

# **Project Controls Expo – 22<sup>nd</sup> November 2018**

## **Melbourne Cricket Ground**

**Integrating Knowledge Management with  
Project Management for better performance**

Vittal Anantatmula

## Vittal S. Anantatmula

Professor  
Western Carolina University

- ❖ scholarly publications (>60)
- ❖ author of eight books
- ❖ a director of the PMI-GAC
- ❖ taught at:
  - Western Carolina University
  - Keio University, Japan
  - Embry-Riddle Aeronautical University
  - George Washington University
- ❖ consulting experience
- ❖ editorial board member of several journals



# trends

---

- present economy distinguishes itself from earlier ones
  - the size of knowledge base,
  - rapid pace of innovation, and
  - the technological advances
- challenges of these new trends
  - outsourcing
  - virtual teams

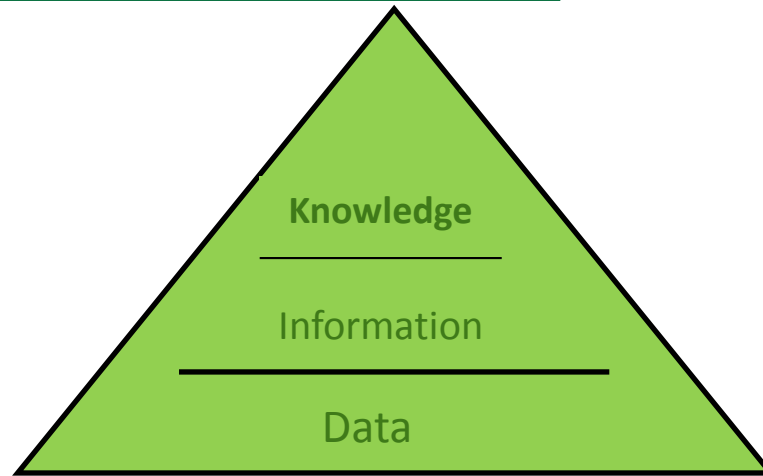
# issues

---

- if a long-term employee leaves the organization, will the organization miss him? and his experience?
- does your manager know what you know?
- how is innovation accomplished in your workplace?
- how often do you share your knowledge with your colleagues?
- how much do you know what your colleagues know?

# knowledge hierarchy

---



## data

facts, specifically numerical facts collected together for reference or information

## information

communication of knowledge or news of some fact, subject, or event; when used by someone to solve a problem, information in turn becomes personal knowledge (tacit knowledge)

# knowledge

---

- deriving knowledge from information requires human judgment, and is based on context and experience.
  - therefore, knowledge is associated with people.
- ironically, knowledge will remain dormant, and not very useful, until it is reflected in action.
- knowledge is the only resource that increases with the use.

# knowledge and learning

---

- learning is associated with acquiring knowledge, which is reflected through a change in mindset.
- learning is a constant process of reorganizing and interpreting experience
- individual learning is characterized by thinking, personal experience, needs and motives, interests and values, level of difficulty of the task at hand, and manifestation of behavioral changes.

# organizational learning

---

## Individual Learning

Changes in individual behavior through thinking, personal experience, needs and motives, trial and error, and reflection

## Bridge

Communication  
Transparency  
Integration  
Transformation

## Organizational Learning

Changes in collective knowledge, value base, and behavior through collective reflection, which reflects through improved decision making



# project and knowledge

---

- project is a new **time-bound** effort that has a definite beginning, definite ending with several related and/or interdependent tasks to create a unique product or service
  - project is usually associated with uncertainties and unknowns
- knowledge is derived from thinking and can be understood as insights derived from information and experience, which remain dormant until it is reflected through action

