

The Alignment of Workplace Climate, Leadership and Other Institutional Practices to Support the Successful Implementation of Lean Higher Education

Presentation to: Michigan Technological University
November 1, 2017

Bill Balzer (wbalzer@bgsu.edu)

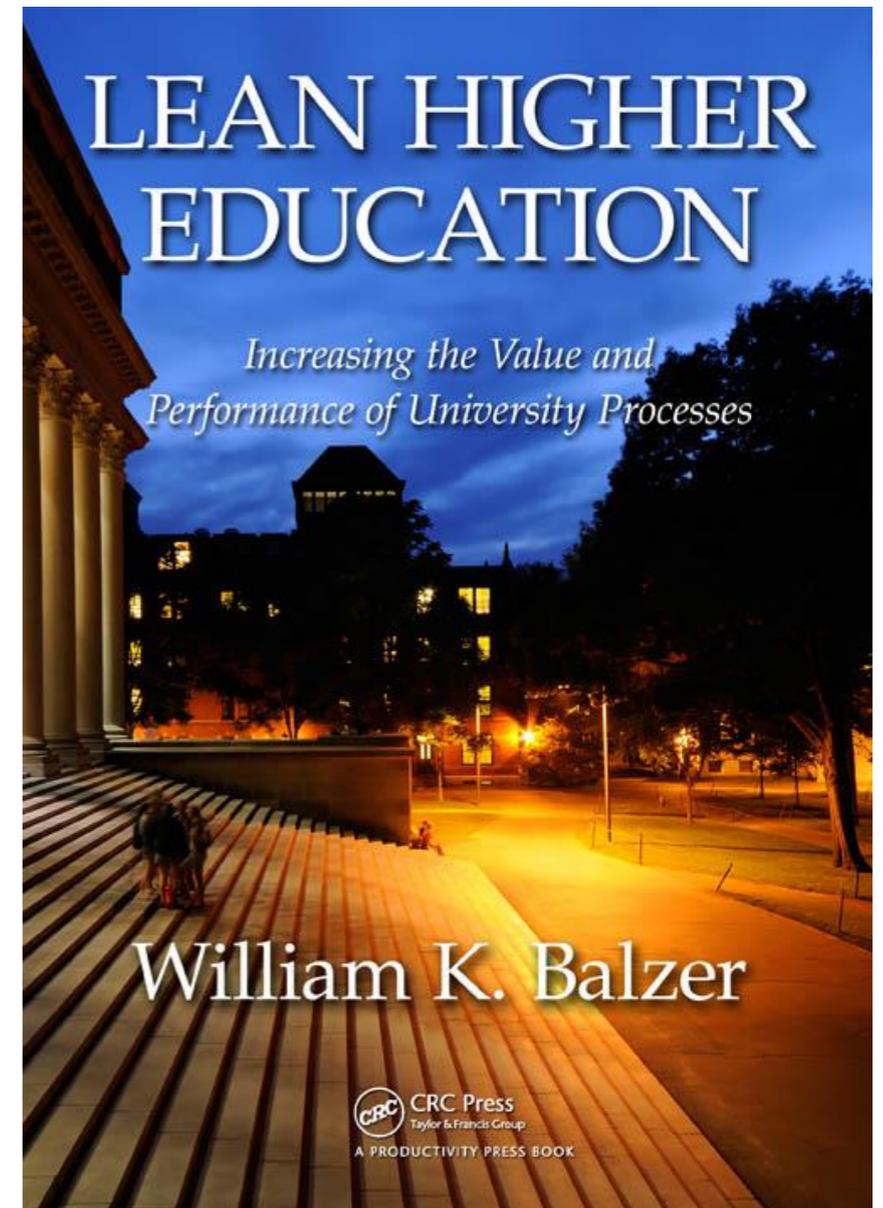
Vice President, Faculty Affairs & Strategic Initiatives

Professor, Industrial-Organizational Psychology

Bowling Green State University, Bowling Green OH, USA

Thanks for invitation to visit!

- MTU is recognized as a leader in LHE
- Learn more about MTU success for 2nd Edition (w/ Mark Robinson)
- Share some new/expanded thoughts on improving LHE success



What is Lean?



“Lean provides a way to do more and more with less and less – less human effort, less equipment, less time, and less space – while coming closer and closer to providing customers with exactly what they want.”

(Womack & Jones, 2003, p. 15)

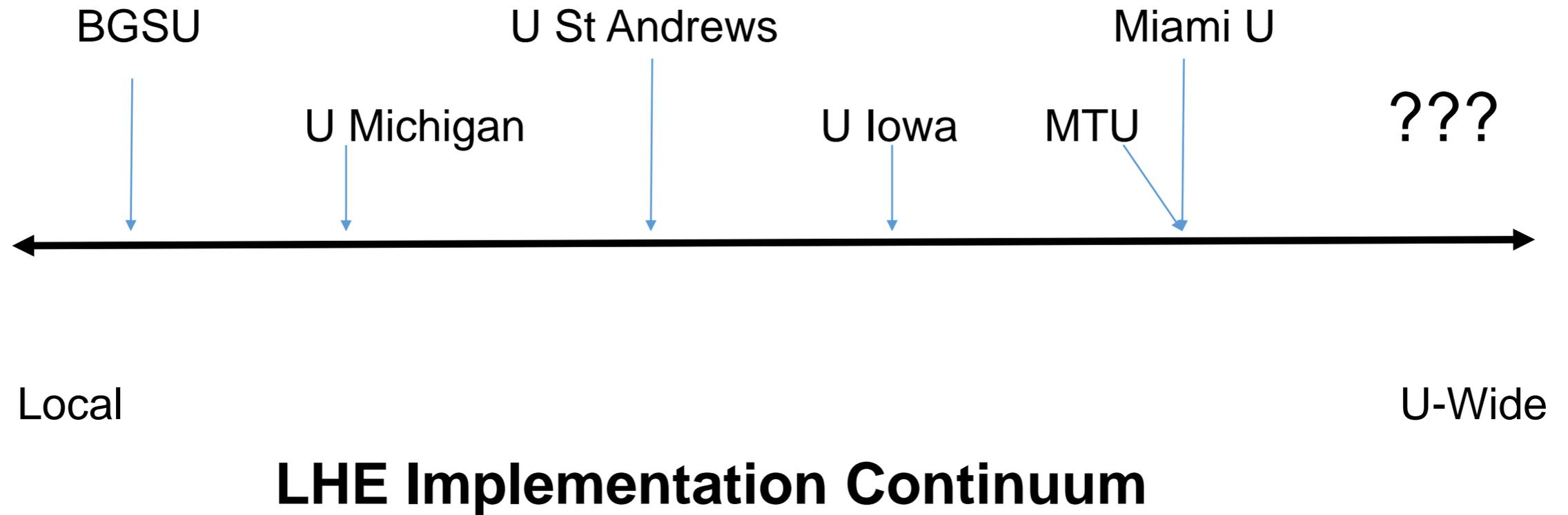
Definition of Lean Higher Education (LHE)

Lean Higher Education (LHE) is a university-wide management system that uses a principle-based, problem-solving method that engages all members of the university to eliminate all forms of waste from their work and processes to provide the value expected by those it serves. It is a long-term and ongoing commitment to continuous improvement and respect for employees and those it serves that results in mutual gains for all parties: fulfilling the expectations of beneficiaries, the growth and development of employees, and the efficiency and effectiveness of the university.

Definition of LHE: Five Key Components

Lean Higher Education (LHE) is a **university-wide management system** that uses a **principle-based, problem-solving method** that engages all members of the university to **eliminate all forms of waste from their work and processes to provide the value** expected by those it serves. It is a **long-term and ongoing commitment to CONTINUOUS IMPROVEMENT and RESPECT FOR EMPLOYEES** and those it serves that results in **mutual gains for all parties**: fulfilling the expectations of beneficiaries, the growth and development of employees, and the efficiency and effectiveness of the university.

Review of Research: LHE Works



Balzer, Francis, Krehbiel, & Shea (2016)

Sustainability of Lean Implementation

Percentage of organizations that continued Lean after implementation:

- Bhasin & Burcher (2006) 10%
- Mohanty, Yadiv, & Jain (2010) 15%
- Bicheno & Holweg (2009) 10%
- Taleghanis (2010) 10%

Overall: High failure rate

Source: Scoggin, S.C. (2017)

“At their core, higher education institutions do not function like corporations, hospitals, or any other type of for-profit or nonprofit organization ... ***Irrational systems, nebulous and multiple goal structures, complex and differentiated campus functions, conflicts between espoused and enacted values, and loosely coupled systems of organization and governance*** are just some of the dynamics that make organizational change in higher education so hard.”

