

Workshop

## How to improve outcomes of IOF projects

*The key success drivers*

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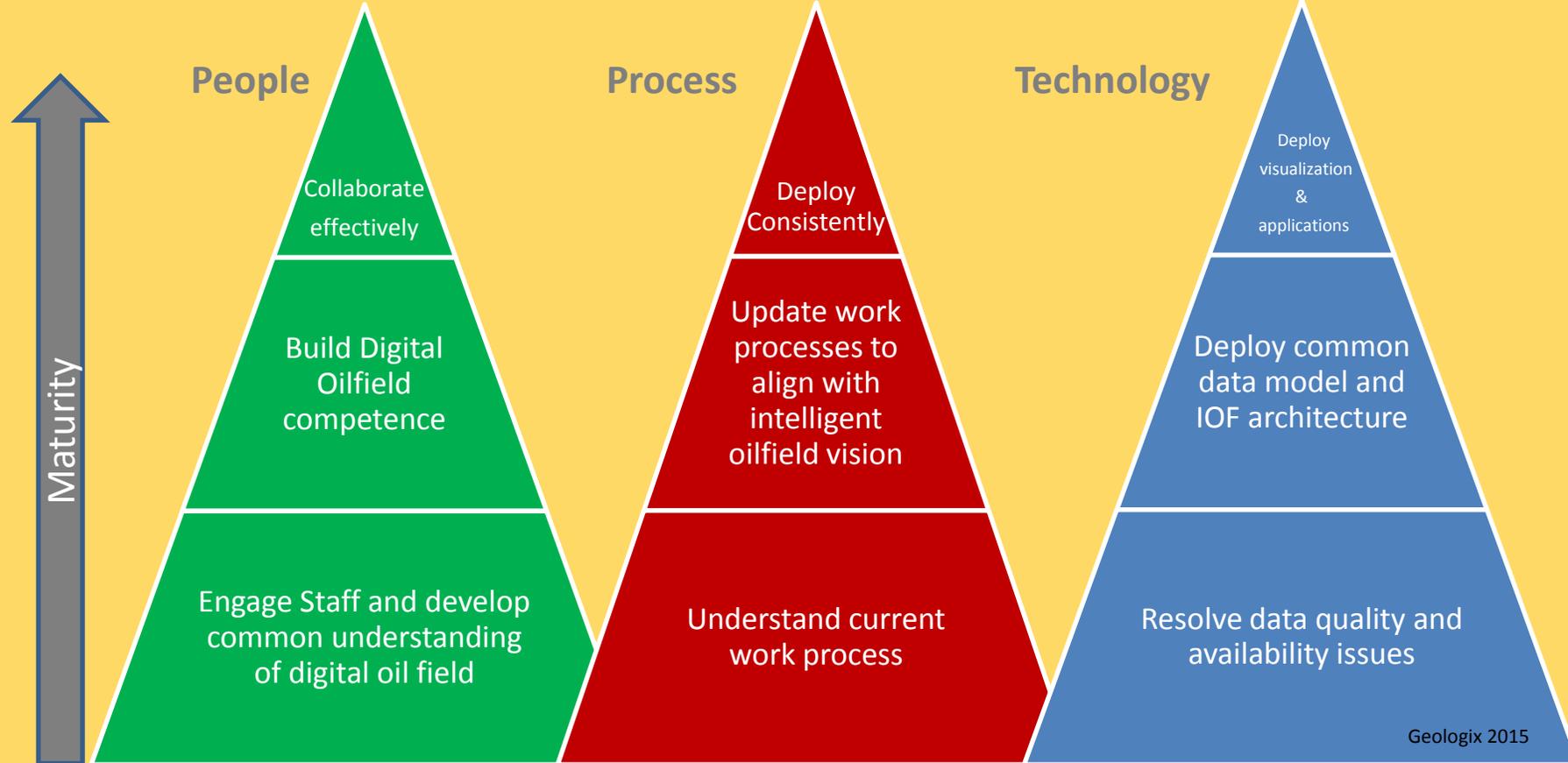
October 2017, Qingdao

# Agenda for today

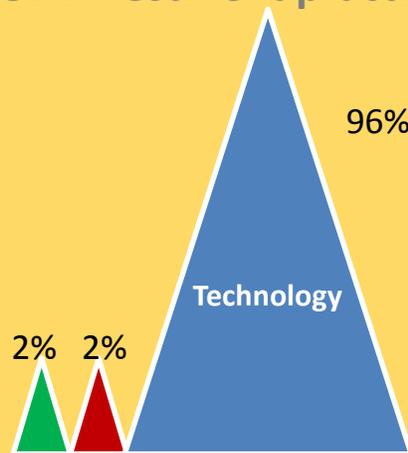
1. The need for a clearly **defined and monetized value proposition...**
2. IOF means **Intelligent Operations**: the holistic view
3. What people need **know and learn**: Ground rules, interpersonal- and user skills
4. A **Chinese IOF Case Study**: Why Project X doesn't deliver

Point 1:

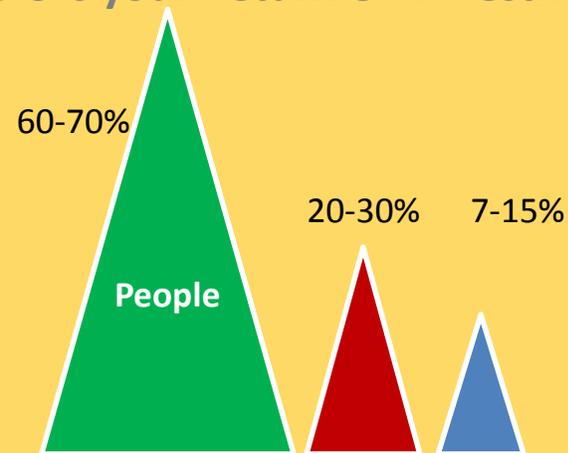
The need for a clearly **defined**  
**and monetized**  
**value**  
**proposition...**