# PM and KM

---

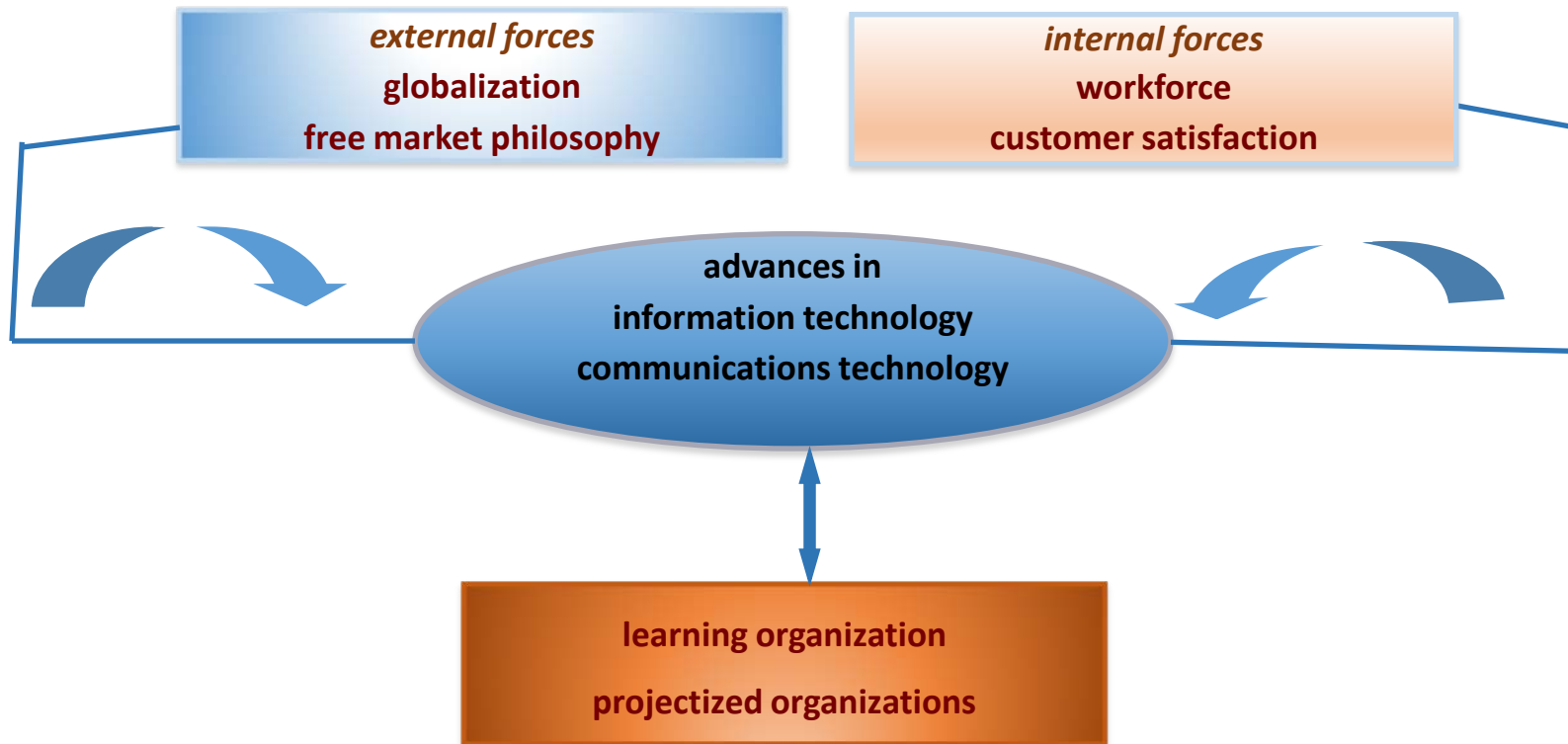
- project management
  - concerned with completing a project on time, within budget, and according to the project specifications while satisfying both the customer and project team expectations
  - *utilize resources effectively and efficiently*
- knowledge management
  - the primary focus is to utilize information technology and tools, business processes, best practices, and culture to develop and share knowledge within an organization and to connect those who possess knowledge to those who need it.
  - *capture and leverage knowledge*

# project and knowledge

---

- project
  - *performance focus*
  - new by definition
  - adopting new is associated with change in behavior
  - planning and control
- knowledge
  - *innovation focus*
  - learning something new
  - learning new is associated with change in behavior
  - systems thinking

# knowledge economy



# outcomes of KM

---

- results in improving:
  - communication
  - collaboration
  - productivity
  - employee skills
- ultimately, KM leads to:
  - better decision making
  - better customer satisfaction
- it is not easy to tie KM with business results directly

