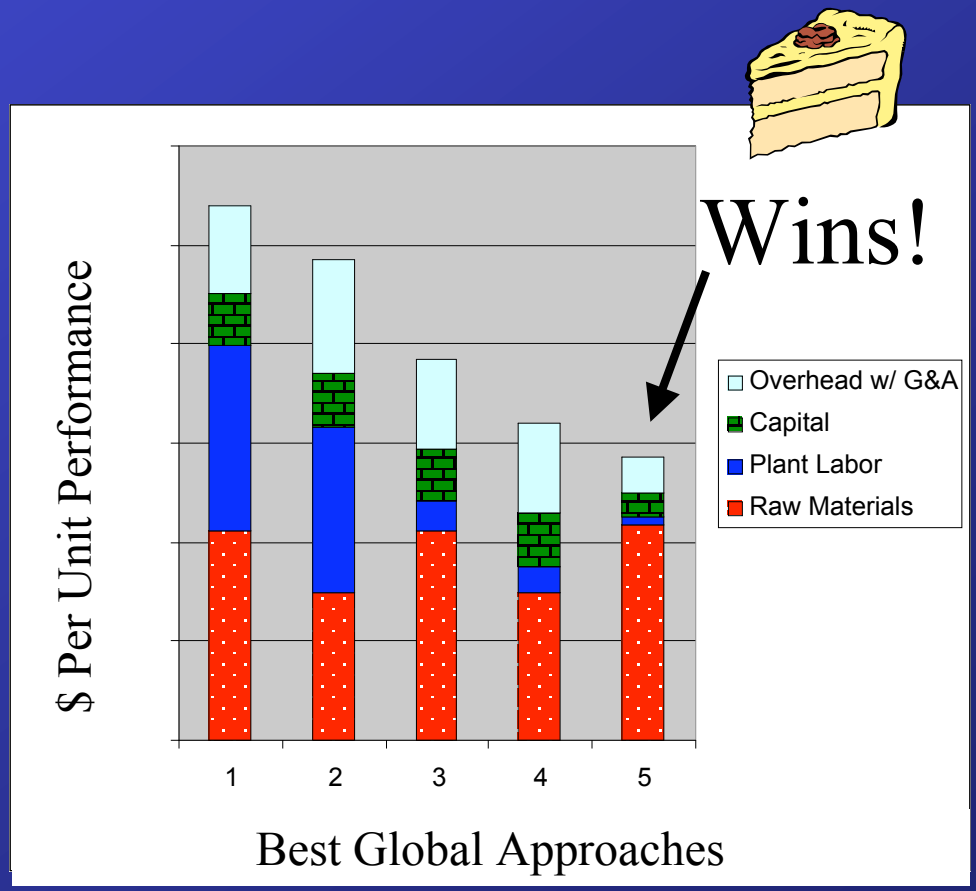
Final Early-Stage NBD Analysis Step:
Cost Per Unit Performance
In The Customer's Eyes Is Key
($/Part, or $/Ft. Bonded: *Not* $/Lb. Sold)

- 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**



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Training and Coaching NBD Personnel In Use of New Tools Is Critical

Suggested Managerial Metrics to *Measure & Ensure* System Implementation

Organizing for Success

Effectiveness 1-10 1 = Low 10 = High	*Awareness* of Possiblity of More Effective NBD System	*Understanding* of More Effective NBD System	*Management Preference* For New NBD System	*Group Preference* For New NBD System	% Whole Group with 2-3 Day Group Training Class	Creating Dedicated Working Group	% Working Group with 2-3 Day Training	% Working Group with >40 *Rainmaker-Index*	% of Top Mangers with *Gut-Level Screen* Measured	NBD Process Broadly In Place	NBD Software In Place *WebCentric* Robust	Overall Organizational Index
	Yes Fall, 2002 Houchens	Follow Up 11/26/2002 Houchens & Managers	Building	Building	0%	Not Yet	0%	56%	60%	85%	%	Beginning
Effectiveness:	10	10	5	7	0	0	0	6	6	8.5	0	4.8

Implementing for Success

Effectiveness 1-10 1 = Low 10 = High	% of Projects Being Analyzed Meeting Gut-Level-Screen	Manager of Working Group Coached on At Least One Project	% of Analysts Coached on At Least One Full Project	# of Customer Visits Coached by Certified Trainer	% of Projects With Coached Cost/Performance Models Completed	% of Projects With Final Report Coached by Certified Trainer	% of Analysts Certified, By Certified Trainer	% of "Yes" Analyses that Business Implements	% of "No" Analyses that Business Agrees With			Overall Implementation Index
	Unknown	No	Zero	None	None	None	None Done	None Done	None Done			Not Yet Started