**IOF Investment practice**

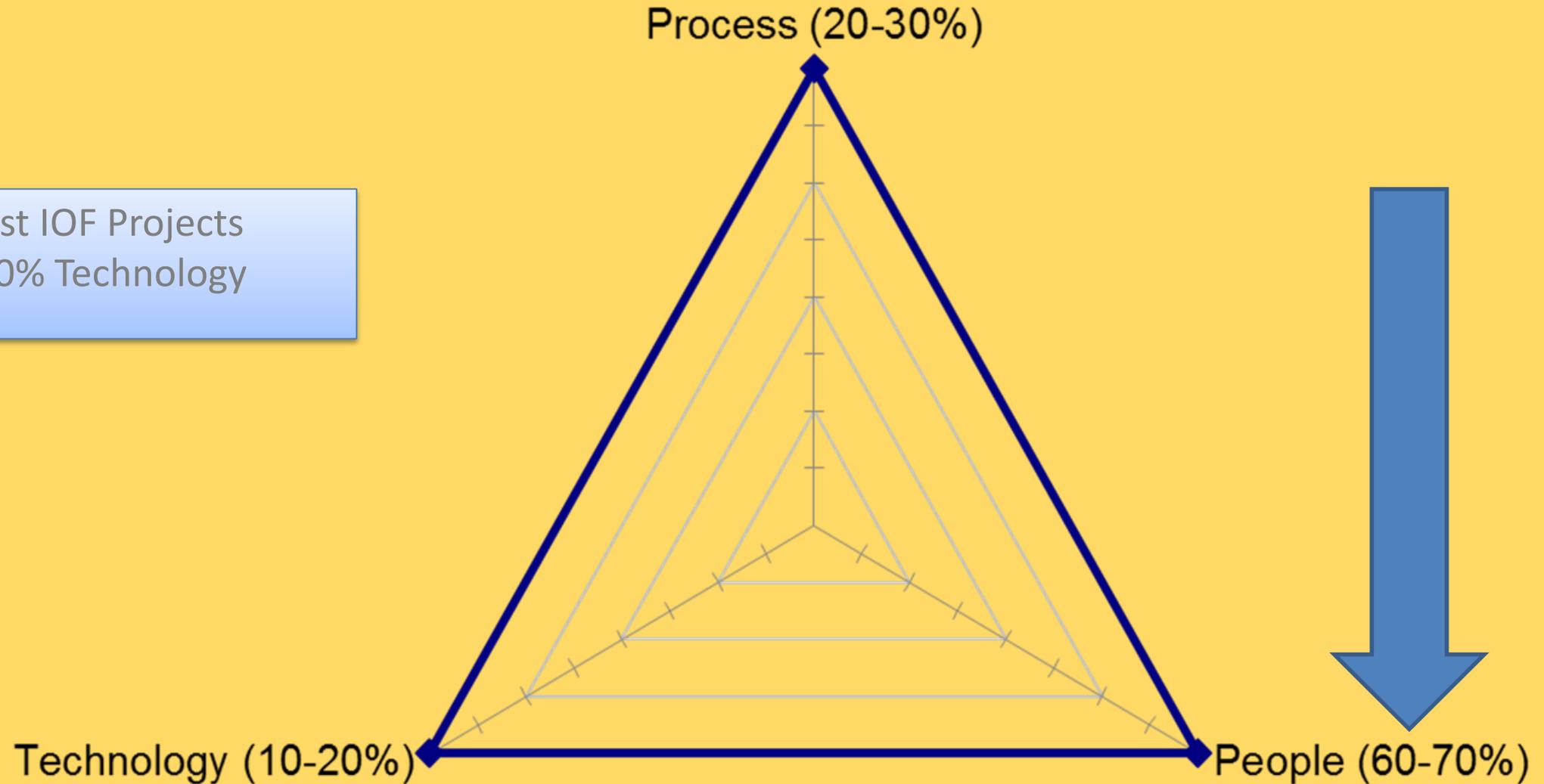


**Where is your Return On Investment**



# Statement of one Problem: The budget balance

Most IOF Projects  
100% Technology



# Statement of one more Problem: The value chain



Focus on the business case, not on the spending

Incremental revenue from IOF is far more significant than cost savings – **billions, not millions.**

Benchmarking early deployment or pilot is critical in **establishing the true business value** - often it is the increments of small gains.....

**Anecdote -**

Resolving diurnal gas lift pressure loss - reduction through mitigation of losses - 1,000 bbls/day - 100k\$/day

Gas well testing - reduced testing time - ten days per annum reduction in deferred production at 60 mmscf/day

Point 2:

IOF means **Intelligent**  
**Operations**: the holistic view

- Technology works but is **used to accelerate previous work** practice
- RTOC **facilities remain under-utilised** as staff continue to work in silos
- Real-time workflows do not include the technology to 'close the loop' and act on the accelerated actions and analysis now possible.



- **Staff demotivated** to use system and see it as a 'white elephant' and disassociate themselves
- **Management lose interest** as the whole exercise is seen as another 'failed experiment' and.....

Most of the Value from IOF is Lost

- Ensure **clear engagement by all key stakeholders** in the business from the CEO to the engineer engaged in the real time processes
- **Stakeholder Analysis, Risk Analysis and IOF Health check** to ensure proper balance across People , Process and Technology
- Design the **business process first**, then the technical workflows and then the technology implementation
- Build a **fit-for-purpose change management program** to run alongside and integrated with the process design to initiate changed behaviours.