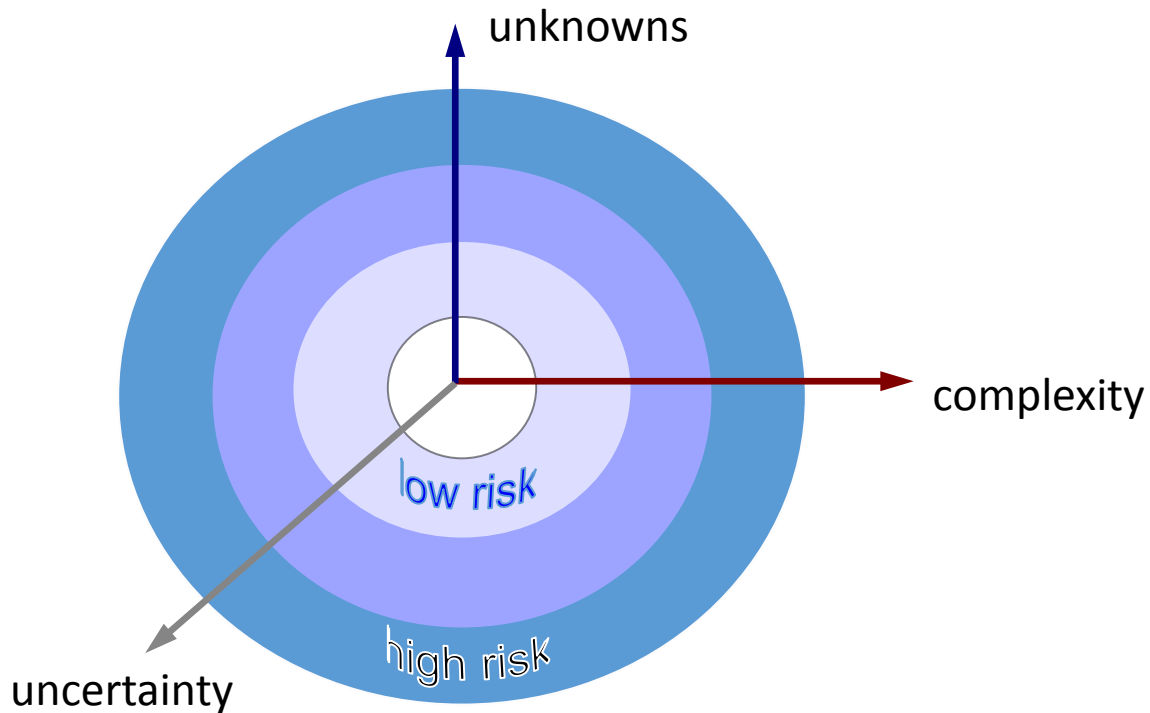
# difficulty with projects

---

- unique
  - defined start and end
  - transient teams
  - little precedence
  - unknowns
  - changes in practices
  - risky
  - complex
  - uncertain
  - revolutionary improvements
- 
- moreover, project manager often/usually has
    - little control in team selection of the project
    - no formal authority over people assigned to the project team
    - team members are assigned to multiple projects