Williams, Berger, & McClendon (2005)

Q: Why Such a High Failure Rate?

A: We Don't Have a Clue!

- No documentation of LHE failures (publication bias?)
- No curation of LHE failures (failure to gather data)
- No exploration of LHE failures
 - No principle-based problem solving (e.g., DMAIC, PDCA)
 - Pareto Charts, Five Why, Cause-Effect Diagrams, etc.
 - No principle-based prevention (e.g., FMEA)
 - Force field analysis, responsibility matrix and action register, implementing countermeasures
- Conclusions
 - LHE practitioners/researchers don't know
 - LHE practitioners/researchers don't practice what they preach

Why Such a High Failure Rate?

Some Hypotheses



- Lean doesn't work – it dies off
- What is called LHE is not really LHE (e.g., Fake Lean; Doing Lean vs. Being Lean) – it dies off
- LHE is big business for nomadic consultants – it dies off when consultants leave
- LHE is not sustained (e.g., new leadership, focus shifts to new shiny things, loss of interest/energy/resources) – it withers or is killed off
- LHE is the wrong solution to the yet-unspecified problem – wrong cure
- LHE is not implemented as large-scale change – unprepared to succeed
- Poorly implemented large-scale change efforts fail – including LHE

Supporting the Successful Implementation of LHE (as Large Scale Change):

Overview of Today's Presentation

- I. Best Practices for Implementing LHE Change
- II. Supporting the Successful Implementation of LHE Change
- III. Considering the Two Most Critical Factors in the Successful Implementation of LHE Change: Climate/Culture and Leadership
- IV. Conclusions, Questions and Reactions

I. Best Practices for Implementing LHE Change

- A. Implementing Large Scale Change
- B. Organizational Development & Change: Theories and Models of Practice
- C. Organizational Development & Change: Practices That Change Workplace Behaviors and Attitudes/Perceptions
- D. EXAMPLE: Organization Analysis and Change: Physical and Psycho-Social Structures of the Organization

A. Implementing Large Scale Change: Best Practices (Hedge & Pulakos, 2002)

- Context of Change
 - Vision-Driven or Gap-Driven Change
 - Maintaining a Systems Perspective
 - Valuing Resistance to Change
- Management and Motivation of the Human Resource
 - Change Leadership
 - Personal Adaptation to Change
 - Participation
 - Transition Planning

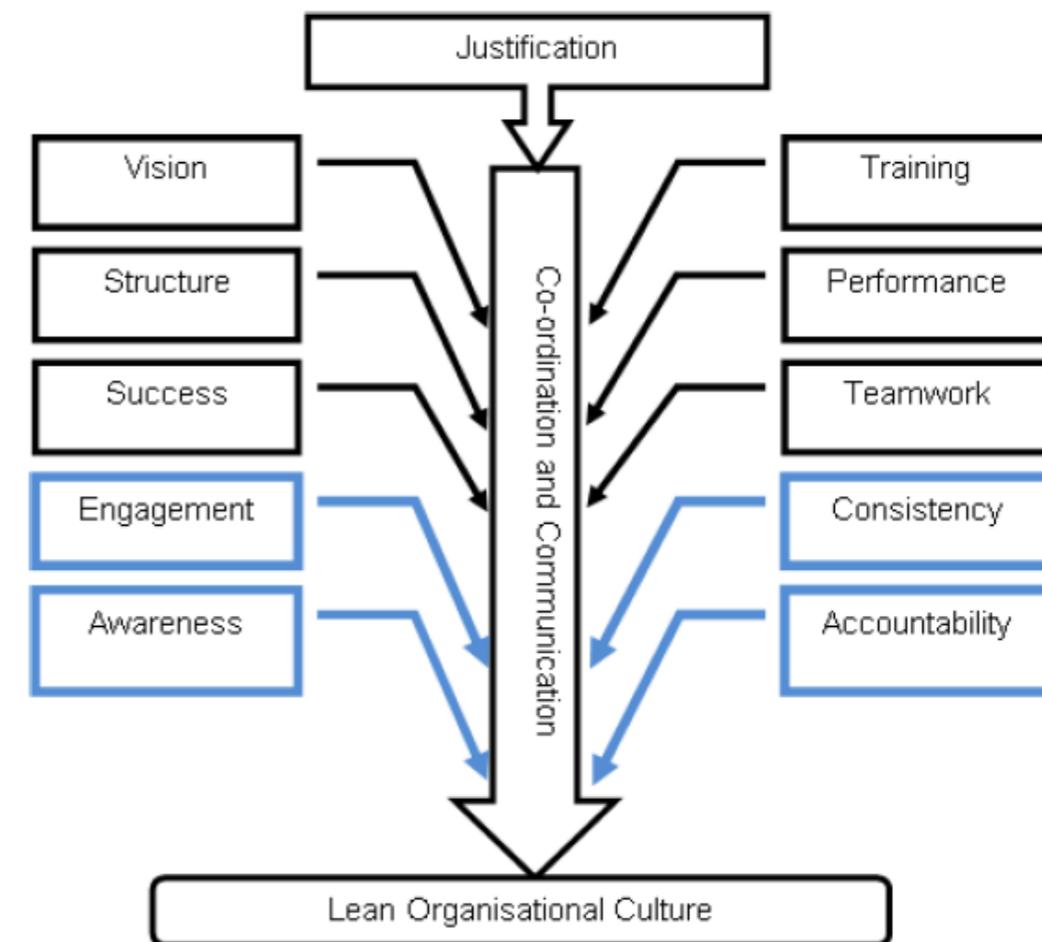
B. Organizational Development & Change: Theory and Models of Practice (Porras & Robertson, 1992)

- Change Process Theories: underlying dynamics of the planned change process within the organization
 - Factors that can be manipulated by the OD intervention
 - Outcomes intended by the change efforts
 - Factors that mediate the effects of the manipulated factors on the outcomes
 - Causal relations between the manipulated factors, the mediator factors, and the outcomes
 - Relevant moderating factors that affect the specified causal relationship
- Implementation Theories: actions undertaken by change practitioners when effecting planned change

Change Process Theory:

Developing a Lean Culture Causal Framework to Support Lean Implementation (van der Merwe, Pieterse, & Lourens, 2014)

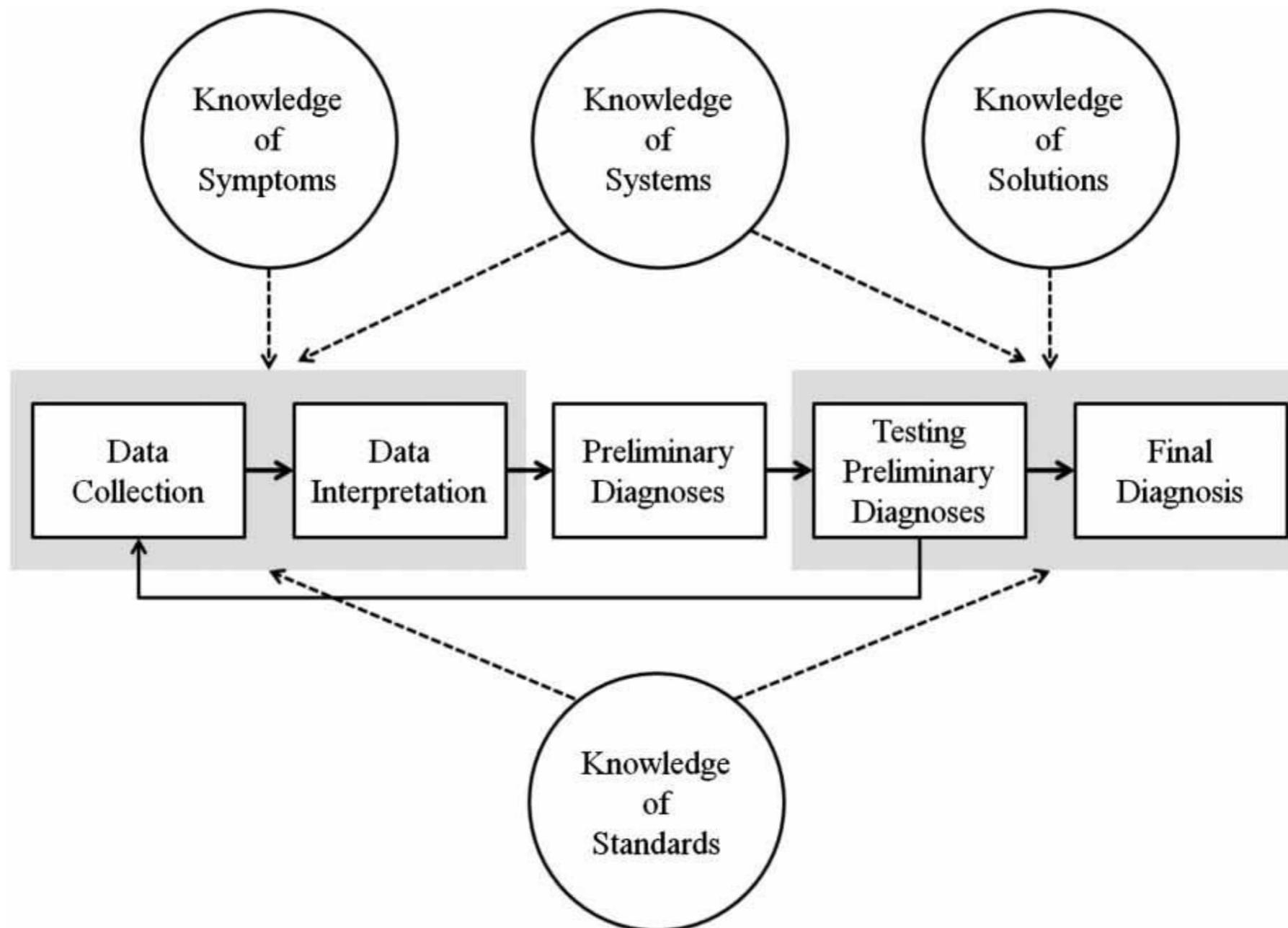
- Culture is critical to Lean success
 - **Blue components** are unique to Lean culture
- Culture is an effect, not a cause
 - Intentional Lean behaviors by leaders create Lean culture