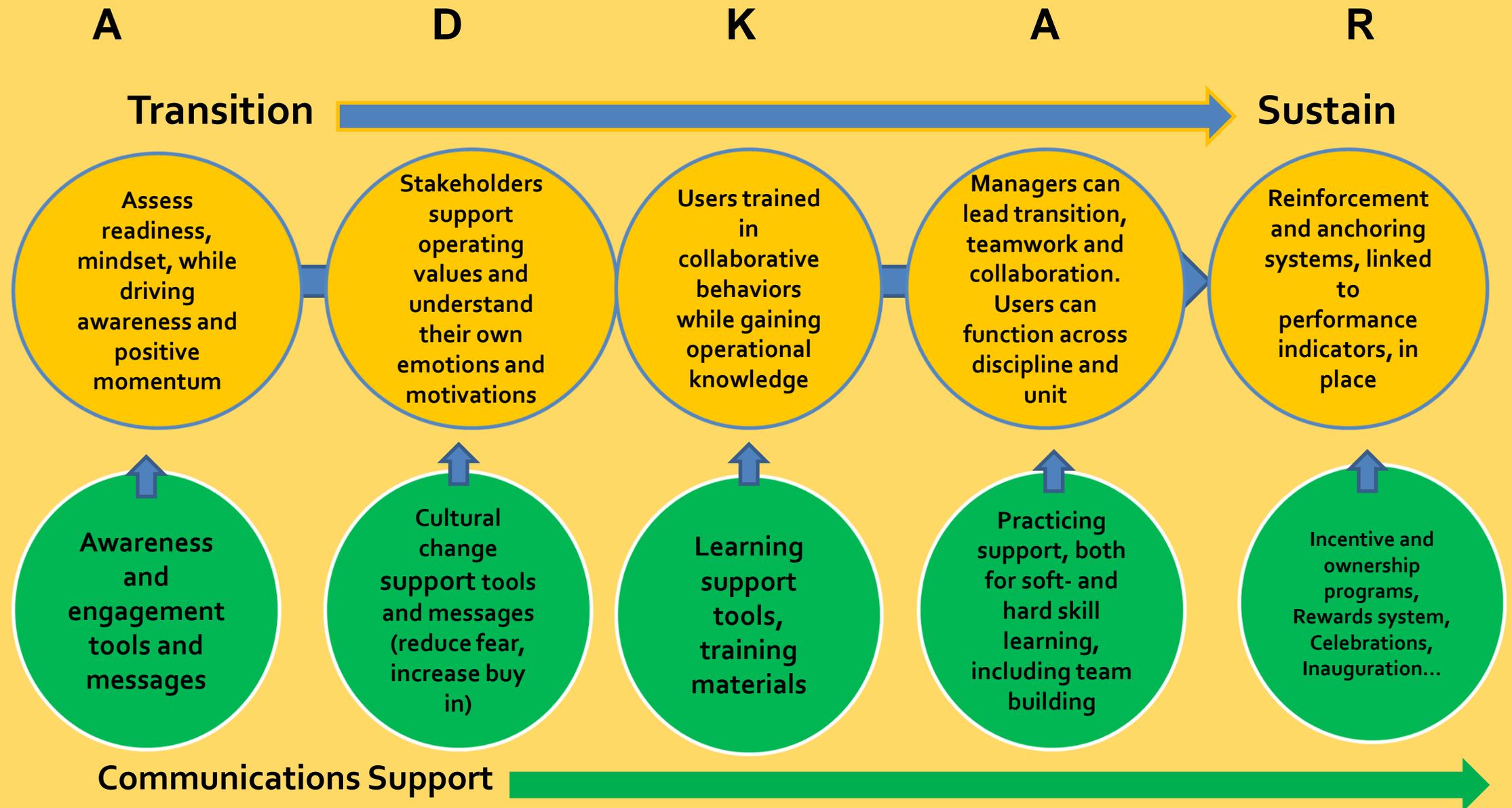


# Change management priorities....

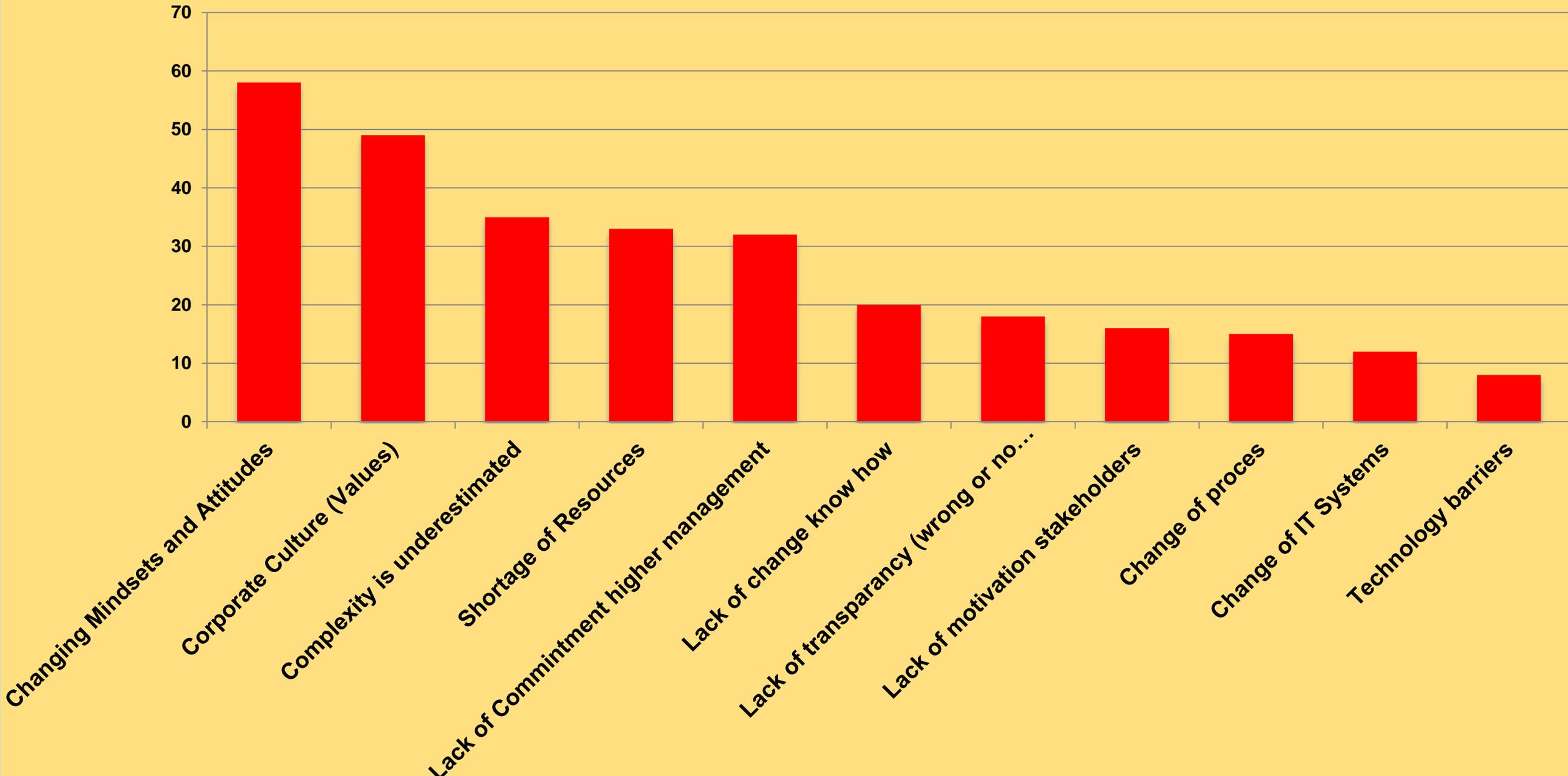
- Address the “human side” systematically. Staff need to be **empowered** to take actions on a shorter timeframe
- Start at the top. **Executive management needs to engage** Mid Management needs to **devolve authority**
- Involve every layer Leaders need to **give up any power**
- Emotional Intelligence needs to **change attitudes** about how to work collaboratively
- **Communicate** the message
- Assess the **cultural landscape**



# Change Management Strategy



# Benchmark for succesful Change (IBM, 2011)



# The Change Management Paradigm

## The business

Looking for business driven changes

Business survival driven

Change

People

100% conscious process

## The Employee

Looking for stability and security

Personal survival driven (fear and anger as survival mechanism)

Behavior

Motivation

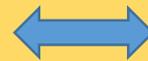
Emotions

Amygdala

> 90% subconscious process

**UNDERSTAND THE COMPLEXITY OF THE CHANGE PROCESS**

Connection through prepared and empowered leadership



Connection through emotional awareness and education, mindfulness, constellations, roll games,

# How to approach the challenge

## ME

People transition is about helping people **overcome their fears first**. That's an intrapersonal effort supported by emotional education while

- **learning new personal skills**

## WE

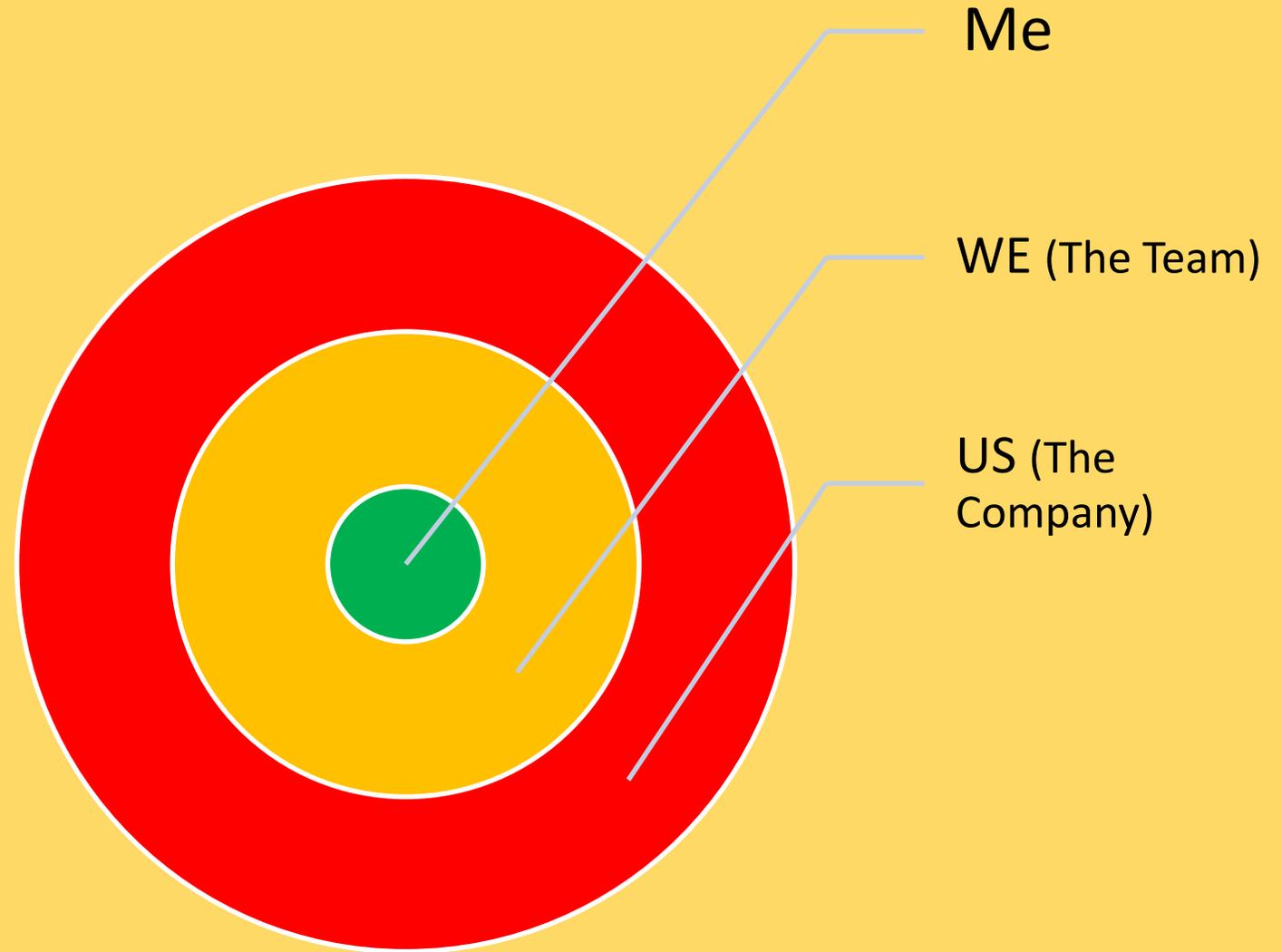
Than its **helping them learn how to work with others in high performance teams** which is an interpersonal effort supported by

