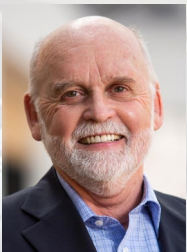


Digital Transformation Principles

Driving Journeys Toward Educational Resilience



Ron Murch

Senior Instructor Emeritus,
Haskayne School of Business,
University of Calgary, Canada



Dr Peter Chatterton

Independent Consultant –
Digital Innovation & Transformation,
UK



Michael Barr

Chief Information Officer
Southern Alberta Institute of Technology
(SAIT), Canada

A Snapshot of Our Session

(1) Innovation, Change and Transformation

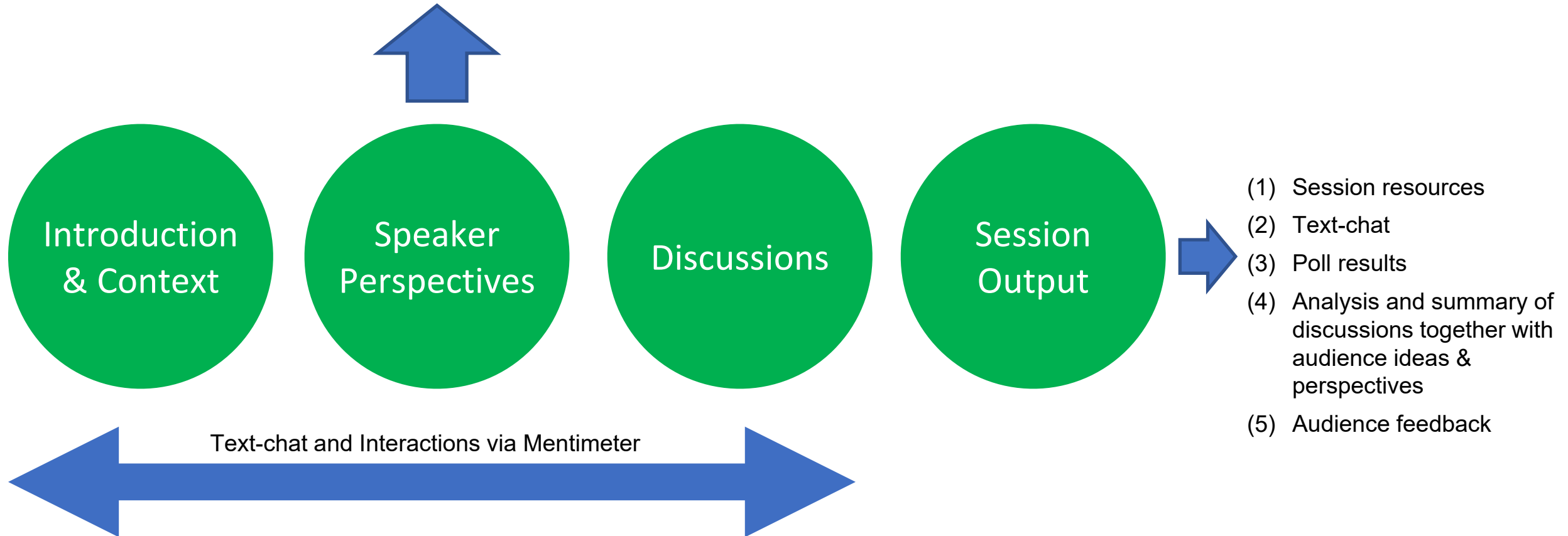
A Practitioner and Scholarly Perspective

(2) Guiding Principles for Digital Transformation of Teaching, Learning & Assessment and Institutional Preparedness

Lessons from the UK's National Digital Transformation Programme

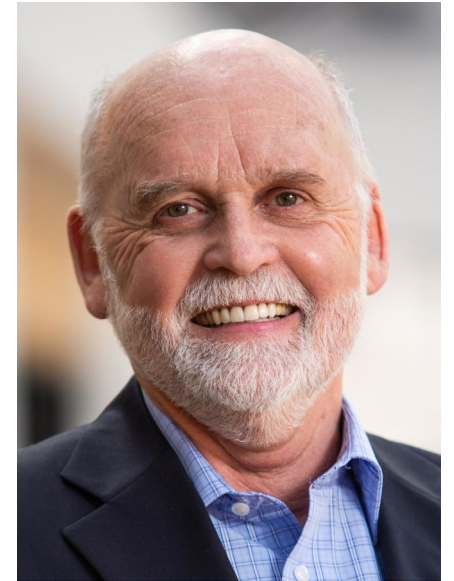
(3) Commitment and Motivation to Drive Educational Resilience