B. Organizational Development & Change: Theory and Models of Practice

- Change Process Theories: underlying dynamics of the planned change process within the organization
- Implementation Theories: actions undertaken by change practitioners when effecting planned change (e.g., Procedures Theory)
 - Prescribed intervention steps
 - Diagnostic variables to be identified
 - Criteria for choosing which specific intervention to use
 - Conditions for effective change
 - Characteristics of effective change agents

Implementation Theory: Organizational Diagnosis: An Evidence-Based Approach (McFillen, O'Neil, Balzer, & Varney, 2013)



C. Organizational Development & Change: Practices That Change Workplace Behaviors & Attitudes/Perceptions

- Organizational **Analysis**: Determine misalignment of institutional practices
- Organizational **Development**: Improve alignment of institutional practices
- Organizational **Effectiveness**: Full alignment of institutional practices

D. Example of Organizational Analysis: Physical and Psycho-Social Structures of a University

Physical Structures

- Vertical Differentiation
- Span of Control
- Centralization of Authority
- Formalization
- Departmentation
- Line-Staff Differentiation

Psycho-Social Structures

- Goals
- Activities and Roles
- Interaction and Communication
- Power and Influence
- Status and Esteem

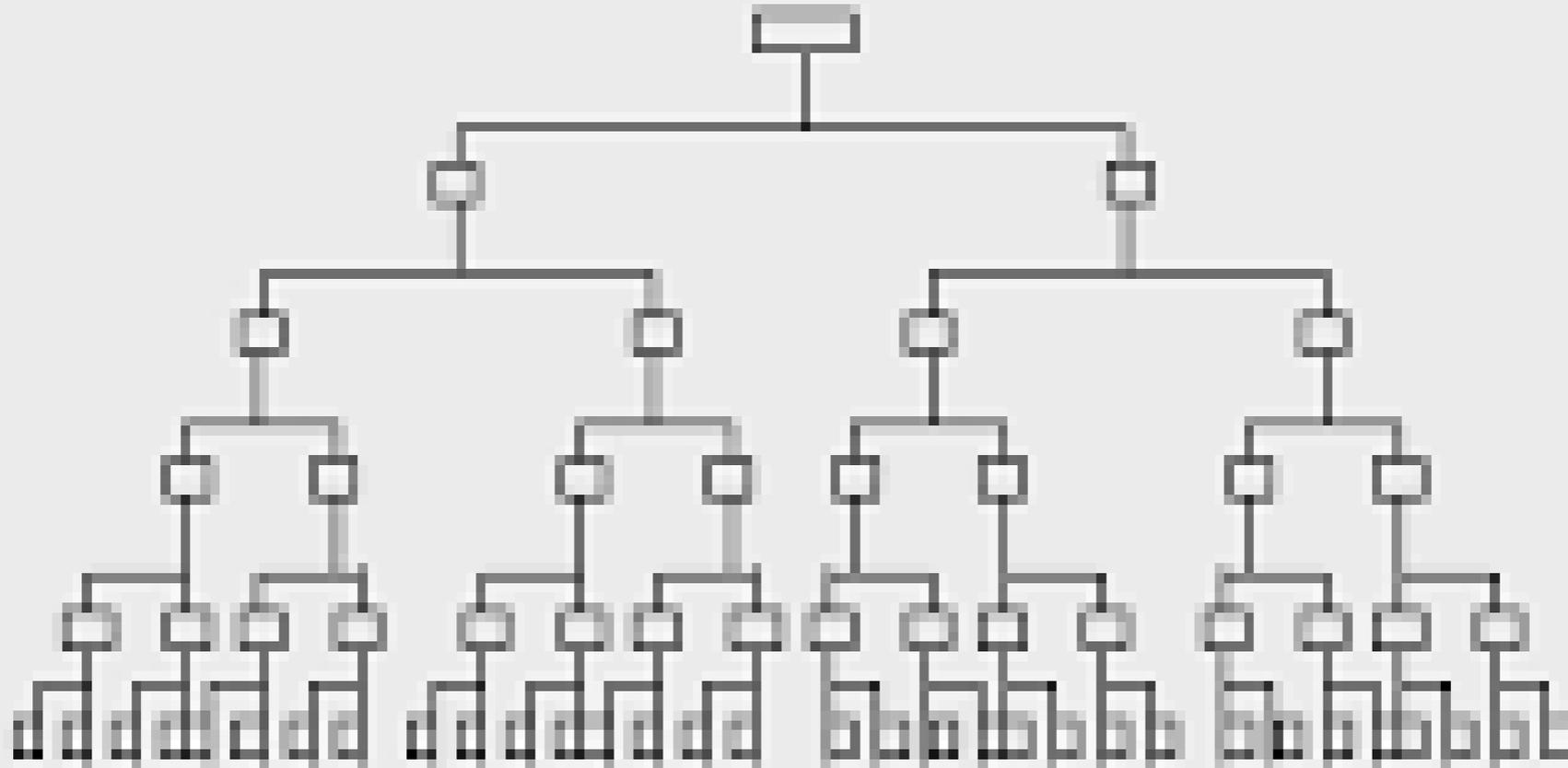
Katz, D., & Kahn, R. L. (1978)

Physical Structures: Traditional University Design

Physical Structure	Traditional University
Vertical Differentiation	Decision making power increases as level in university increases (some horizontal differentiation for faculty); level determines your role in decision making
Span of Control	Closer oversight and managerial control (because of less standardization of work, outputs, and skills)
Centralization of Authority	Academic Functions: Range of centralized - decentralized; Nonacademic Functions: Centralized; legitimate/reward/coercive power held by limited set of supervisors/managers
Formalization	Limited formalization of jobs by workflow and rules; clear chain of command to be followed for communication and decision making
Departmentation	Units are grouped by function (stovepipes/silos?) and not processes or work flow interdependencies
Line-Staff Differentiation	Significant support staff to administer and monitor processes; decisional authority that impacts the core operations of higher education

