A strategic framework to optimize sponsored research services:

An experience from a transitioning small to medium institution

By: Doris Andujar; Fernando Rosario, and Claris Vega

1

Knowing Our Audience
Poll

- Position (Director, Deans, VPs, etc)
- Centralized, Departamental
- Pre-award, Post-Award, Contracts, All of the Above

Learning Objectives:

Objective 1:
Explain how the logic model can be utilized in sponsored research administration and strategic planning.

Objective 2:
Describe the benefits of how a collaborative approach can support a successful strategic plan development and initiation process.
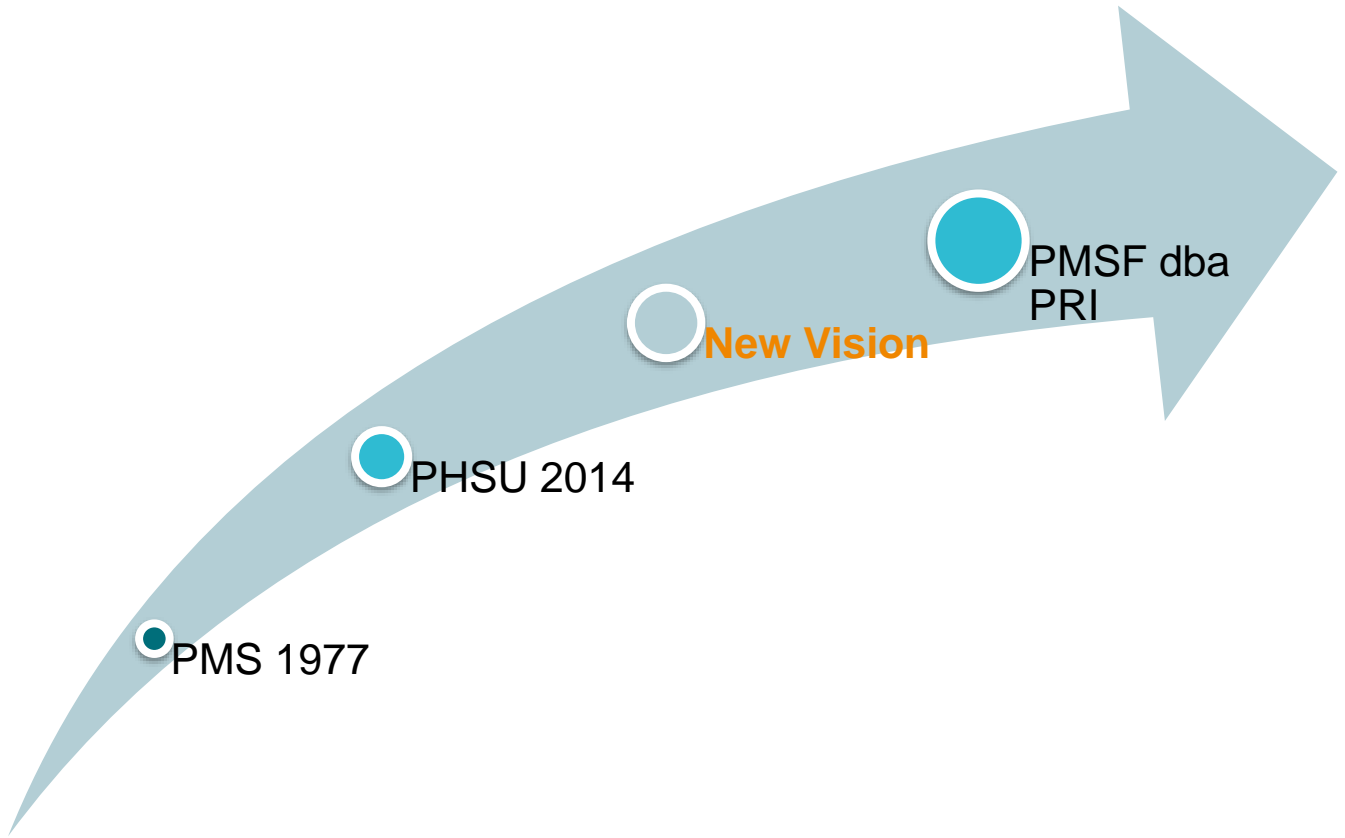
Background

Background

In 2014...

PHSU

- Ponce School of Medicine was founded in 1977and became Ponce Health Sciences University (PHSU) in 2014.
- New PHSU Vision is to build upon its reputation as a prestigious academic and research leader by continuing to educate underrepresented diverse populations while focusing research efforts on solving health disparities both locally and abroad.
- With PHSU's new vision, the Ponce Medical School Foundation, Inc. doing business as the Ponce Research Institute (PRI) emerged.

Institutional Overview

PMSF dba PRI

New Vision

PHSU 2014

PMS 1977

PHSU/PRI location

The Institute is located in the southern coastal city of Ponce (population ca. 250,000) in the US Commonwealth of Puerto Rico (PR).

Ponce School of Medicine

Ponce Health Sciences University

Background

PRI

- Established the mission to make a difference by solving health disparities through groundbreaking, innovative and relevant research that has a global impact in health care.
- PRI's main goal is to strengthen and expand research activities to diversify the scientific work and reduce health disparities.
- The Office of Research and Sponsored Program and Projects focused on assisting biomedical scientists **re-branded** to the Office of Research Development (ORD) with the purpose of streamlining all funded research at PHSU by enhancing the human resources to support research faculty from all disciplines such as behavioral and brain sciences, clinical studies, clinical trials, public health, translational research, in addition to basic and biomedical sciences.

What is PRI?

