

Sustaining Innovations



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Sustaining Innovations

What is sustainability?

What is an innovation?

What factors affect innovation implementation?

What do you want to have last?

What strategies do we need to use to bring about broad, deep, enduring impacts?



Sustaining Innovations

What is sustainability?



See my results Reset Show codes See all users results

Maintenance

Sustainability

Institutionalization

Diffusion

Definitions	
a largely symbolic decision reflecting an intent to implement	the longer-term efficacy/effectiveness of an intervention
a one-way active transfer process from resource to user groups	the general capability to adapt, that is, to readily change
adoption of a change that is new to an individual/organization or the relevant environment	activities are carried out by regular employees and are backed by an organizations management
A state that is in transition continually	continues to implement a program
Activities that area accepted and sustained by the community	addresses the permanent use of a certain innovation such that it loses its own identity and becomes a normative part of the organisation and its culture
the spread of new ideas, techniques, behaviors, or products throughout a population	spread or mass usage
the delivery and adoption of the program	effort to reproduce an effective practice in a considerably greater number of classrooms and schools
the processes of becoming conscious and acquiring information without being prepared to actually implement an innovation.	the planned and active diffusion of a new idea to a social system
ensuring that the organization assumes long-term ownership and that a blueprint exists for countering forces that erode progress.	process of communicating information through defined channels and media in order to reach various target groups
When a program is enduring, livable, adaptable, and supportable.	the set of planned, systematic efforts designed to make a program or innovation more widely available
something your mother expects you to do, like cleaning your room or brushing your teeth.	the process by which an innovation is communicated through certain channels over time among the members of a social system
the extent to which an intervention becomes institutionalized or part of routine organizational policies and practices of an agency	the ability to preserve an advantageous market position
the point at which an innovative practice, having become implemented, loses its special project status	active process of making information available to the target audience