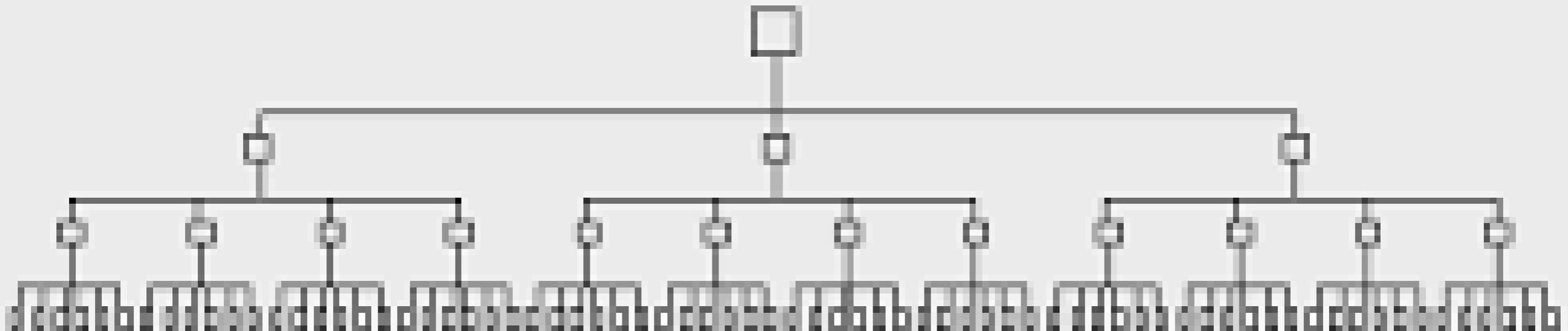
Tall Organization

(More formalization & vertical differentiation; Less span of control)

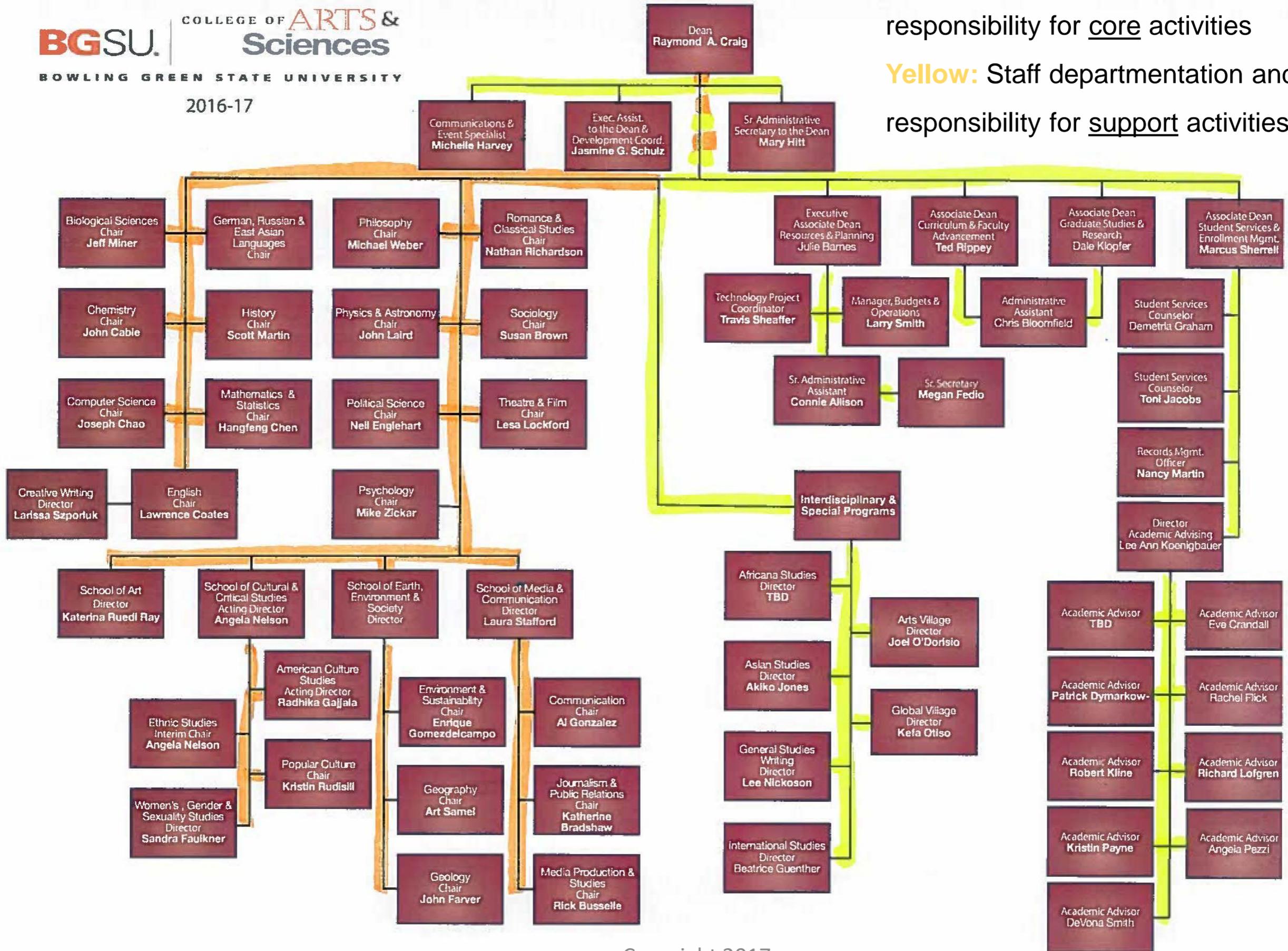


Flat Organization

(Less formalization & vertical differentiation; wider span of control)



2016-17



Orange: Line departmentation and responsibility for core activities

Yellow: Staff departmentation and responsibility for support activities

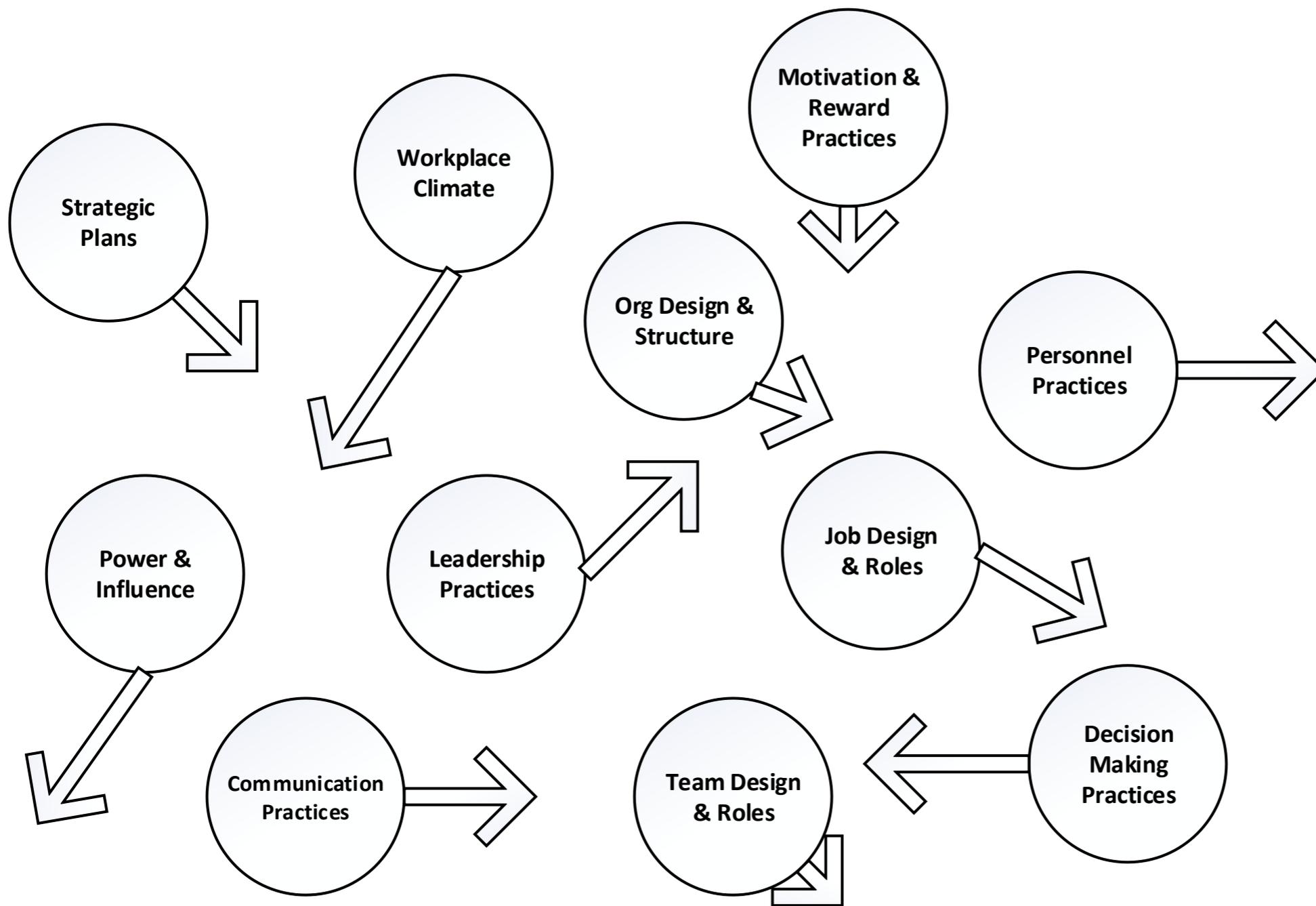
Psycho-Social Structures: Traditional University Design

