

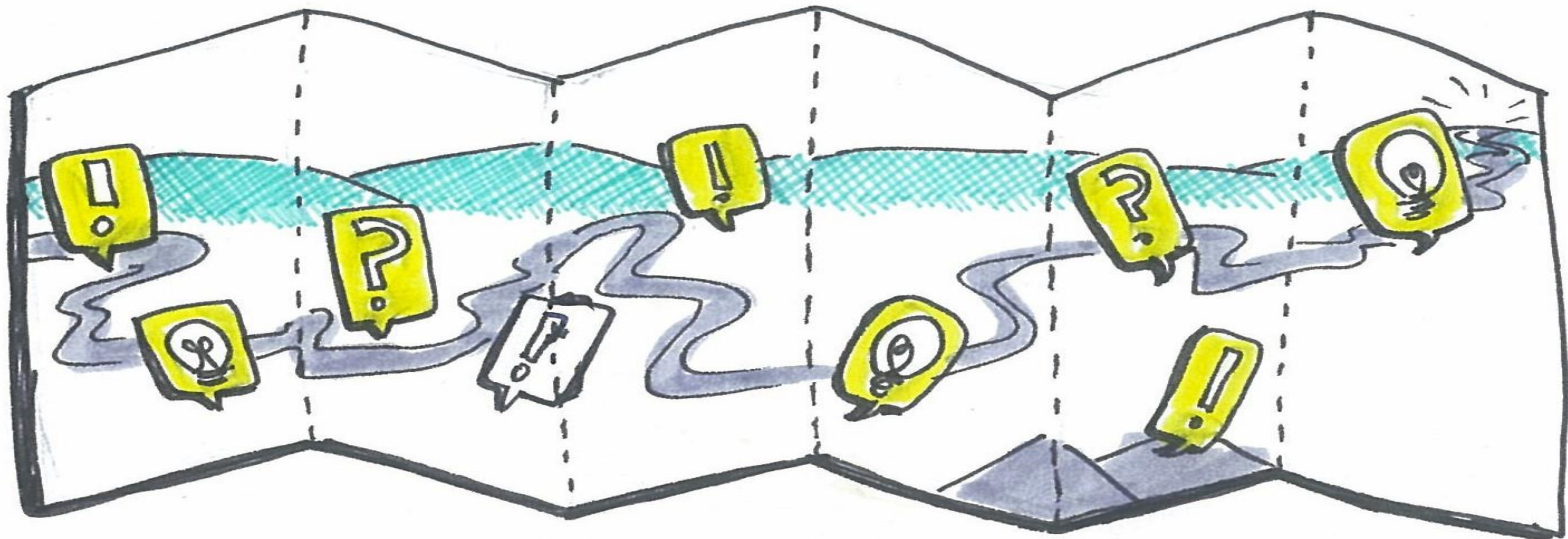


The supporting *African* role of Knowledge Management in Research Organisations

Madelein van Heerden

Roadmap

- What is knowledge management (KM)?
- The Knowledge Life Cycle (KLC)
- KM tools & techniques to support the KLC
- Where to start?!?

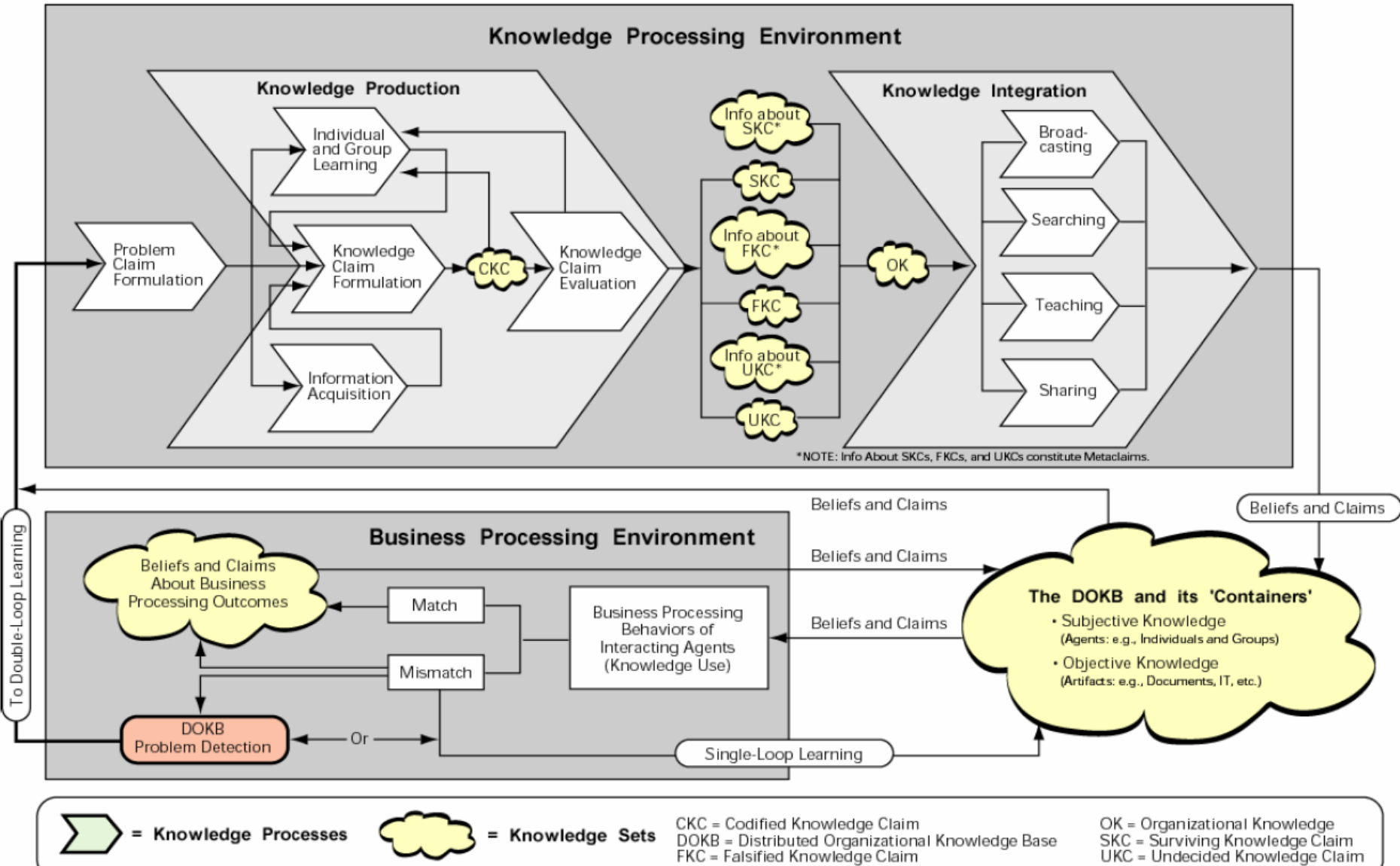


What is Knowledge Management (KM)?

