

The Business Case for Learning

Using Design Thinking to Demonstrate ROI



Presented by:
Patti P. Phillips, Ph.D., CPLP
President & CEO
ROI Institute

Application on the Job

- Research on what executives want from their learning investments.
- Eight steps to build the case for investing in people.
- Techniques to seamlessly integrate measurement, evaluation and analytics into your programs, projects and practices.



Levels of Evaluation	Measurement Focus	Typical Measures
0. Inputs and Indicators	The input into the project in terms of scope, volume, efficiencies, costs	Participants, Hours, Costs, Timing
1. Reaction & Planned Action	Reaction to the project or program, including the perceived value	Relevance, Importance, Usefulness, Appropriateness, Intent to use, Motivation to take action
2. Learning	Learning to use the content and materials, including the confidence to use what was learned	Skills, Knowledge, Capacity, Competencies, Confidence, Contacts
3. Application & Implementation	Use of content and materials in the work environment, including progress with actual items and implementation	Extent of use, Task completion, Frequency of use, Actions completed, Success with use, Barriers to use, Enablers to use
4. Impact	The consequences of the use of the content and materials expressed as business impact measures	Productivity, Revenue, Quality, Time, Efficiency, Customer Satisfaction, Employee Engagement
5. ROI	Comparison of monetary benefits from program to program costs	Benefit-Cost Ratio (BCR), ROI%, Payback Period

Katzell developed four steps of training evaluation; Kirkpatrick wrote about four steps of training evaluation; Phillips added economic theory and operationalized the framework by adding process and standards and applying it in practice.

What is ROI?

$$\text{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

$$\text{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100$$

What is ROI?

$$\text{BCR} = \frac{\$750,000}{\$425,000}$$

$$\text{ROI} = \frac{\$750,000 - \$425,000}{\$425,000} \times 100$$

What is ROI?

$$\text{BCR} = \frac{\$750,000}{\$425,000} = 1.76:1$$

$$\text{ROI} = \frac{\$750,000 - \$425,000}{\$425,000} \times 100 = 76\%$$

Levels of Evaluation	Measurement Focus	Typical Measures
0. Inputs and Indicators	The input into the project in terms of scope, volume, efficiencies, costs	Participants, Hours, Costs, Timing
1. Reaction & Planned Action	Reaction to the project or program, including the perceived value	Relevance, Importance, Usefulness, Appropriateness, Intent to use, Motivation to take action
2. Learning	Learning to use the content and materials, including the confidence to use what was learned	Skills, Knowledge, Capacity, Competencies, Confidence, Contacts
3. Application & Implementation	Use of content and materials in the work environment, including progress with actual items and implementation	Extent of use, Task completion, Frequency of use, Actions completed, Success with use, Barriers to use, Enablers to use
4. Impact	The consequences of the use of the content and materials expressed as business impact measures	Productivity, Revenue, Quality, Time, Efficiency, Customer Satisfaction, Employee Engagement
5. ROI	Comparison of monetary benefits from program to program costs	Benefit-Cost Ratio (BCR), ROI%, Payback Period

Katzell developed four steps of training evaluation; Kirkpatrick wrote about four steps of training evaluation; Phillips added economic theory and operationalized the framework by adding process and standards and applying it in practice.

We keep
reading the
same story.

Metropolitan Police Service



◆ PREMIUM

Met police accused of 'wasting' £10m on leadership training programme as crime soars

03 Jun 2018, 6:30am

Why does this
keep
happening?



Why does this keep happening?

- L&D opting out
- Fear of the consequences
- Results do not exist and nothing is being done about it
- Programs are not designed to deliver results





**Design is intelligence
made *visible*.**

ALINA WHEELER

www.interaction-design.org

Three months free membership if you use this link: <https://www.interaction-design.org/invite?r=patti-phillips>