- You Have to Really Do It to Gain the Benefits

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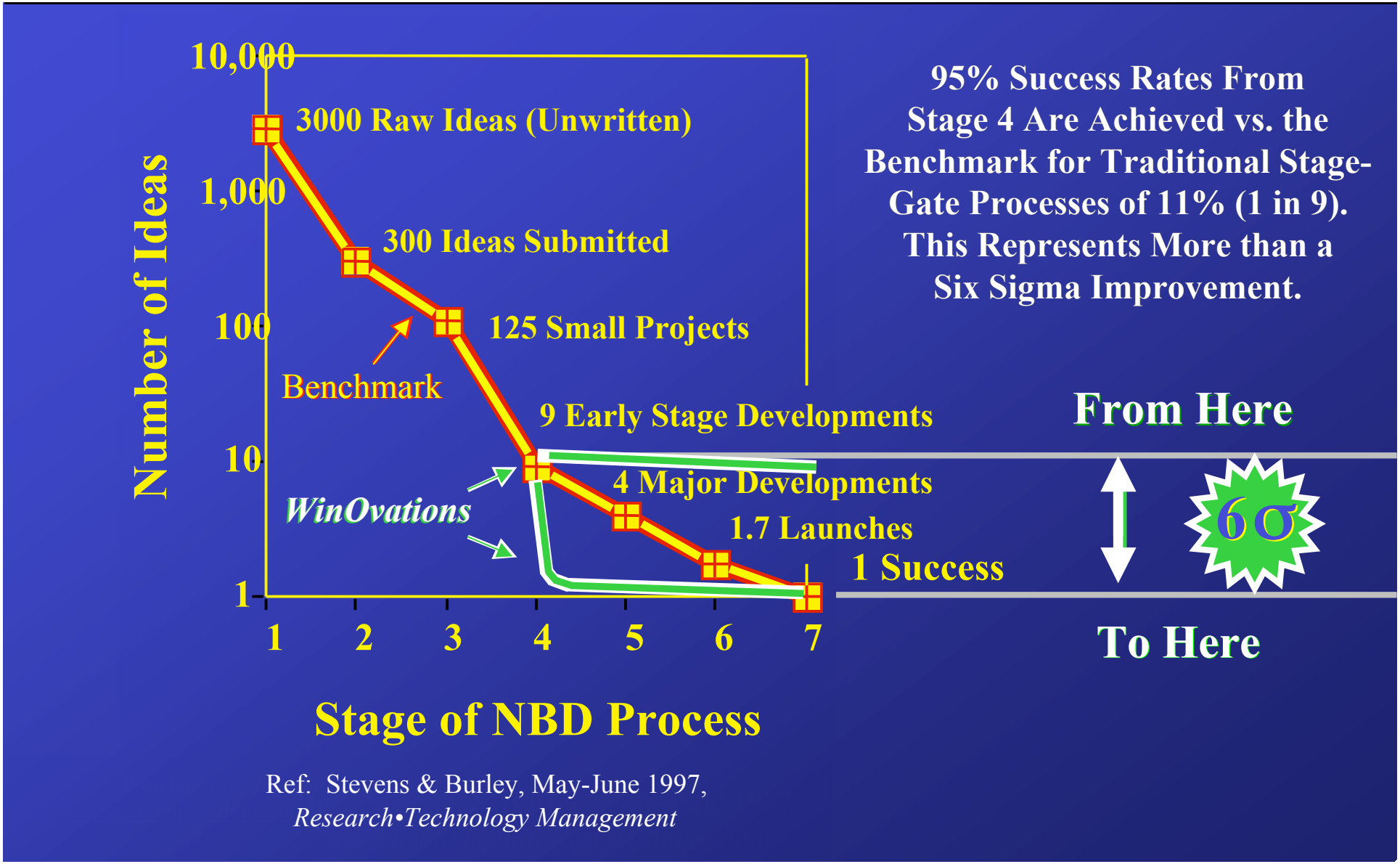
The New NBD System Provides More Than a Six-Sigma Improvement Vs. The "Universal" NBD Success Curve



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*

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**Achieving Planned Innovation:* Bacon and Butler, 1998

Summary of New Tools Enabling Success Rates of Over 95%

1. Top Management *Gut-Level-Screen*
2. *Gap-Analyses* & *Draft-Propositions* of Customer Needs
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*

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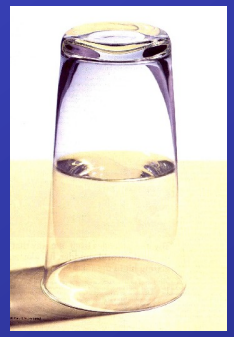
The Answer Seems Clear to the Challenge of "Faster Returns" from Six Sigma…



- 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*

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Appendix 1: *WinOvations* References

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

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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

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