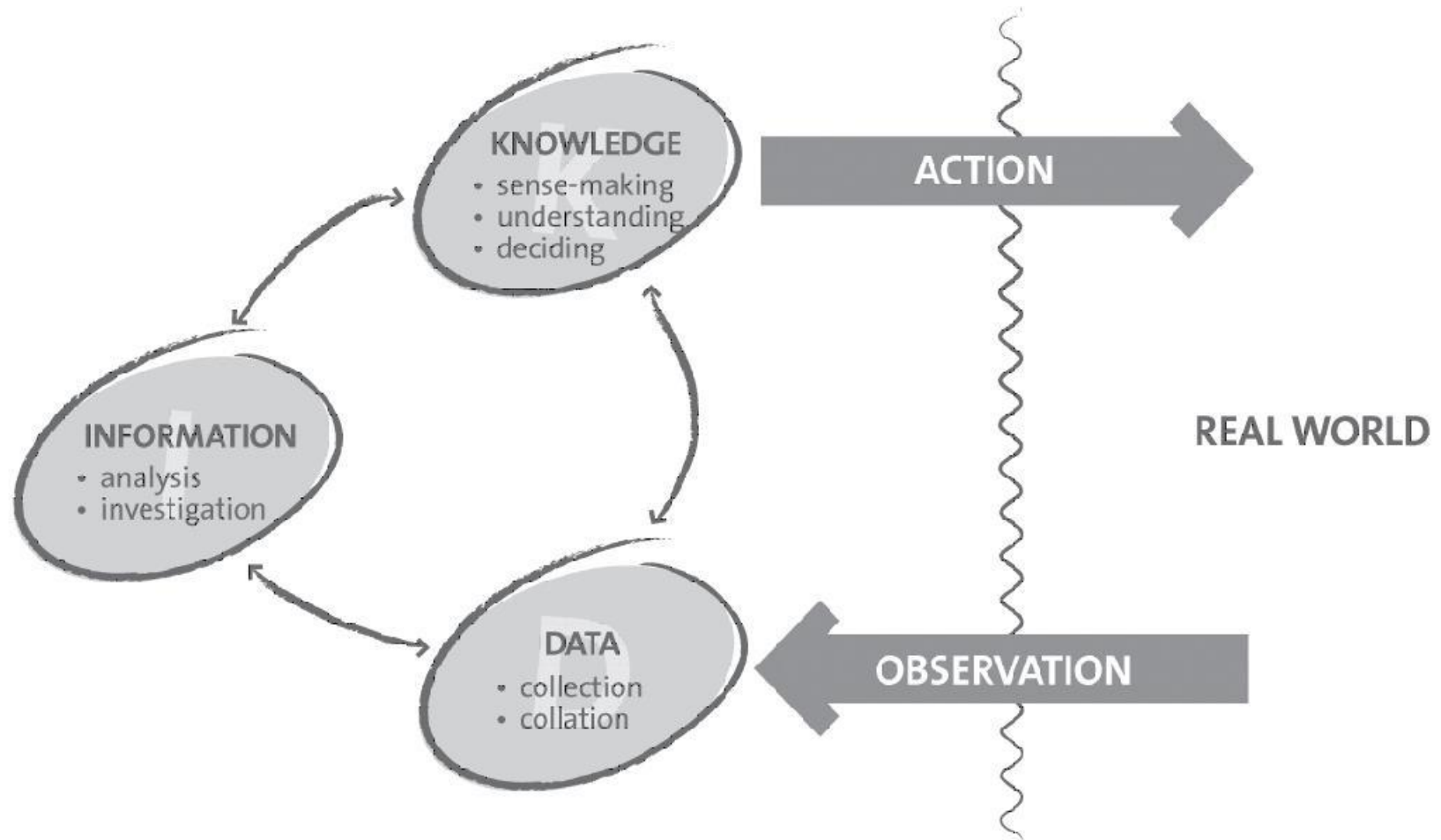
- KM is an organisation's ability to leverage its collective knowledge to meet its strategic objectives.
- KM is about the creation, sharing and flow of knowledge within an organisation through events, knowledge bases (such as wikis, blogs, portals, best practice guides, etc.), communities of practice or shared spaces where groups can exchange information and have conversations.
- KM also entails the ability to learn from, and with, each other to build strategic capabilities and realise strategies.
- A KM strategy is simply a plan that explains how an organisation will use selected KM tools and techniques to better manage knowledge important to the business objectives.



The Knowledge Life Cycle (KLC)

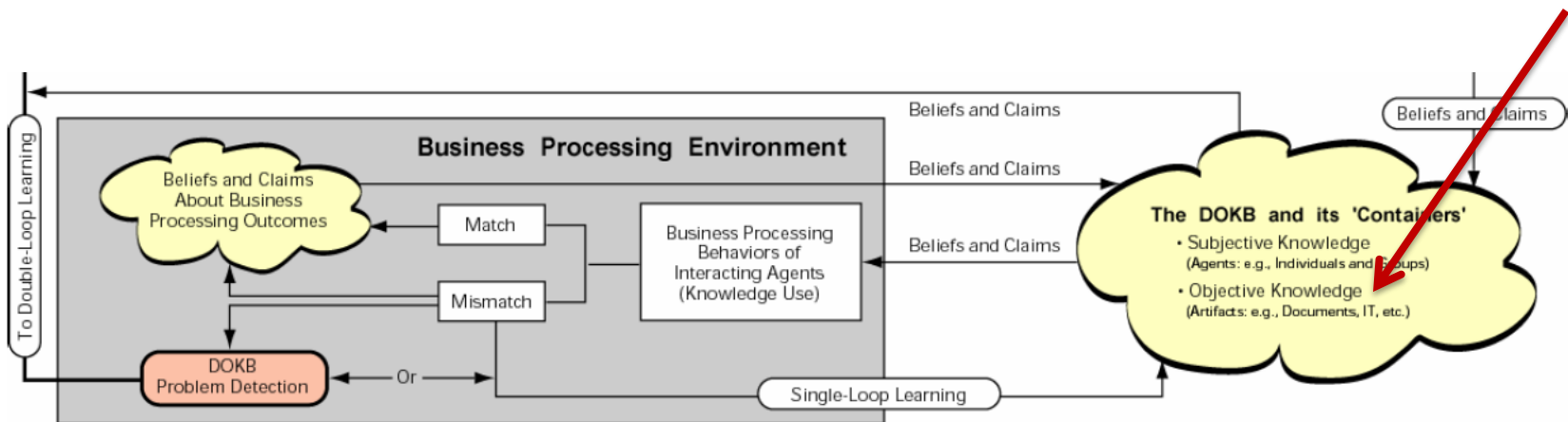


No KM without information management!



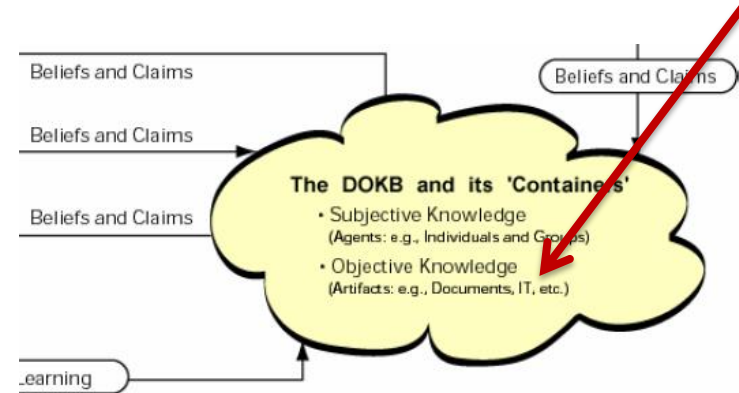
Organisational knowledge base

- Objective knowledge
 - Publications, documents, research data sets, intellectual property, IT systems, business processes, etc.
- Requires a shared repository
 - Reusable in a consistent and repeatable manner
 - Discoverable, visible and accessible