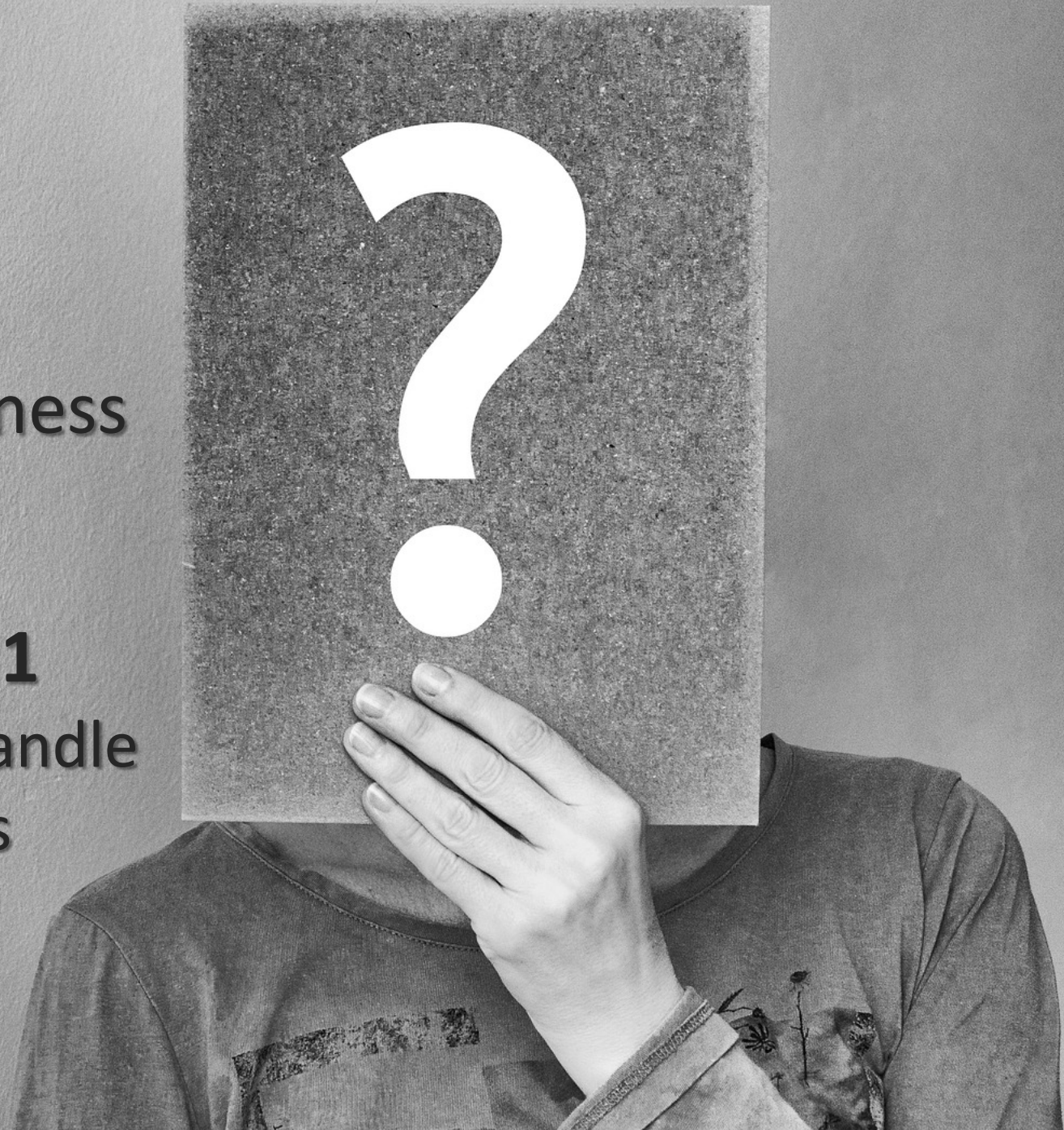
Design for Results

Start with Why

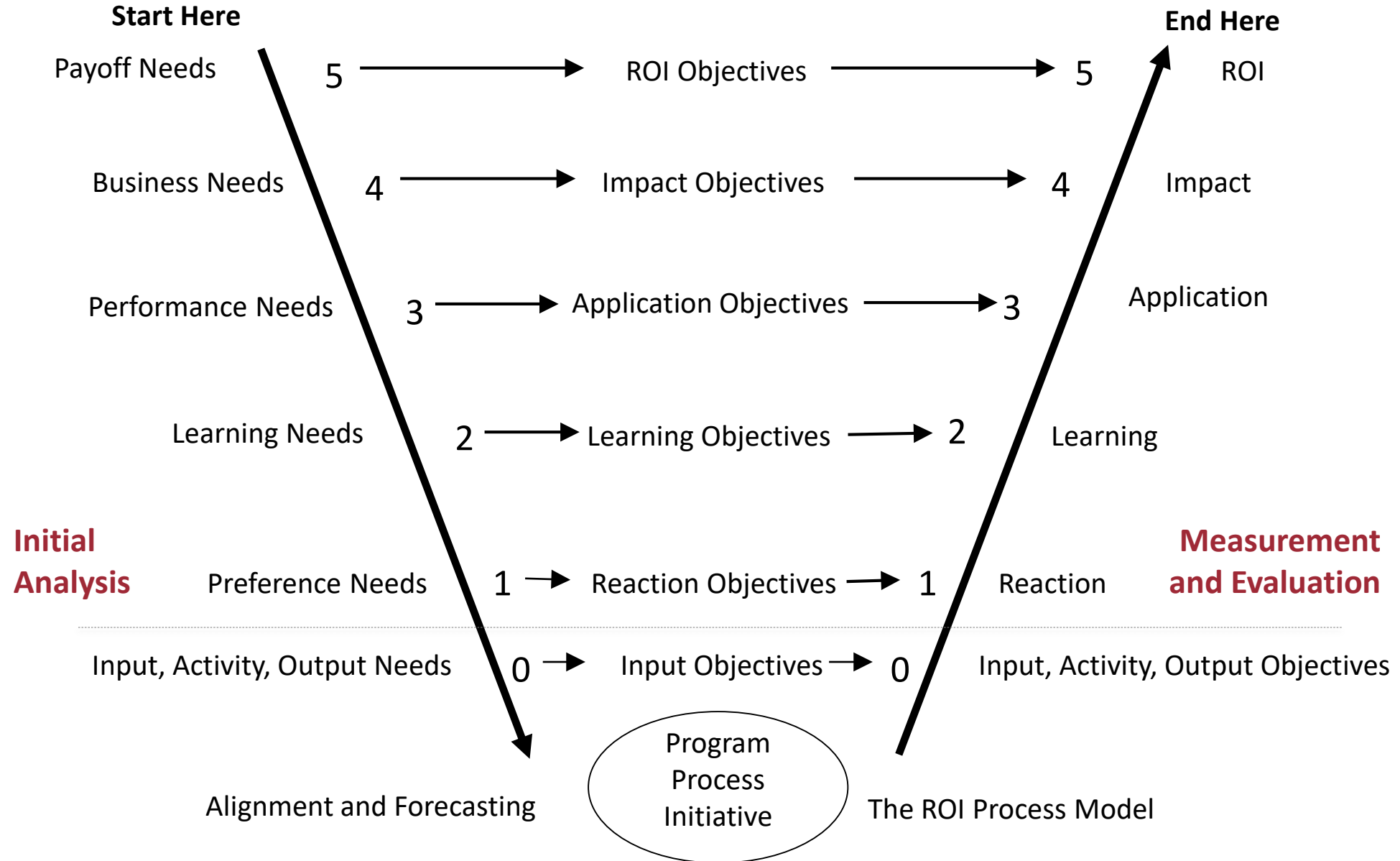
Align Programs with the Business

Design Thinking Principle 1

A problem solving approach to handle problems on a systems levels



Alignment Model

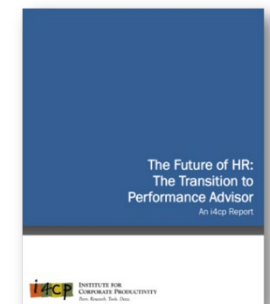
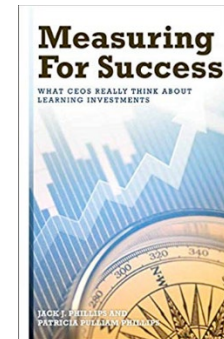
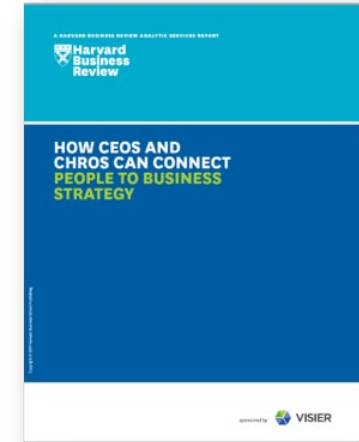


Senior leaders want it.

67% of CEOs say they get at least a basic set of human capital metrics from HR – but **only 24% of survey respondents** said HR also provides analytics that connect their people metrics to business metrics.

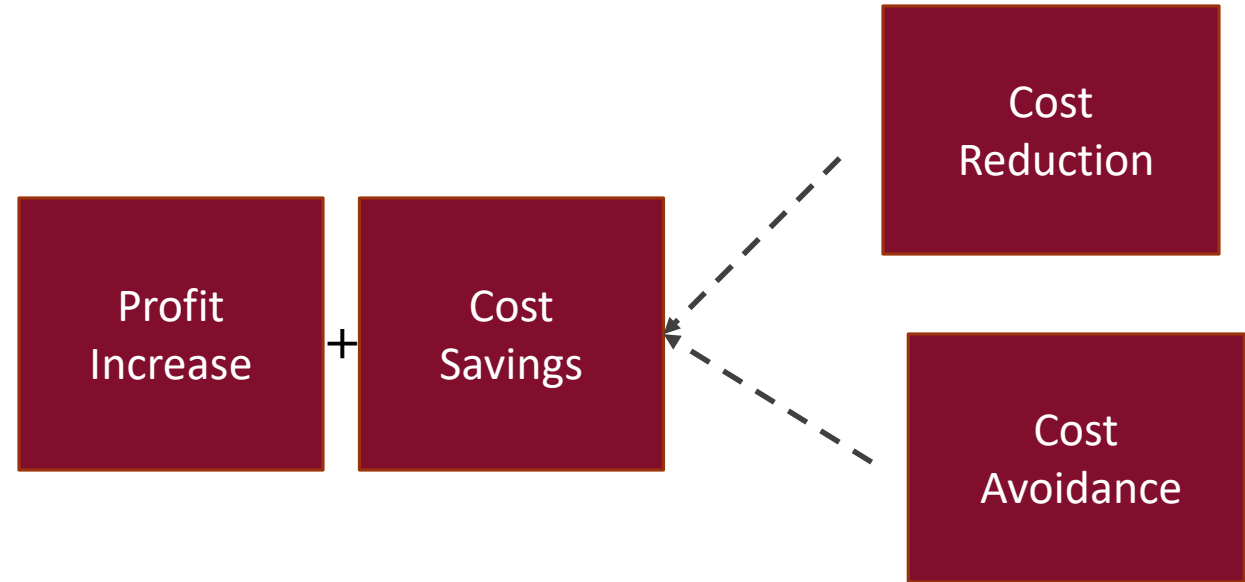
Really, the question isn't about relevance of the (HR) function or a 'seat at the table;' rather, it is **what impact has HR made on the business.**

74% of CEOs report that they want ROI, but only 4% are getting it. Next to business impact data, **ROI is the most important metric** in their decision making about the learning investment.



Payoff Needs

- Is this program worth doing?
- Is the problem worth solving?
- Is this an opportunity worth pursuing?



Business Needs

Hard Data	
Output	Time
Citizens Vaccinated	Length of Stay
Graduation Rate	Cycle time
Loans Approved	Downtime
Units Sold	Overtime
Forms Processed	Response Time
Inventory Turnover	Wait Time
Cost	Quality
Budget Variances	Readmissions
Unit Costs	Failure Rates
Variable Costs	Dropout Rates
Operation Costs	Rejects
Accident Costs	Product Failures
Cost Per Day	Incidents

Business Needs

Soft Data	
Leadership	Client Service
Teamwork Collaboration Networking Communication	Client Complaints Client Satisfaction Client Dissatisfaction Client Impressions
Work Climate/Satisfaction	Development/Advancement
Grievances Discrimination Charges Employee Complaints Organization Commitment	Promotions Capability Intellectual Capital Readiness
Initiative/Innovation	Image/Reputation
Creativity New Ideas Trademarks Patents	Brand Awareness Reputation Social Responsibility Diversity/Inclusiveness