A Strategy Perspective from a Senior Leader



Speaker Bio (1) – Ron Murch

- Retired educator from the Haskayne School of Business, University of Calgary
- Taught and directed B.Comm., MBA, EMBA and Executive Leadership Programs
- Visiting faculty in UK, New Zealand, Hong Kong
- Information Technology, Executive Leadership, Management of Technology and Innovation
- B.Math., MBA
- Received awards for teaching excellence
- Member of the CIO Association of Canada



Speaker Bio (2) – Dr Peter Chatterton



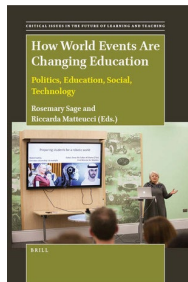
Independent Consultant – Digital Innovation & Transformation

- Visiting Professor - University of Hertfordshire (Blended Learning Unit)
- Founder / board member of the (virtual) Automotive College
- Consultant to the European Commission
- Associate Consultant - Atkins Management Consultants

Key member of multi-million £s UK Government investment in Digital Transformation

working through educational agencies (Jisc, HEA, LFHE, HEFCE, HEFCW, QAA, Becta):

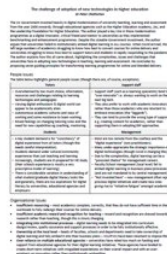
- **Roles:** *Consultant, Critical Friend, Mentor, Evaluator, Benchmarking specialist*
- **Working with** *universities/colleges (academics, students, management, administrators), employers (inc SMEs) and employer bodies*
- **Specialisms:** *technology-enhanced learning, digital innovation & change management, student employability, employer engagement, students as change agents / entrepreneurs, HE-FE-industry partnerships, flexible curriculum, digital literacy*



How World Events are Changing Education

Chapter: The Rise and Rise of Digital Learning in Higher Education

Brill



The challenge of adoption of new technologies in higher education

CMCE Consulting Research Conference

Centre for Management Consulting Excellence



Business communications: *Rethinking your professional practice for the post-digital age (co-author)*

Routledge



Technology for Employability Toolkit

Jisc



Technology for Employability: *Study into the role of technology in developing student employability*

Jisc



Industry 4.0: *Implications, Issues and Opportunities for Higher Education*



Digital 3.0 in Higher Education: *IT Departments at the vanguard of digital leadership and disruptive innovation*
Atkins Management Consultants



QAA Flexible Curriculum Toolkit

QAA (Quality Assurance Agency)



Eight lessons from the private sector for universities investing in technology-enhanced learning

HE Efficiency Exchange



Financial Times Management Report: *Information Management in the Oil and Gas Industry: A New Vision for Productivity and Safety*

Financial Times Business Information

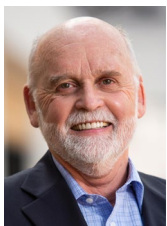
Speaker Bio (3) – Michael Barr

- 28 years of experience as an IT practitioner
 - 16 years of that as Director and CIO
 - Five years of that in K-12, Eight in HE
- Leading digital transformation (DT) initiatives for 19 years
- Doctoral candidate – University of Bath, UK in Higher Education Management
 - Area of research: DT; Teaching practices; Motivation
- Memberships and board involvement in CIO and HEI consortiums at the provincial and federal level



Innovation, Change and Transformation

A Practitioner and Scholarly Perspective



Ron Murch

Senior Instructor Emeritus, Haskayne School of Business, University of Calgary, Canada

Driving Digital Transformation Toward Educational Resilience

You can't get there from here!

Start with Institutional values, culture, and strategy.



What are we really talking about?