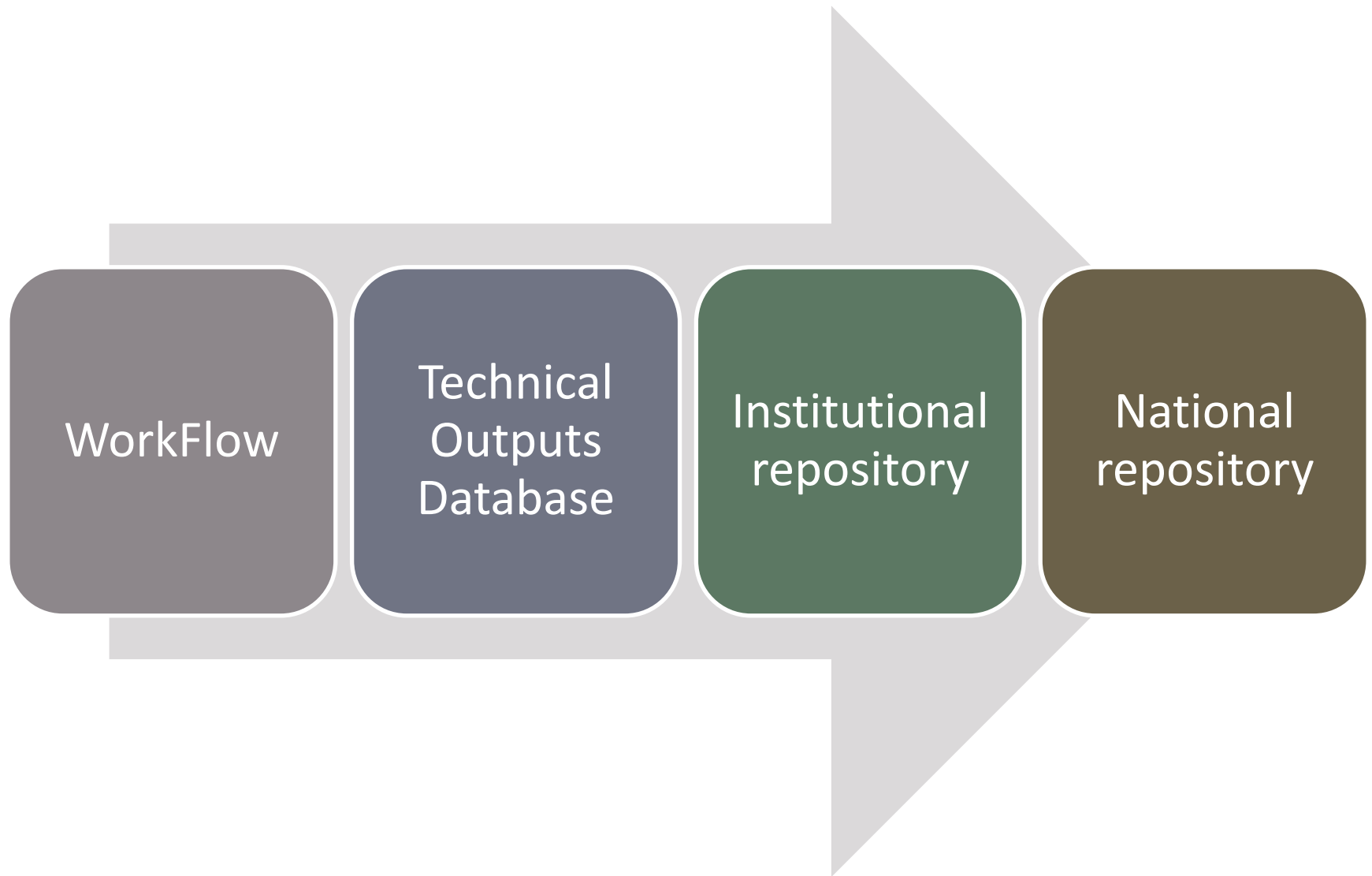


Shared repository

- Design considerations
 - Target audience: institutional vs shared repository
 - Hosting, service level agreements and security
 - Structure
 - Metadata fields
 - Different formats
 - Searchability
 - Strategic decision support tools
 - Quality control
- Support and enhance traditional KM tools
 - Expertise databases
 - Lessons learnt

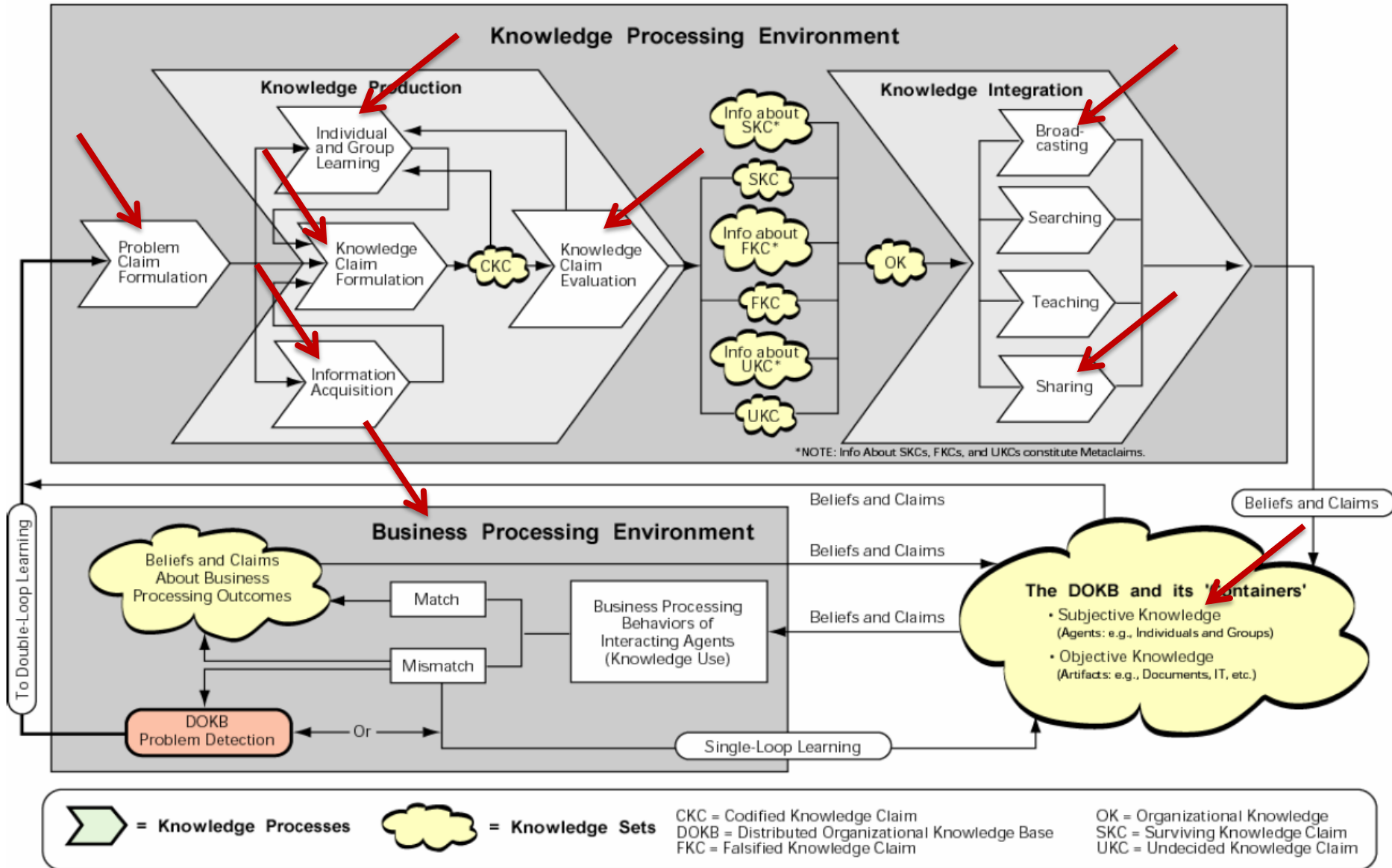


CSIR knowledge repositories



Discussion platforms

The Knowledge Life Cycle (KLC)



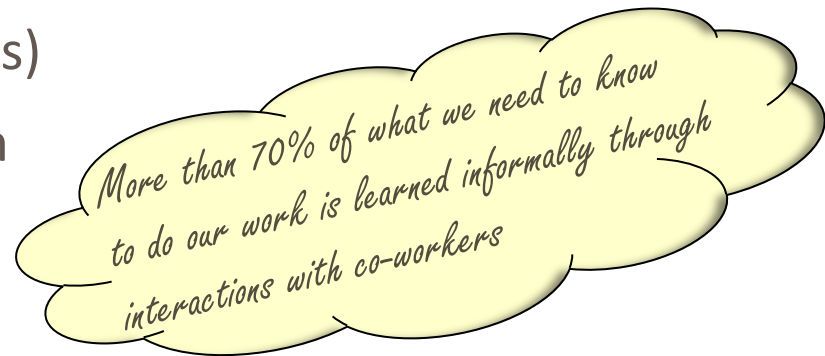
Discussion platforms



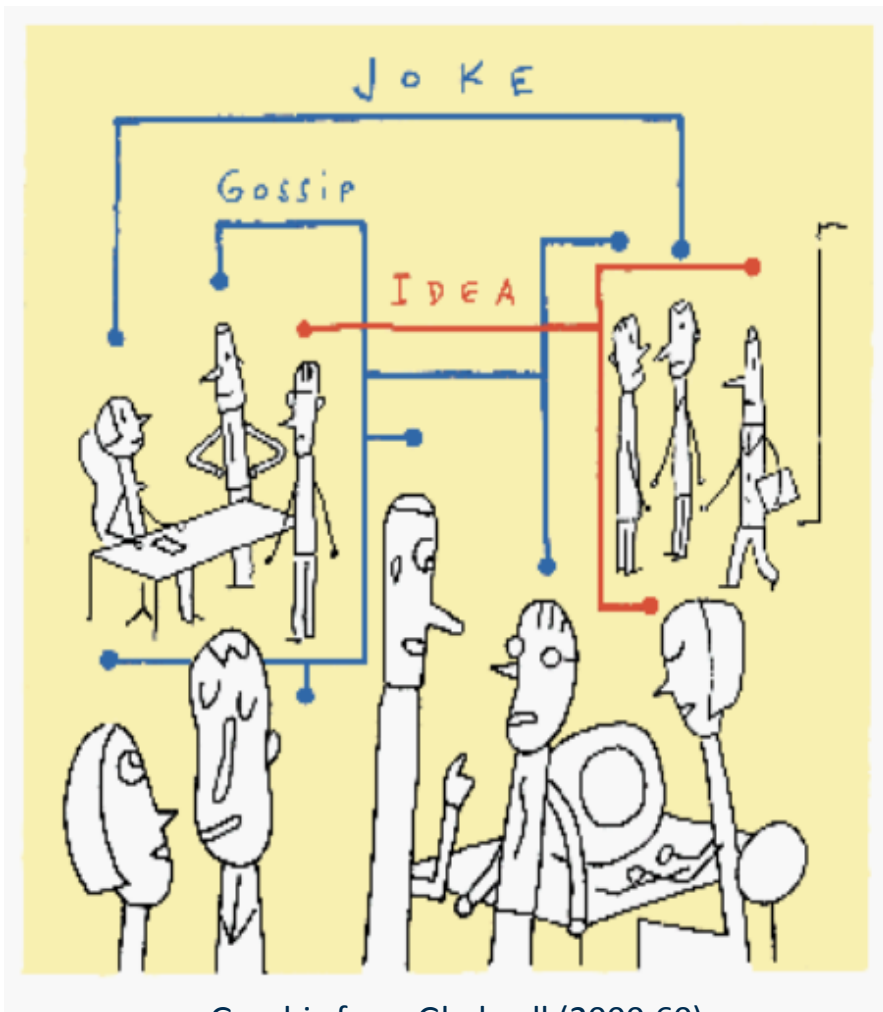
- Inter/multi disciplinary research projects
- Team work & collaboration across organisational boundaries
- Knowledge transfer is problematic:
 - Organisational & physical distribution
 - Modern information technology & email
- Create opportunities for informal interaction & serendipitous knowledge sharing
- Physical space: CSIR Knowledge Commons facility