Make it Feasible

Select the Right Solution

Design Thinking Principle 2

A mind-set for curiosity and inquiry

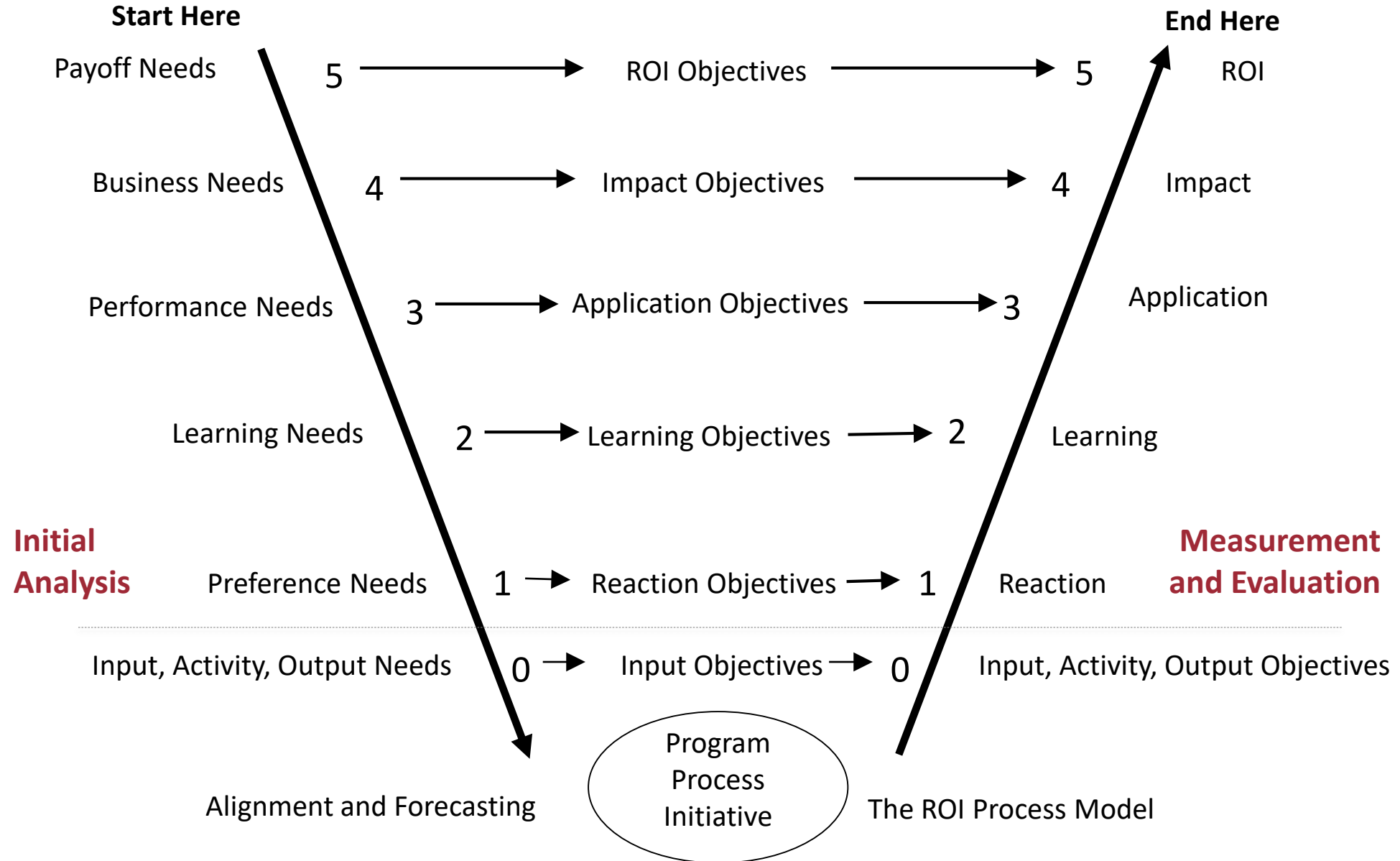




The point of an effective interface, whether for a computer or a doorknob, must begin with an analysis of what a person is trying to do rather than with a metaphor or a notion of what the screen should display.

Don Norman
Director of The Design Lab at University of California

Alignment Model



Diagnostic Tools

Feasible solutions evolve through the understanding of context, empathizing with the target audience, and identifying performance gaps. The next step is to identify learning needs and how best to deliver relevant information. Forecasting outcomes based on inputs is sometimes helpful.

- Statistical process control
- Brainstorming
- Problem analysis
- Cause-and-effect diagram
- Force-field analysis
- Mind mapping
- Affinity diagrams
- Simulations
- Diagnostic instruments
- Focus groups
- Probing interviews
- Job satisfaction surveys
- Engagement surveys
- Exit interviews
- Exit surveys
- Nominal group technique



Organization Network Analysis

Goals of the Analysis

- Understand how the network was operating after a reorganization

Overall Network Population

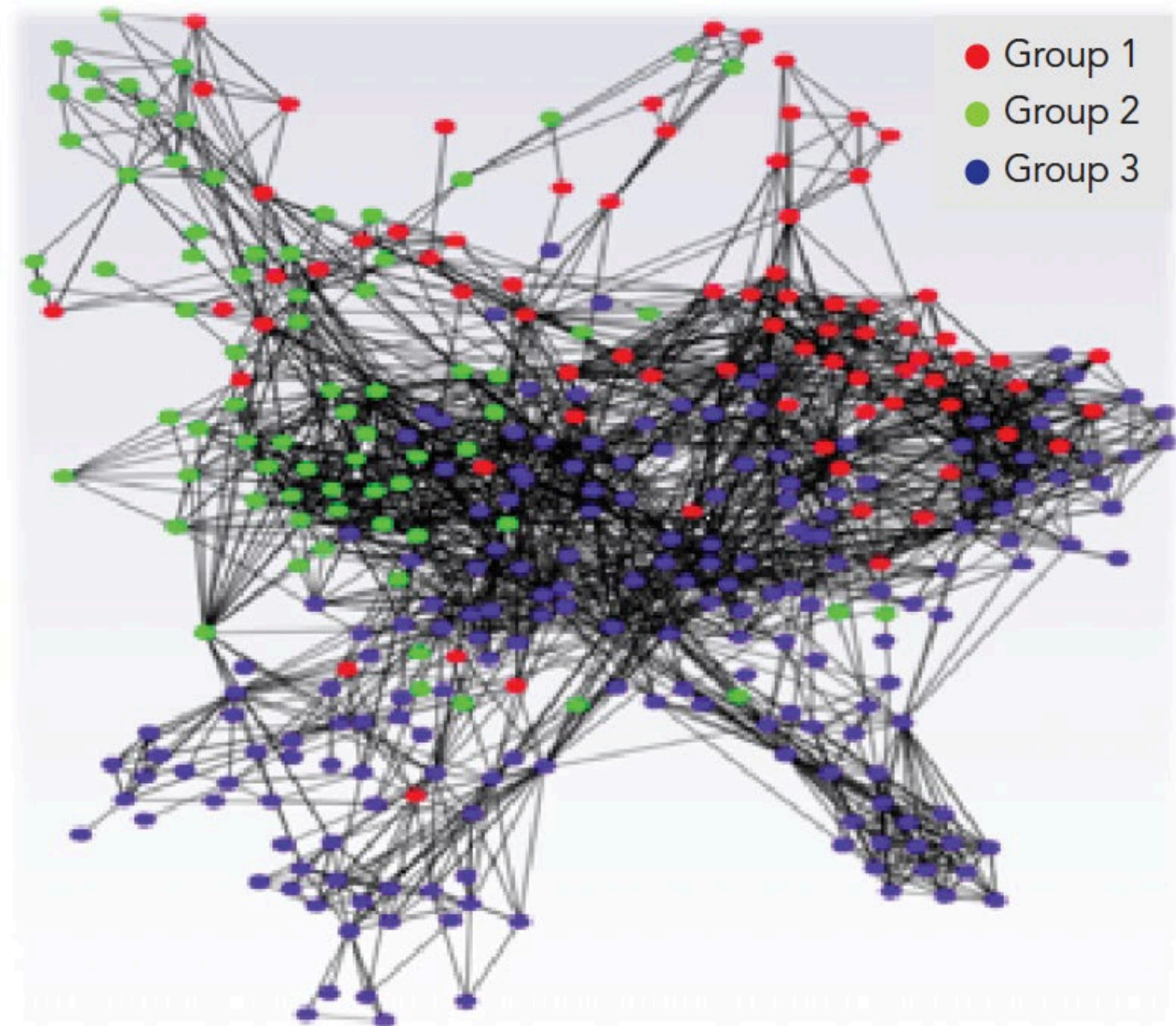
- 326 individuals
- 19 countries and 5 regions
- 3 groups