- Conference theme? (DT and Educational Resilience)
- Do we need definitions? (probably a few key ones)
 - Resilience
 - Transformation
 - Innovation
- I'll know it when I see it!
 - If I hadn't believed it, I wouldn't have seen it.
- The digital strategy and the institutional strategy must be co-aligned and will co-evolve.



Digital Transformation and Educational Resilience in HEI

- Digital Transformation (DT) is a process or journey.
- **There is no end! If you get it right, this is both the biggest benefit and the biggest challenge.**
- The result of DT in HEI is a behavioural transformation that embeds a capacity for continuous, positive innovation enabled by digital technologies and collaboration throughout the institution
- There are helpful, proven dynamics from the worlds of business and behavioural psychology to encourage the success of innovation adoption and diffusion.

FOOD FOR THOUGHT

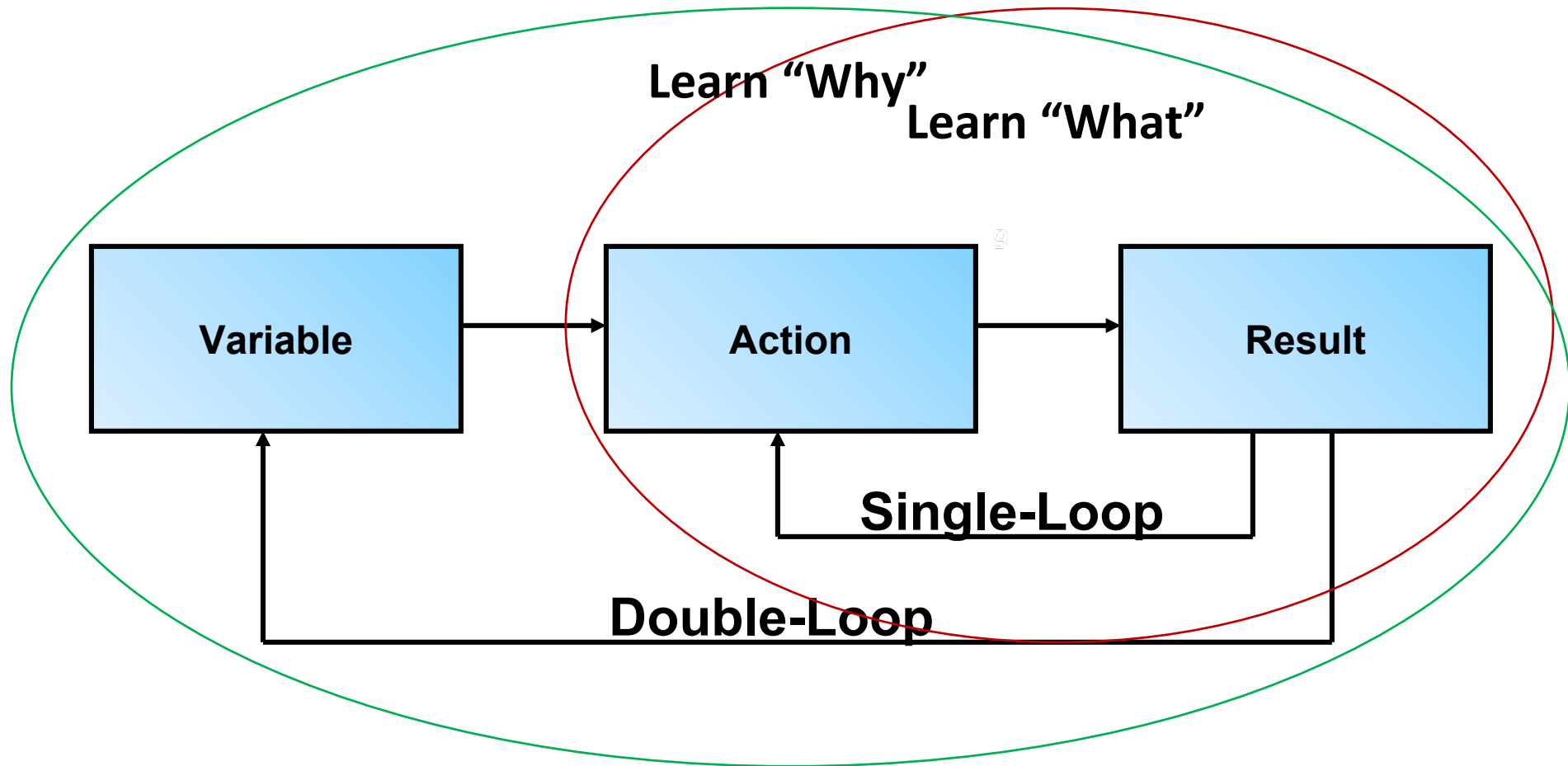
It must be remembered that there is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system. For the initiator has the enmity of all who would profit by the preservation of the old institution and merely lukewarm defenders in those who would gain by the new ones.