- Non-profit 501 (c) (3)
- Is a foundation connected the Ponce Sciences University
- 66 + Researchers
- 500 + Staff
- 23 million current portfolios
- PRI –Divisions:
  - Cancer Division
  - Clinical Research Division
  - Clinical Trails Division
  - Health Disparities Division
  - Infectious Disease Division

- PRI –Divisions (continuation):
  - Mental Health Division
  - Neuroscience Division
  - Publication Division
  - Service Division
  - Training Division

- Education and Training
- Outreach Activities
- Clinical Activities
- Research Integrity / Compliance

Background

Office of Research Development

Claris A. Vega, MBA - Director

- Established in May 2015 composed of nine staff members
- Dedicated to the research administration areas of pre-award, post-award, and contracts.
- Since 2017, the team has grown to 13 members with a small turnover of staff (<10%).
- In 2018, PRI hired a senior grant writer that collaborates with ORD in pre-award.
- In the year 2020, the percent of grants awarded has a two-fold increase as compared to the year 2017 (21.9% vs. 10.9 %).

Why did we change?

- Increase of awarded grants and contracts
- Increase of new faculty and staff
- Increase of grants and contract submission (*NIH, DOD, Foundation grants, etc..*)
- Increase collaborators, Consultants, Subawards, Subcontracts
- Increase of Annual Reporting to federal agency or other (*RPPR and FSR*)
- Changes in modern technology and electronical submissions
- Increased training for faculty and staff

Key Indicators (2014 to 2022)

87% increase in funding (12M vs. 23M)
Funding

50 publication per year on average
Scientifc Articles

802 enrollments per year on average
Student Enrollment

61% increase in employees (376 vs. 607)
Employees

75% increase in faculty (102 vs. 179)
Research Faculty

How did we
go
about this?

What is strategic planning?

- It's an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment.

Purpose of the organization

Business Aspiration

Vision

Mission

Objectives

Desired results

Long-term plan developed to achieve objectives

Strategy

Approach - Tactics

Approach

Methodology for executing the plan

Tactics

Smaller actions that support overall strategy

Objective 1:
Explain how the logic model can be utilized in sponsored research administration and strategic planning.

Program Logic Model

- A schematic representation that describes how a program is intended to work by linking:

ACTIVITIES WITH OUTPUTS → INTERMEDIATE IMPACTS → LONGER TERM OUTCOMES
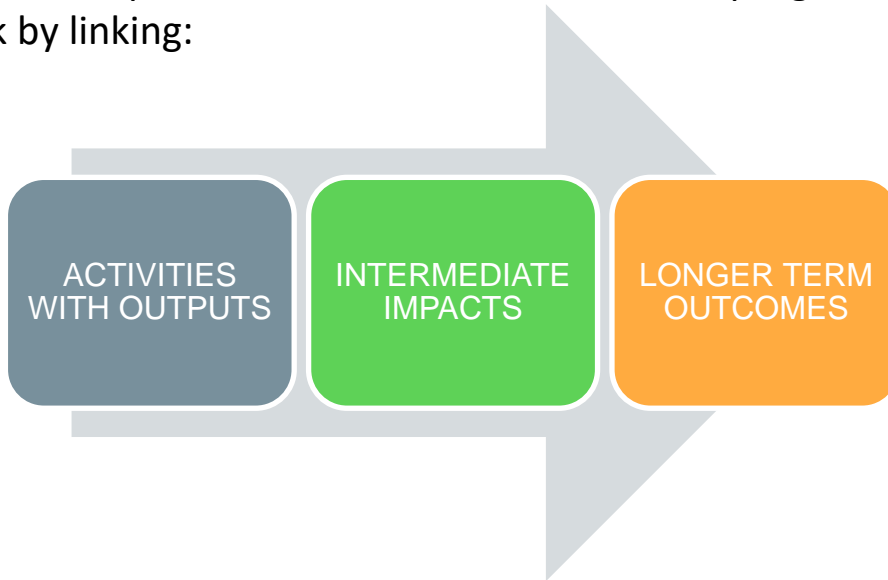
- Program logic aims to show the intended causal links for a program.

Program Logic Model: Benefits

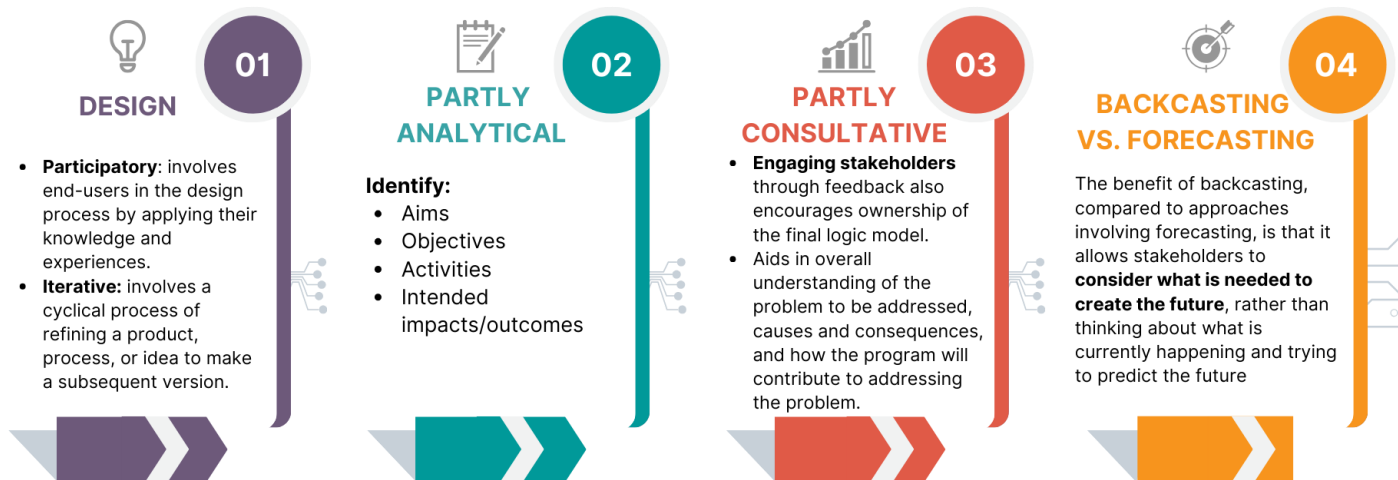|	
METHODOLOGICAL	Provides a systematic and integrated approach to program planning, implementation and evaluation.
BIG PICTURE	Tells the story of how the program is proposed to work.
PROBABLE CAUSES	Makes program assumptions explicit and enables testing of how these assumptions are supported by evidence.
COLLABORATORS	Engaging stakeholders in program planning and evaluation, and clearly communicating with stakeholder audiences about program concepts.
SHARED UNDERSTADING	Agreements with key stakeholders can facilitate common language about the program and build a shared understanding of how it will work.
EVALUATION	Provides a framework for evaluating a program by identifying areas where evaluation will be most important.