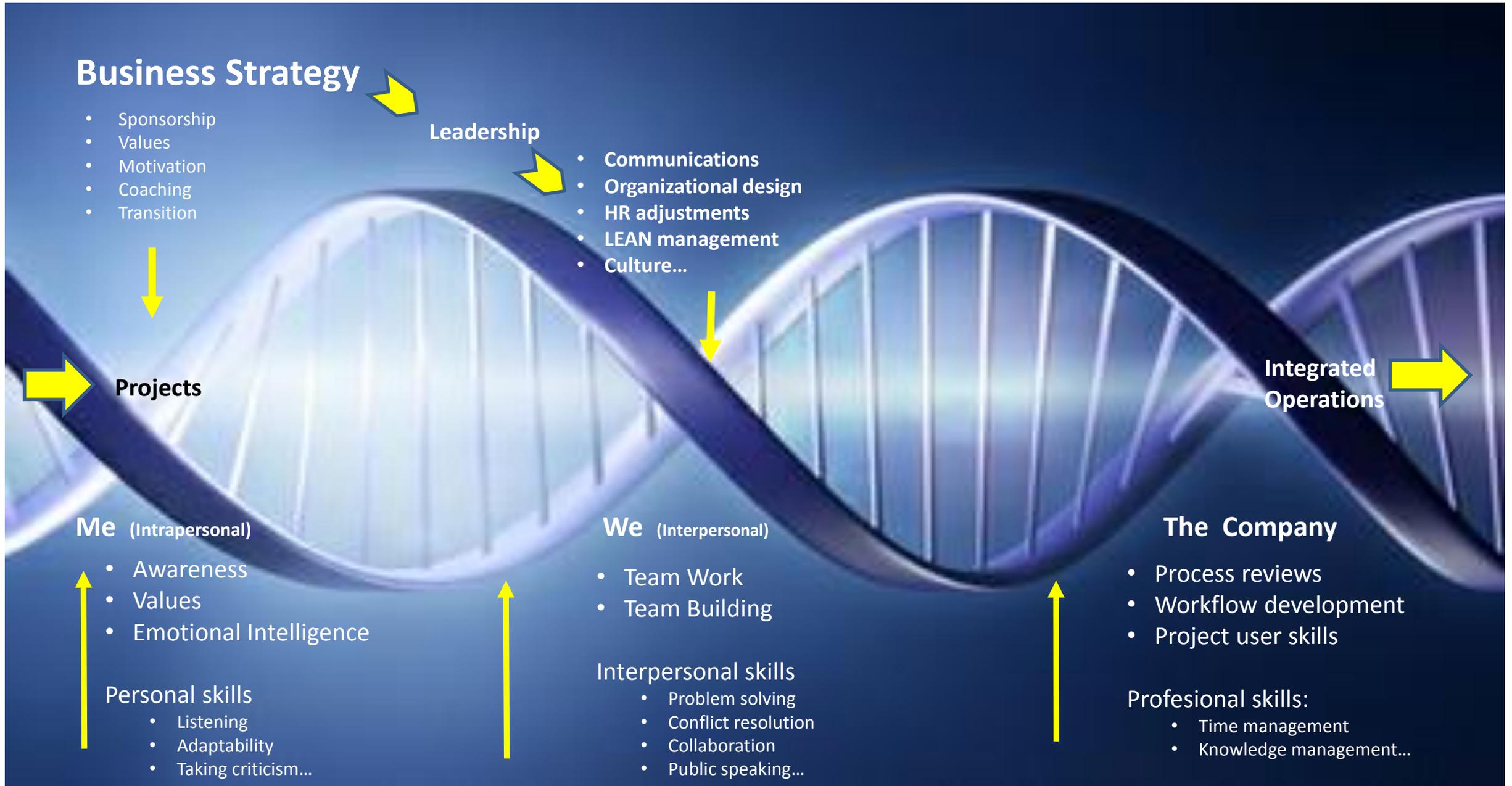
- **learning new interpersonal skills**

## US

Once the intra- and interpersonal issues are dealt with, **people become ready for productive alignment with the company's needs** and objectives, supported by

- **professional skill learning**





# The winning process: Together



## What the company needs

Digitalization

Joint effort

knowledge sharing

To Believe

## What the employee needs

- Management culture and sponsorship (Leadership)
- Honest and timely communications
- The right company culture (and values)
- A suitable organization model
- A human resources policy set

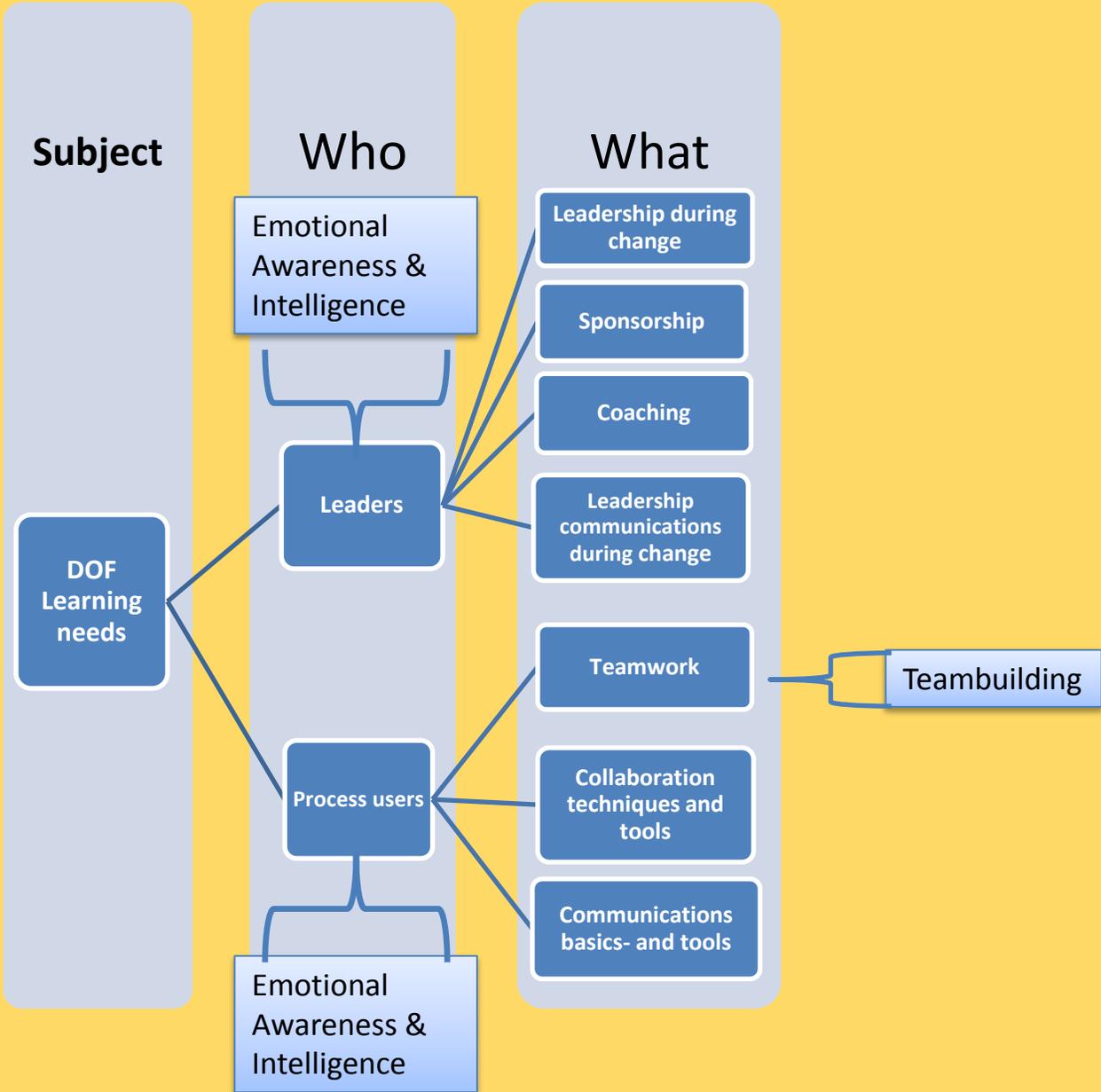
- Emotional intelligence training
- Reset Values, define Behaviors
- Manage Resistance (what will happen to me)
- Mindfulness and somato-emotional osteopathy
- Teamwork and Collaboration
- Team Building
- Space to learn and to make mistakes
- Training and Gamification
- Participation and co-authorship workflows

Knowledge sharing is key

# Basic “Soft” learning & practice needs

Can be developed with or without previous knowledge about IOF, as these are the basic requirements and toolset for all transformational leadership and collaborative work

There will be individual needs and gaps that arise during this phase



Basic conditioners

To learn/practice

This package of basic building blocks, is not a “pick & choose” list. All need to be done.

All are 1 to 2 day(s) sessions for maximum 16 to 24 pax (might be extended or repeated, upon results/findings, until the desired understanding and levels of practice are reached.

# Example: Emotional Intelligence Workout

## Key concepts in this workshop are:

Self-knowledge, the expression of feelings, self-esteem, emotions, cool down techniques, basic human needs, values, how I see myself, negative and positive thoughts, goals and priorities, criticism and how to deal with conflict and avoidance or solution.