Machiavelli, "The Prince", 1513

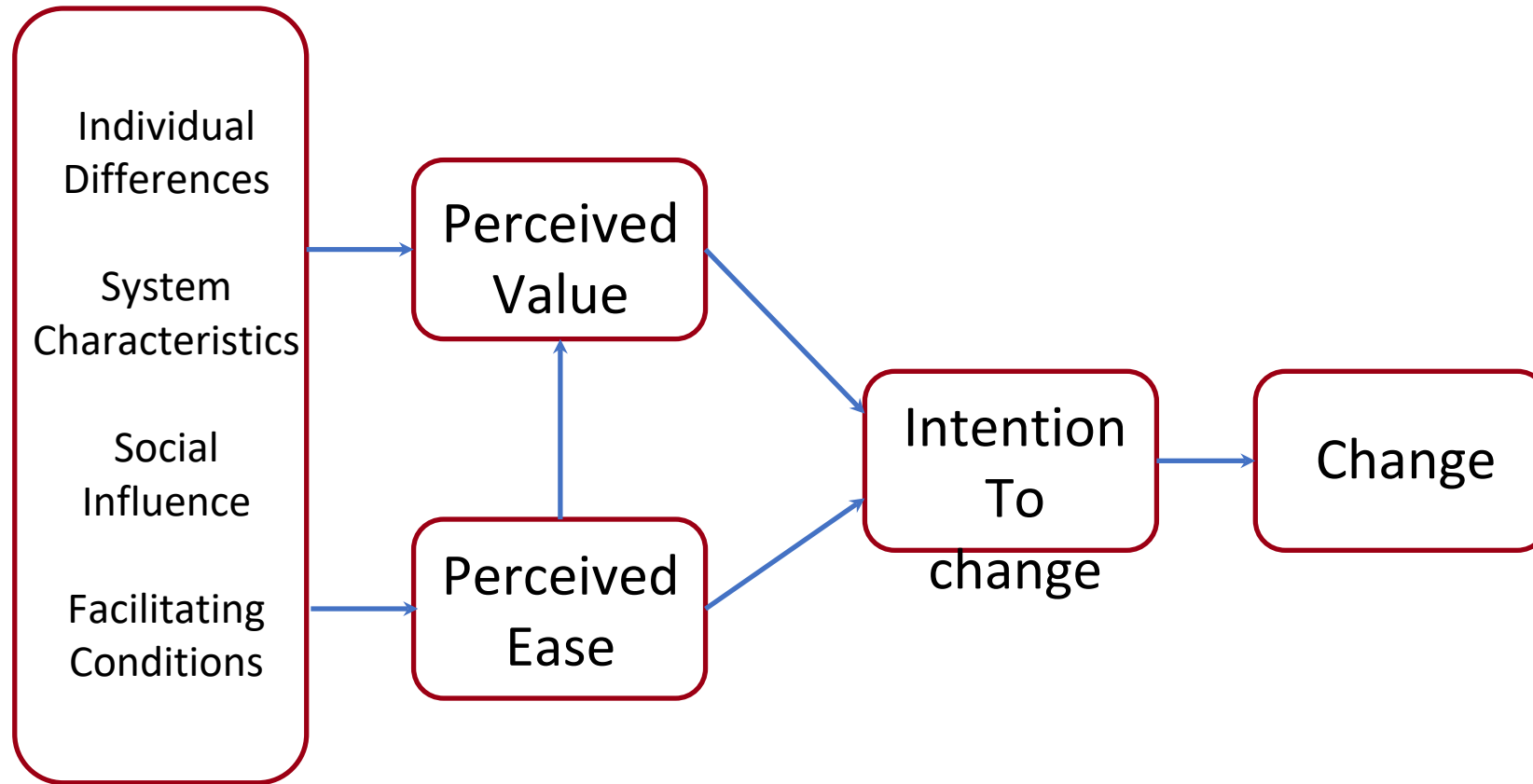
FUBINI'S LAW

- People initially use a new technology to do what they are already doing – only better.
- Then, they gradually begin to use the technology to do new things.
- These new things change the ways we live and work.
- The new lifestyles and workstyles change society and eventually change technology.

Single-loop and Double-loop Learning



Change Isn't Easy



Adapted from Viswanath Venkatesh and Hillol Bala, "Technology Acceptance Model 3 and a Research Agenda on Interventions," *Decision Sciences* (2008), 39(2), 276

Speaker Perspective (2)

Guiding Principles

for

Digital Transformation of Teaching, Learning & Assessment
and Institutional Preparedness

Lessons from the UK's National Digital Transformation Programme



Dr Peter Chatterton