Dissemination

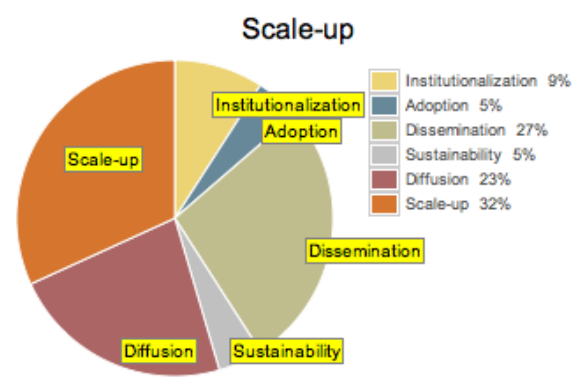
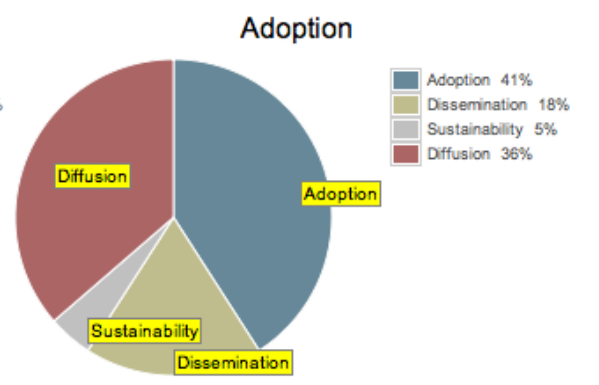
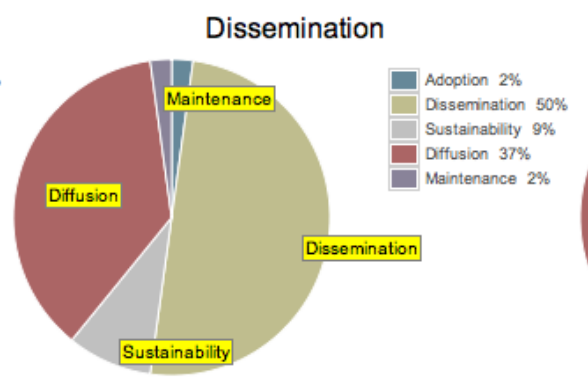
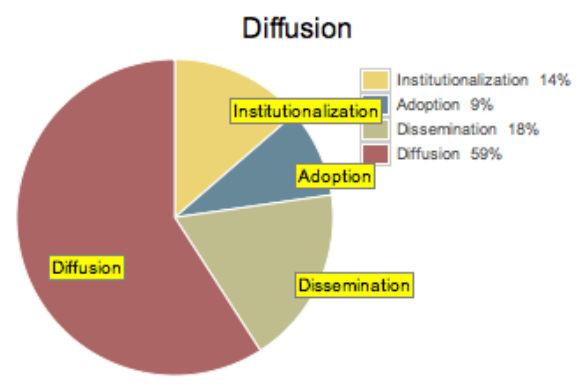
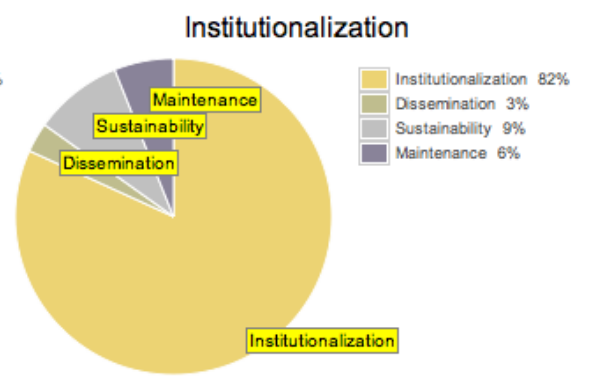
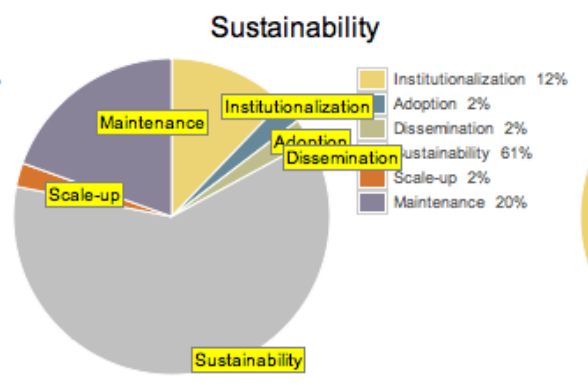
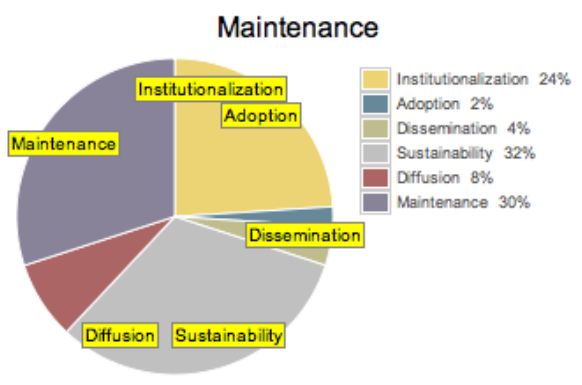
Adoption

Scale-up

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 bility • Inst
 • Adoptio
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 ability • In
 e • Adopti
 lization •
 inabiliity



Maintenance
 Institutionalization
 Adoption
 Diffusion
 Sustainability
 Scale-up



maintenance



sustainability



Sustainability entails evolution.





Keep the essential core.

Remove and improve the ineffective and obsolete.

What is the nature of lasting innovations?

They stay the same.

They change.

They become embedded in daily practice.

Defining Sustainability of Innovation

The ability of a program to maintain core beliefs and values
and use them to guide adaptations to changes
and pressures over time.