Source: Centre for Epidemiology and Evidence. (2017)

Program Logic Model: Considerations

01 DESIGN

- **Participatory**: involves end-users in the design process by applying their knowledge and experiences.
- **Iterative**: involves a cyclical process of refining a product, process, or idea to make a subsequent version.

02 PARTLY ANALYTICAL

Identify:
- Aims
- Objectives
- Activities
- Intended impacts/outcomes

03 PARTLY CONSULTATIVE

- **Engaging stakeholders** through feedback also encourages ownership of the final logic model.
- Aids in overall understanding of the problem to be addressed, causes and consequences, and how the program will contribute to addressing the problem.

04 BACKCASTING VS. FORECASTING

The benefit of backcasting, compared to approaches involving forecasting, is that it allows stakeholders to **consider what is needed to create the future**, rather than thinking about what is currently happening and trying to predict the future

Source: Centre for Epidemiology and Evidence. (2017)

Program Logic Model: Model Sequence or Pipeline

#1 Inputs
- Resources
- e.g., staff, funding, partnerships)

#2 Activities
Essential actions to deliver the outputs.

#3 Outputs
Product or services needed to achieve impacts.

#4 Impacts
Short-term
Intermediate
Long-term

#5 Outcomes
The desired end result of a service, program or intervention.

Context, assumptions, evaluation

Source: Centre for Epidemiology and Evidence. (2017)

Example: Training for new software X

#1 Inputs
- New software
- Budget, trainers, time.

#2 Activities

Coordination, training development for software X.

#3 Outputs

Implementation of training program for software X.

#4 Impacts
- **Short-tem:** Staff knowledgable in program X.
- **Intermediate:** Time use reduction in process Y.
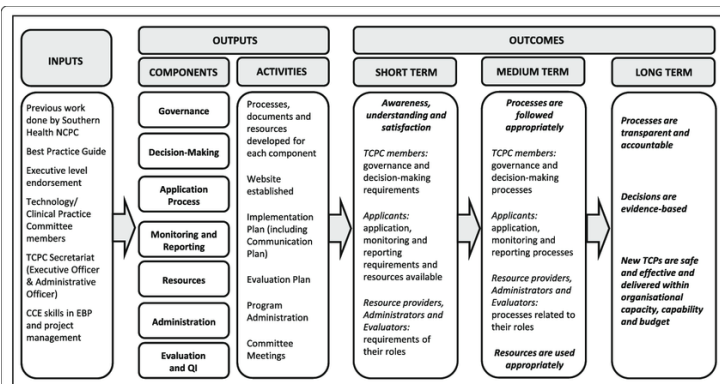- **Long-term:** Process tracking for data analysis.
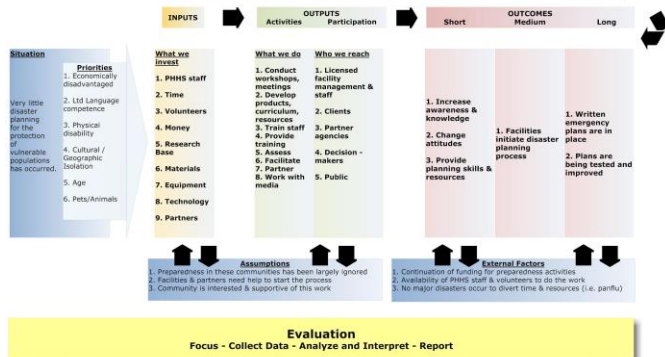
#5 Outcomes

Efficiency in time use for process Y.

Context, assumptions, evaluation

Examples of Program Logic Models

St. Louis County Public Health & Human Services CHAAP Improvement Plan
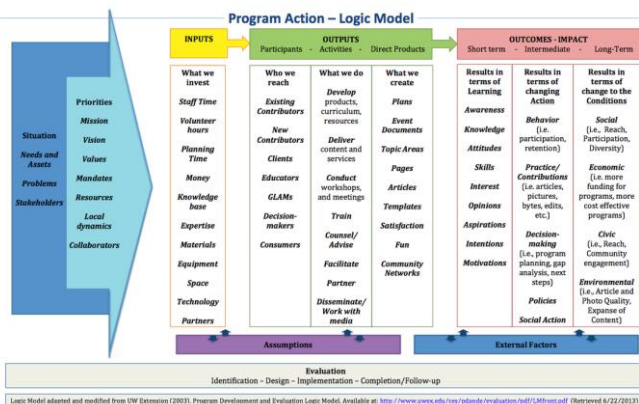Area of Public Health Responsibility - Public Health Preparedness

Program Implementation Logic Model

Program Action – Logic Model

Program Logic Model: Limitations of Logic Models

A logic model only represents reality; it is not reality.

- It is only as good as our understanding of the situation, the environment, the theory we are expressing, and our assumptions.
- Programs are rarely neat and orderly and the unexpected happens.
- Programs are not linear and rarely follow a sequential order.
- It does help articulate causal linkages, builds consensus, and identifies what and when to evaluate.