Independent Consultant – Digital Innovation & Transformation, UK

Institutional Digital Transformation – a focus on 2 key elements



**Digital transformation of
teaching, learning &
assessment**



**Institutional
“Preparedness”**

Key Lessons Learnt from UK's multi-£m Investment in Digital Transformation of HE

Problems of complexity, uncertainty and rapid change
(external & internal)

Too much innovation and insufficient embedding / scaling-up

Complex challenges not addressed

Insufficient programme performance goals
(sector, institutional and staff)

Insufficient leadership commitment

Key Lessons Learnt from UK Covid-lockdown

“Slow adopters”
need help with
visualising &
experiencing good
digital learning

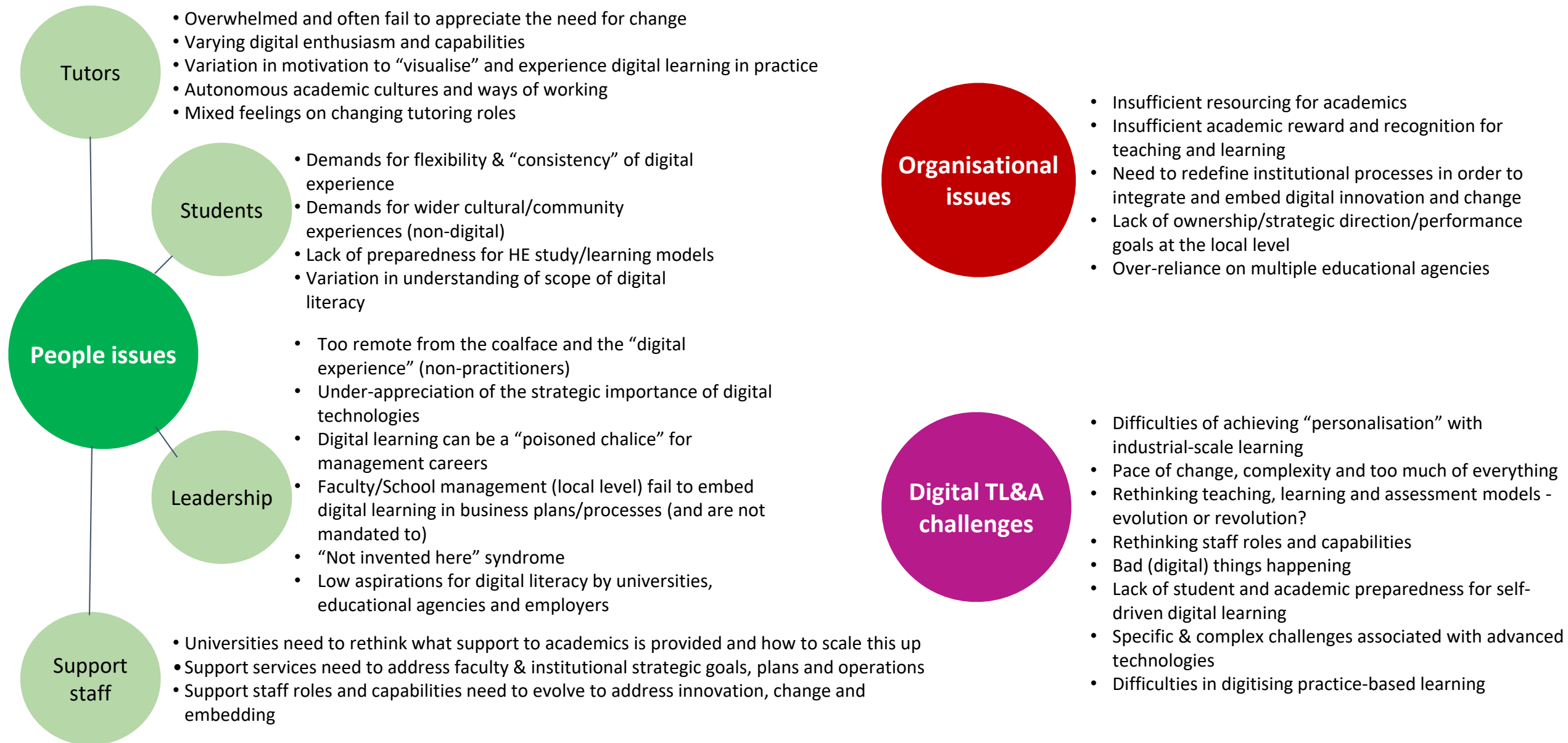
Need for leadership
to anticipate, address
and resource
challenges