Survey Topics

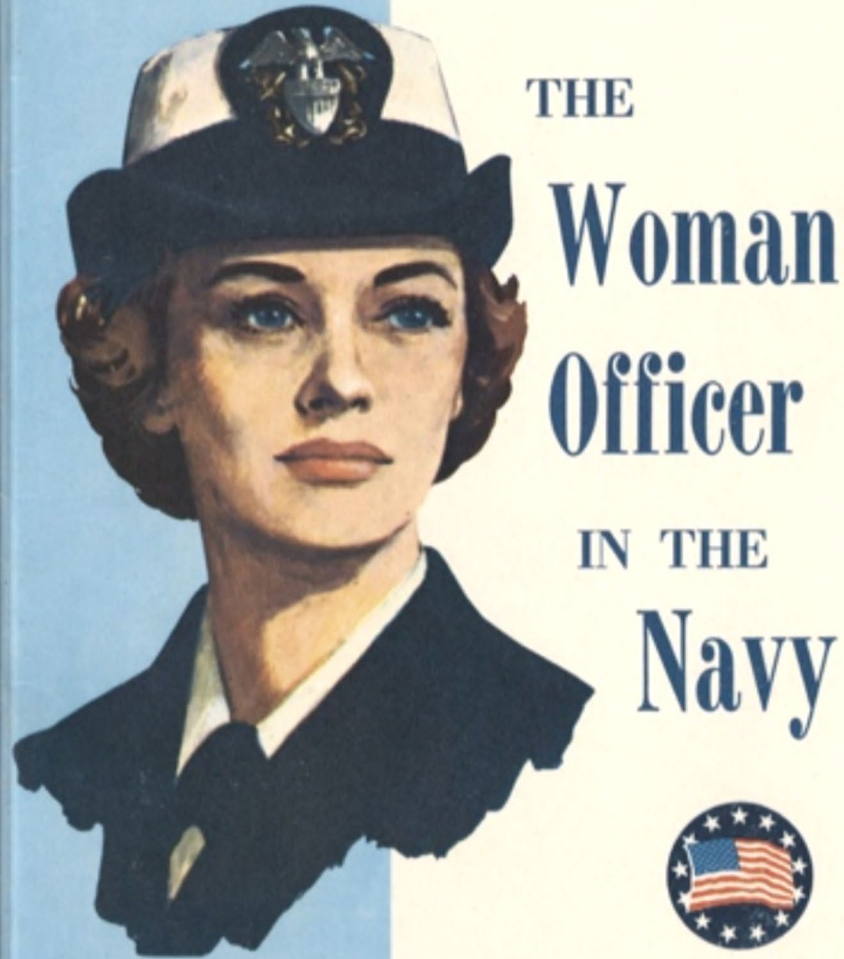
- Information flow, access, collaboration and overloads

Results

- 3,000 connections
- Collaboration across groups
- Silos in regions and specialties



In the mainstream...



www.history.navy.mil

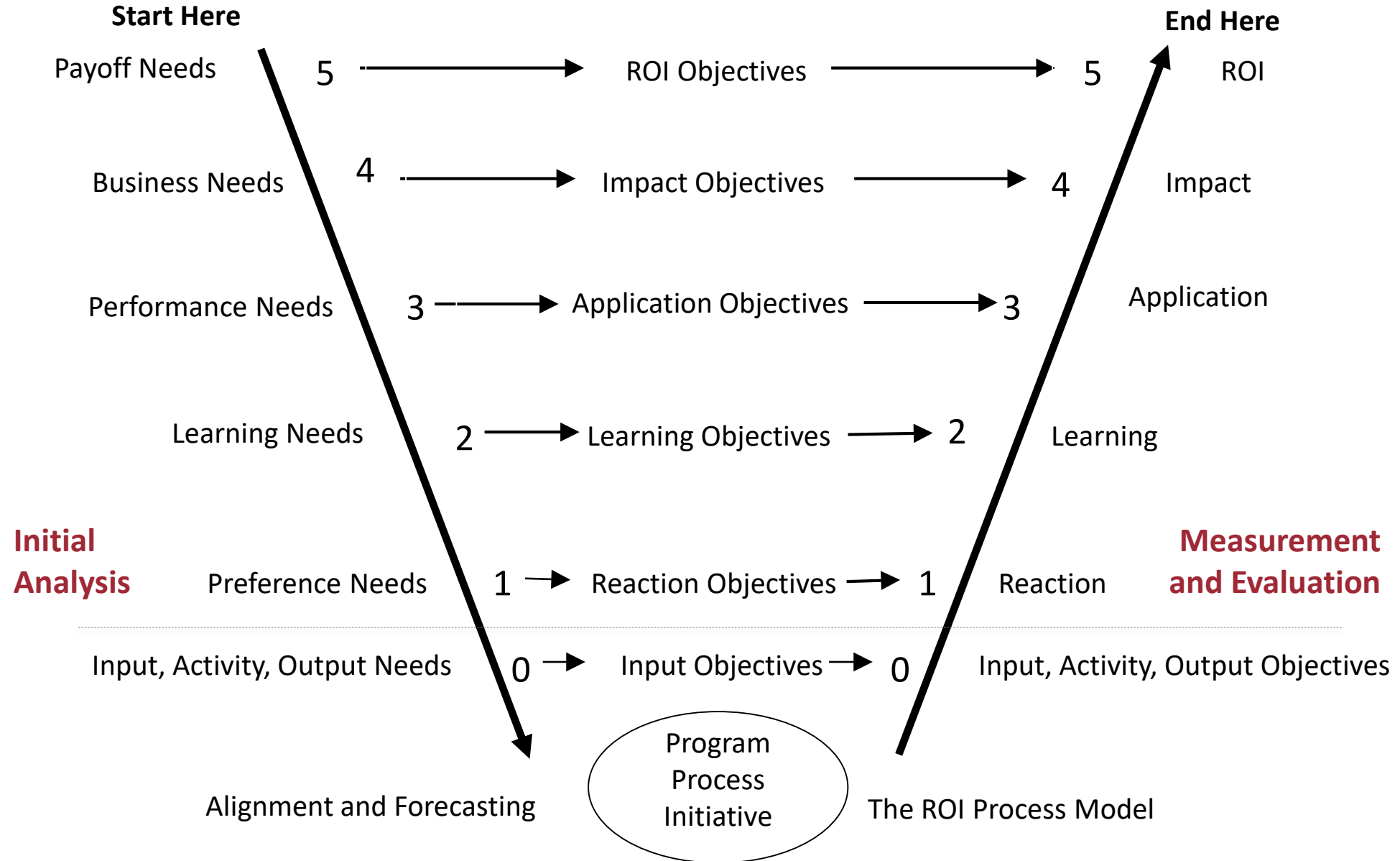
Interpretative Phenomenological Analysis

Identify effective strategies for female Navy officers, who are mothers, to embrace long-term deployment

- Face-to-face interviews lasting 45-90 minutes
- Study Criteria and Demographics Collection Form
- 11 semi-structured, open-ended questions
- Use of appreciative inquiry in formulating positive and engaging questions for positive conversation and outcomes

Walker, A. H. *Increasing Female Navy Officer Retention: Deploying Mothers' Perspectives*.
The University of Southern Mississippi

Alignment Model



Learning Needs

TECHNIQUES

- Subject-Matter Experts
- Job and Task Analysis
- Observations
- Demonstrations
- Tests
- Management Assessment