After completing this Workshop leaders and staff will be able to better handle the emotions and motivations of others and recognize behavioral patterns. Accordingly changes are thus more enjoyable and will be faster and more efficient.



Point 3:

What people need to **know**  
**and learn**: Ground rules,  
interpersonal- and user skills

# IOF specific training needs

1. General awareness
2. (IOF) Values
3. Mind Setting (Emotional Intelligence)
1. Behavior modeling
2. Transformational Leadership
3. Managing change
7. Team Work and Team Building

8. Workflow development and (Technical) deployment support
9. Continuous Improvement program (CIP)
10. Sponsorship (hands on inspiration and motivation)
11. Change Champions selection and preparation
- Communication



## General Skill needs detected

### Communication

- Listening
- Public speaking

### Influencing

- Motivating
- Collaborating

### Interpersonal skills

- Conflict resolution

### Personal skills

- Adaptability
- Taking criticism
- Competitiveness

### Creativity

- Problem Solving

### Professional skills

- Time Management
- Knowledge management

General gaps detected. Does not fit all.



# Skill development Areas

For Employees:

- **Interpersonal skills**

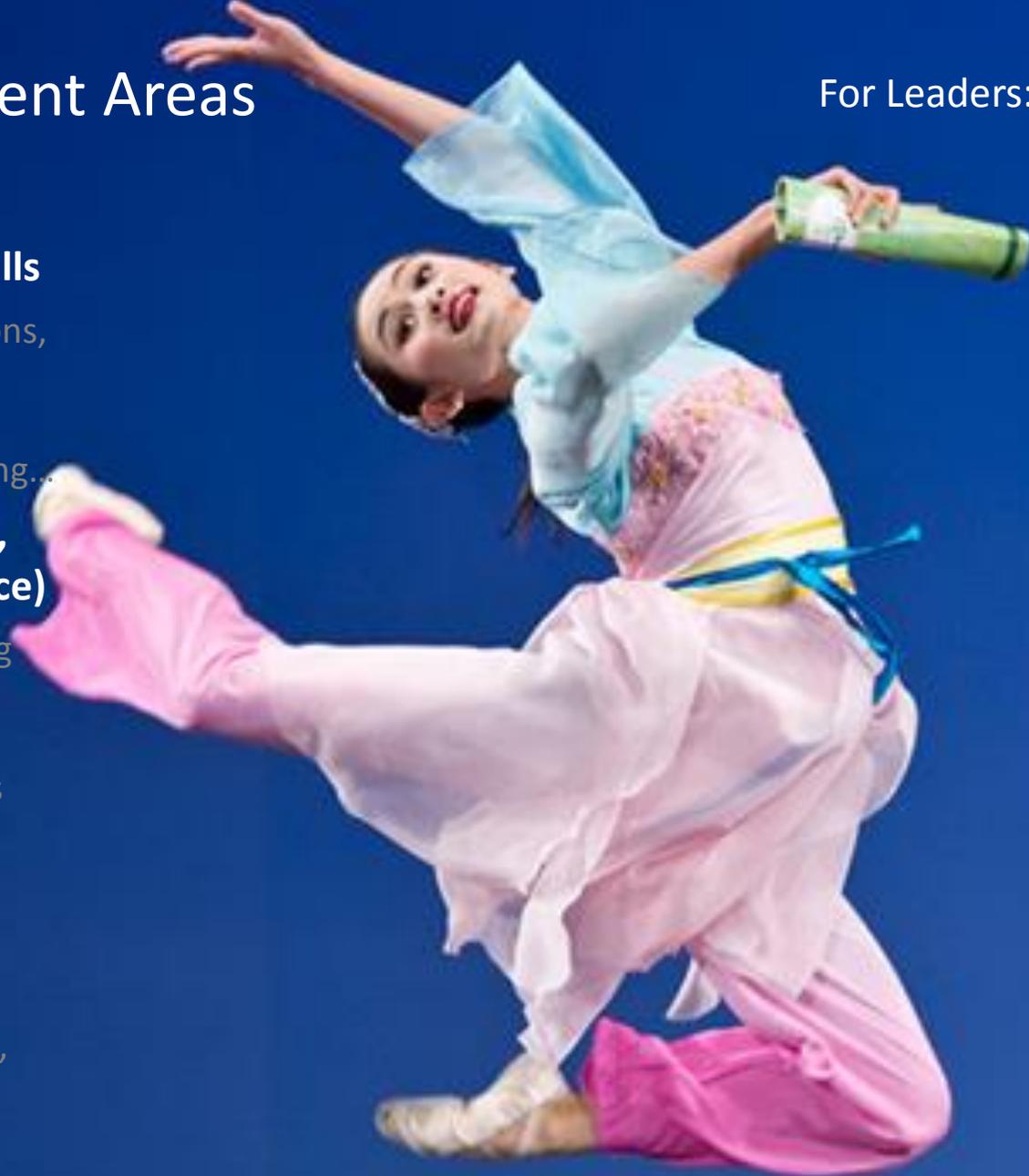
Soft skills, communications, emotional intelligence, conflict handling, negotiation, team building...

- **Ground rules (ID, agree and practice)**

Common values, meeting conduct, assistance, absentees, holiday planning, responsibilities team members

- **User skills**

Workflow deployment support, On-site training, learning and coaching



For Leaders:

- **Interpersonal Leadership skills**

Role of the Leader, Motivation, Leadership styles and models, Teamwork (for team leaders – working together – Problem solving – Achieving team goals – meeting and decision making), Communications skills, How to apply communications, Assertiveness

- **Change management skills**

Key Aspects of Transformational Leadership, Managing transition, communicating change, preparing for change, change the manager's role (from Command to Coach)

- **Coaching support**

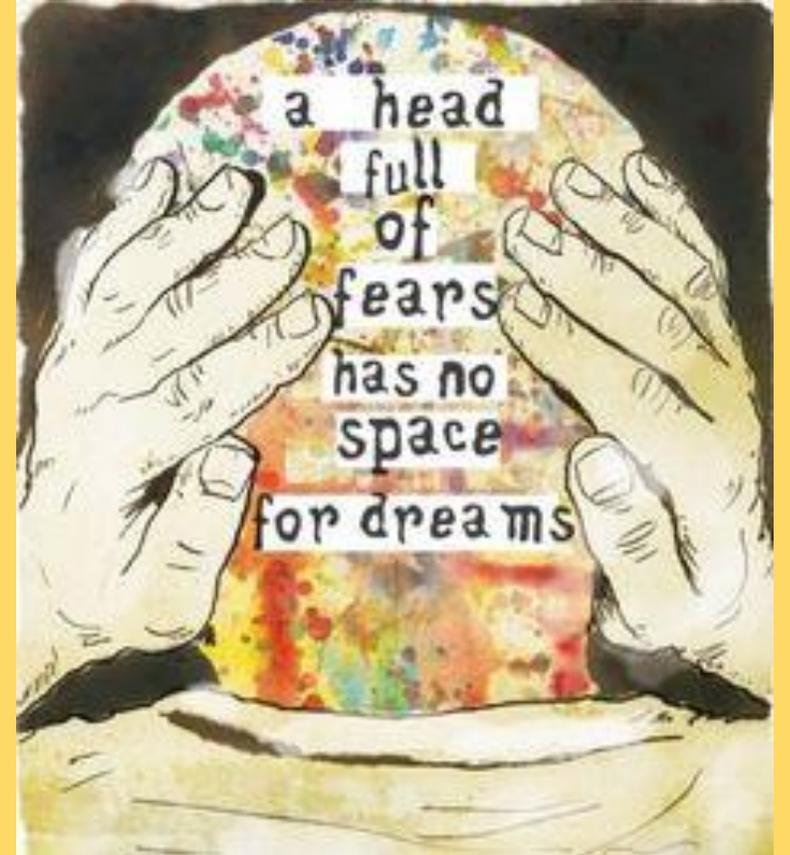
Coaching principles, getting the message right, productivity and satisfaction...

# The Transition Management Order

First me,

then the team,

then the Company



## Basic Needs (Maslow)

- **Safety** Will I still have a job? How does it affect my pension?
- **Belonging:** Will I have to move? Will my team survive?
- **Esteem:** Will my social status change? Will I have less influence?
- **Identity:** What does this mean about who I really am?
- **Prediction:** What will happen now? Can I see a new future?



Pyramid of Needs (After Abraham Maslow)

## Values

People look for commonsense in your [explanations](#).