Century & Levy, 2002

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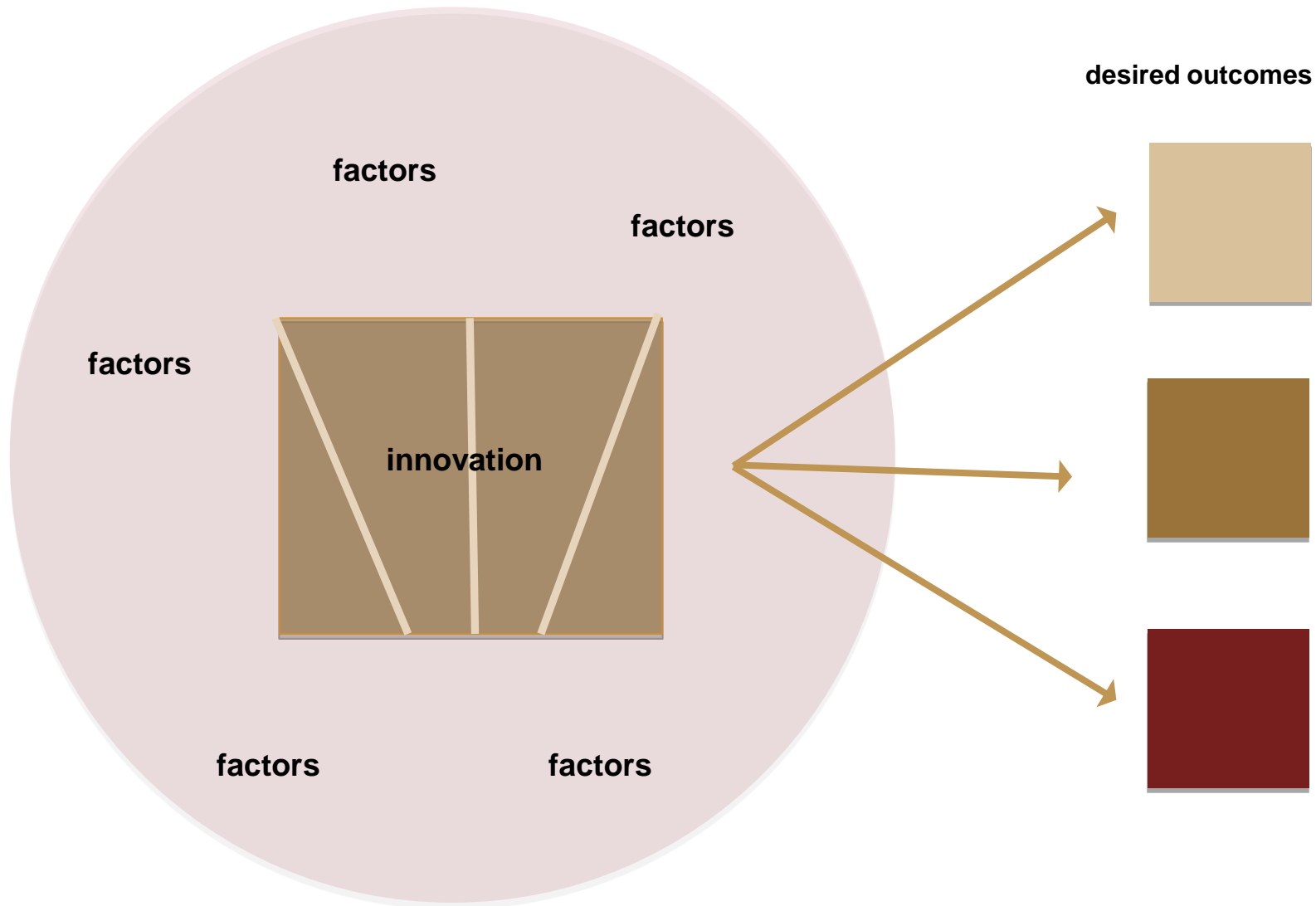