Psycho-Social Structure	Traditional University
Goals	Often lacking or incongruous, with limited connection between job and university success
Activities & Roles	Limited opportunity to change work; role ambiguity and role conflict due to job design; distinct roles for supervisors
Interaction & Communication	Typically asymmetrical (downward) and infrequent; interaction influenced by group/departments; supplemented by informal communication & interaction
Power & Influence	Top down supervision due to centralized power; influence is often confounded with role
Status & Esteem	Positional status from vertical differentiation and title, with rewards that follow; esteem bestowed (based on education and experience) in limited circumstances

Physical & Psycho-Social Structures Impose Institutional Practices



- Strategic Plans
- Organizational Design & Structure
- Job Design & Roles
- Team Design & Roles
- Leadership Practices
- Personnel Practices
- Power & Influence
- Motivation & Reward Practices
- Communication Practices
- Decision Making Practices
- Workplace Climate



UNINTENTIONAL MISALIGNMENT OF INSTITUTIONAL PRACTICES

**Successful Implementation of LHE
Philosophy and Management System to
Support University Mission**

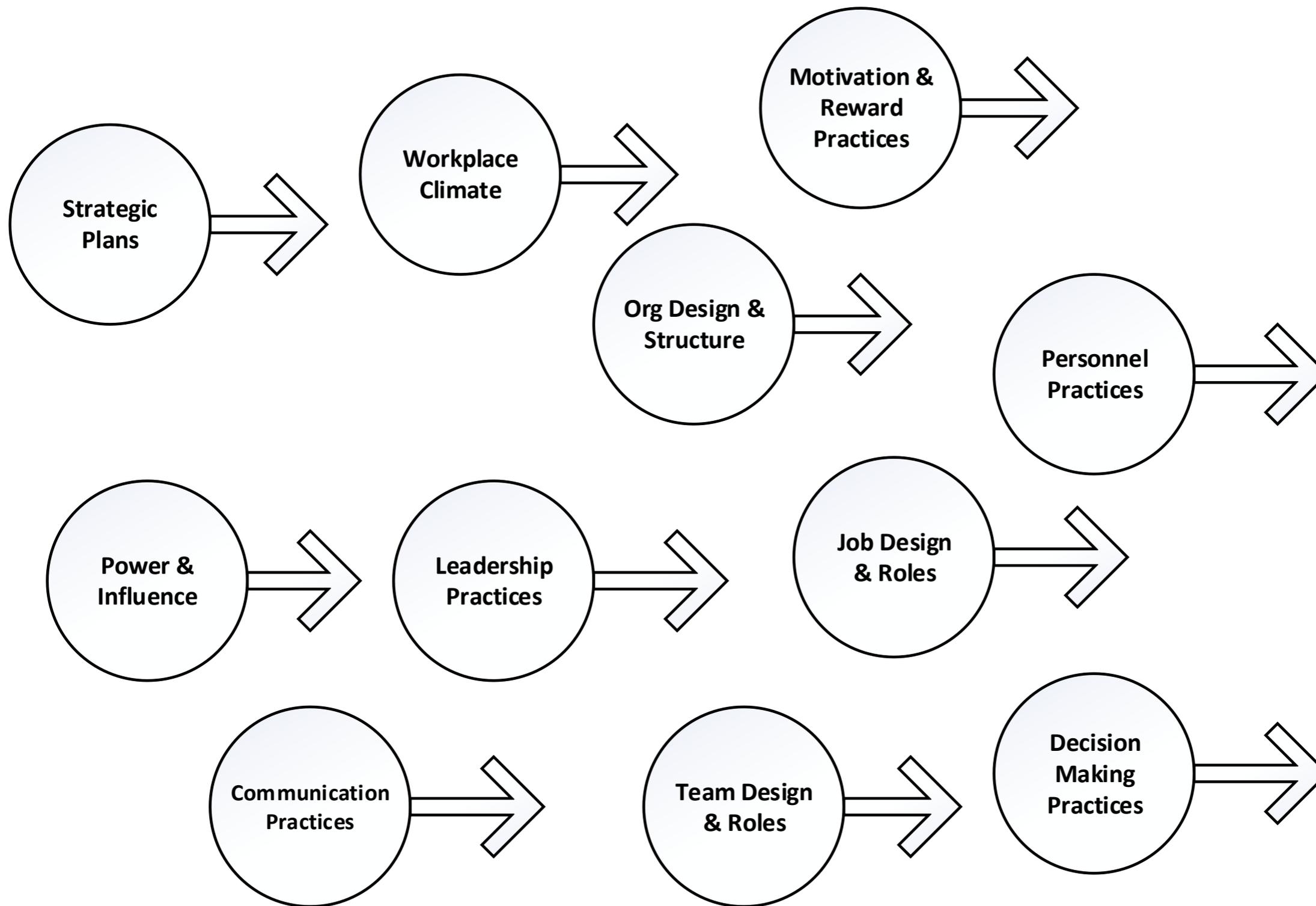
Organizational Development and Lean University Design: Physical Structures



Physical Structure	Traditional University	Lean University
Vertical Differentiation	Decision making power increases as level in university increases	Decision making pushed down to those who know the process
Span of Control	Closer oversight and managerial control (because of less standardized work, output, and skills)	More autonomy to individuals (and self-managed teams) based on standardized output
Centralization of Authority	Decisions are likely to be centralized and top down	Decision making is shared with employees empowered to change process
Formalization	Limited formalization of jobs by workflow and rules	Employees understand the complete process and their role in adding value
Departmentation	Units are grouped by function (silos and stovepipes)	Units are grouped by process families (workflow interdependencies)
Line-Staff Differentiation	Significant support staff that monitors; decisional authority to resolve problems that impact core operations	Employees monitor their work and are involved in any change to core operations (all employees add value)

Organization Development and Lean University Design: Psycho-Social Structures

Psycho-Social Structure	Traditional University	Lean University
Goals	Often lacking or incongruous, with limited connection between job and university success	Providing value to beneficiaries; commitment to continuous improvement
Activities & Roles	Limited opportunity to change work; role ambiguity and role conflict due to job design; distinct roles for supervisors	Clear role responsibilities and role interdependence; cross-functional teams; improvement kata (DMAIC; PDCA); employee engagement
Interaction & Communication	Typically asymmetrical (downward) and infrequent; interaction influenced by departmentation; supplemented by informal communication & interaction	Frequent communication in all directions; on demand by employee; visual management
Power & Influence	Top down supervision due to centralized power; influence is often confounded with role	Empowered employees (andon cord); leadership kata (coaching to individual success); Lean experience respected
Status & Esteem	Positional status from vertical differentiation and title, with rewards that follow; esteem bestowed in limited circumstances	Respect for people; influence from Lean expertise regardless of position



INTENTIONAL ALIGNMENT OF INSTITUTIONAL PRACTICES

Successful Implementation of LHE Philosophy and Management System to Support University Mission

II. Supporting the Successful Implementation of LHE Change

A. Is a University Ready for LHE Change?

(Pfeffer & Sutton, 2006)

B. Resistance to Change

C. Overcoming Resistance to Change

A. Is Your University Ready for Change?

Eight Questions (Pfeffer & Sutton, 2006; slide 1 of 2)

- Will the adoption of LHE result in improvements on what the university now accomplishes?
- Is the change expected from LHE really worth the time and money required and the disruption and challenges expected?
- Would it be better to implement symbolic changes with less risk and less benefit rather than core change with significant risk and significant benefit?
- Is the decision to adopt LHE influenced by a personal career agenda or the best interests of the university?