# project risk drives the need

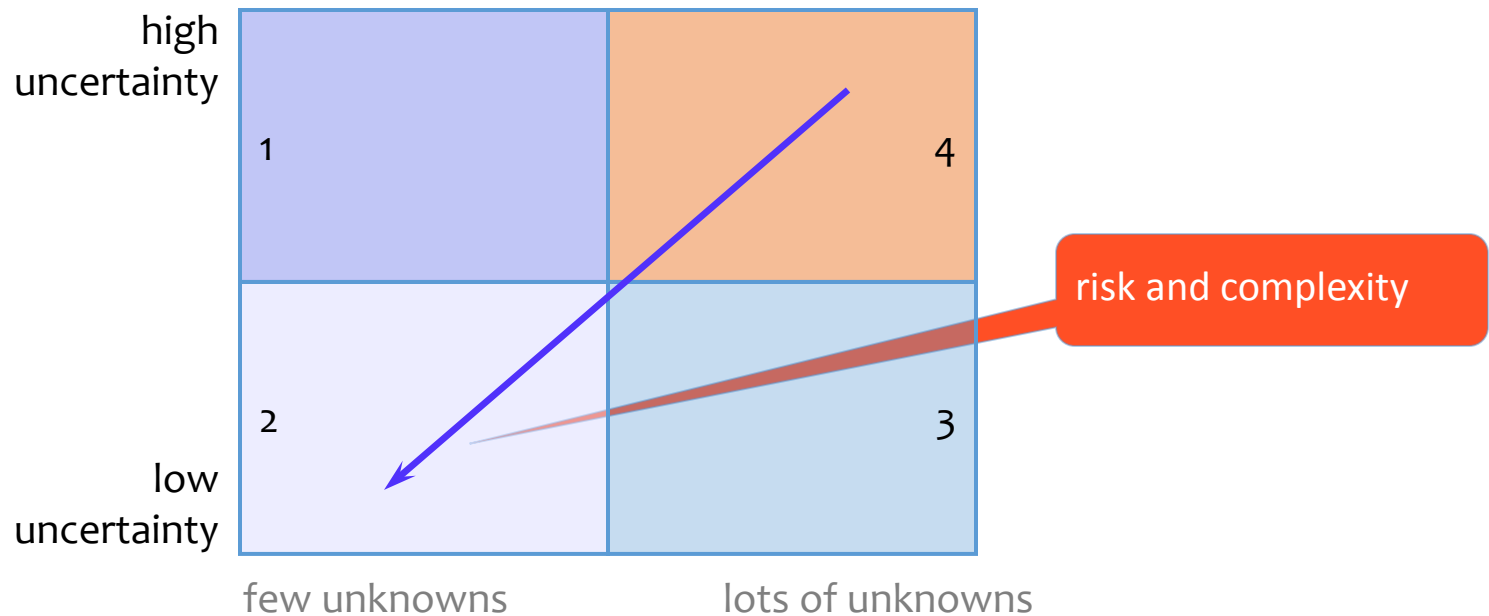
---



as you move away from the center, the need for managing knowledge becomes more important

# influencers of KM

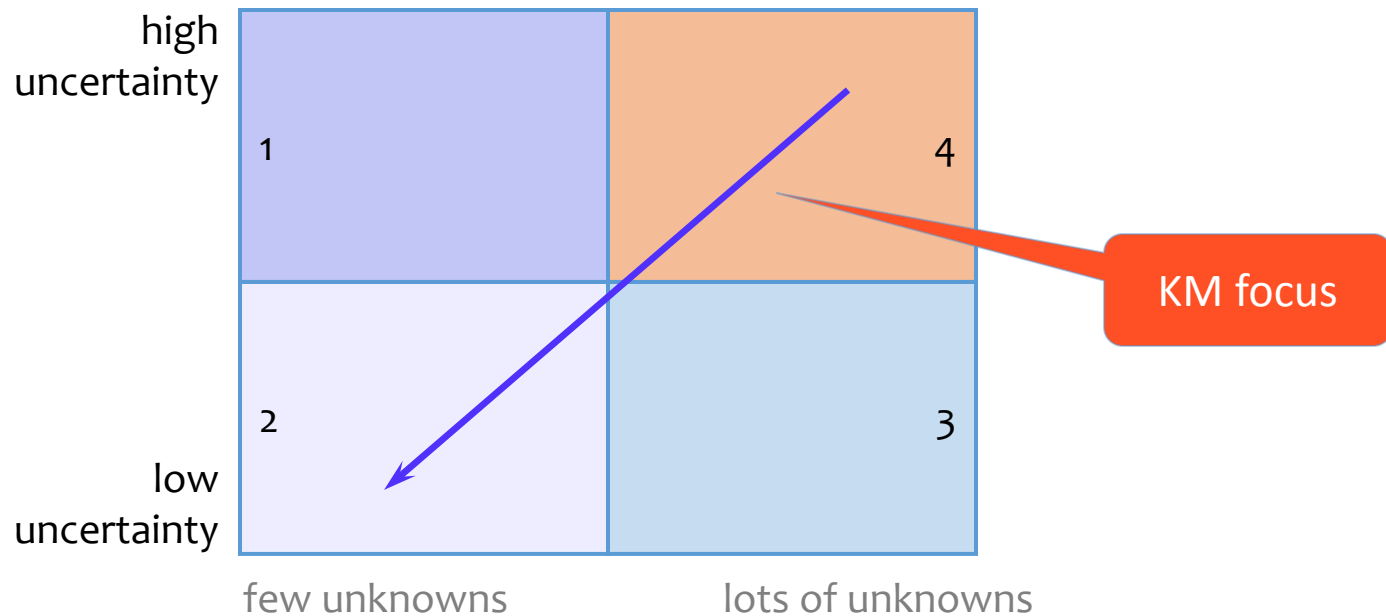
- 2 — project processes and outcomes are certain
- 4 — uncertainties can impact project processes and outcomes