Discussion platforms

- How can spatial design be used to:
 - facilitate formal & informal knowledge creation & sharing?
 - increase collaboration across boundaries?
- The use of space for knowledge work (Earl; Ward & Holtham; Doyle & Nathan; Gladwell)
 - **Personal space:** Individual time for concentration, reflection & learning
 - **Team space:** Collaborative learning & strategising (space & set-up varies according to team needs)
 - **Social space:** Casual interaction in a non-threatening environment



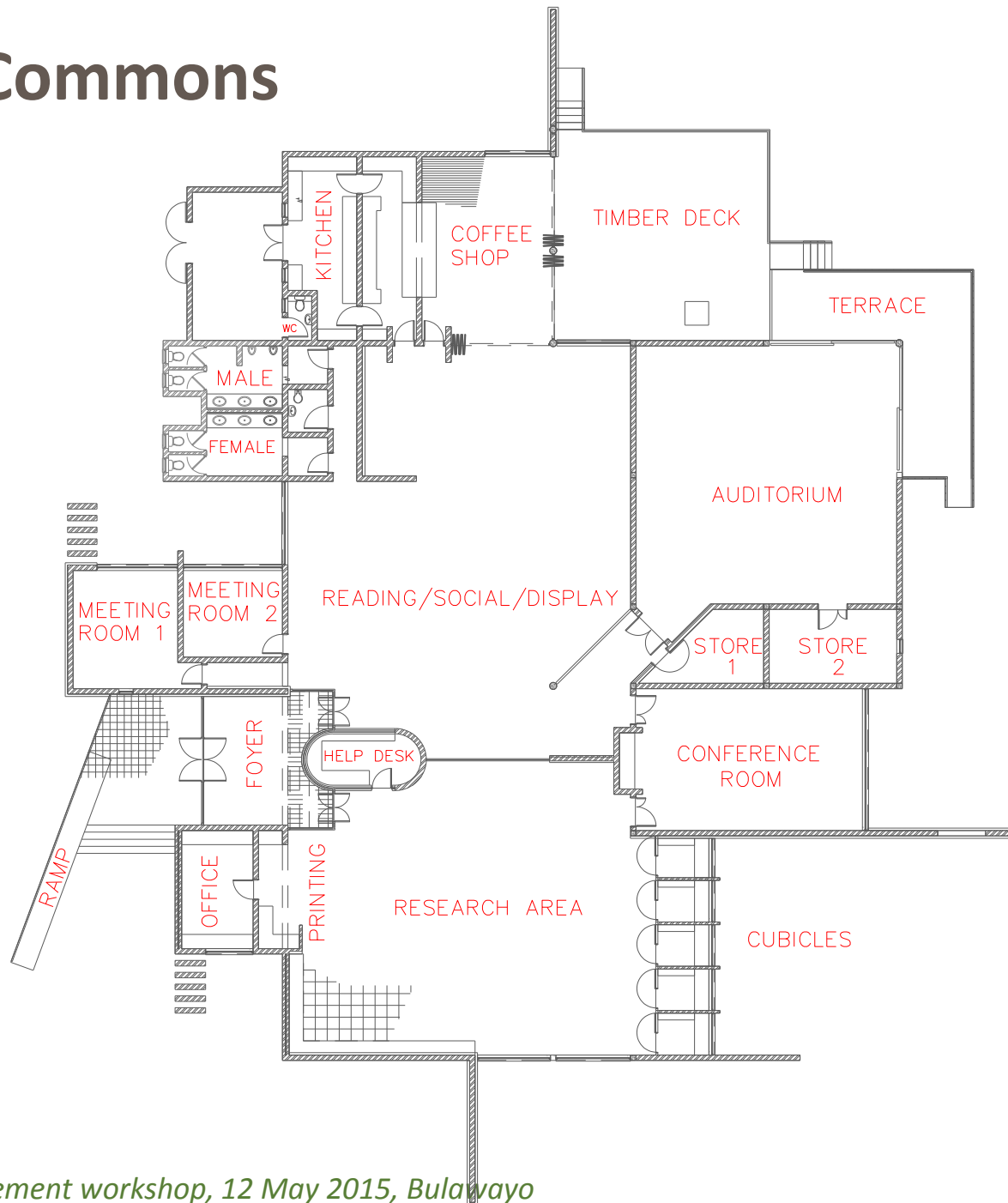
More than 70% of what we need to know to do our work is learned informally through interactions with co-workers



Graphic from Gladwell (2000:60)

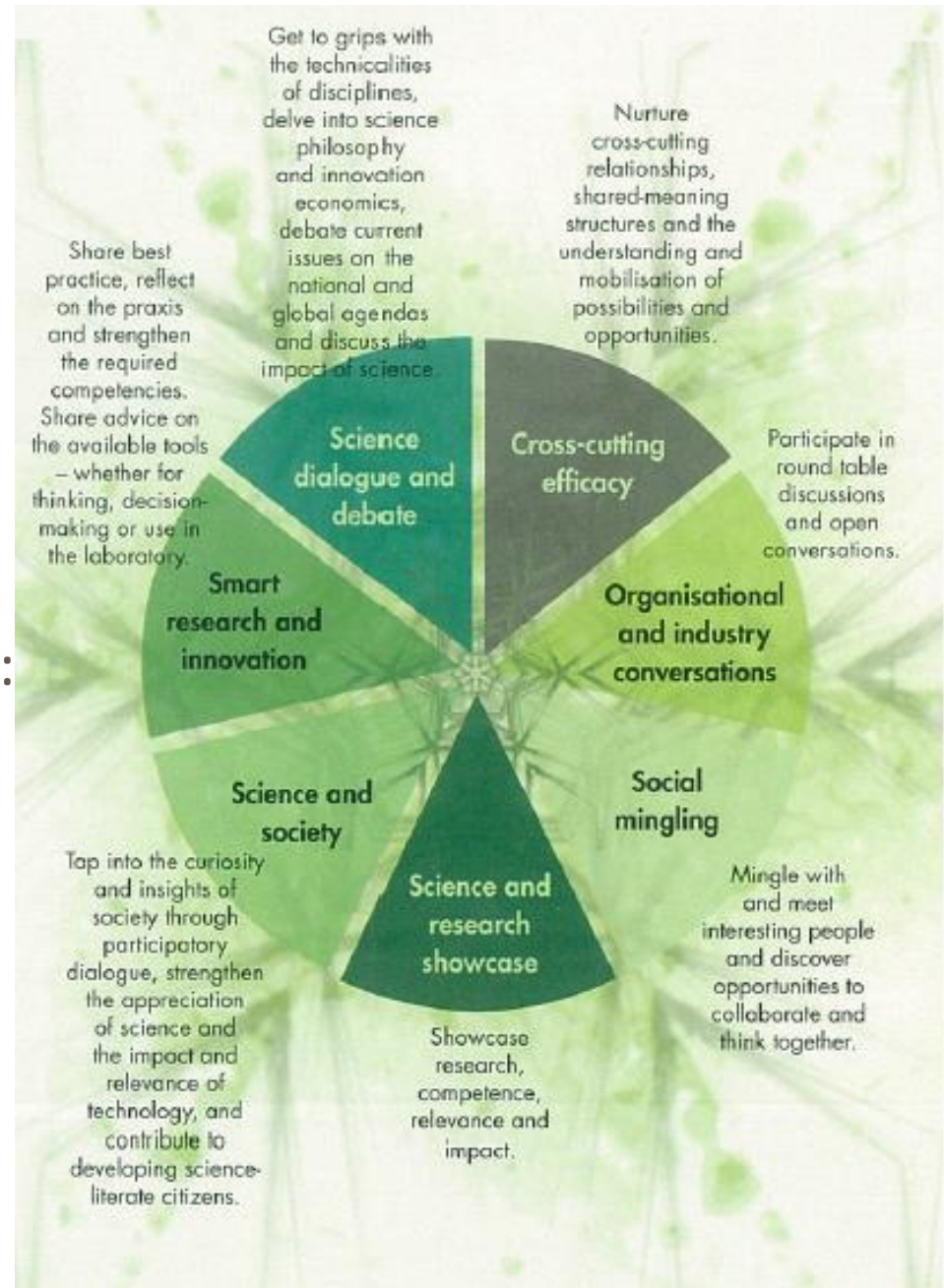
Casual conversations provide an opportunity for tacit knowledge transfer as they have the advantage of opening the door to serendipity. They are opportunities for spontaneous meetings of the mind that have the potential to **generate new ideas and solve old problems in unexpected ways**. (Davenport & Prusak)