A logic model focuses on expected outcomes.

- We need to pay attention to unintended or unexpected outcomes: positive, negative, or neutral.
- We should think about alternative pathways of change, alternative outcomes, and the unexpected.

A logic model faces the challenge of causal attribution.

- A logic model depicts assumed causal connections, not direct cause-and-effect relationships. It does not "prove" that the program caused the effect.
- The program is likely to be just one of many factors influencing outcomes.
- Other factors that may affect observed outcomes should be considered.

A logic model doesn't address the question: "Are we doing the right thing?"

- We need to consider whether what we are doing is the right thing separately from the logic model. Is what we are doing worth doing?

Objective 2:
Describe the benefits of how a collaborative approach can support a successful strategic plan development and initiation process.

Collaborative Strategy

- A **collaboration strategy** is a proper system through which an **organization structures the way a team will work**. It is basically the approach business takes toward teamwork.

- This includes concrete guidelines which dictate aspects like the interaction between team members, **regular feedback**, **building fraternity**, and **ensuring a smooth workflow**.
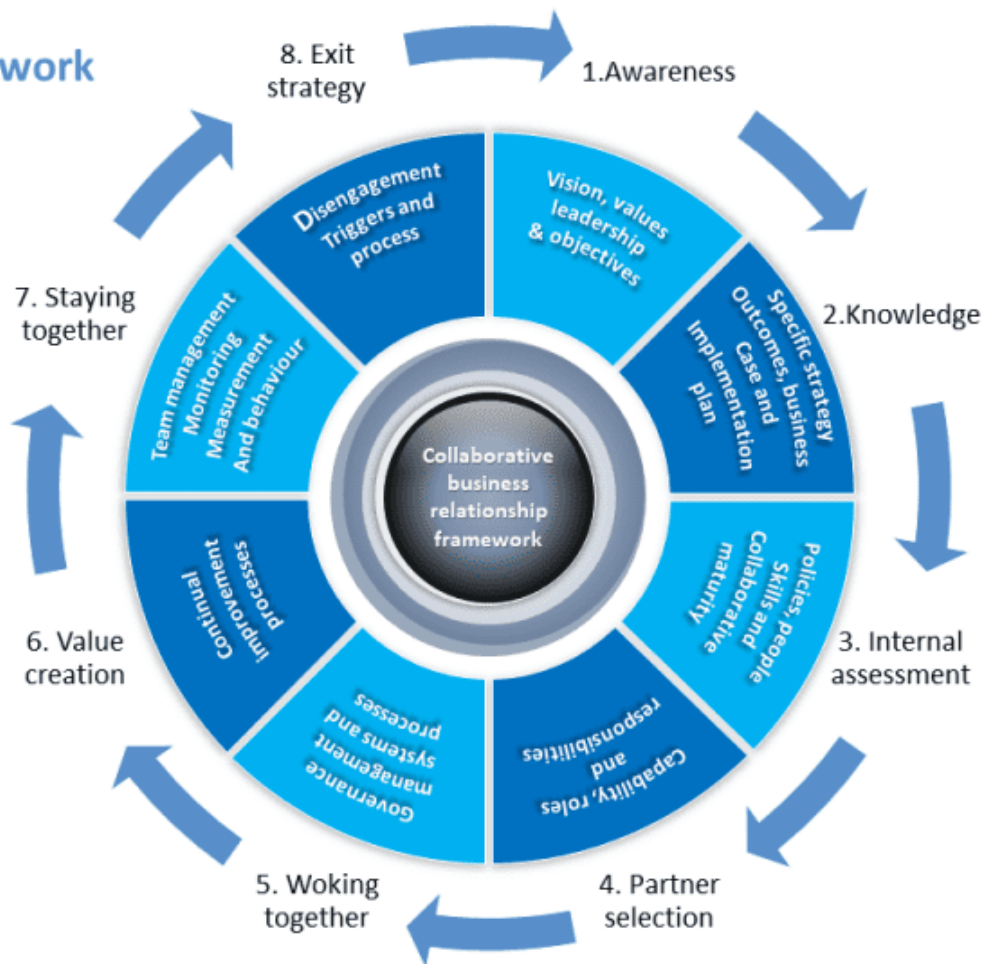
Collaboration Framework
ISO 44001 Operation
8 Stages

8. Exit strategy

1. Awareness

2. Knowledge

3. Internal assessment

4. Partner selection

5. Woking together

6. Value creation

7. Staying together

Disengagement Triggers and process

Vision, values leadership & objectives

Specific strategy Outcomes, business Case and Implementation plan

Policies, people Skills and Collaborative maturity

Capability, roles and responsibilities

Governance management systems and processes

Continual Improvement processes

Team management Monitoring Measurement And behaviour

Collaborative business relationship framework

SRA INTERNATIONAL

Benefits of a Collaborative Approach

Engagement & Retention

- Increase Engagement
- United and aligned
- Talent retention
- Improve culture and sense of community

Learning, Development & Innovation

- Stronger Learning and development
- Improves problem solving
- Increased Creativity
- Aids Synergy

Productivity & Efficiency

Increased:
- Commitment
- Productivity
- Efficient processes
- Accountability
- Enhanced business agility
- Risk Mitigation

Communication & Relationships

- Enhanced communication
- Improved customer relationships
- Brings diverse perspectives
- Supports rich data
- Favors learning and innovation

Source: Indeed, UC Today, LumaApps, and Barker, et al. (2022)

Strategies for Development and Implementation

Is collaboration part of your institutional or office culture?