People affected will judge your actions severely.

They will assess your [Values](#) and ask whether your actions are [moral](#) or [ethical](#) (using their own standards, of course).

Even if they do not agree with the outcomes, it is very important for them to perceive the process as [fair](#).

# Change versus Transition

Change is a shift, transition is the process of one state of being to another



**Change**

External  
Organizational  
Quicker  
More Visible  
More predictable  
Physical  
Tangible

**Transition**

Internal  
Personal  
Slower  
Less visible  
Less predictable  
Psychological  
Intangible



*One person at a time, one step at a time*

# Transition takes place by Hands, Heart and Brain...



It takes serious time and effort to align people's minds

# Fun is the main driver for adults to learn



Studies show that adults best learn playing



# Make them work hard... And have success!



Mutual Trust and Respect need help and time to grow



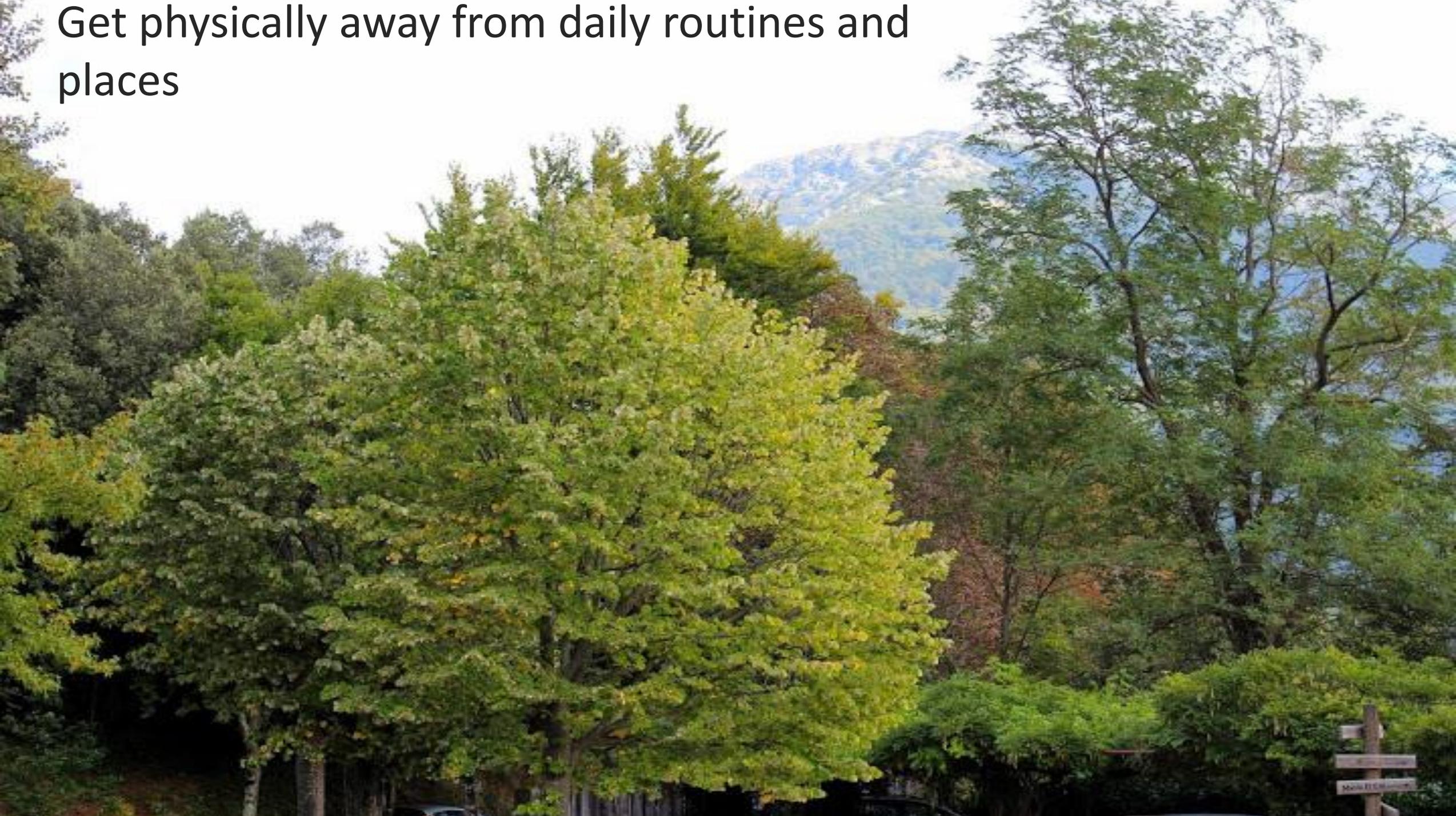
# Bury the past...get rid of the backpacks



Before embracing the new... let go of the past



Get physically away from daily routines and places



# Hands and Heart moving? Prepare for the Brain to join in



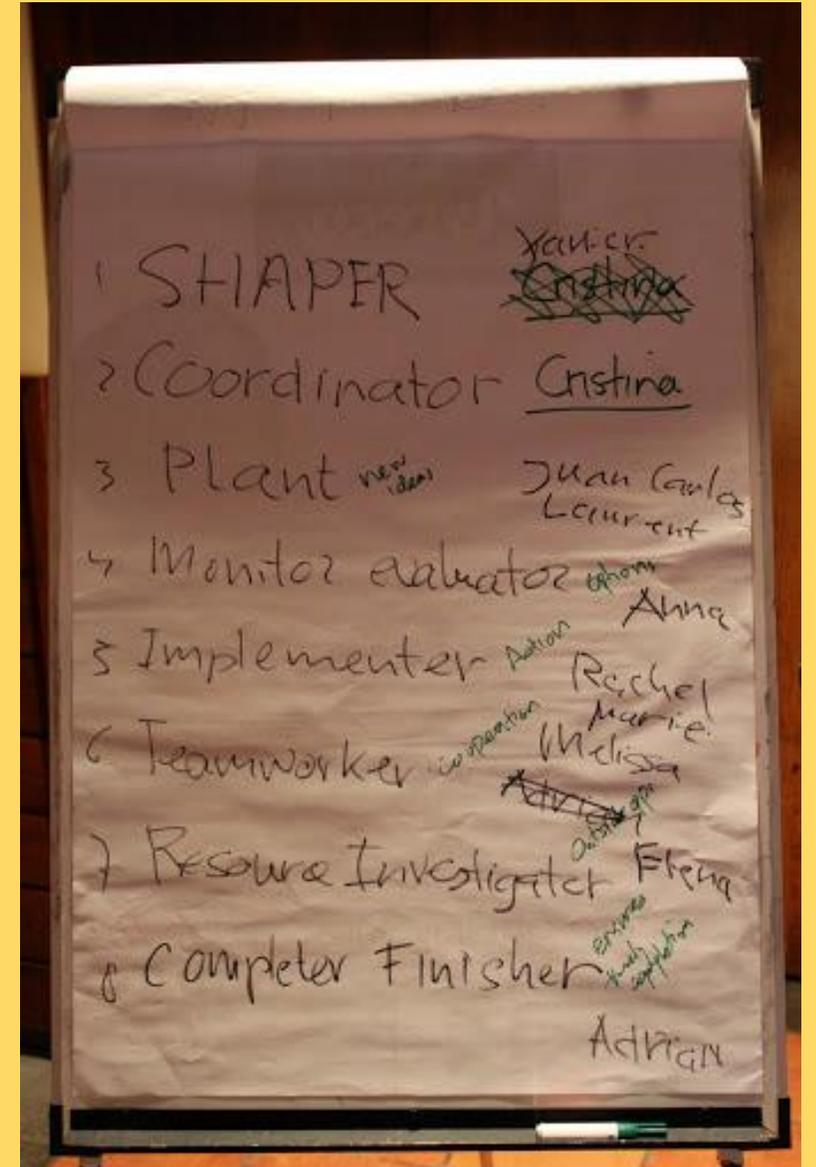
Allow them to break some eggs and learn



# The Brain ready to start working: What is a Team?



A high performance team needs to be created, nurtured and sponsored to maturity



# New Rules, new behaviors



**"Being Essential" Requires the Power of Shared Norms**

The irony of leadership through culture is that the **less formal direction** you give employees about how to execute strategy, the **more ownership** they take over their actions and the **better they perform.**

Leaders also promote **innovation** by creating a **shared belief** that team members are safe to take **interpersonal risk.**

Dr. J. J. & Chantal, J. A. (2015). Leading by Leveraging Culture. California Management Review, 57(4), 46, 48, 49.