Sustaining Innovations

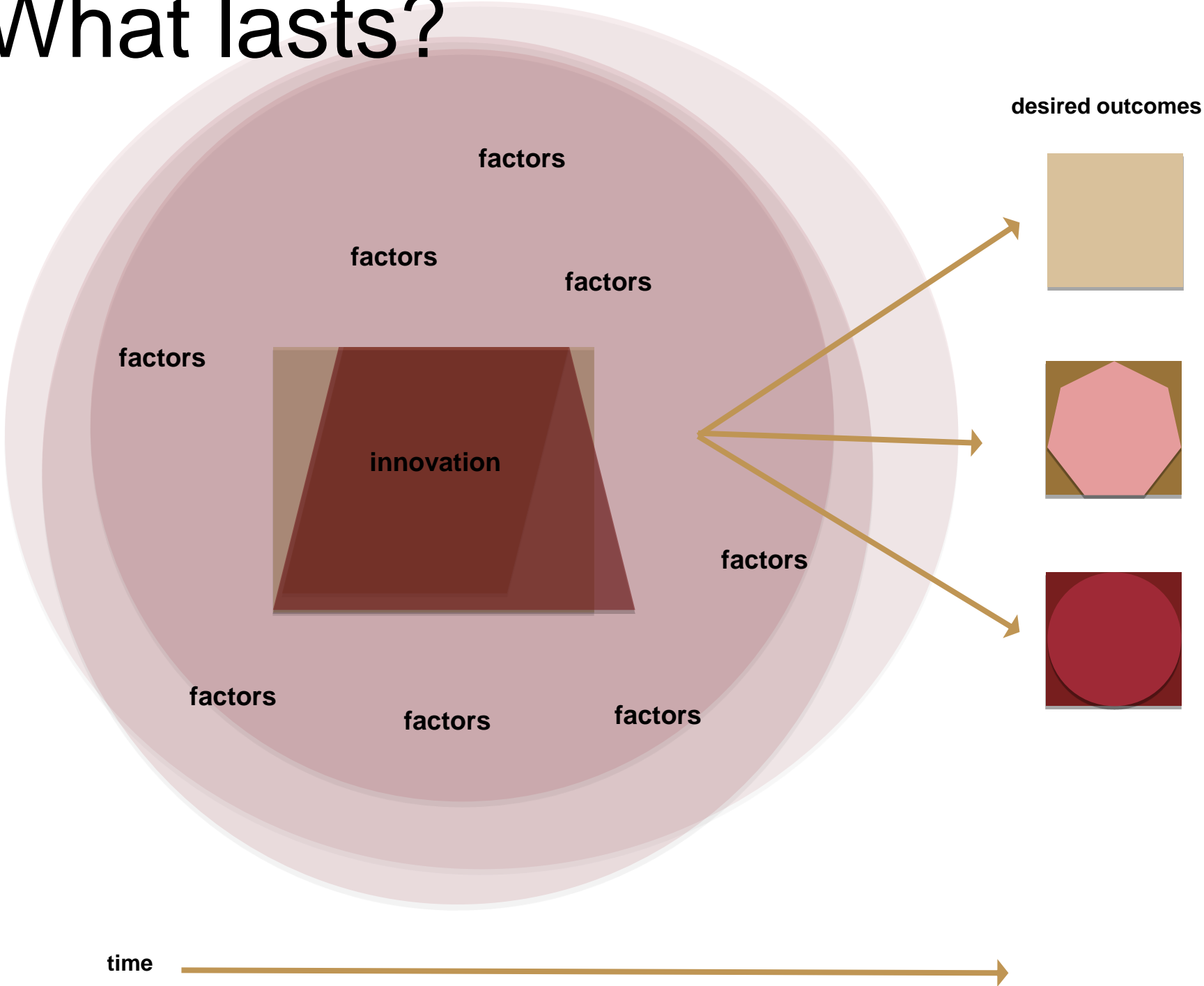
What is an innovation? What is the *IT*?



What lasts?



What lasts?



Critical Components Framework

Fidelity and Implementation Framework

Categories of Critical Components

Structural		Interactional	
Procedural	Educative	Interactional - Leader	Interactional - Participant (engagement)

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What do you want to have last?



What do you want to have last?

The structures of a program

The interactions of a program

The outcomes of a program



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Sustaining Innovations

What factors affect innovation implementation?



Sustainability Study #1

9

Nine-Site Study 1998-2002

Nine sites that sustained elementary science programs from 10-30+ years
Why did they last?

5

Five Lessons

**Sustainability and Maintenance Differ
Programs Go Through Stages**
(programs evolve)

Contextual Conditions Influence the Sustainability of Programs
(school or district culture, decision-making structures, equity issues)

Factors Expected to Affect Sustainability Do So in Unexpected Ways
(accountability, instructional materials, leadership, money, partnerships, professional development)

**Intangible and Sometimes Invisible Factors Affect Sustainability in Pivotal,
Dramatic Ways**
(critical mass, program history, implementation and adaptation, perception, philosophy, quality)

Sustainability Study #2

Accumulating Knowledge on Scaling and Sustaining Reform:
A Foundation for Future Research 2006-2010

69801
abstracts found

659
identified

572
reviewed

30
concepts
factors
processes
mechanisms

Factor Categories

Characteristics of the Innovation
Characteristics of the Individual Users
Characteristics of the Leadership (sub-set of users)
Characteristics of the Organization
Elements of the Environment
Networks