CSIR Knowledge Commons



Knowledge Commons events programme

Knowledge Management role: to foster a collaborative environment and culture through the provision of discussion platforms



Establishing a virtual Knowledge Commons

- AV / VC technology
- Event intermediation

PRE-AMBLE

- **Event promotion**
(anywhere; anyone)
- **Create online presence/
pre-event engagement**

DURING EVENT

- **Blending with physical or virtual only**
- **Synchronous attendance/
participation**
 - KC <--> VC venue
 - KC <--> Skype
 - KC <--> Desktop
- **Broadcasting**
- **Social reporting**
(Live blogging /
collaborative mind
mapping, Twitter, etc.)

POST EVENT

- **Social Reporting**
 - Report backs
 - Sharing photos
- **Publish recordings and
other material**
- **Continue event in
asynchronous mode**

Right time participation & extended dialogue

Virtual discussion platforms

- In most organisations the formal knowledge base/shared repository does not make provision for the management of day-to-day information/knowledge required/created by **project teams**:
 - Project managers require the above for decision making; problem identification and solving; writing progress reports
 - Collaboration and knowledge sharing by team members
- Collaboration, communication & file sharing platforms
- Content analysis on the data generated from these platforms provide valuable information for project leaders, coordinators and funders
 - How did the conversations changed & evolved over time?
 - What did we learn at what point?
- Agree on platform(s) to be used and make use mandatory
 - Provide adequate training & hand holding



ICT4RED
ENHANCING EDUCATION



- Home
- About
- Terms of use
- Photo Gallery
- Videos
- Resources and How-to's
- News Flashes
- Feedback

Thursday, 2 April 2015

ICT4RED Research adventures part 2: How to build the nation - teachers' narratives in a changing context

Last weekend Phase Three of the ICT4RED project came to an end with a joyful celebration (see previous blog). Facilitators, Phase Three teachers, ICT4RED staff, and government representatives came together in Cofimvaba to celebrate the project as much as themselves. Alas, I had to leave the country just before the graduation; but the live tweets from the event spread the pride and joy of all participants even to a cold grey London morning. That's right, from a town hall in a small settlement deep in the rural areas of the Eastern Cape detailed live tweets updated the rest of the world in real time. ICT4RED clearly revolutionized teachers' use of social networks but reflecting back now four weeks after my research, I sense this might just be the tip of the iceberg.



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(Mobile centred) Virtual discussion platforms

**Social network, e.g.
Twitter**

Project hashtag for interaction with project target community
Community participation, gathering input from target community
Citizen science (data collection)
Content analysis (emotional evaluation, topic spotting)

**Information sharing platform, e.g.
WhatsApp**

Closed WhatsApp groups (for each aspect of the project)
Sharing platform for project execution (text, photos, videos)
Management & coordination tool (high speed & reduced effort)
Content analysis and curation

**File sharing, e.g.
DropBox, Google-Drive**

Working documents
User create single folder on computer, synchronise with DropBox

Content management system, e.g. OpenCMS, Vibe, WordPress (Blog), Wiki

Shared organisational knowledge base
Include progress & final project reports
Project evaluation and lessons learnt

Project monitoring & evaluation

- Internal and external review processes
 - Did the design of the intervention meet the desired outcomes?
- Results of content analyses of the discussion platforms
 - What did we learn at what point?
 - Learning brief (lessons learnt)
- Outcomes of reflection workshops
 - What worked / didn't worked?
 - What should be done differently?



Project Name	Submitted by
Date	What was the learning? <i>Please describe the learning that occurred:</i>
Learning brief type <i>Indicate which of the following three is applicable and provide a short description</i> <ul style="list-style-type: none"> • <i>Learning from failure during implementation</i> • <i>Learning from implementation success</i> • <i>Learning from review of previous research and practice (i.e. not practically tested yet)</i> 	

The Context

Say something about the context of the learning / project context, add relevant pictures if they are available

Why is this learning important?

Please describe why this learning is important

Evidence Base

Please indicate what the evidence base is for this learning brief, if possible, provide references that may help the reader track down the evidence base.

Recommendations for future similar projects:

Please provide your recommendations in a list form. If possible add pictures, graphs or diagrams

Recommendations that should be taken into account by the current project

Please indicate which of the above recommendations should be taken into account for the current project

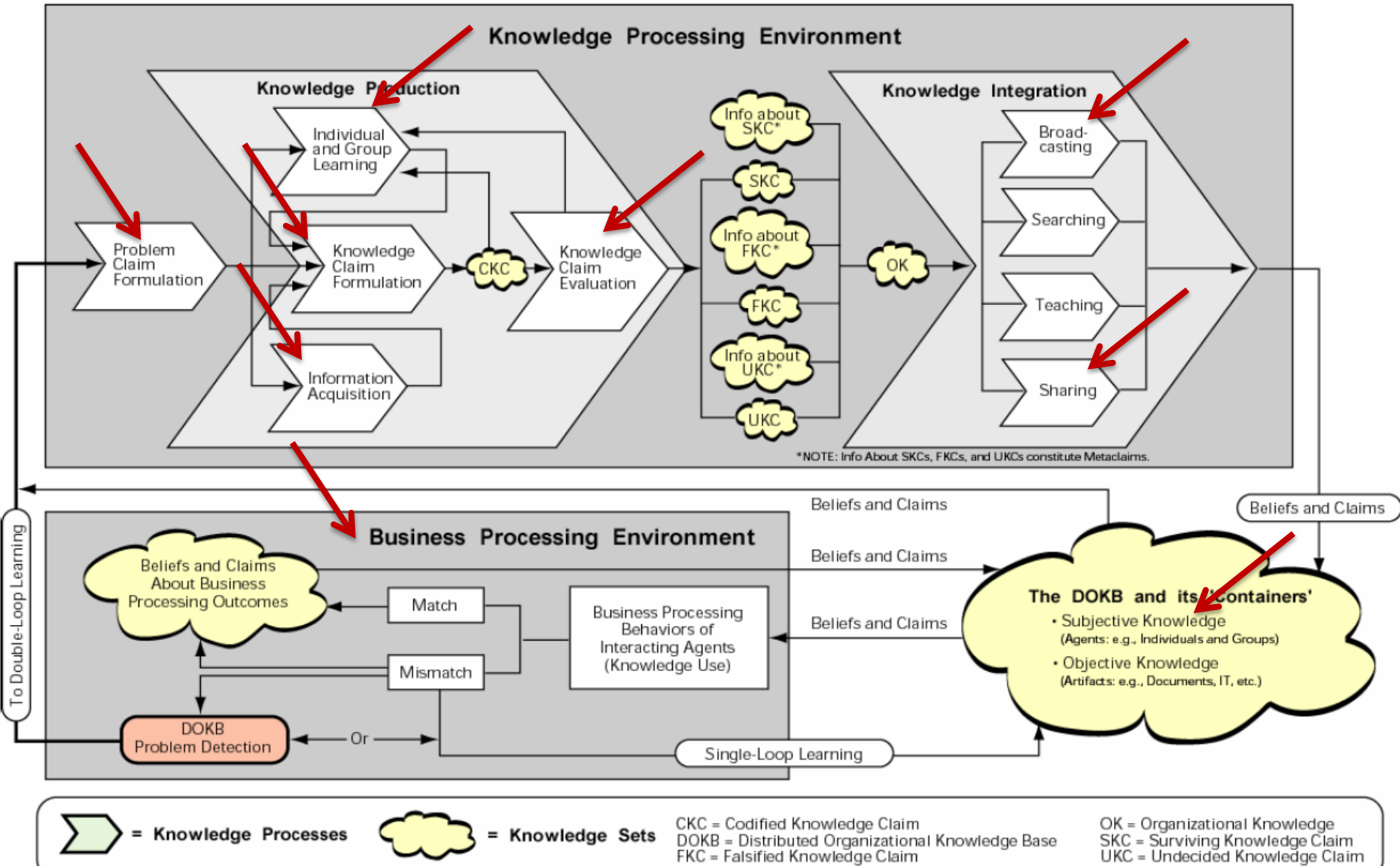
Communities of Practice

- Group who share a common interest and a desire to learn from and contribute to the community with their variety of experiences (Lave & Wenger)
- Differs from project teams (driven by deliverables, team membership is defined by task, etc.)
- Naturally forming, self organising, controlled by individuals