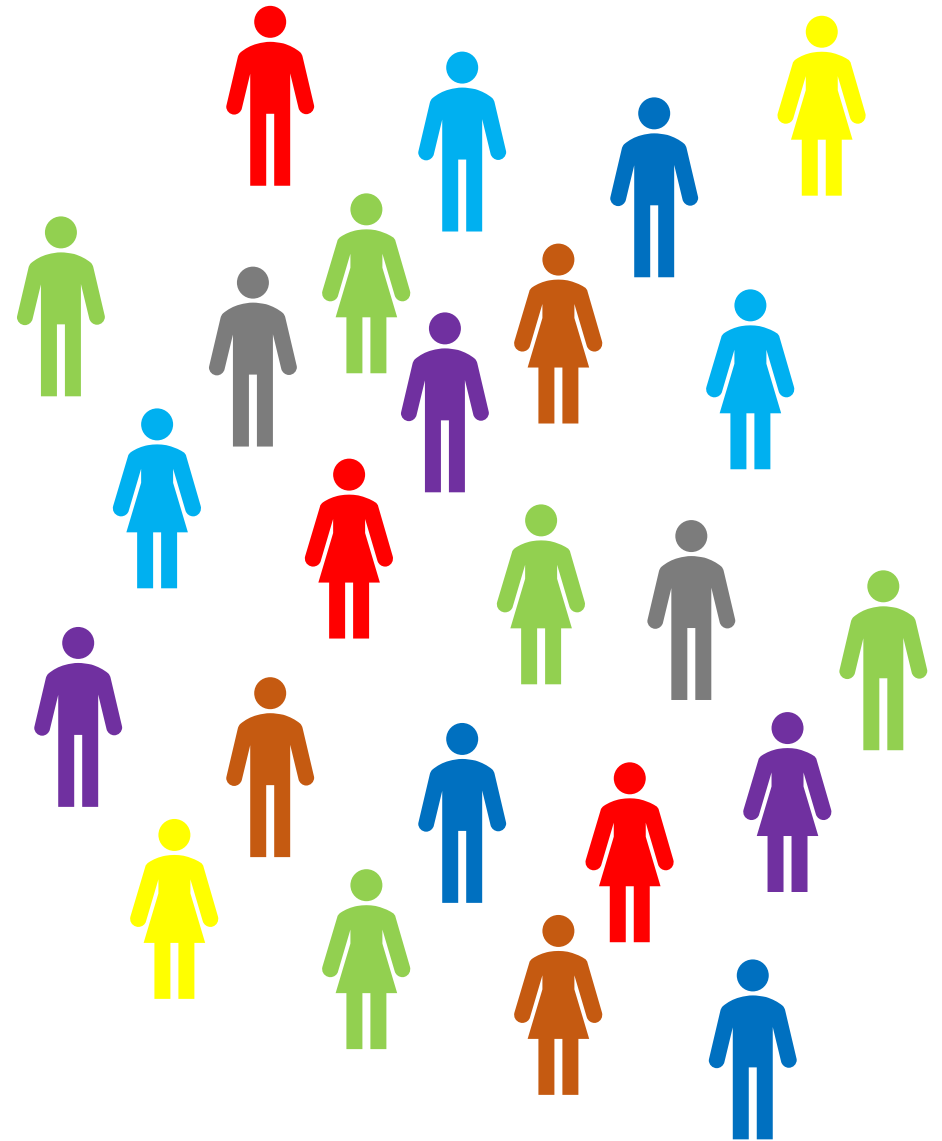
CONSIDERATIONS

- Go beyond technical knowledge and tactical skill.
- People need to know the why, how, what, and when.
- Learning needs assessment is important for multiple stakeholders.



Preference Needs

- Individual preference for processes, schedules, and activities.
- Preferences define how the solution will be implemented to ensure all involved perceive it as relevant and important.
- Designing programs for audience preference increases the chances that the audience will commit to and is better equipped to doing what needs to be done, to drive the matters that matter.