Factors

Characteristics of the Innovation

Adaptability

Complexity

Scope

Specificity

Empirical Effectiveness

Results Demonstrability

Factors

Characteristics of People in the Organization

In the Context of the Innovation
Self-efficacy
Understanding of the Innovation
Attitude toward the Innovation and Related
Intrinsic Motivation
Extrinsic Motivation



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Factors

Characteristics of People in the Organization

NOT in the Context of the Innovation
Innovativeness
Resourcefulness and Coping
Networked-ness
Time Management and Organizational Skills



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Factors

Characteristics of People in the Organization

Perceptions of the Innovation
Perceived Adaptability
Perceived Visibility
Ease of Use
Perceived Effectiveness
Descriptive Characteristics



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Factors

Characteristics of Leadership (Special Case of “User”)

Instructional Leadership
Personal Support
Innovation Advocacy
Innovativeness



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Factors

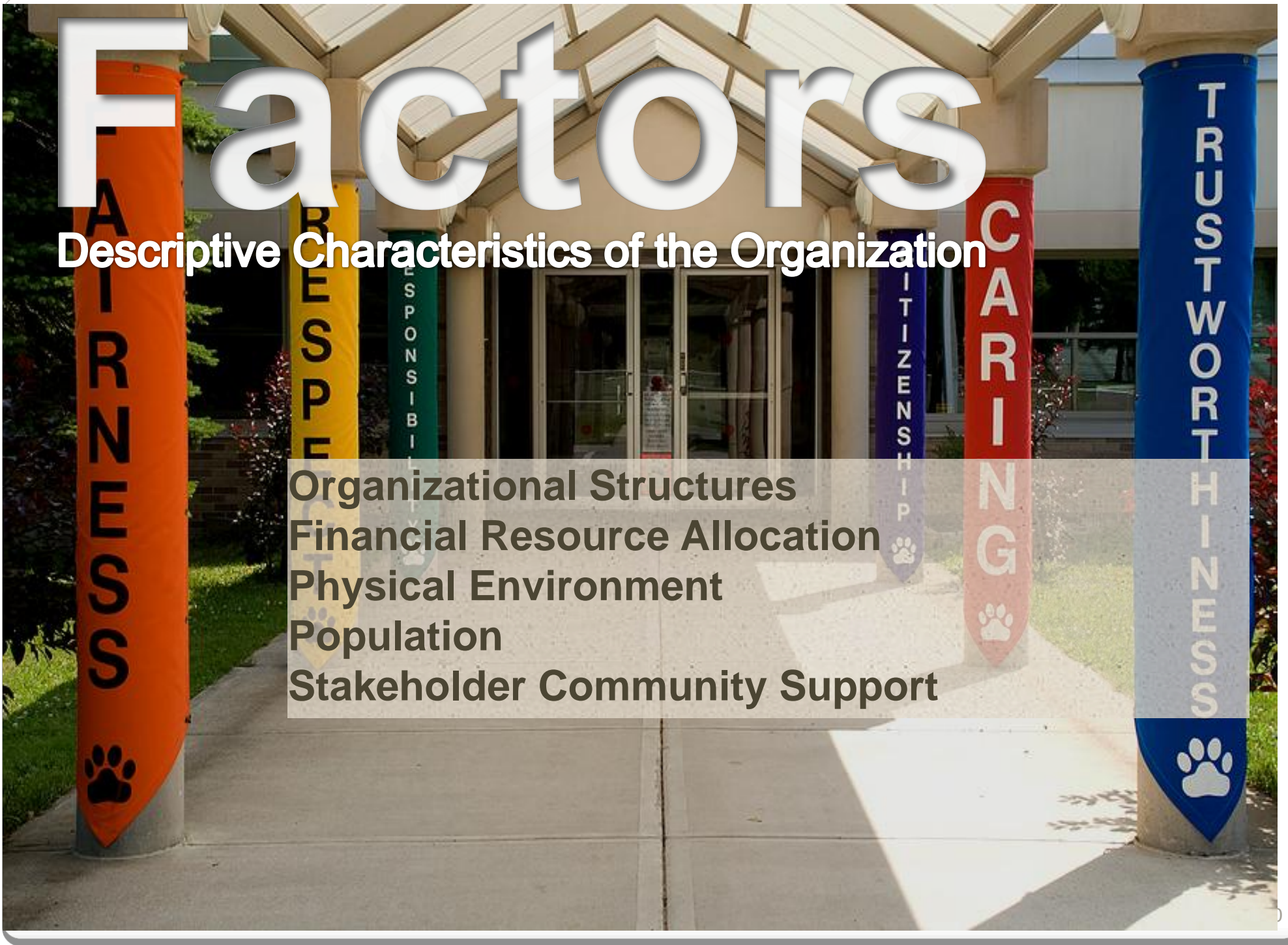
Characteristics of the Organization Related to People