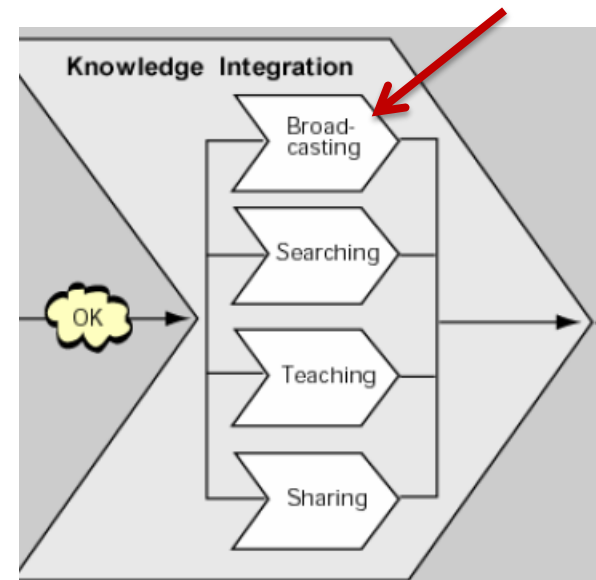
1	What is a community of practice?	4
2	Is a community of practice right for us?	4
3	Choosing a facilitator	5
4	Selecting and recruiting participants	5
5	Getting started: your first meeting	7
6	Case-based learning	8
7	What is a 'knowledge broker' and why is the role important?	8
8	Overcoming challenges	9
9	Evolutions and endings	10
10	External resources	11
	Example case studies	12

The Knowledge Life Cycle (KLC)

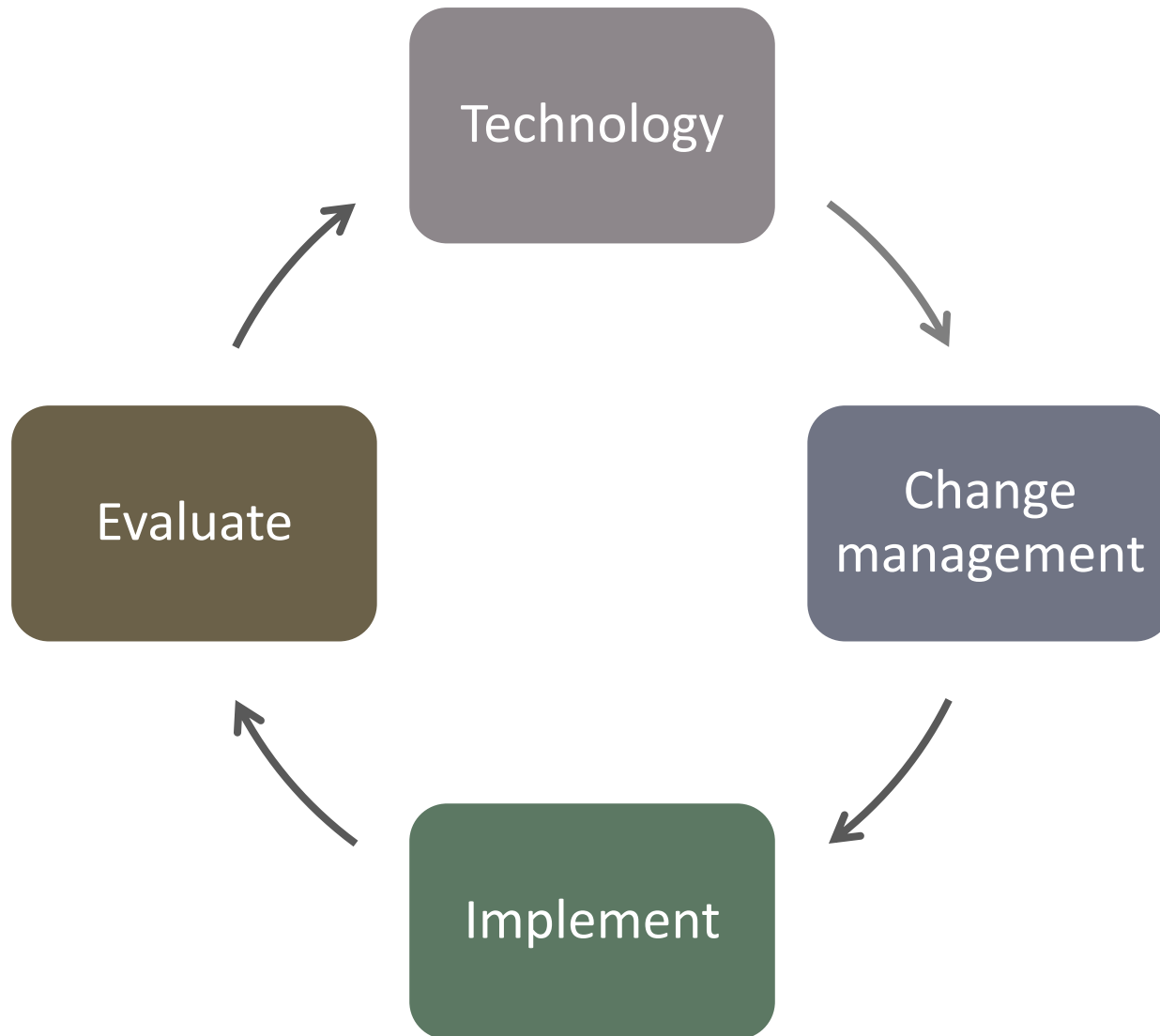


Broadcasting

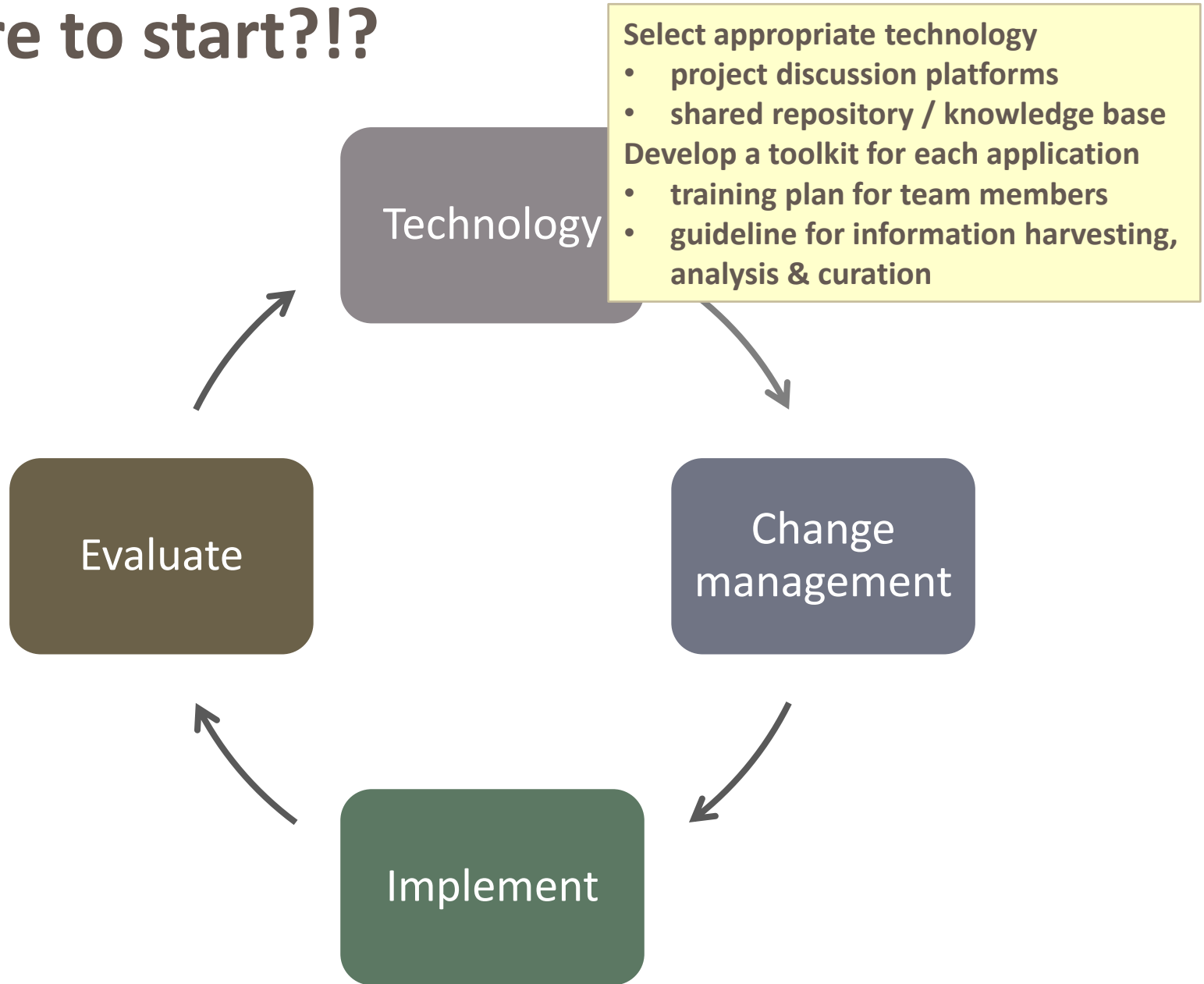
- Communications Group function
- Inter organisational
- Public & target communities to ensure project / research uptake
 - Community radio
 - Television programmes
 - Science cafés
- Stakeholders & government
 - Raise awareness
 - Communicate benefits
 - Secure funding