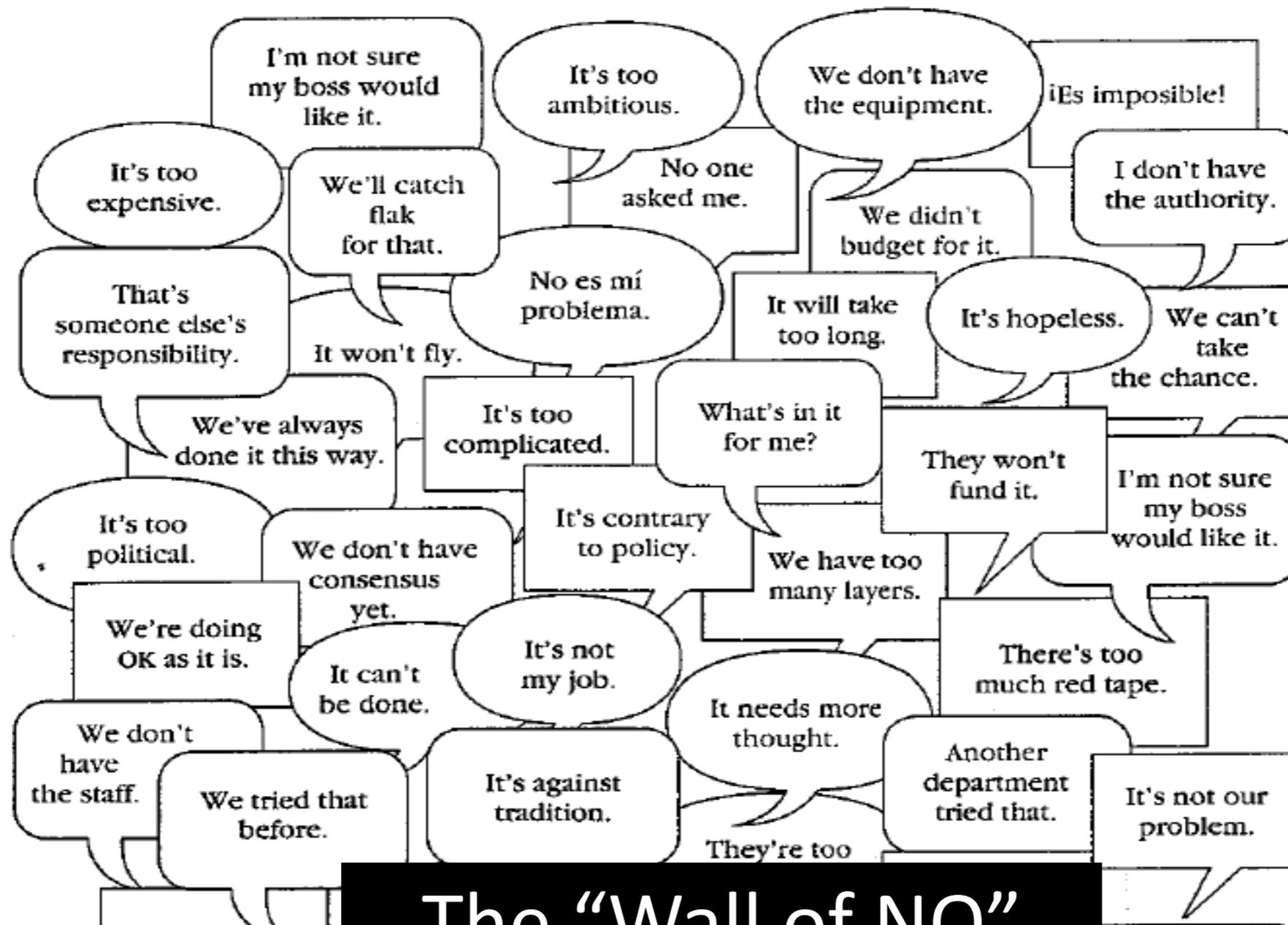
A. Is Your University Ready for Change?

Eight Questions (Pfeffer & Sutton, 2006; slide 2 of 2)

- Will the adoption of LHE have the needed sources and levels of power and support to implement and sustain change?
- Are faculty and staff and other constituencies already overwhelmed by too many changes at the university to embrace LHE?
- Will faculty and staff and other constituencies be able to learn and adapt in response to circumstances after LHE is introduced?
- If necessary, would the university be able to reverse course if the adoption of LHE did not work?

B. Resistance to Change

50 Reasons Not To Change



The "Wall of NO"

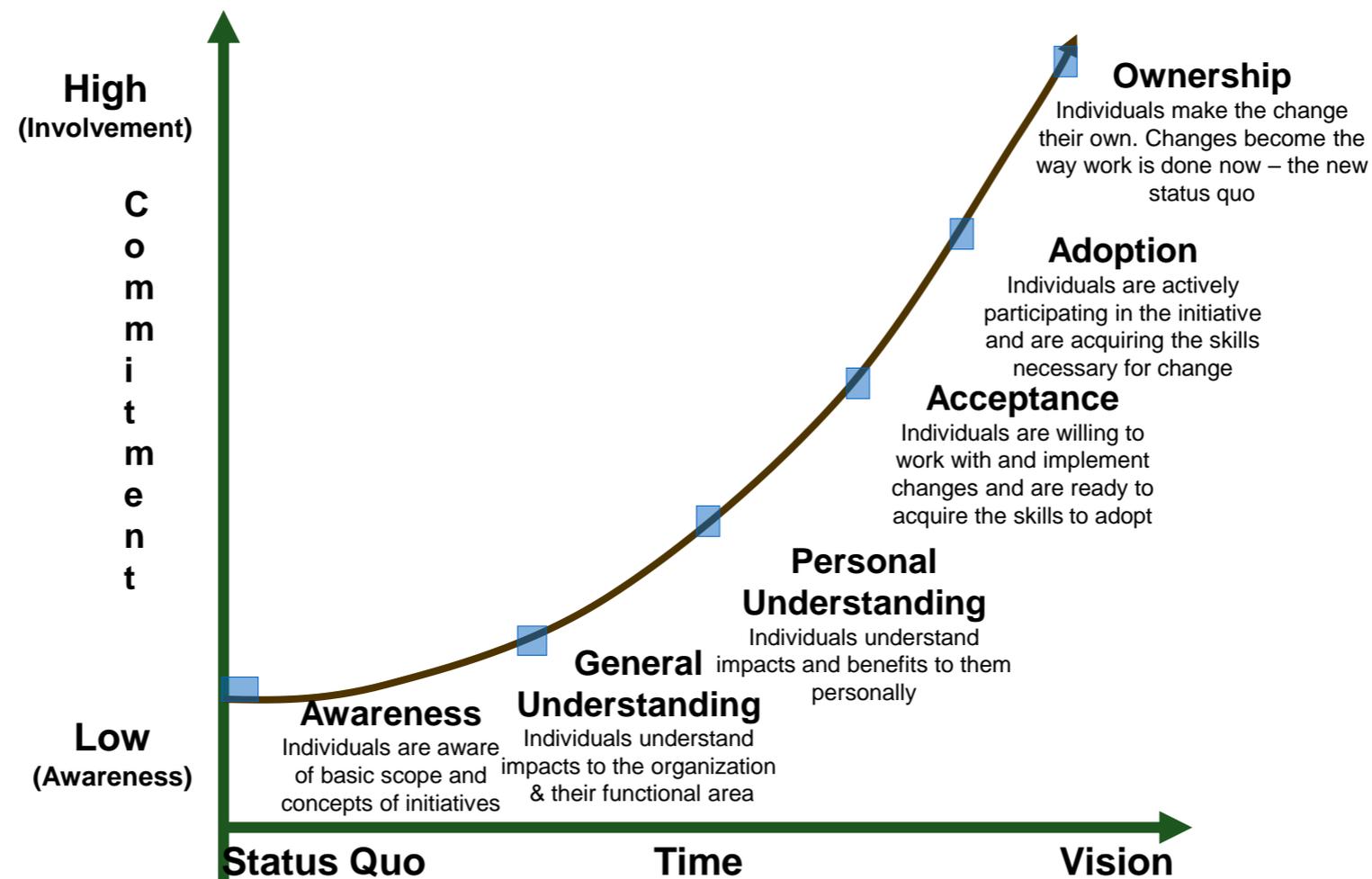
Medical Metaphor for Resistance to Change: Organizational Infection and Immunology

The Resistant Organization: Protective Immune System

- Active & strong immune response:
 - Foreign bodies will harm the current balanced system
 - Immune system (i.e., institutional practices) will resist foreign bodies (i.e., LHE philosophy & management system)
 - Resistance will encapsulate and kill foreign bodies (e.g., Wall of No)
 - Nothing from the outside (including good things) will survive