Yes!
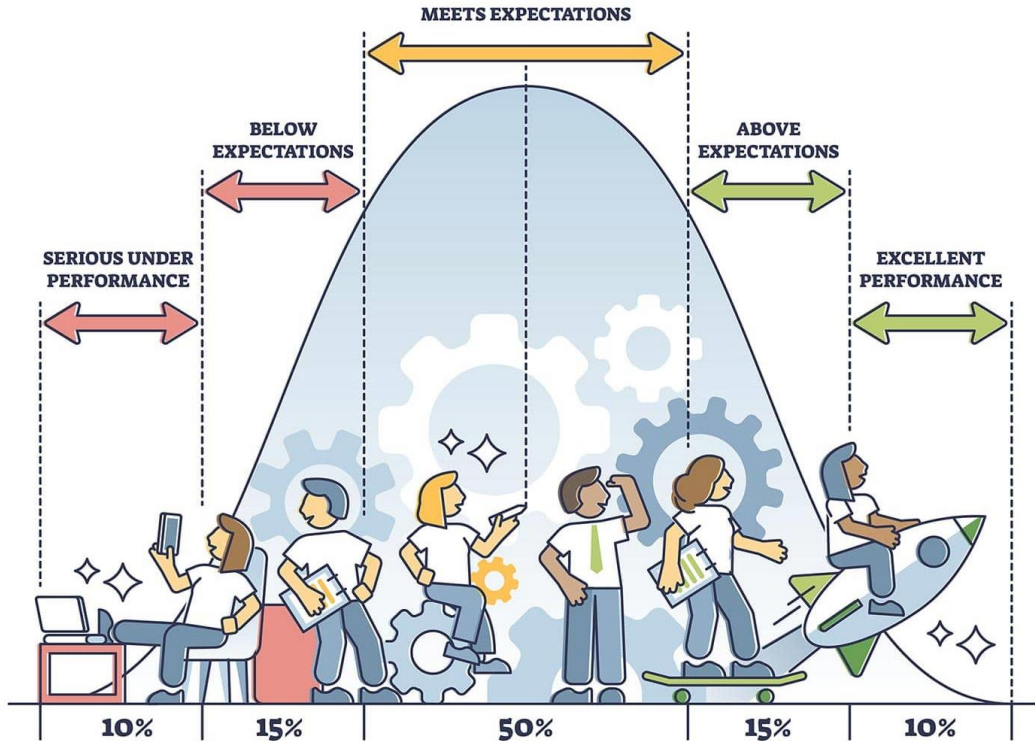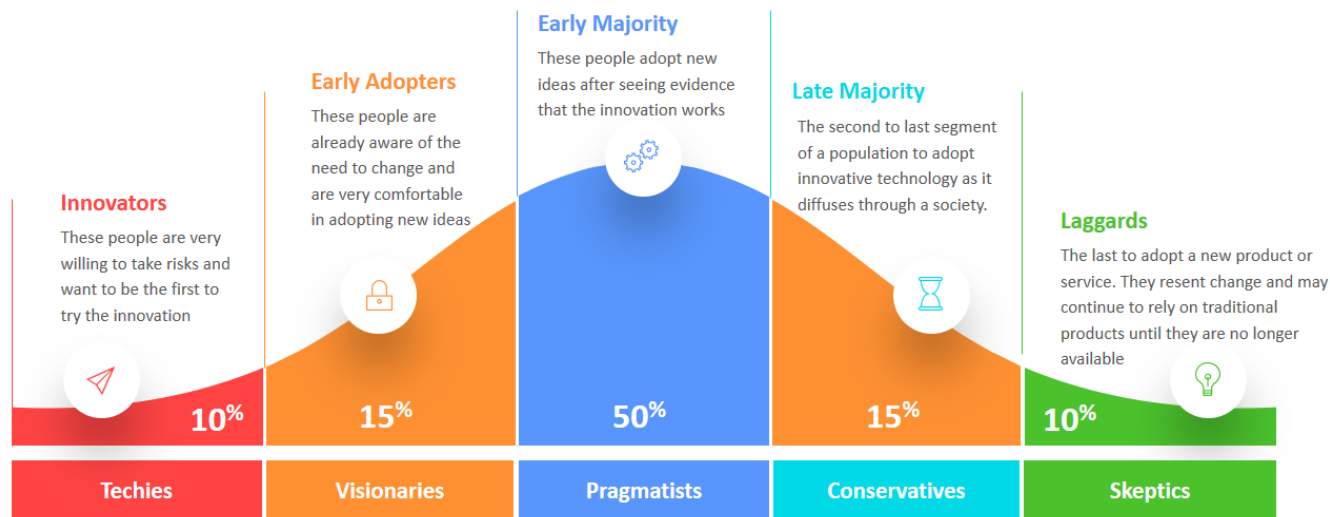
No

☑ Somewhat

Source: Mcleod, S (2023). Simply Psychology – Statistics | Introduction to the Normal Distribution (Bell Curve). Retrieved at simplypsychology.org

DIFFUSION OF INNOVATION MODEL

Innovators

These people are very willing to take risks and want to be the first to try the innovation

Early Adopters

These people are already aware of the need to change and are very comfortable in adopting new ideas

Early Majority

These people adopt new ideas after seeing evidence that the innovation works

Late Majority

The second to last segment of a population to adopt innovative technology as it diffuses through a society.