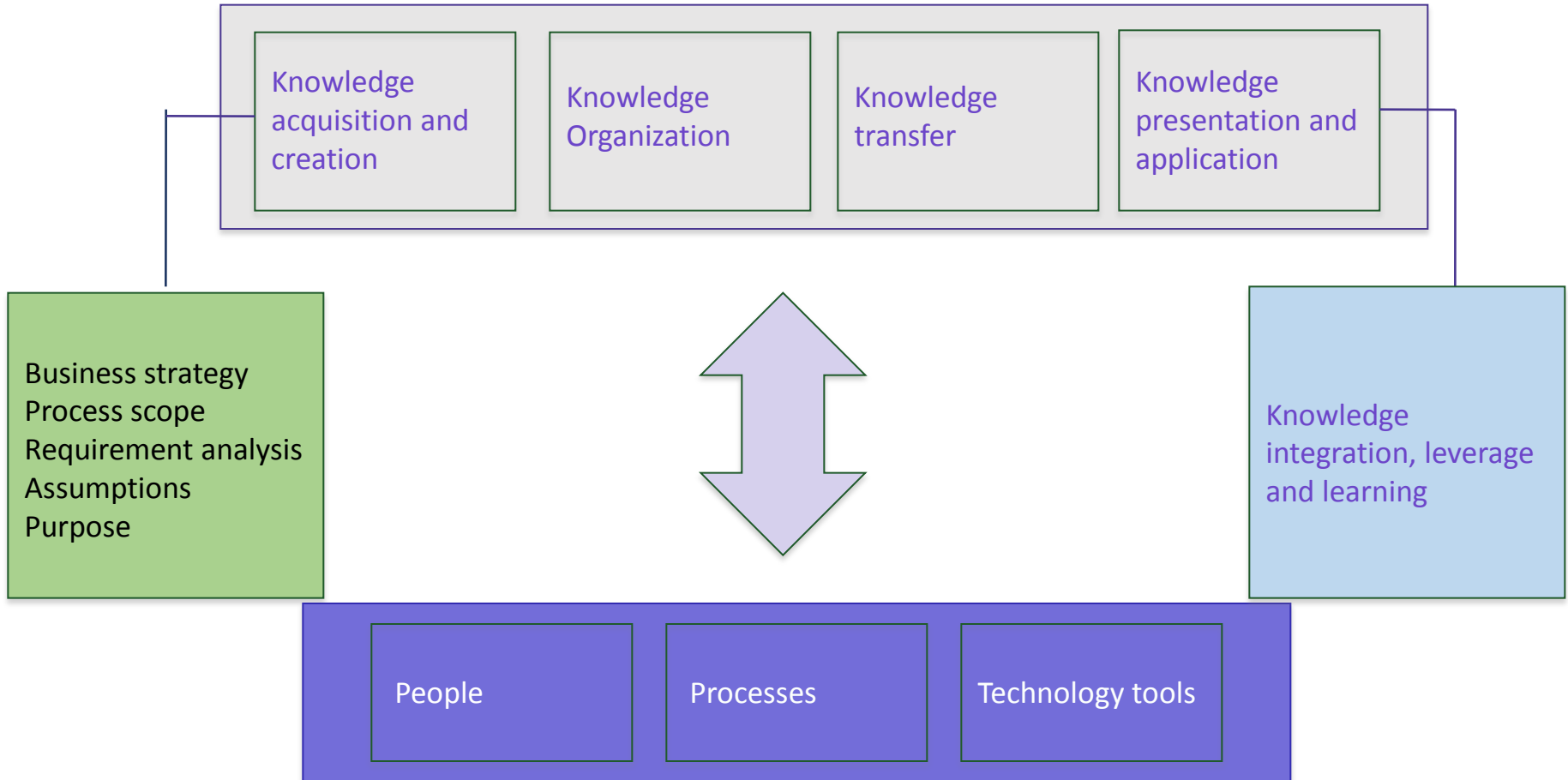


# influencers of KM

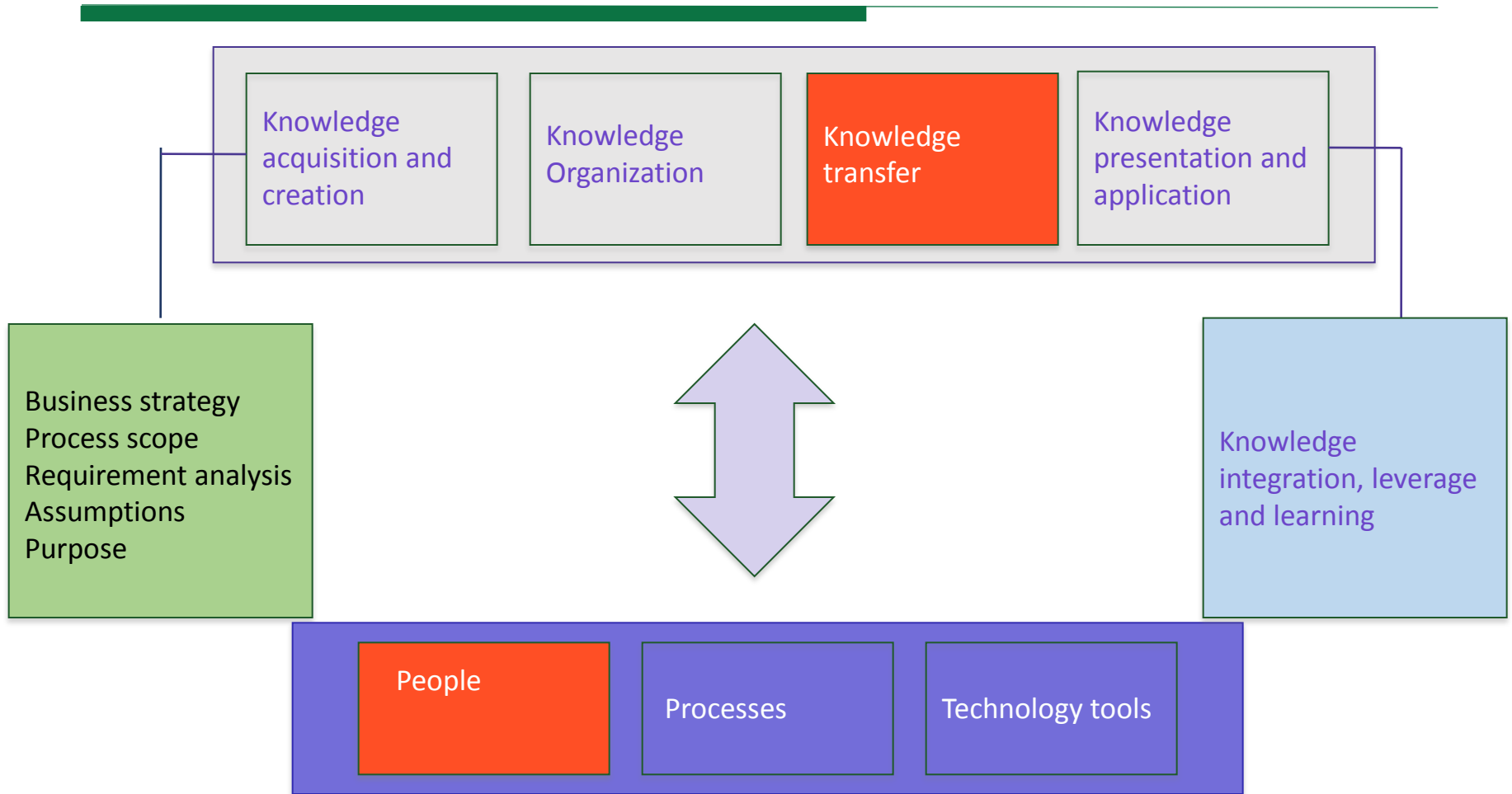
- 2 — predictable, low innovation - KM need is low
- 4 — unpredictable, high innovation - KM need is high