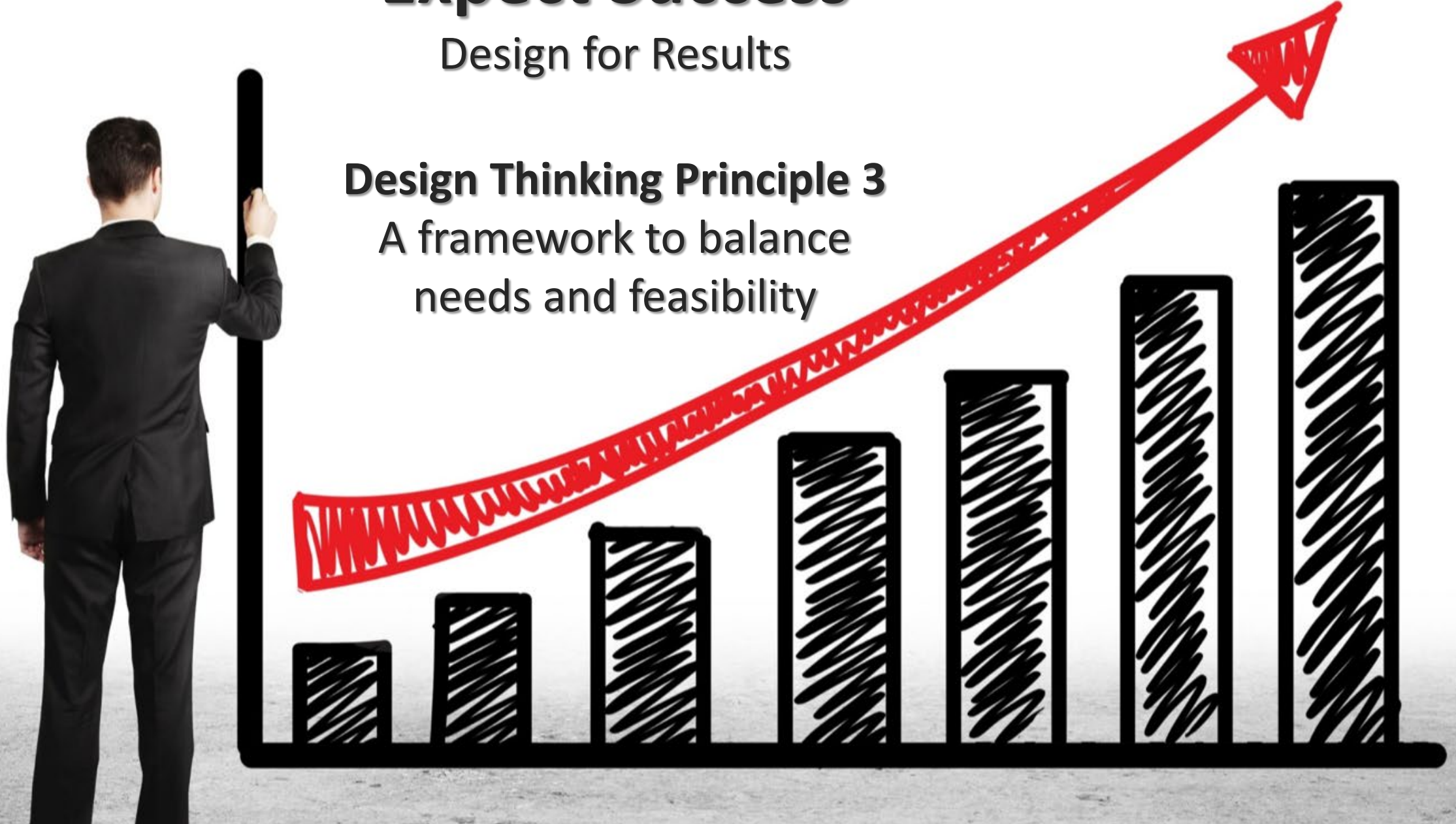


Expect Success

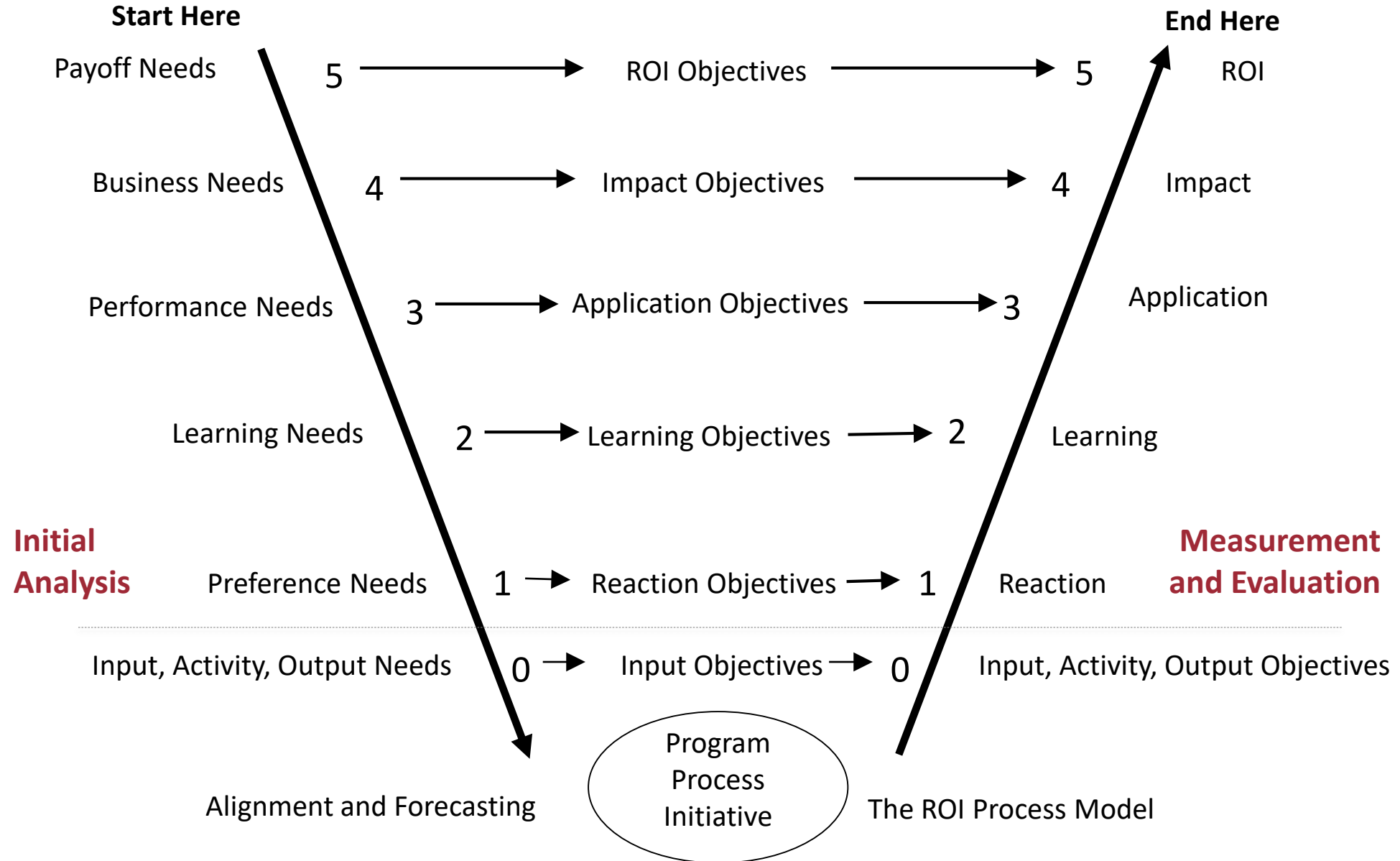
Design for Results

Design Thinking Principle 3

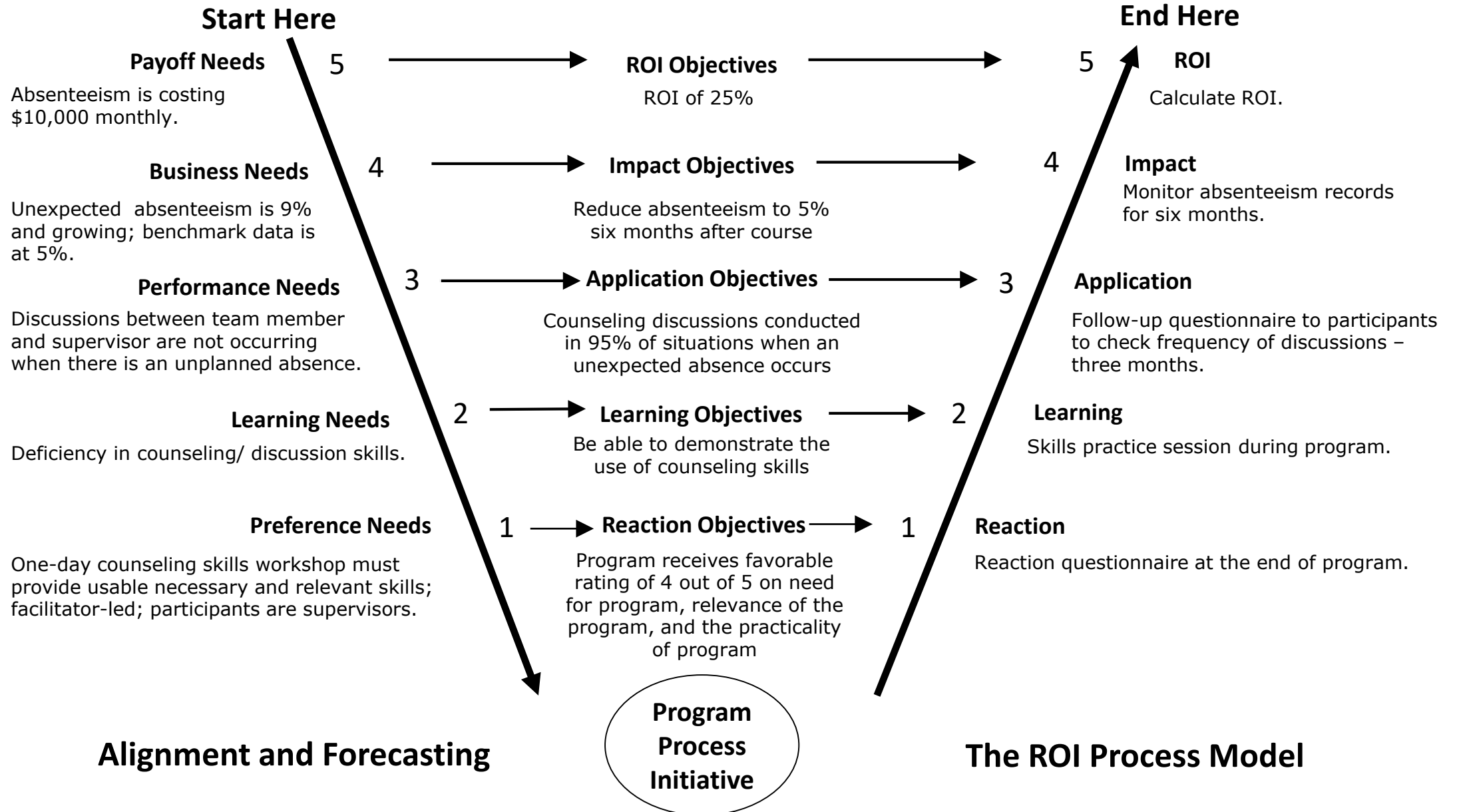
A framework to balance
needs and feasibility



Alignment Model



Alignment Model





Make it Matter

Design for Input, Reaction, and Learning

Design Thinking Principle 4

A way to take on design challenges by applying empathy

Make it Stick

Design for Application and Impact

Design Thinking Principle 5

A culture that fosters exploration
and experimentation



Data Collection Methods

Method	Level			
	1	2	3	4
• Surveys	✓	✓	✓	
• Questionnaires	✓	✓	✓	✓
• Observation	✓	✓	✓	
• Interviews	✓	✓	✓	
• Focus Groups	✓	✓	✓	
• Tests/Quizzes		✓		
• Demonstrations		✓		
• Simulations		✓		
• Action planning/improvement plans			✓	✓
• Performance contracting			✓	✓
• Performance monitoring				✓

The background of the slide is a grayscale photograph. On the left, a portion of a black calculator is visible, showing buttons for division, addition, subtraction, multiplication, and equals. In the center-right, a pen lies diagonally across a sheet of paper. The paper features a grid pattern and a series of numbers (31, 34, 37, 40, 43, 46, 49, 52) arranged in a curve, suggesting a line graph or a data series.

Make it Credible

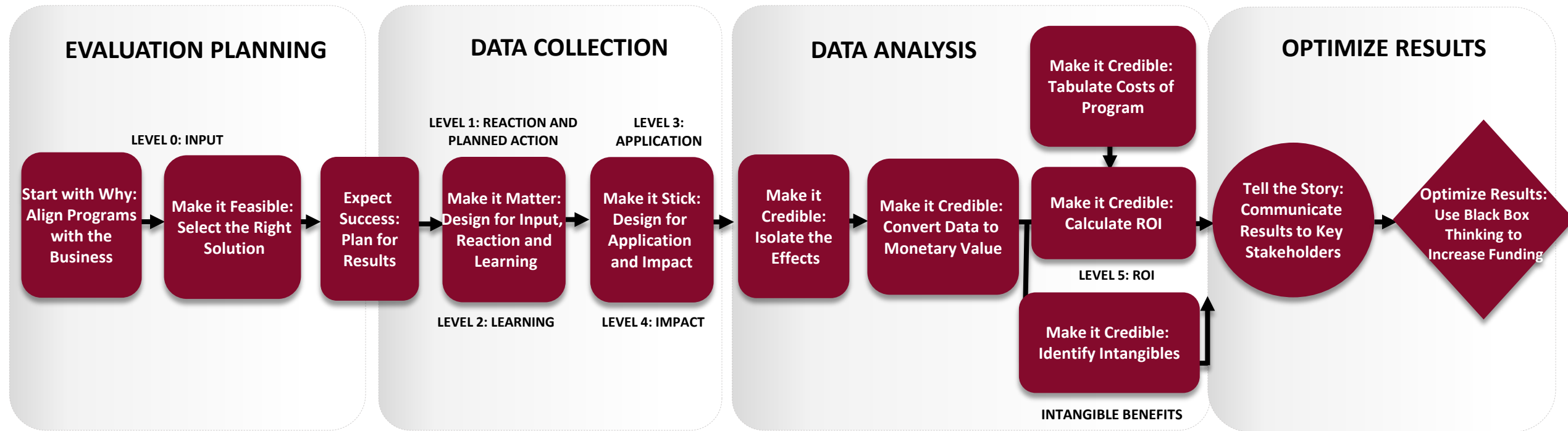
Measure Results and Calculate ROI

Design Thinking Principle 6

A fixed process and a tool kit

The ROI Methodology® Process Model

Designing for the Delivery of Business Results



12 Guiding Principles Ensure Reliability in the Process

- Report the complete story
- Conserve evaluation resources
- Use the most credible sources of data
- Choose the most conservative alternatives
- Isolate the effects of the program
- Assume no data, no improvement
- Adjust estimates for error
- Throw out the extreme and unsupported claims
- Use first year benefits for short-term programs
- Include fully-loaded costs
- Report intangible benefits
- Communicate results to all stakeholders