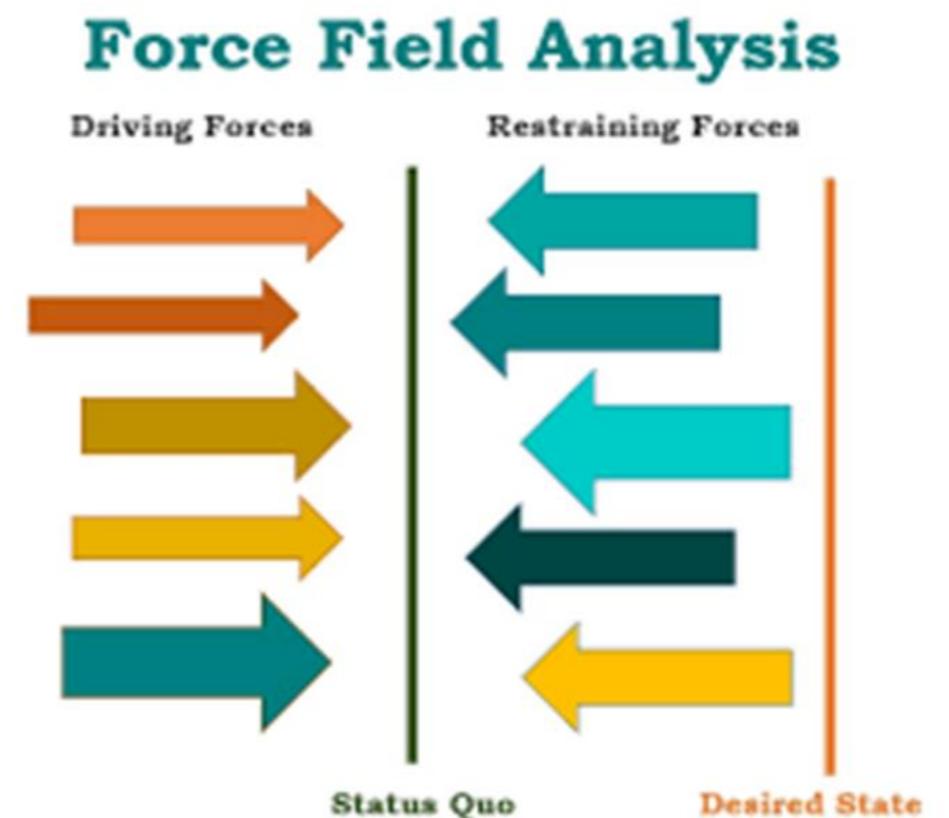
Abrahamson, 1996; Myers, Hulks, & Wiggins, 2012; Watkins, 2007)

C. Overcoming Resistance to Change



Tool for Overcoming Resistance to Change: Force Field Analysis

- Brainstorm a list of forces that will help implement the proposed change (Driving Forces)
- For each driving force, list a Restraining Force that will work against implementation
- Analyze the diagram to understand the areas you can influence
- Plan and take appropriate action (countermeasures)



Why LHE?: Strengthening Driving Forces to Change



- Explain what attracts you to future improved state or vision
- Show opportunities that lie ahead when strategic goals are realized
- Offer guarantees (e.g., no loss of employment; commitment to current university mission)
- Provide a clear statement of opportunity
- Move to intentionally align institutional practices to strengthen Driving Forces

Why LHE?: Valuing & Overcoming Restraining Forces to Change

- Explain challenges that exist today that require change
- Provide clear statement of problem
- Share thinking that requires you to let go of the past
 - remembering to “honor the past”
- Move to intentionally align institutional practices to weaken Resisting Forces

III. Considering the Two Most Critical Factors in the Successful Implementation of LHE Change: Climate/Culture and Leadership

- A. Creating and sustaining a supportive **workplace climate** for LHE
- B. Establishing **leadership practices** to implement and sustain LHE

A. Creating & Sustaining a Supportive Workplace Climate for LHE (Stringer, 2002)

- **Climate of Standards.** *A workplace committed to high standards and continuous improvement to improve processes*
- **Climate of Support.** *Faculty & staff ideas and talents are expanded through professional development and risk taking to improve processes*
- **Climate of Commitment.** *Personal enthusiasm and energy of employees to improve processes*

Note: van der Merwe et al. (2014) Components of Lean Culture: **Engagement**, Awareness, Consistency, & **Accountability**

Organizational Analysis & Development: Assessing & Improving Workplace Climate

- Assessing Workplace Climate
 - Surveys
 - Key informants
- Improving Workplace Climate
 - Change consultant
 - Leadership statements and behaviors
 - Alignment of institutional practices (training, reward system, planning, etc.)

B. Leadership Practices to Implement and Sustain LHE

The ability of leadership practices to support and sustain LHE will depend on:

- Leadership Knowledge of “Implementation Kata” and “Coaching Kata” (Rother, 2009)
- Power of the leader (i.e., university-provided)
- Influence of the leader (i.e., personally earned); Charisma
- Personal and sustained commitment of the leader
- Competition for the leader’s available resources
- Leader stability

Leadership Beliefs and Behaviors: Conventional versus LHE Universities

Conventional Leadership	LHE Leadership
Most university processes are working well (including educational processes)	All university processes can be improved (including educational processes)
Problems are bad and reflect negatively on employees and leaders	Problems are good and provide insights into improving the process that caused them
Leaders know best and provide solutions to problems	Leaders develop employee skills and capabilities to solve problems
Leaders use ad hoc approach to problem solving	Leaders support the broad-based application of LHE problem solving practices
Employees are used effectively to support the university	The skills and capabilities of employees are grossly underutilized

Leadership Reaction to Support and Sustain LHE (1 of 2)

“Another leader initiative – this too shall pass.”

REACTION: Demonstrate LHE is a strategy and culture, not a fad

“We’ve done well, why change if we don’t have to?”

REACTION: Communicate the “burning platform” for change

“Let my unit choose what’s best for us.”

REACTION: Emphasize the synergy of a common strategic approach

“This is just a way to cut costs and jobs.”

REACTION: Commitment to reduce waste, not workforce

“I’ll join when I see that the leaders are on board.”

REACTION: Active participation in LHE training, kaizen, report out

“How can we afford this new program?”

REACTION: Show the hidden direct and indirect costs of bad processes

Leadership Reaction to Support and Sustain LHE (2 of 2)

“Who can lead this?”

REACTION: Invest in release time to develop LHE experts

“My job won’t allow me to be in a 3 day workshop.”

REACTION: Demonstrate LHE as the new strategy/culture through workshop attendance and other LHE activities

“I can’t risk failure in changing my process, or letting someone else change my process.”

REACTION: Create LHE teams, accountability, goals, and expectations across divisional silos and levels of the institution

“Standard work stifles creativity, our most important asset.”

REACTION: Standardized output ≠ Standardized work

REACTION: Emphasize that standardization precedes creativity (surgeons and astronauts standardize based on evidence, then innovate from standardization using evidence)