Balance between
“stick” and “carrot”
change approaches
needs to be better
defined long-term

Support for Digital
Learning needs to
embrace faculty goals
and plans

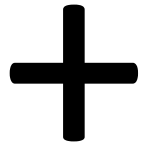
Need to embrace
QER
"Quality", "Efficiency"
& "Responsiveness"

Challenges in the Adoption of Digital Learning in HE



Guiding Principles for Digital Transformation of TL&A

Build on and evolve established and evidence-based pedagogic models



Balance synchronous and asynchronous approaches

Adopt “assessment for learning” approaches

Adopt longitudinal approaches to student academic, personal and professional development

Future-proof flexible curriculum design

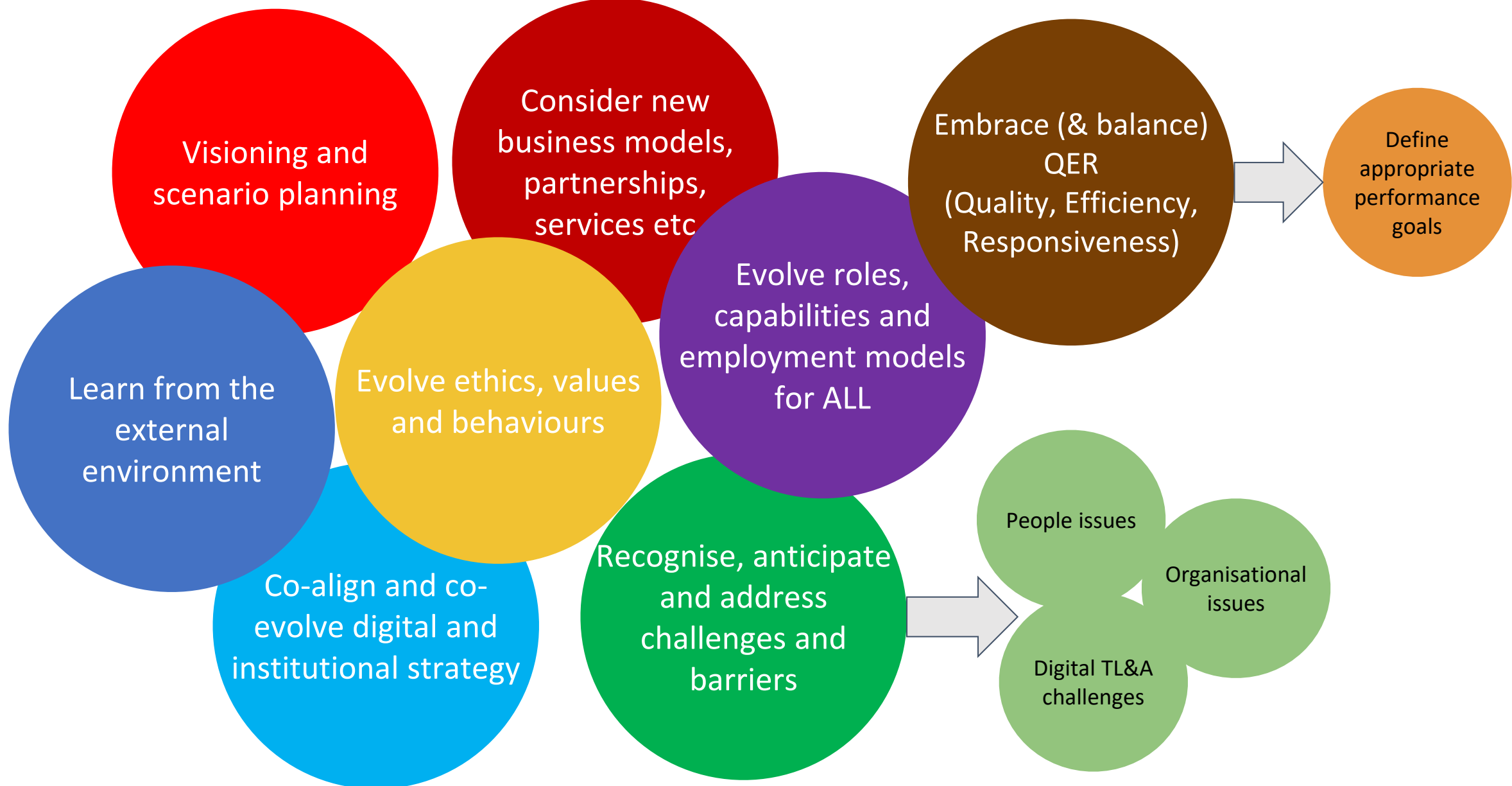
Adopt high levels of communications, engagement and community-building

Adopt DIY approaches to content creation

Focus on QER (course Quality, Efficiency and Responsiveness)

+++ radical innovation??

Guiding Principles for Institutional “Preparedness”



Speaker Perspective (3)

Commitment and Motivation to Drive Educational Resilience

A Strategy Perspective from a Senior Leader



Michael Barr

Chief Information Officer at Southern Alberta Institute of Technology (SAIT), Canada