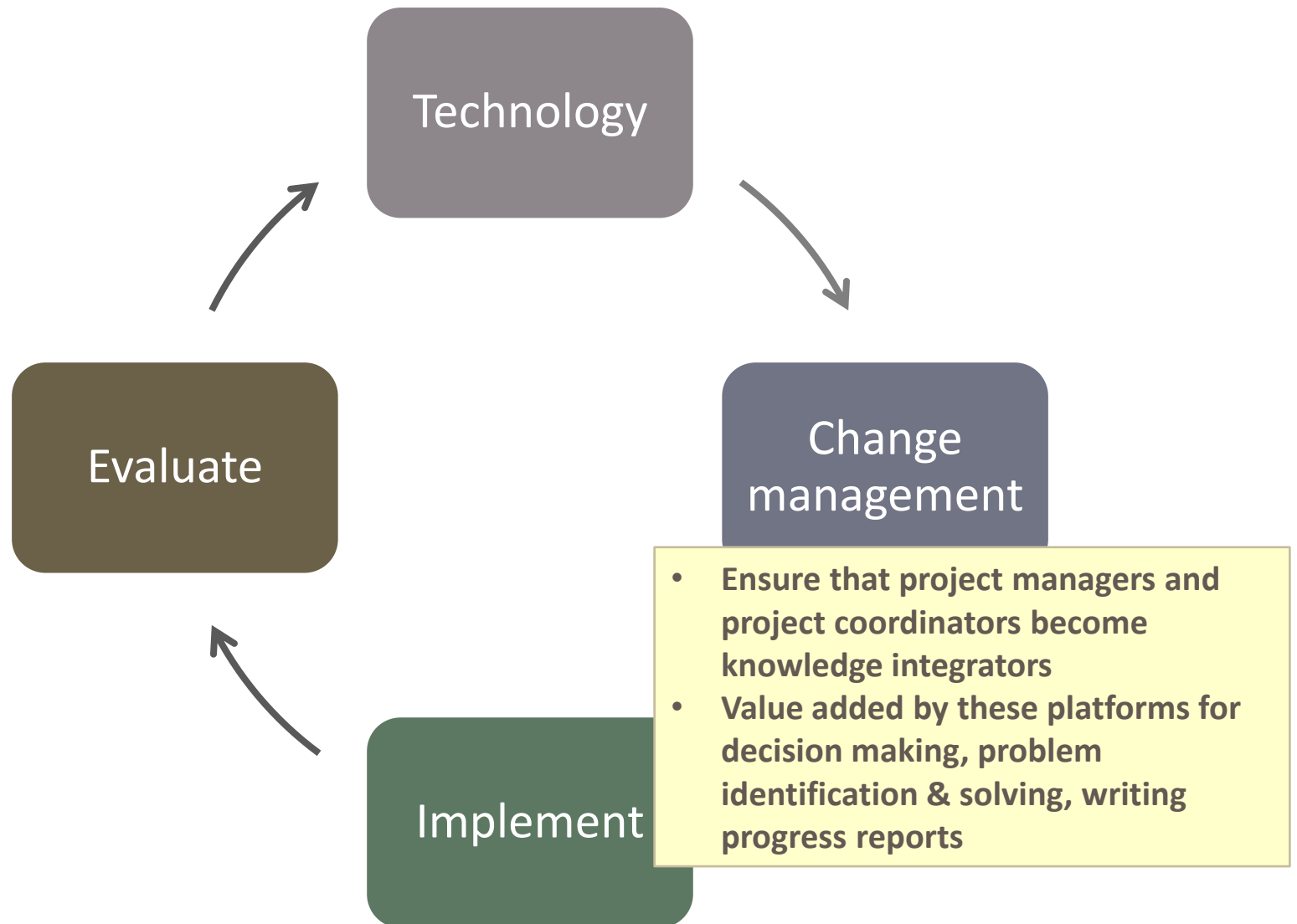
Where to start?!?