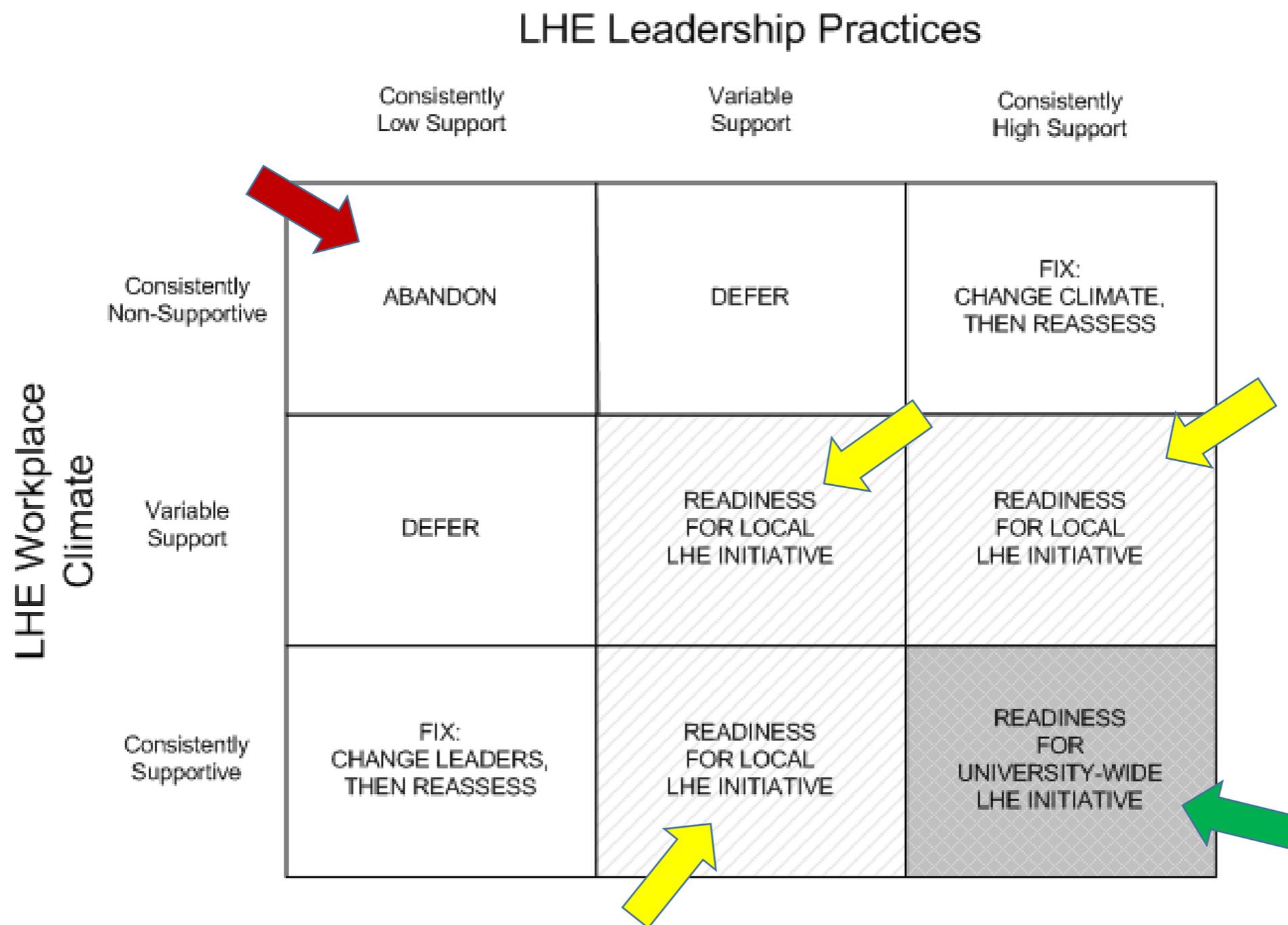
BUT: Will Leaders Support LHE?



- LHE is self-imposed change
- LHE changes (threatens?) the roles of leaders
- Leadership actions and reactions are critical to overcome challenges to the success of LHE
 - Institutional climate neutral/hostile to change will challenge receptivity to LHE
 - Significance of the process to university will challenge willingness to risk the shift to LHE
 - Large number of individuals in/outside the university affected by LHE will challenge why they are all being forced to change

Deciding Whether to Implement LHE

Two Critical Factors Influencing Readiness and Successful Implementation (Balzer, 2010)



Other Institutional Practices

- **Strategic Plan:** Incorporating the LHE philosophy and management system as a key strategic priority for the university
 - Direct the conscious alignment of academic and nonacademic subunit goals with the priorities in the institution's strategic plan
 - Shape other institutional practices (e.g., personnel practices expand LHE professional development and training for all employees)
- **Job Design & Roles:** Substantive changes to job responsibilities of leaders and employees
 - Employees: more autonomy and responsibility over own job; responsibility for continuous improvement
 - Leaders: shift to improvement and coaching kata
- **Other institutional practices** (organizational design & structure, communication practices, etc.)

IV. Conclusions, Questions, & Reactions

- LHE works, many/most LHE implementations fail
 - Causes of failure unknown
- LHE may fail because it is poorly implemented large scale change
- LHE can be successfully implemented and sustained
 - Discipline of organizational development and change can greatly improve LHE readiness and success
 - Seek better alignment of institutional practices with LHE philosophy and management system
- If you can only focus on two institutional practices, start with:
 - Workplace Climate
 - Leadership

Recommendations to Support the Successful Implementation of LHE

HANDOUT:

- A. **General** recommendations for Implementing LHE
- B. Recommendations for Facilitating a **University-Wide** Transition to LHE
- C. Recommendations for Getting LHE Started **Locally**

A. General recommendations for Implementing LHE

- Gather information to understand the university context
- Change behaviors and workplace climate will follow
- Build a Lean community
- Grow your own lean expertise
- Don't lose sight of the big picture
- Focus LHE on “learning by seeing and doing”
- Technology follows an improved process
- Prepare a communication plan
- Maintain realistic expectations
- Publicize your LHE projects

B. Recommendations for Facilitating a University-Wide Transition to LHE

- Seize a crisis to promote LHE
- Establish an office that oversees and promotes LHE
- Hire, train, and promote LHE leaders
- Include LHE in strategic plan, policy deployment, and goal setting
- Focus on cross-functional processes or service streams
- Shift from top-down leadership to bottom-up initiatives
- Make LHE mandatory
- Invite vendors and K-16 partners to adopt LHE principles and practices

C. Recommendations for Getting LHE Started Locally

- Identify one or more LHE champions
- Learn about LHE
- Find a LHE teacher
- Invite broad participation
- Identify pilot projects to demonstrate the benefits of LHE
- Conduct Rapid Improvement Events and immediately implement changes

References



- Abrahamson, E. 1996. Management Fashion. *Academy of Management Review*, 21(1): 254–285.
- Balzer, W.K. (2010). *Lean Higher Education: Increasing the Value and Performance of University Processes*. Boca Raton, FL: CRC Press.
- Balzer, W.K., Francis, D.E., Krehbiel, T.C., & Shea, N. (2016). A Review and Perspective on Lean in Higher Education. *Quality Assurance in Education*, 21, 442-462.
- Hedge, J.W., & Pulakos, E.D. (Eds.). *Implementing Organizational Interventions—Steps, Processes, and Best Practices*. London: John Wiley & Sons.
- Katz, D., & Kahn, R.L. (1978). *The Social Psychology of Organizations* (2nd Ed.). New York: John Wiley & Sons.
- McFillen, J.M., O’Neil, D.A., Balzer, W.K., & Varney, G.H. (2013). Organizational Diagnosis: An Evidence-Based Approach. *Journal of Change Management*, 13, 223-246.
- Myers, P., Hulks, S., & Wiggins, L. (2012). *Organizational Change: Perspectives of Theory and Practice*. Oxford: Oxford University Press.
- Pfeffer, J., and Sutton, R. (2006), *Hard Facts, Dangerous Half-Truths, and Total Nonsense: Profiting from Evidence-Based Management*. Boston: Harvard Business School Press.
- Porras, J.I., & Robertson, P.J. (1992). Organizational Development: Theory, Practice, and Research. In M. Dunnette and L. Hough (Eds.). *Handbook of Industrial and Organizational Psychology*. Palo Alto, CA: Consulting Psychologists Press.
- Rother, M. (2010) *Toyota Kata*. New York: McGraw-Hill Education.
- Scoggin, J.C. (2017). *The Interdependency of Lean Implementation and Organization Development*. Dissertation, The Chicago School of Professional Psychology. Proquest Number: 10263384.
- Stringer, R. (2002), *Leadership and Organizational Climate*, Upper Saddle River, NJ: Prentice-Hall.
- Van der Merwe, K.R., Pieterse, J.J., & Lourens, A.S. (2014). The Development of a Theoretical Lean Culture Causal Framework to Support the Effective Implementation of Lean in Automotive Component Manufacturers. *South African Journal of Industrial Engineering*, 25, 131-144.
- Watkins, M. (2007). Organizational Immunology (Part1: Culture and Change). <https://hbr.org/2007/06/organizational-immunology-part-1>
- Watkins, M. (2007). Organizational Immunology (Part2: Brains and Immune Systems ... and a personal note. <https://hbr.org/2007/06/organizational-immunology-part-2>
- Williams, D.A., Berger, J.B., & McClendon, S.A. (2005). Toward a Model of Inclusive Excellence and Change in Postsecondary Institutions. *Association American Colleges and Universities*.
- Womack, J.P., & Jones, D.T. (2003). *Lean Thinking: Banish Waste and Create Wealth in Your Corporation* (Revised and updated). New York: Free Press.

Thank You!

What Questions do you have for me?

What Reactions would you like to share?

BGSU BELONG. STAND OUT. GO FAR.
CHANGING LIVES FOR THE WORLD.