# managing knowledge



# managing knowledge

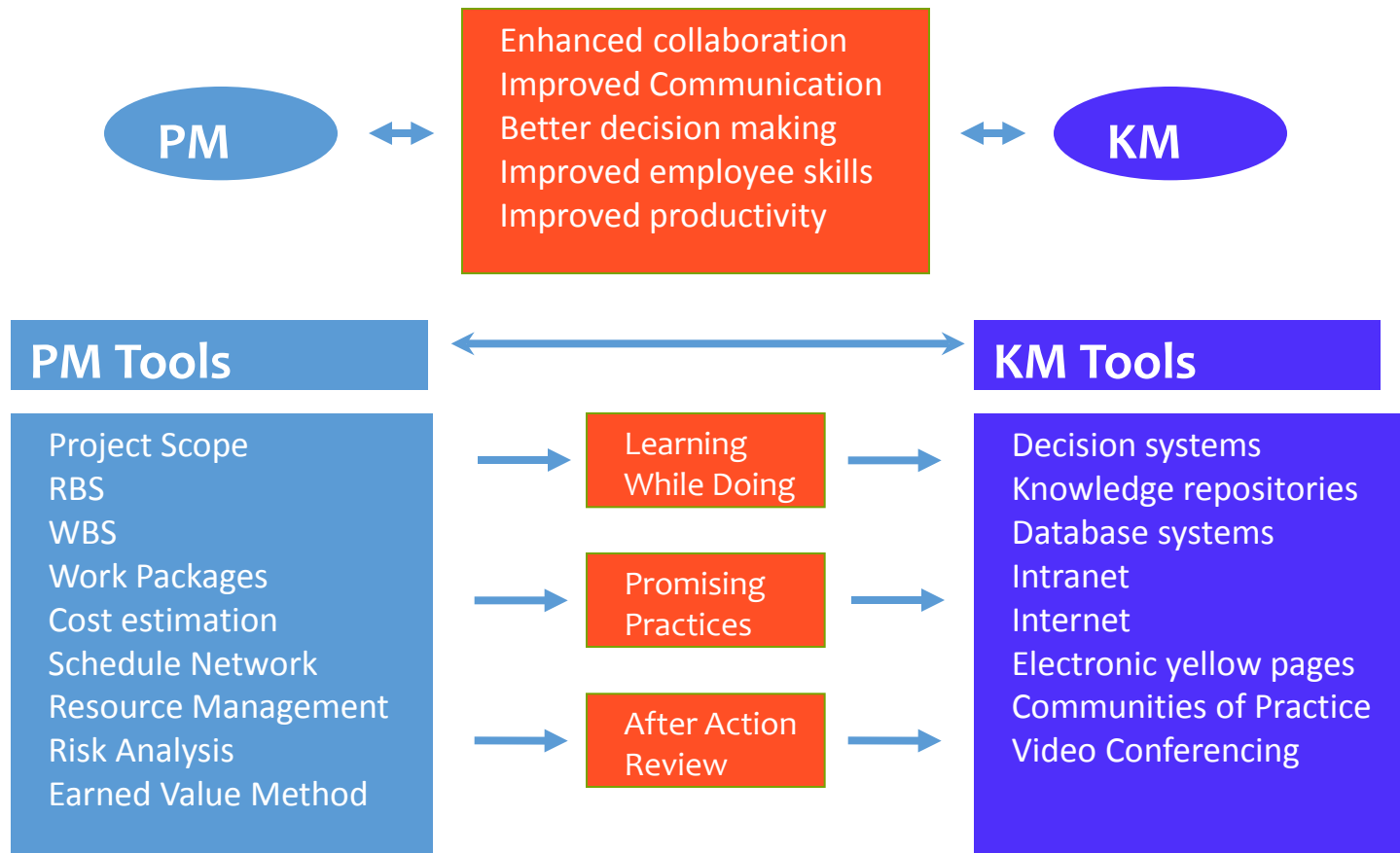


# integrating PM and KM

---

- applying of KM principles and processes designed to make relevant knowledge available to the project team
- creating and integrating knowledge, minimizing knowledge losses, and filling knowledge gaps throughout the project duration
- capturing lessons learned throughout the project
- applying lessons learned from the past projects
  - lessons learned should cover both successes and failures