Tell the Story

Communicate Results to Key Stakeholders

Design Thinking Principle 7

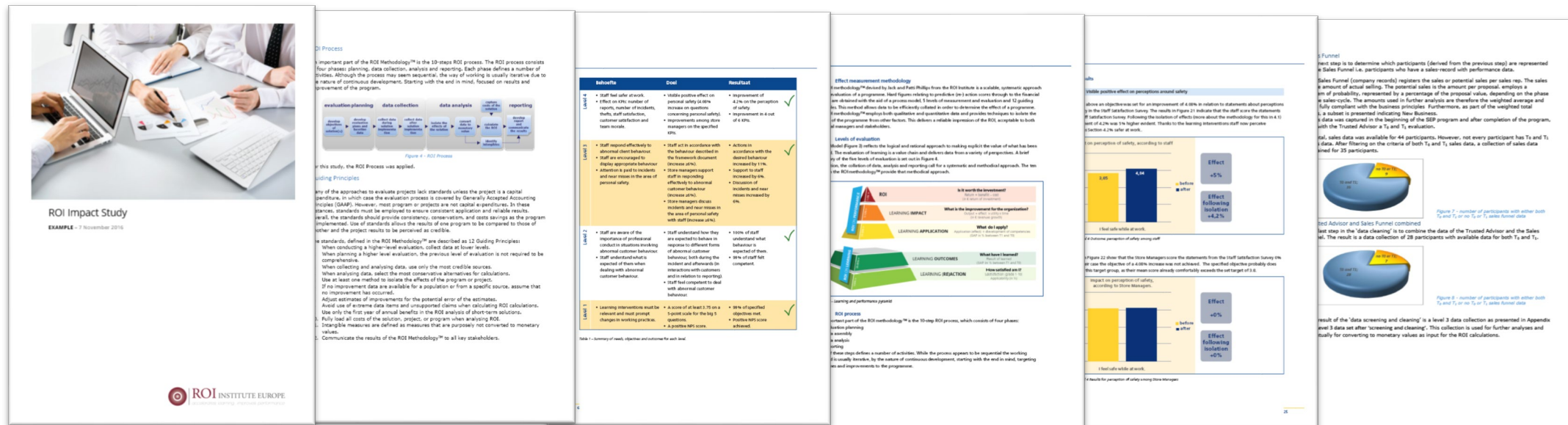
A storytelling process to inspire senior executives



Detailed ROI Study

Return on Investment (ROI)

The ROI study tells the complete story of program success and provides a road map to improving the program. It becomes the resource for replicating future studies and the back up if someone challenges the process. The details provide evidence that the program delivered on its promise; and, if it did not, what is the best course of action.



Performance Report

Learning and Application

Employees and supervisors receive a personalized report with the results of the performance scan to gain insight into the qualities and development areas to enhance competencies. This gives them insight into the skills employees need to develop in order to improve their performance.



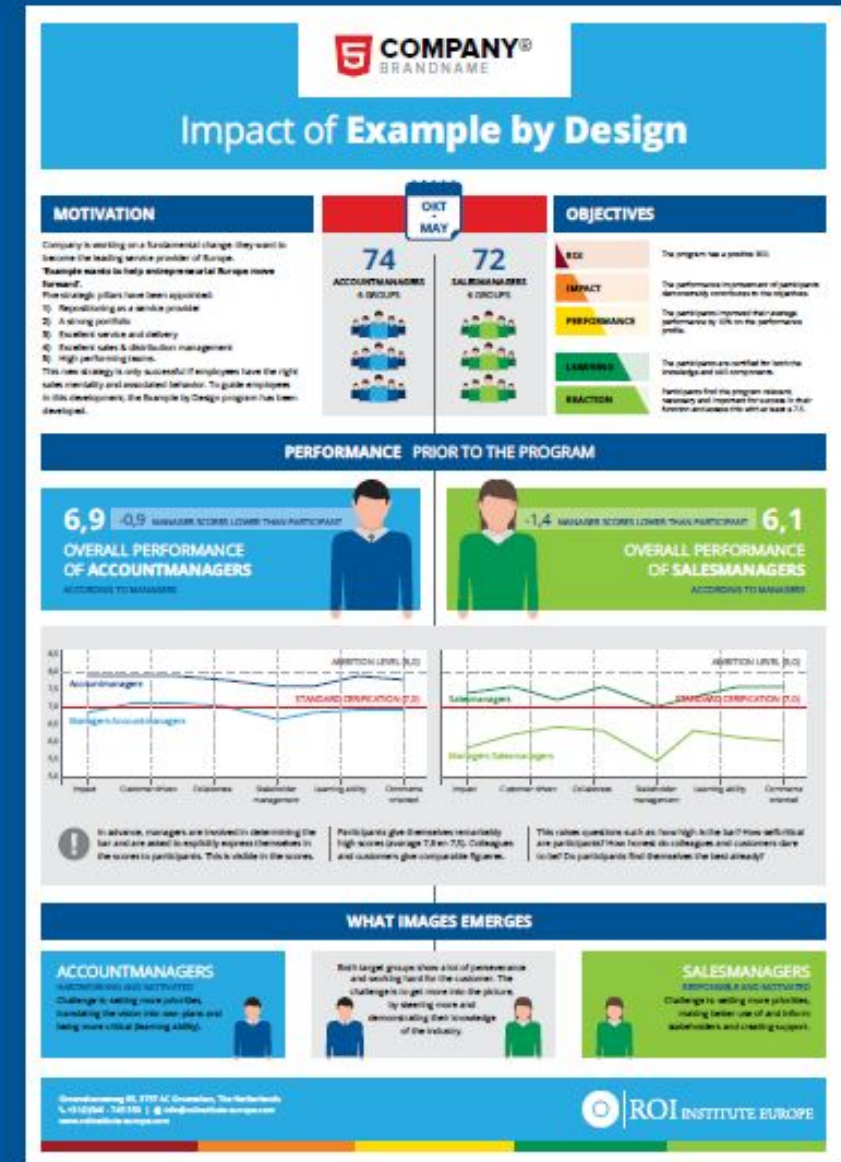
Infographic

Management receives information they can use to focus on the strategy and the goals to be achieved. The most important information is displayed in a clear report or in an infographic.

The infographic provides stakeholders insight into the performance of the program including:

- The extent to which participants actually implement the behavior in practice
- The impact of the program on the performance (actual behavior change in practice).
- The most and least applied competencies.

Example: Infographic



Sample Operations Report

<u>Effectiveness Measures</u>	<u>Unit of Measure</u>	2015 <u>Actual</u>	For 2016				
			<u>Plan</u>	<u>Jun YTD</u>	Comparison <u>to Plan</u>	<u>Forecast</u>	Comparison <u>to Plan</u>
Level 1: Participant Feedback (All programs)							
Quality of content	% favorable	76%	80%	79%	1% below	79%	1% below
Quality of instructor	% favorable	80%	85%	86%	1% above	85%	on plan
Relevance	% favorable	72%	78%	73%	5% below	75%	3% below
Alignment to goals	% favorable	68%	75%	69%	6% below	71%	4% below
Total for Level 1	Average of measures	74%	80%	77%	3% below	78%	2% below
Level 1: Sponsor Feedback (Select programs)	% favorable	66%	80%	68%	12% below	75%	5% below
Level 2: Learning (Select programs)	Score	78%	85%	83%	2% below	85%	on plan
Level 3: Application rate (Select programs)							
Intent to apply (from survey at end of course)	% top two boxes	70%	75%	70%	5% below	72%	3% below
Actual application (after three months)	% who applied it	51%	65%	55%	10% below	63%	2% below
Level 4 (Select programs)							
Estimate by participants (end of course)	% contribution to goal	20%	25%	15%	10% below	20%	5% below
Level 5 (Select programs)							
Net benefits	Thousands \$	\$546	\$800	\$250	31%	\$650	81%
ROI	%	29%	35%	25%	10% below	30%	5% below