Laggards

The last to adopt a new product or service. They resent change and may continue to rely on traditional products until they are no longer available

Techies	Visionaries	Pragmatists	Conservatives	Skeptics
10%	15%	50%	15%	10%

Simon Sinek
#ExecTok

Considerations in Implementation
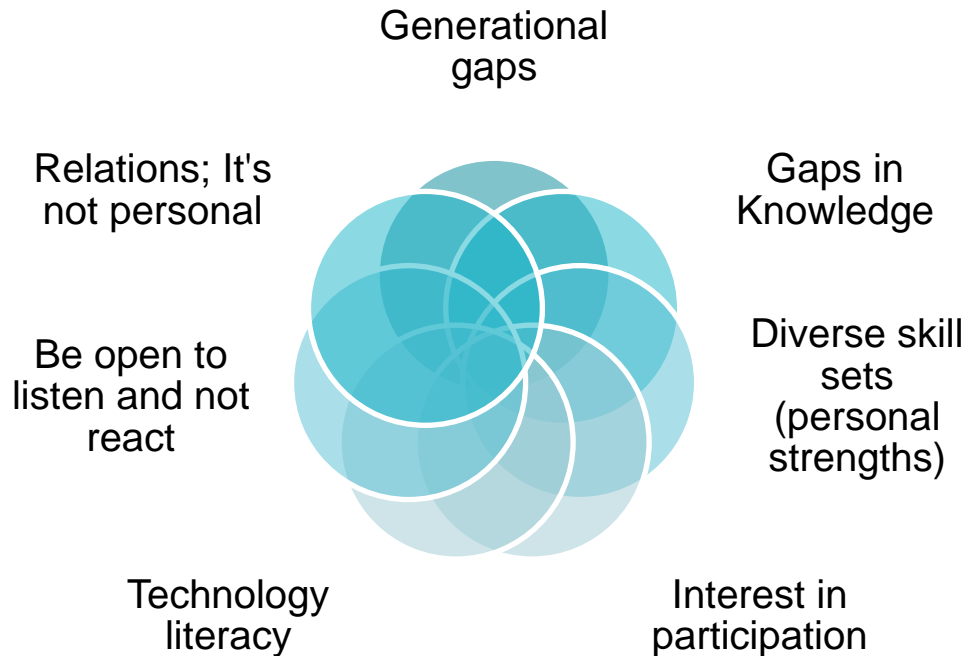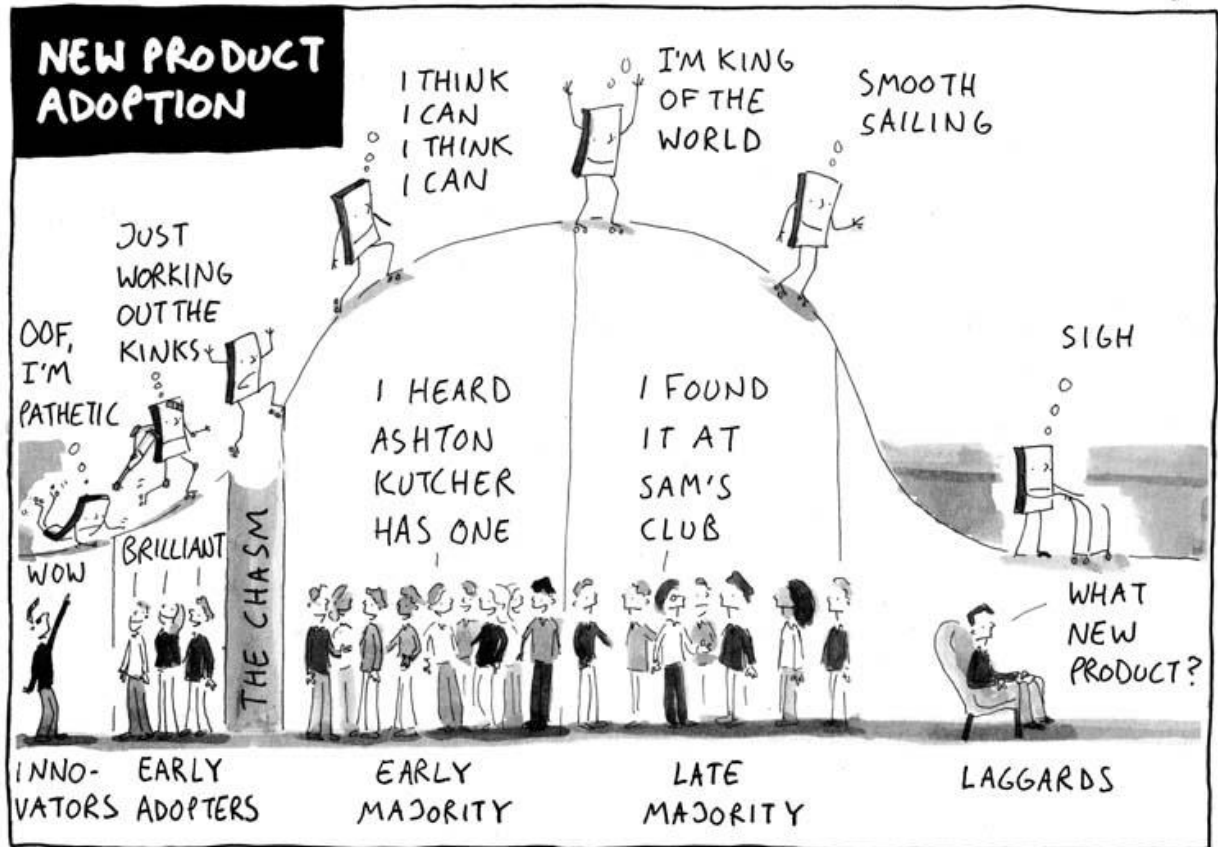
Generational
gaps

Relations; It's
not personal

Gaps in
Knowledge

Be open to
listen and not
react

Diverse skill
sets
(personal
strengths)