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# What do we need to fix to make this work?



If its broke, find the reasons and fix it





All in favor say "Aye"

# Does it work in your culture?

Culture is circumstantial or even irrelevant  
as we address **Emotions** first, **Motivations** later and only than  
**Behaviors**



# It does



People need a challenge, something to work on or fix it together, make mistakes, learn fast from them and improve with each iteration



# Be ready to invest in people, before diving into the processes



Only when people understand their own emotions, they become ready for collaboration. Only when ready for collaboration, they can function in high performance teams. Only then they can master today's challenges... if you let them!

Even though they become ready as a person, they still need collaboration tools and standards



6 Thinking Hats

Now they are ready for workflow/process (re)design



IOF Teams need to be selected (if possible) prepared, built and coached during the journey



- Help **legitimize and authorize** the project continuously
- Create the **positive momentum** for engagement and **reduce anxiety**
- Transmit and authorize the **new values and behaviors**
- Support to the introduction of the RTOCs



# Tools, many, and Often



Tell them, then tell them again and again, and again



# And many more, and more often

## s Company Kuwait Integrated Digital Field KOC: World Class Company

The Sabriyah Collaboration Center will be manned with the brightest, most energetic Engineers/Geo-Scientists, who will have the latest technology at hand. Teamwork will be paramount, as they will have to take critical decisions in a quick, accurate and collaborative way

"We can have the best make no difference if Dr. Adel Al-Abbasi, R&T Ma

The Sabriyah Collaboration Center will be manned with the brightest, most energetic Engineers/Geo-Scientists, who will have the latest technology at hand. Teamwork will be paramount, as they will have to take critical decisions in a quick, accurate and collaborative way

## KOC: World Class Company

KwIDF has in place the most The data can be analyzed in s

State-of-the-art instrumentation

Ultra Low Frequency Passive Surface Seismic Monitoring (ULF-PSSM) Allows to specially visualize a subsurface hydrocarbon index, as well as the actual and the expected trajectory of the waterfront.

Key is Collaboration!

It's Real!

Key is Collaboration!

Collaboration Center Leads

It's our Future

Posters, Newsletters, Websites, Town Halls, Workshops...never stop, never give up

Transition of minds needs time!

And when you think you have told them enough... start again!



**“KwIDF brings true real time data”**

Bibi Hussain Akbar  
Geologist I at KOC

Courtesy of KOC R&T



**Taking Care of Oil**  
Kuwait Integrated Digital Field

[kwidf.kockw.com](http://kwidf.kockw.com)



شركة نفط الكويت  
Kuwait Oil Company  
أحد شركات مؤسسة البترول الكويتية  
A Subsidiary of Kuwait Petroleum Corporation

Point 4:

# A Chinese IOF Case Study:

Why Project X doesn't deliver

一位中国IOF案例研究：为什么X项目不提供

# Chinese IOF project for Company “X” doesn’t deliver full potential

## Root Cause

- Similar characteristics in cultural bias as the middle east and Asian countries
- The combination of long-term orientation and power-distance generates a cultural bias towards a siloed organization

## Symptoms:

- Emphasis on **doing 'what the boss wants'**
- Show only **'expected' behavior**
- **Lack of data sharing** across the organization; hiding behaviors
- **Aversion to taking on responsibilities** that are 'shared' - 'not my department' means **'not my problem'**.
- **Lack of openness** based on a fear of criticism or the perception that the quality of work or decision-making is less than it should be

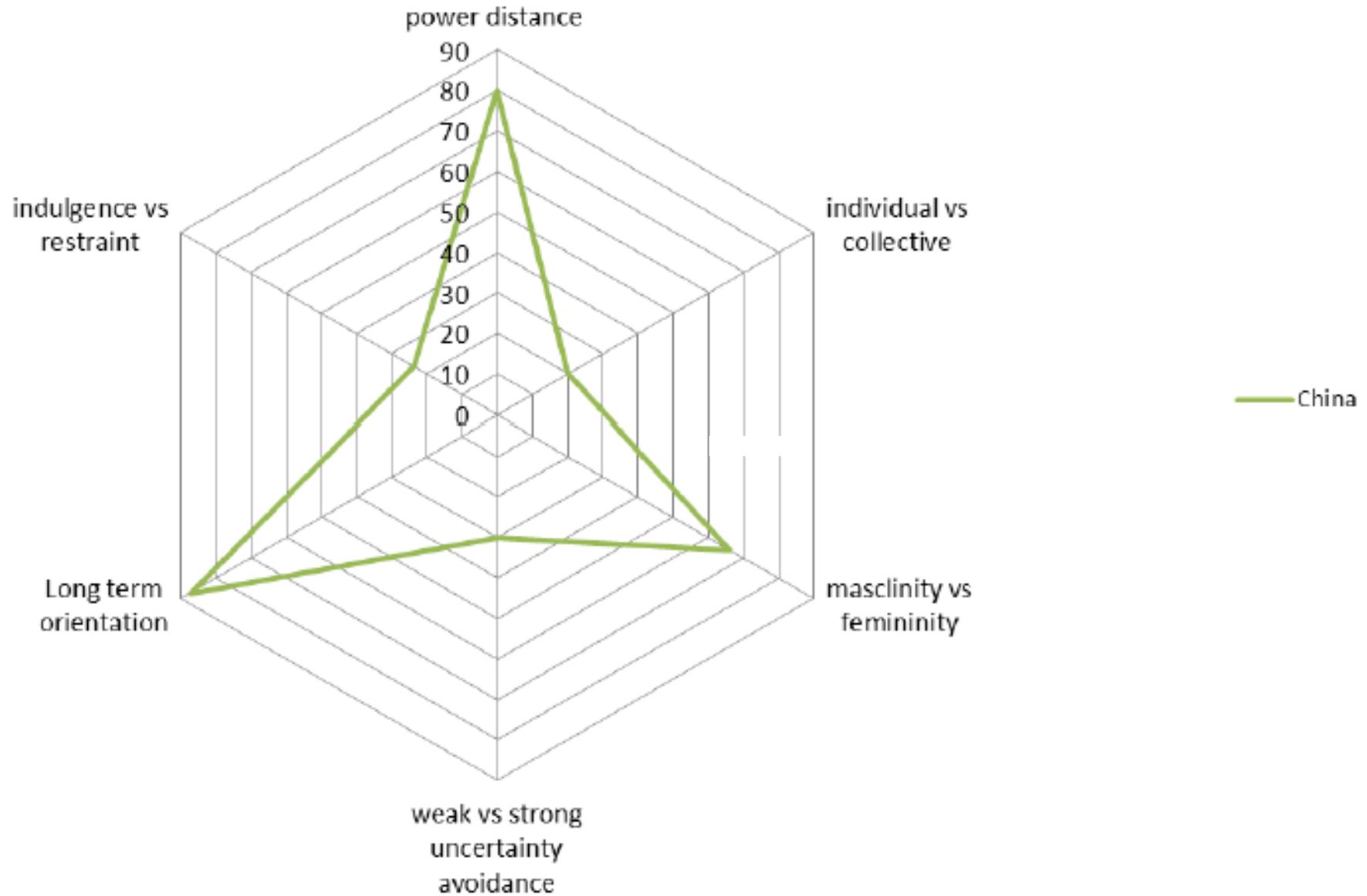
**This severely limits the value that can be achieved from this Chinese IOF implementation**

## Consequences:

- Building a production digital oilfield for this organization is restricted to the **surveillance and operations activities only** that the **Production department handles on its own**.
- There are **no reservoir, planning or other activities** which can be included.
- Old and **very poor lines of communication** between departments are retained.