Organizational Innovativeness
Organizational Efficacy
Clarity of Organizational Goals
Collaboration
Communication
Shared Beliefs and Values
Locus of Decision Making
Resource Sufficiency
Time Sufficiency
Utility of Opportunities for Learning

Factors

Descriptive Characteristics of the Organization

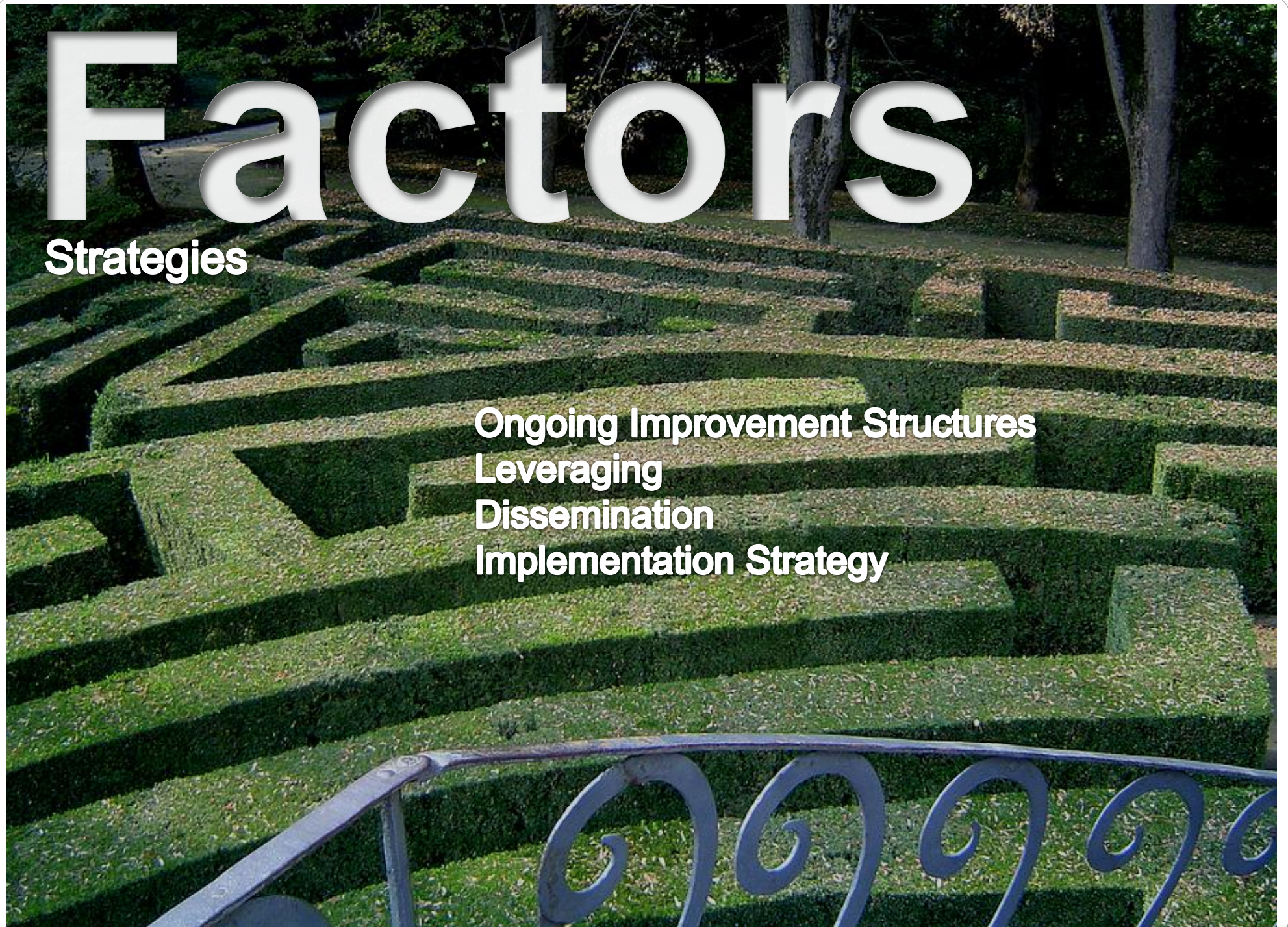
Organizational Structures
Financial Resource Allocation
Physical Environment
Population
Stakeholder Community Support