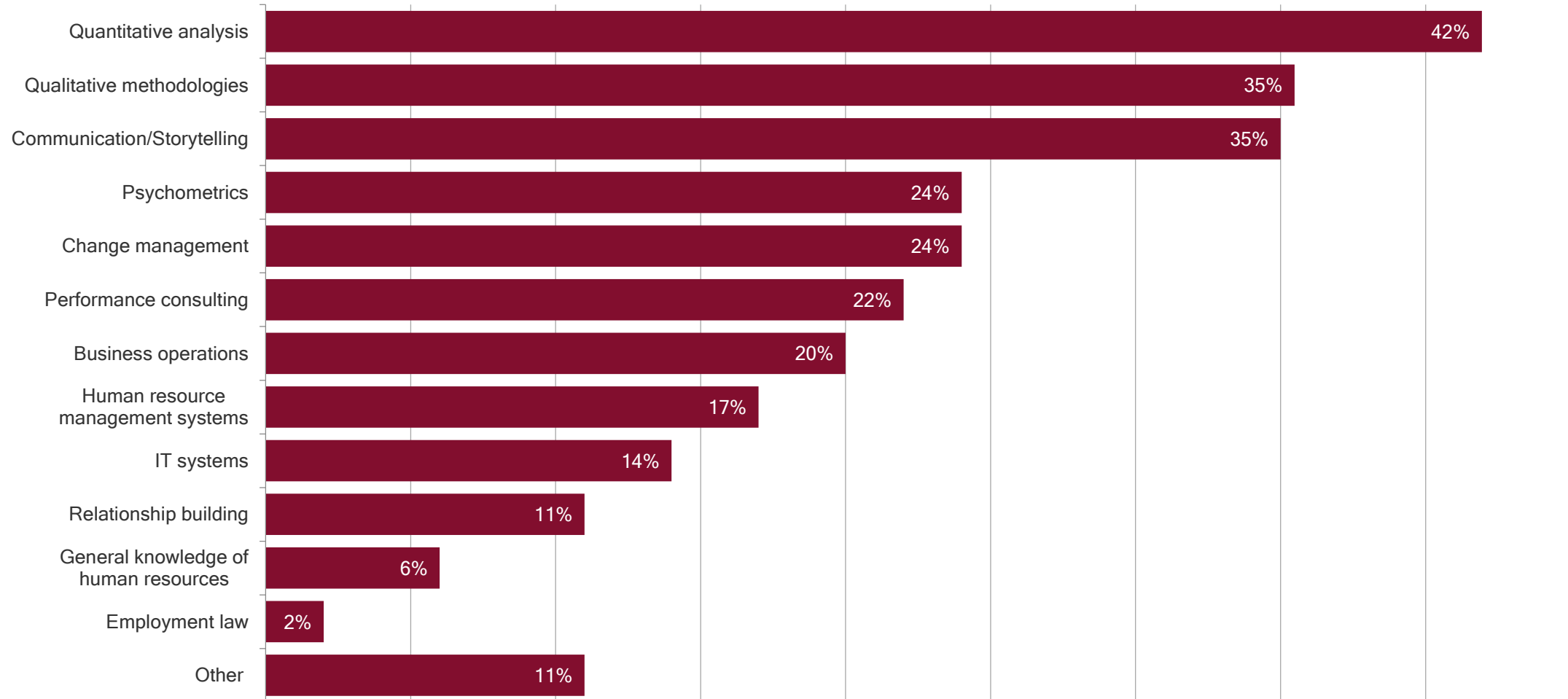


New International Standard requires reporting on core HR activities

- Compliance and ethics
- Costs
- Diversity
- Leadership
- Organizational culture
- Organizational health, safety, and well-being
- Productivity
- Recruitment, mobility, and turnover
- Skills and capabilities
- Succession planning
- Workforce availability

Skills most important but lacking

2018 i4cp/ROI Institute study indicates that other than skills in quantitative analysis, storytelling and qualitative methodologies are most important, but lacking. (N=317)



HighTechSpeaking®

Substance | Style | Staging

Storytelling must be compelling, logical, and credible.

www.powerspeaking.com

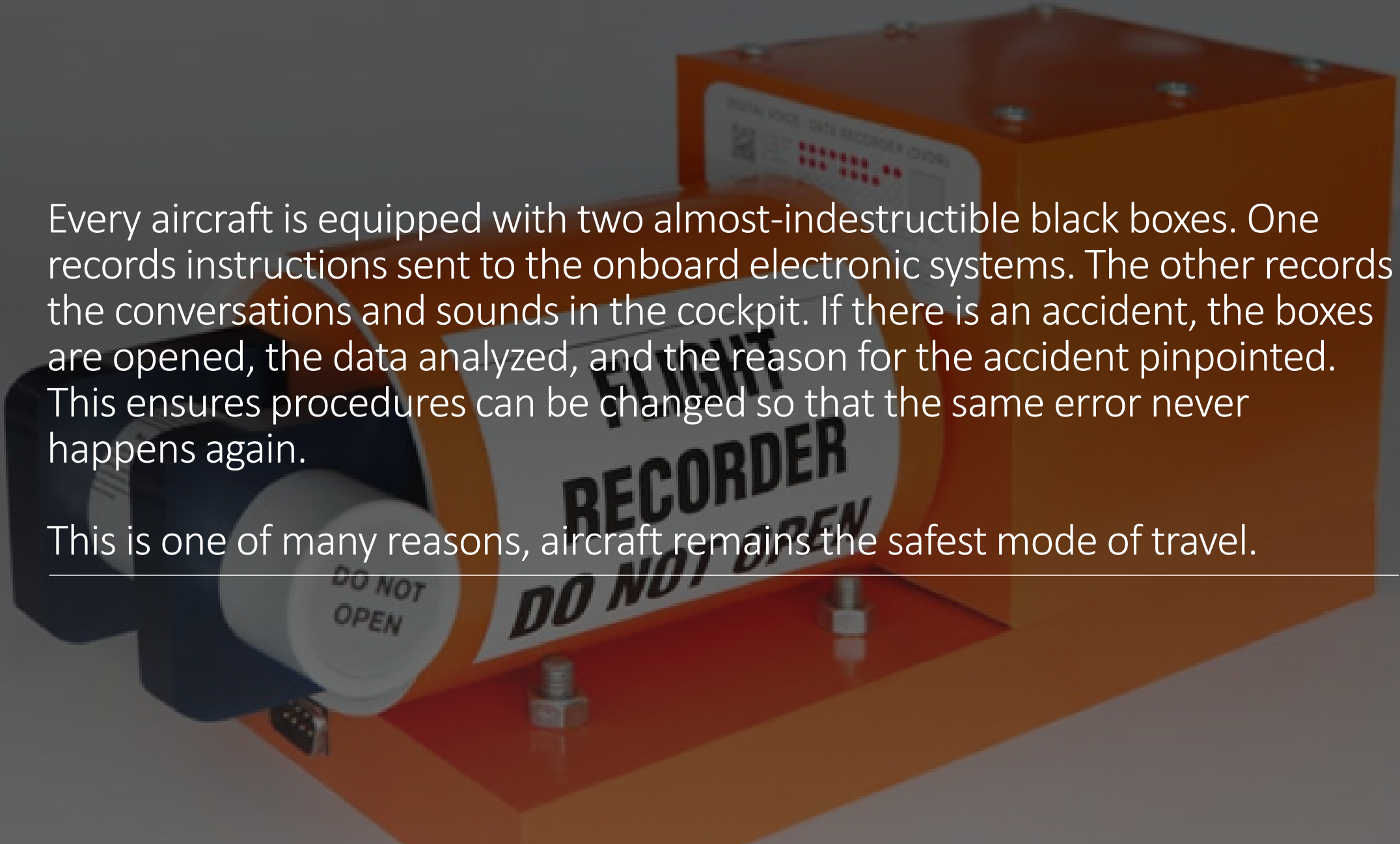
Optimize Results

Use Black Box Thinking to Increase Funding

Design Thinking Principle 8

A new competitive logic of business strategy





Every aircraft is equipped with two almost-indestructible black boxes. One records instructions sent to the onboard electronic systems. The other records the conversations and sounds in the cockpit. If there is an accident, the boxes are opened, the data analyzed, and the reason for the accident pinpointed. This ensures procedures can be changed so that the same error never happens again.

This is one of many reasons, aircraft remains the safest mode of travel.



*The
Economist*
March 30, 2019

The worst industrial disaster since 2015

An explosion on March 21st at a pesticide factory in Xiangshui county, Jiangsu province, killed at least 78 people and injured more than 600 others. It was China's deadliest industrial accident since 2015. The government blamed local officials and the company, Tianjiayi Chemical, for failing to learn lessons from safety violations at the plant.



Design for Results



Questions?

Email:

patti@roiinstitute.net

Visit us online:

www.roiinstitute.net

Connect with us on:



ROI Certification® Events

July 1-5, 2019

Sydney, Australia

Contact: Emma Weber
emma@leverlearning.com

Auckland, New Zealand

Contact: Beryl Oldham
beryl.oldham@completelearning.co.nz