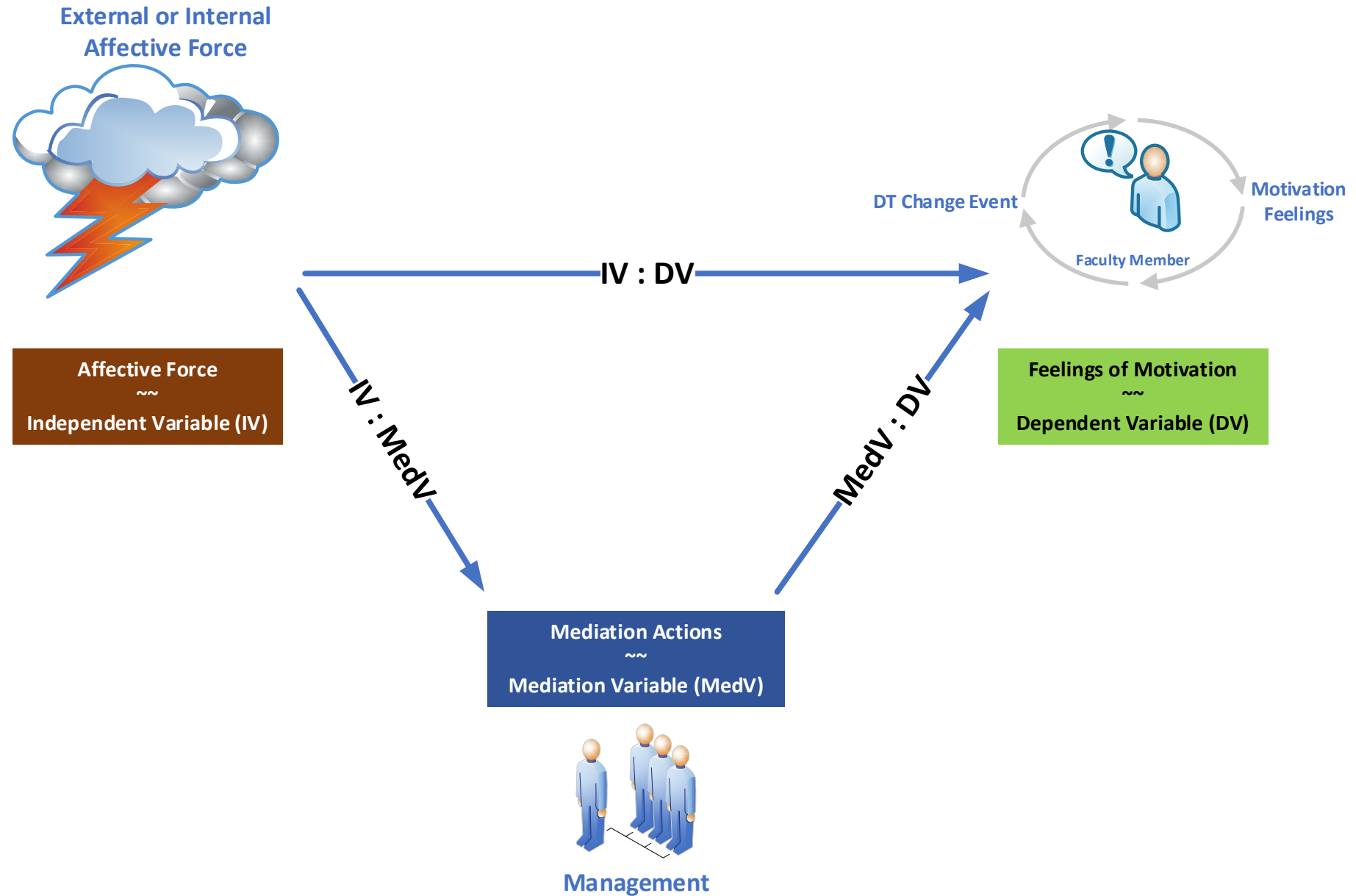
Leadership and Motivation Enable Resilience

- Don't get too focused on technology as the solution: Keep in mind that 80% of any solution is people and process, it's typically 20% that's the technology
- How do you view DT? Journey; Outcome; Relationship
 - The way in which you view it, influences how you respond, i.e., your actions or utterances
- Bottom-up change is desirable but requires senior leadership support and sponsorship if it is to have a chance of succeeding
- Teaching faculty motivation is critical to the success of DT initiatives
- Motivation can be analyzed through questions:
 - Is the task or thing I have to do understood?
 - Can I do it?
 - Am I set up for success?

Leadership and Motivation Enable Resilience

- Forces outside of the DT initiative (IV) that impact on teaching faculty (DV)
- Management (MedV) and IT governance (MedV') as a mediating force between the two
 - Management as a mediating force between the two
 - IT governance as a mediating force between the two
 - Strategic planning as a mediating force between the two
- The phenomenon I am researching: DT-motivation-affective forces (see diagram)
- Do significant or interesting relationships exist within the phenomenon?
- Can we develop an instrument to assist with strategic planning with a specific focus of addressing motivation issues that might impact the implementation of DT change initiatives such as changes to teaching practices? This is a key component of a successful strategic plan.

DT-Motivation-Affect Phenomenon



In Summary

- Student and faculty requirements are increasingly complex
 - **Student support** processes, and the underlying technology, must continue to evolve to ensure continued relevancy
 - Increasing pressure to embed student supports into **teaching practices** – support this via AI?
- Digital transformation change initiatives are complex
- The leadership skills you have used in the past might not get you to the future
- Are you being honest about your institutional change capabilities?
- Be aware of:
 - **Underestimating** the complexities involved
 - **Overestimating** your management skills

Discussion

Comments?

Questions?

Perspectives?

Ideas?

Speaker Contact Info



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