Factors

Strategies

**Ongoing Improvement Structures
Leveraging
Dissemination
Implementation Strategy**



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What strategies do we need to use to bring about broad, deep, enduring impacts?

Making it Simple

A photograph of a vast agricultural field, likely a tobacco plantation, with rows of green crops stretching towards a hazy horizon under a blue sky. The foreground shows a close-up of the dense, leafy plants, while the background shows the field receding into the distance. A semi-transparent text box is overlaid on the middle of the image.

The goal is broad, deep, enduring improvement.
It all comes down to capacity and will.

Capacity and Will Matrix

Building Capacity and Will for Broad, Deep, Enduring Impact		
	Capacity	Will
Short Term		
Long Term		

Capacity

human capacity
organizational capacity
structural capacity
material capacity

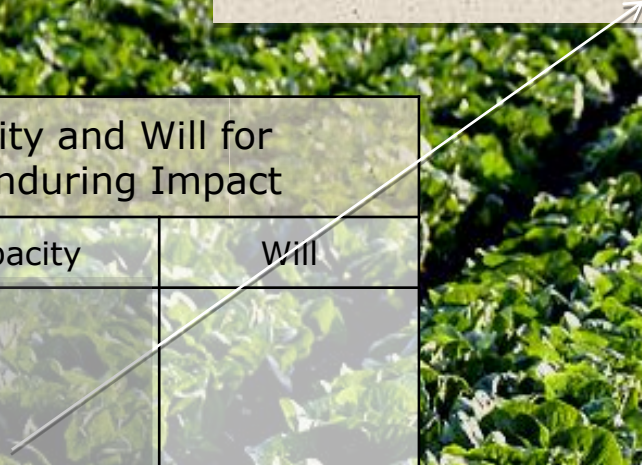
Building Capacity and Will for
Broad, Deep, Enduring Impact

Capacity

Will

Short Term

Long Term



Will

Fit with beliefs, values and desires
Fit with needs
Extrinsic reward

Building Capacity and Will for Broad, Deep, Enduring Impact		
	Capacity	Will
Short Term		
Long Term		

Four Take-Aways

We need to identify effective practices.

We need to scale up effective practices.

We need to make effective practices last.

We need to make evidence-based decisions.



We need to identify effective practices.

What does it mean for a practice to be effective?



Effective practices are useable, flexible and resilient.

We need to scale up effective practices.

What does it mean to scale up?



We need to translate, not replicate.

We need to make effective practices last.

What should last and for how long?



The time horizon shifts the answer.



We need to make evidence-based decisions.

What evidence counts?



Evidence from all aspects of the improvement process counts.

Interdisciplinary Collaborative Community

researchers *without* borders

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Welcome.

Who We Are and What This Is

Researchers Without Borders (RWB) is a home for open research in education. It is a collaborative working environment in which individuals across academic institutions, disciplines, sectors, and levels of organizational structure can direct their efforts to solve shared problems, do collaborative research and development, and build productive working relationships and collaborations.



Community

Check out the community.



Resources

Browse through the resources.



Projects

What is an RWB project?



Media & Events

Listen to the webinars.

“...if it were possible to make small experiments with wild ideas, while retaining the possibility of diffusing those that prove to be good ones, the adaptive position of exploration would be strengthened (Romano, 2002; Holahan, Weil and Wiener, 2003). Since structures that protect the system from the catastrophic consequences of wild ideas generally also inhibit the transfer of major discoveries (Cohen and Levinthal, 1989, 1990), there is no perfect solution to the problem.”

March, 2005



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