Technology
literacy

Interest in
participation

How we started

Literature Review

Workshop Discussion

Review of Research Guidelines

Strategic Planning Committee

Designed

Strategic Framework

Current Steps

Guidelines Committees Surveys Evaluation

Future Directions

Survey Data Analysis

Restructure Committees

Revise & Implement Guidelines

Publication SRA Journal

Update at SRA 2024
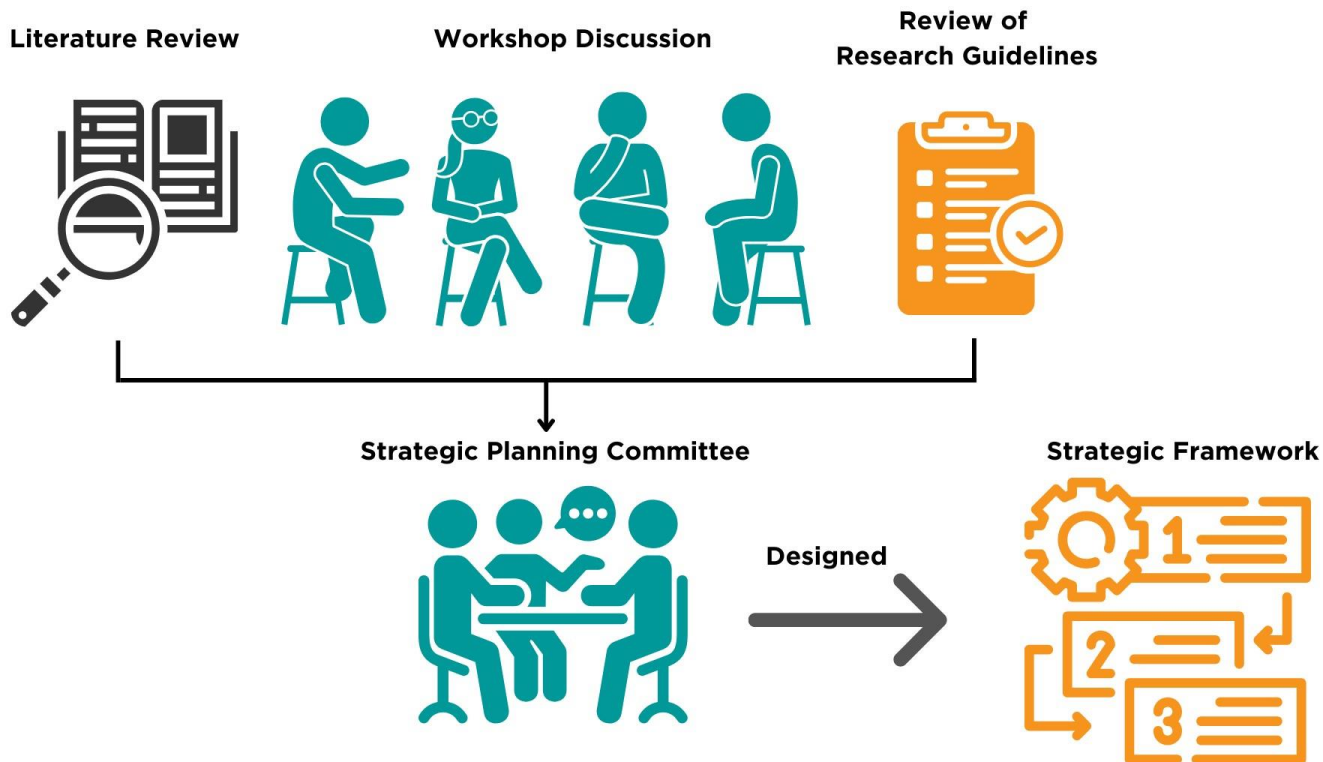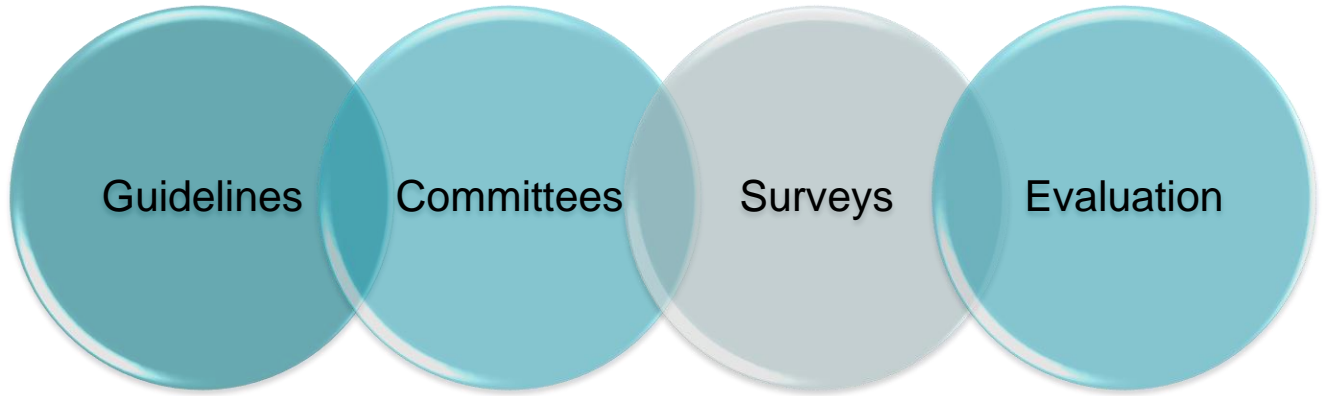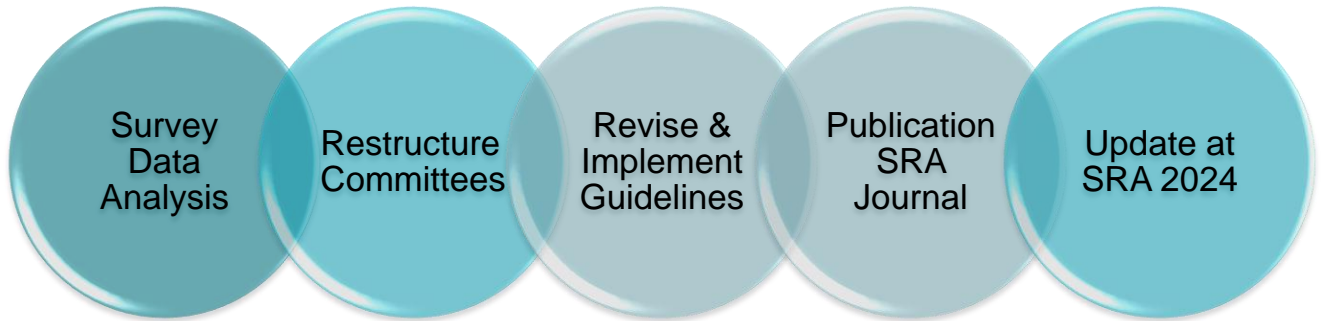
Acknowledgement:

We would like to thank our team for all their efforts in the development of our strategic plan and for making research possible everyday! Thank you!