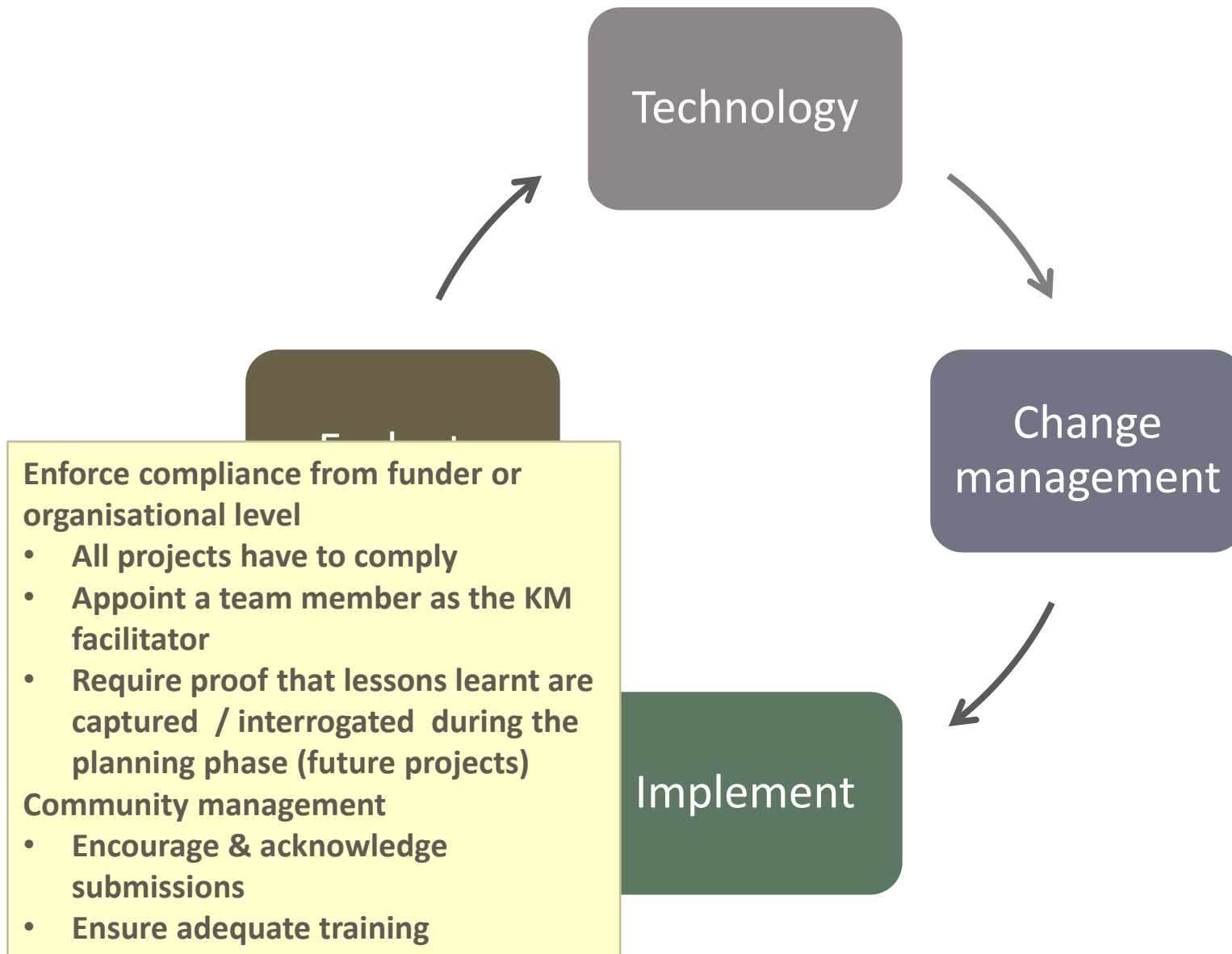
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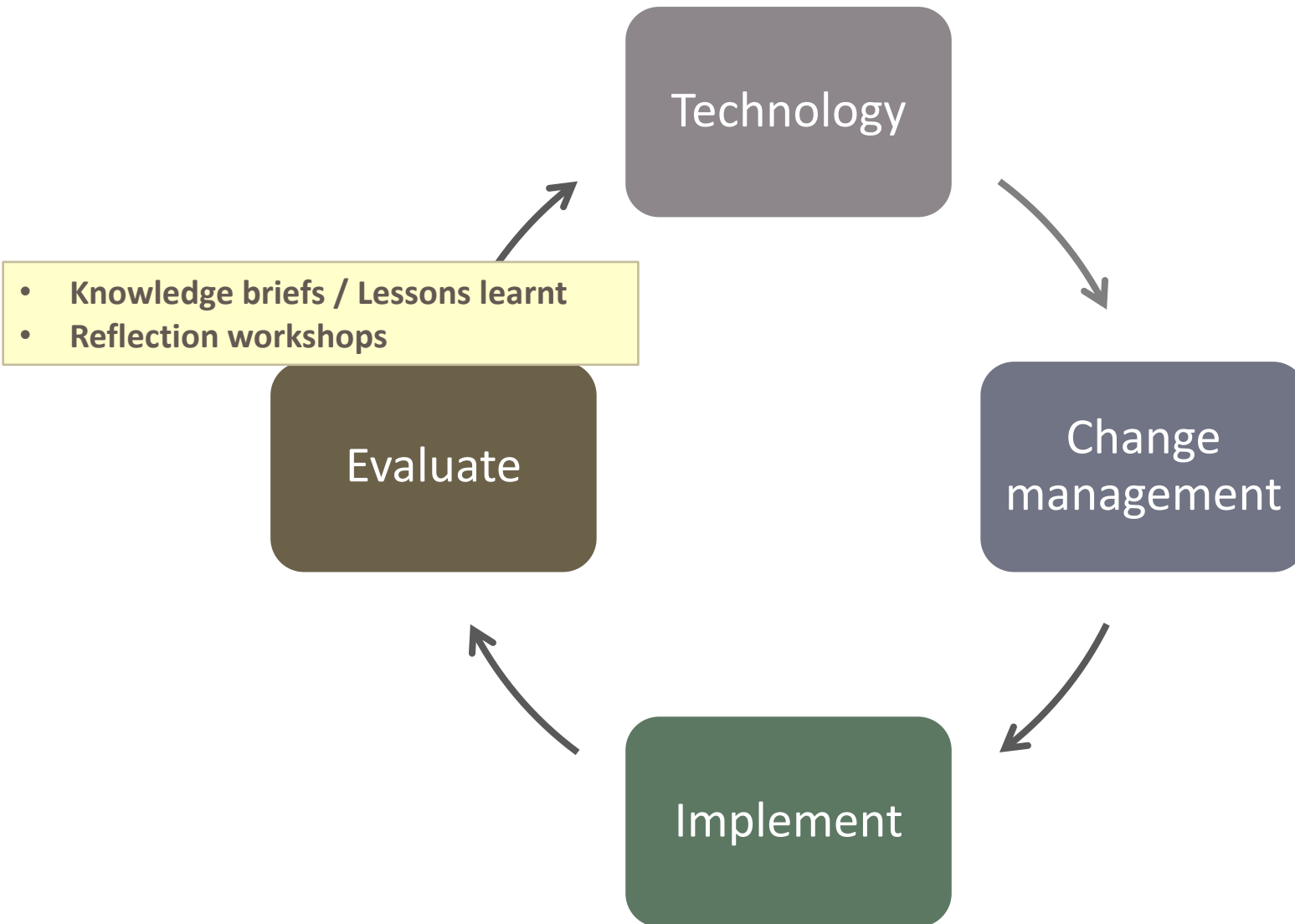
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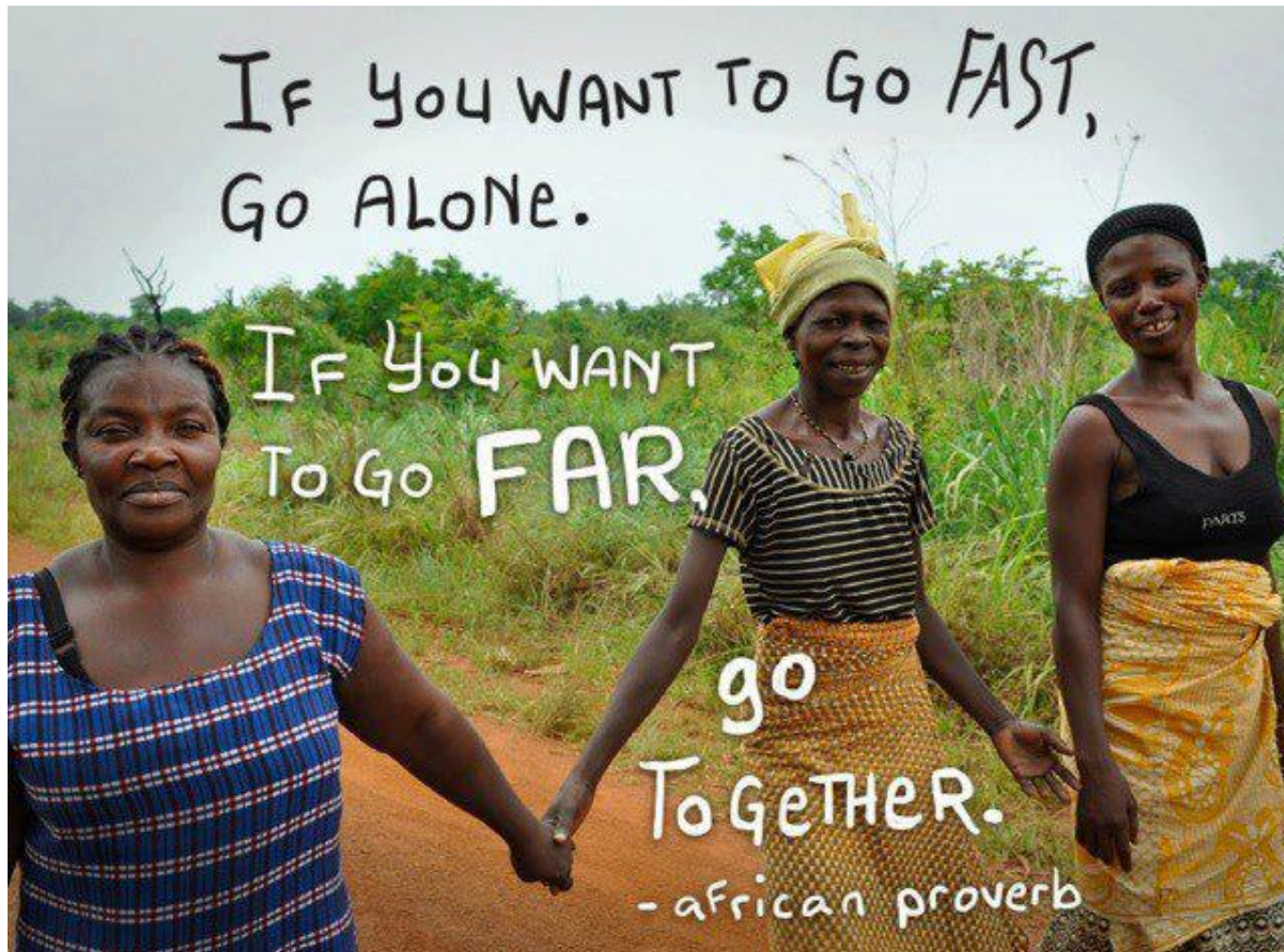


Where to start?!?



Where to start?!?





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Images

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