# Chinese Culture Spider diagram

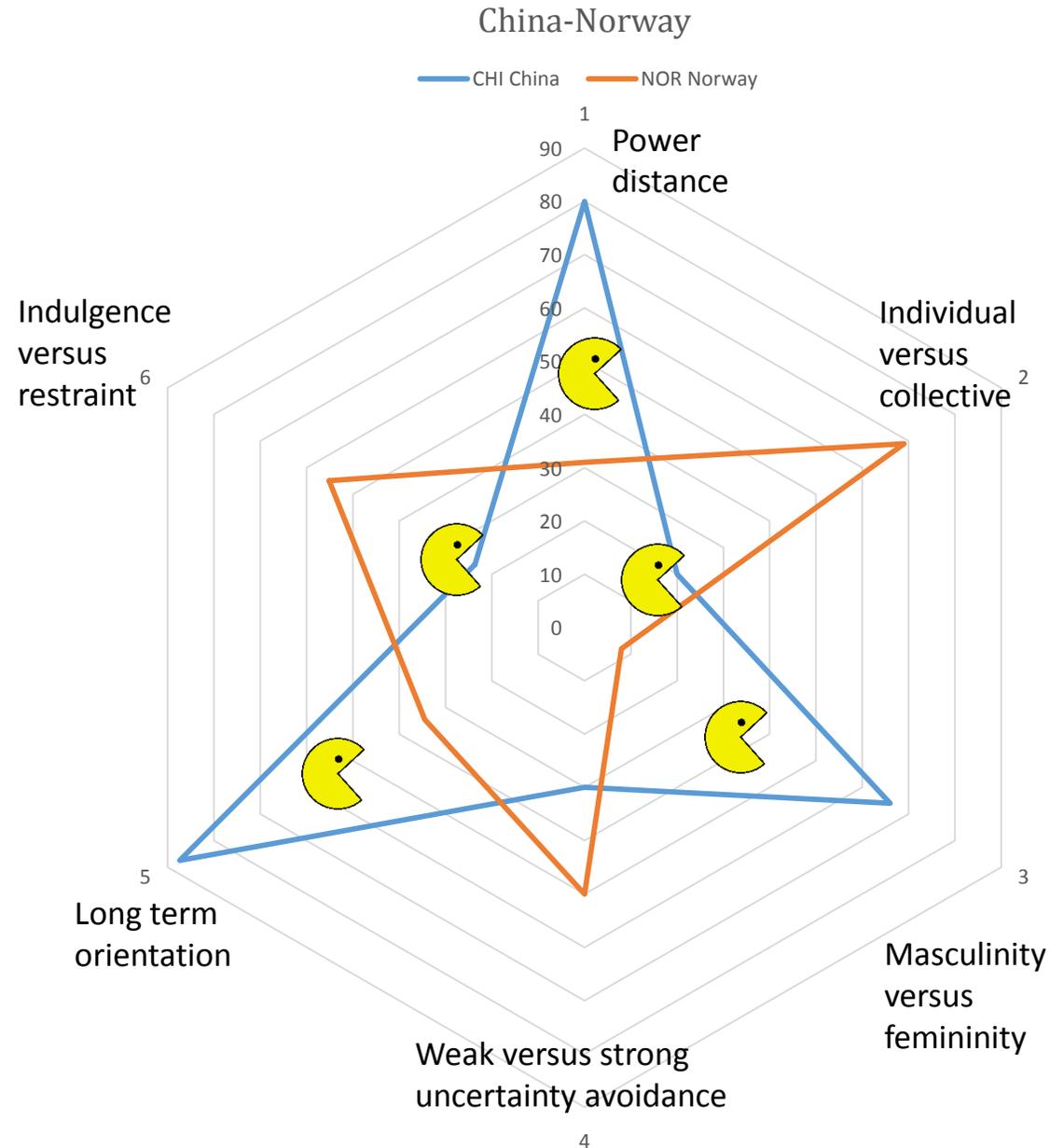




# Ideal IOF Culture diagram: Norway



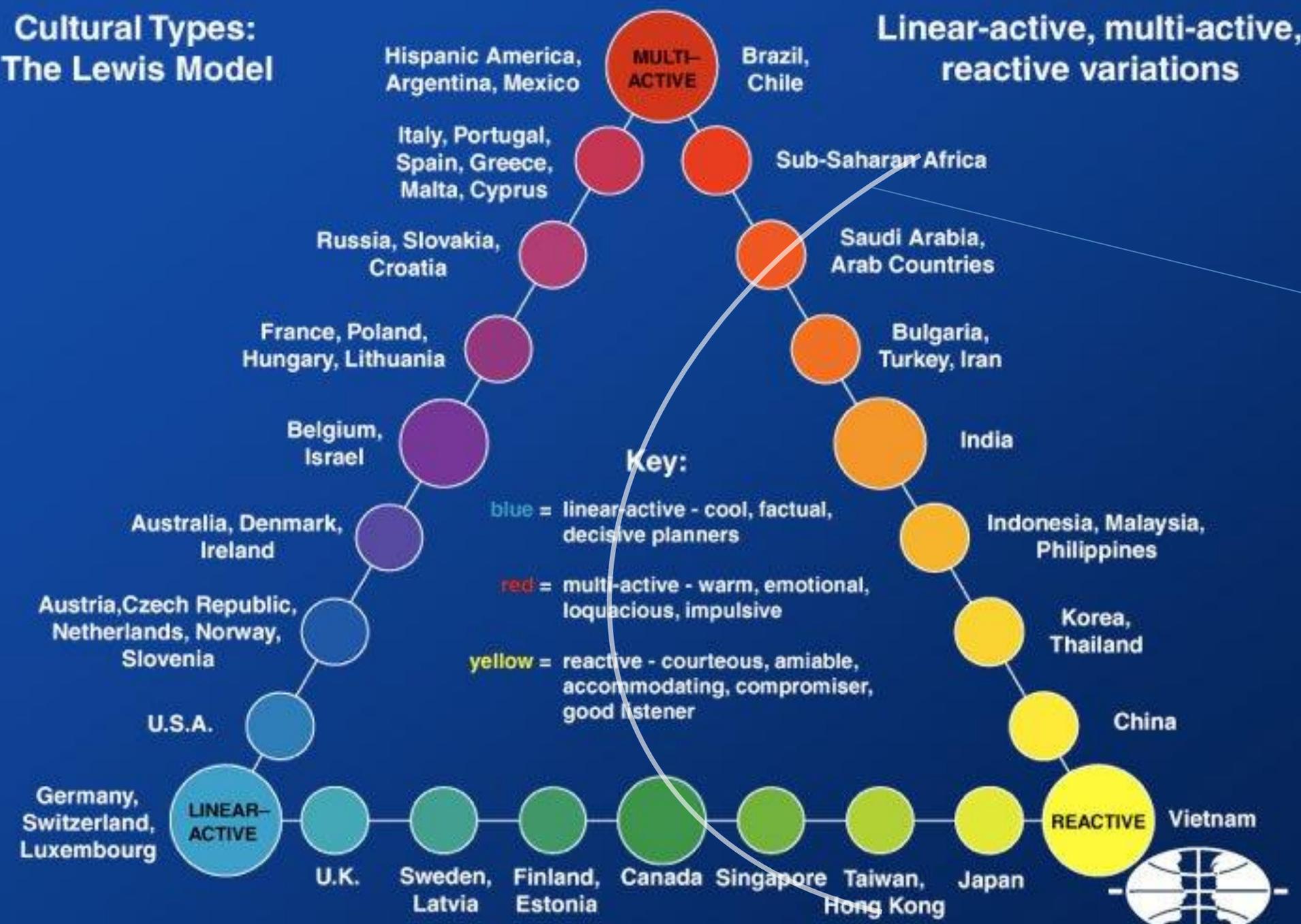
- China:**
- Low Power distribution
  - Restraint
  - Collective
  - Not focused on dealing with uncertainty
  - Masculine
  - Much able to plan ahead
  - Humble but not so flexible individuals



- Norway:**
- Power is distributed
  - Indulgent
  - Individual freedom
  - Able to deal with uncertainty
  - Equal sexes
  - Able to plan ahead
  - Humble and flexible individuals

# Cultural Types: The Lewis Model

Linear-active, multi-active, reactive variations



Cultural Comfort Zone



- **People bring the ROI**
  - Make the formal case
  - Address the “human side” **systematically**
  - People need to be allowed to **transition by heart, hands and brain**
  - Speak to the individual
- **Managers** need to lead and coach, **and...let go and let them go**
  - Start at the top
  - Involve every layer
  - Create ownership
- Intelligent Oilfields effect the Organization, the Culture, the Leadership style, the way people are dealt with and the way of working as such
  - Communicate the message
  - Assess the cultural landscape
  - Address culture explicitly
  - Prepare for the unexpected

If the company culture isn't suitable, change it or else  
**accept low or no IOF results.**

Thank you



Independent expert advice for Digital Oilfield Initiatives

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