Amarilys Santiago, Frances Irizarry, Maria, Santiago, Stephanie Batista, Jean Torres, Alina Cruz, Robert Rodriguez, Veronica Frasqueri, Camille Lugo, Wanda Vega, Hannia Delgado, Cynthia Cortés, Joandeline López, Mariely Linares, Marta Báez, Tatiana Morales, Jaydie Vallés, Arline Vela, Myrella Cruz, Víctor Gómez, Lydiet Dedós, Marilyn Borges, Gladys González, María Colón
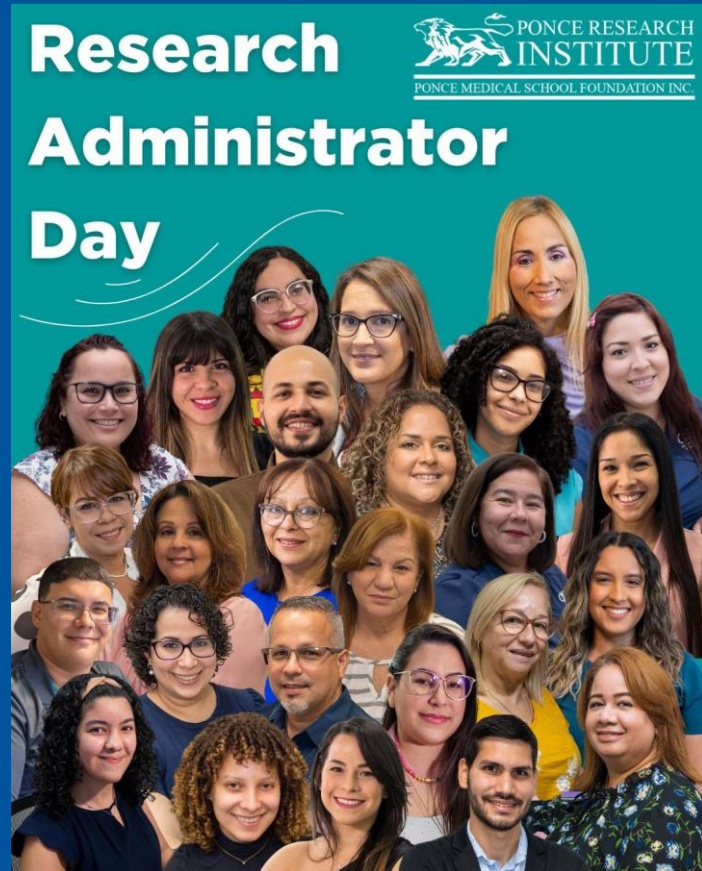
Contact Information:

- Fernando Rosario
  - frosario@psm.edu
- Doris Andujar
  - dandujar@psm.edu
- Claris Vega
  - cvega@psm.edu
- Amarilys Santiago
  - amsantiago@psm.edu

Questions?
Comments?

Feel free to contact us!
Thank you!

References:

- AchieveIt. (2023, April 5). *6 ways to increase collaboration in strategic planning*. https://www.achieveit.com/resources/blog/6-ways-to-increase-collaboration-in-strategic-planning/
- Barker Scott, B. A., & Manning, M. R. (2022). Designing the collaborative organization: A framework for how collaborative work, relationships, and behaviors generate collaborative capacity. *The Journal of Applied Behavioral Science*, 002188632211062. https://doi.org/10.1177/00218863221106245
- Better Evaluation. (n.d.). *Develop theory of change / programme theory*. https://www.betterevaluation.org/frameworks-guides/rainbow-framework/define/develop-programme-theory-theory-change
- Centre for Epidemiology and Evidence. (2017, April 12). *Population Health Research and evaluation - developing and using program logic: A guide*. Developing and Using Program Logic: A Guide - Population health research and evaluation. https://www.health.nsw.gov.au/research/Pages/developing-program-logic.aspx
- Clarke, A. (2012). Key structural features for collaborative strategy implementation : A Study of Sustainable Development/Local Agenda 21 collaborations. *Management & Avenir*, *N˚50*(10), 153–171. https://doi.org/10.3917/mav.050.0153
- Gratton, L., & Erickson, T. J. (2023, March 31). *Eight ways to build collaborative teams*. Harvard Business Review. https://hbr.org/2007/11/eight-ways-to-build-collaborative-teams
- Hier, J. (2011, July 31). *Strategic collaboration - 8 steps to develop your collaboration strategy*. Roelto. https://roelto.com/strategic-collaboration-8-steps-to-develop-your-collaboration-strategy/
- Kitch, B., & Person. (2023, September 20). *8 cross-functional collaboration frameworks for teams: Mural*. RSS. https://www.mural.co/blog/cross-functional-collaboration-frameworks
- Premier's Department. (n.d.). *Evaluation Toolkit for Government Agencies*. NSW Government. https://www.nsw.gov.au/departments-and-agencies/premiers-department/evaluation-toolkit
- W.K. Kellog Foundation. (2004, January). *Logic Model Development Guide*. Resource Directory. https://wkkf.issuelab.org/resource/logic-model-development-guide.html