# integration of tools



# tools are not enough

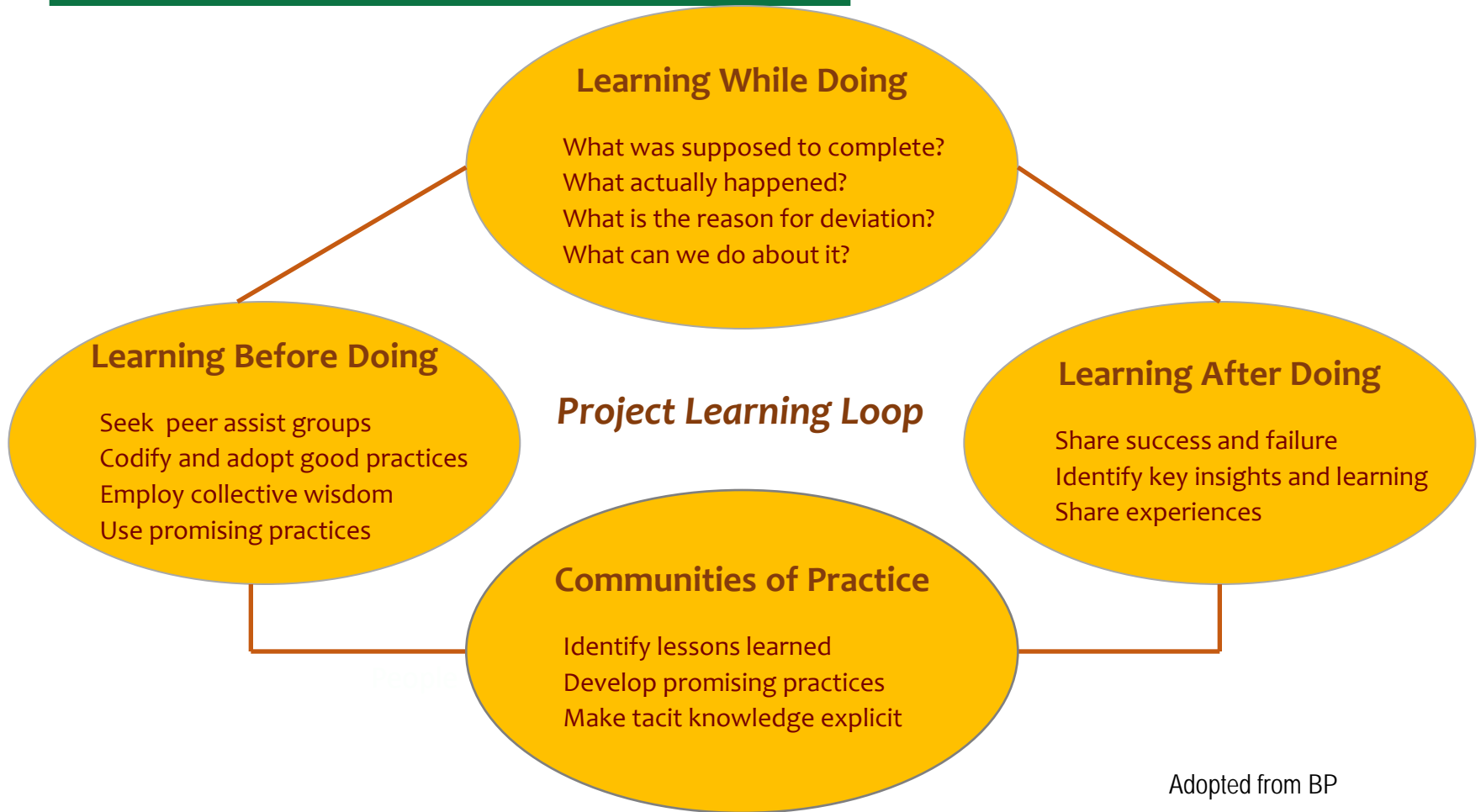
---

- people can conversion from information to knowledge
  - humans are slow as compared to IT systems
- it is not the tools in use or the work being performed that is the largest contributor to project failure;
  - rather it is project leadership that fails and is manifested in the project work

# team process



# learning process



Adopted from BP



# benefits

---

- more knowledge - minimized risk
- realistic
  - project plan
  - project estimation
  - project schedule
- less need for contingencies
- efficient project integration

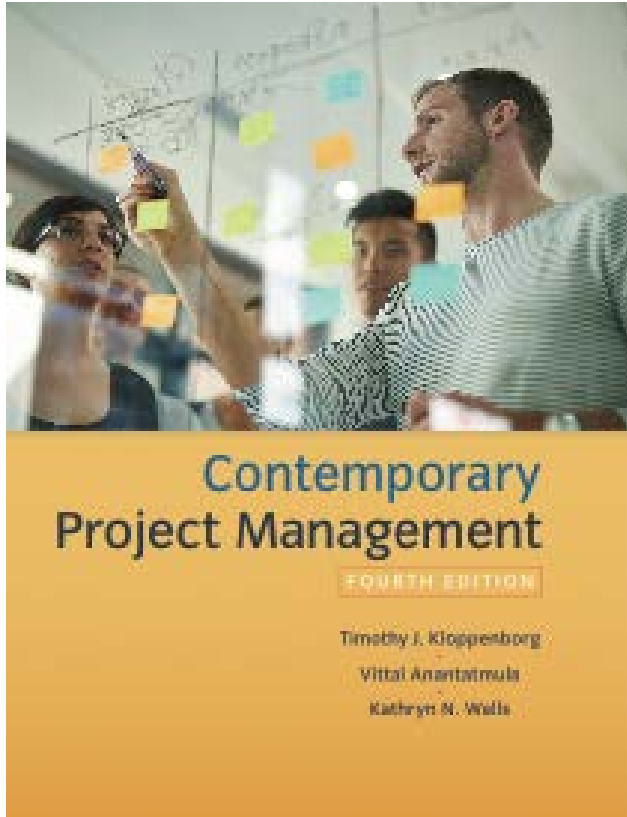
# benefits

---

- transition of project elements into processes
- better conflict resolution
- better team performance
  - improved morale
  - improved job satisfaction
- better rationale for terminating runaway projects

# never stop dreaming..

---



*All our dreams can come true,  
if we have the courage to pursue them*

Walt Disney

# questions?

---



# thank you

---

