

# Combining Value-Based Computer Functionality and an Organisational Change Approach To Deliver a Useful Solution to Users: The Case of Operating Procedures at Alaska's North Slope

Pete Floyd

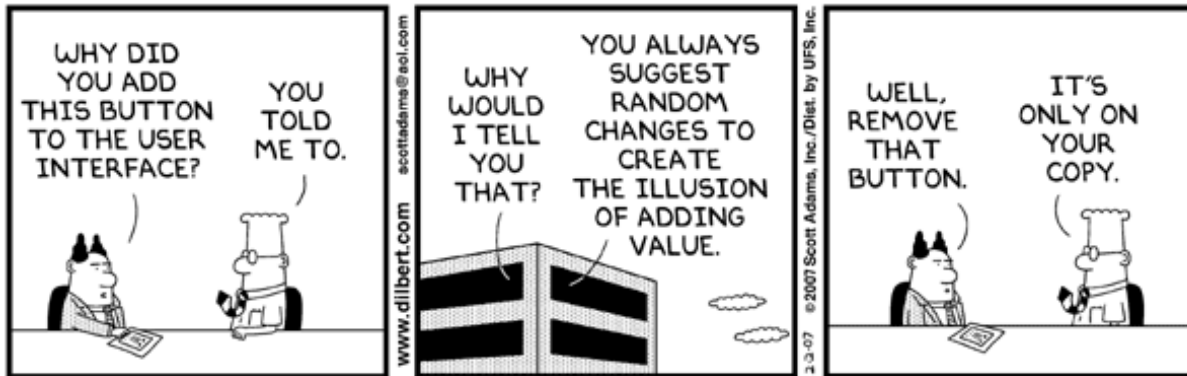


# Part 1

## Setting the scene



# Organisations

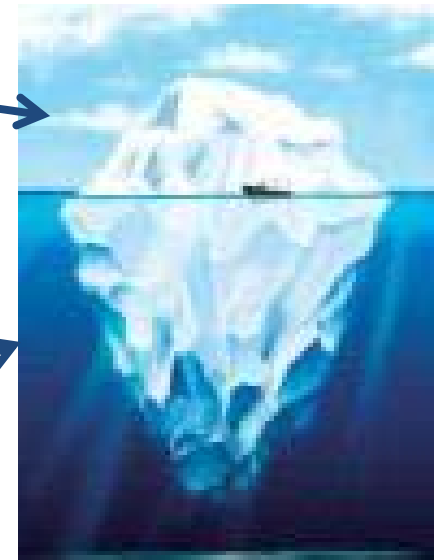


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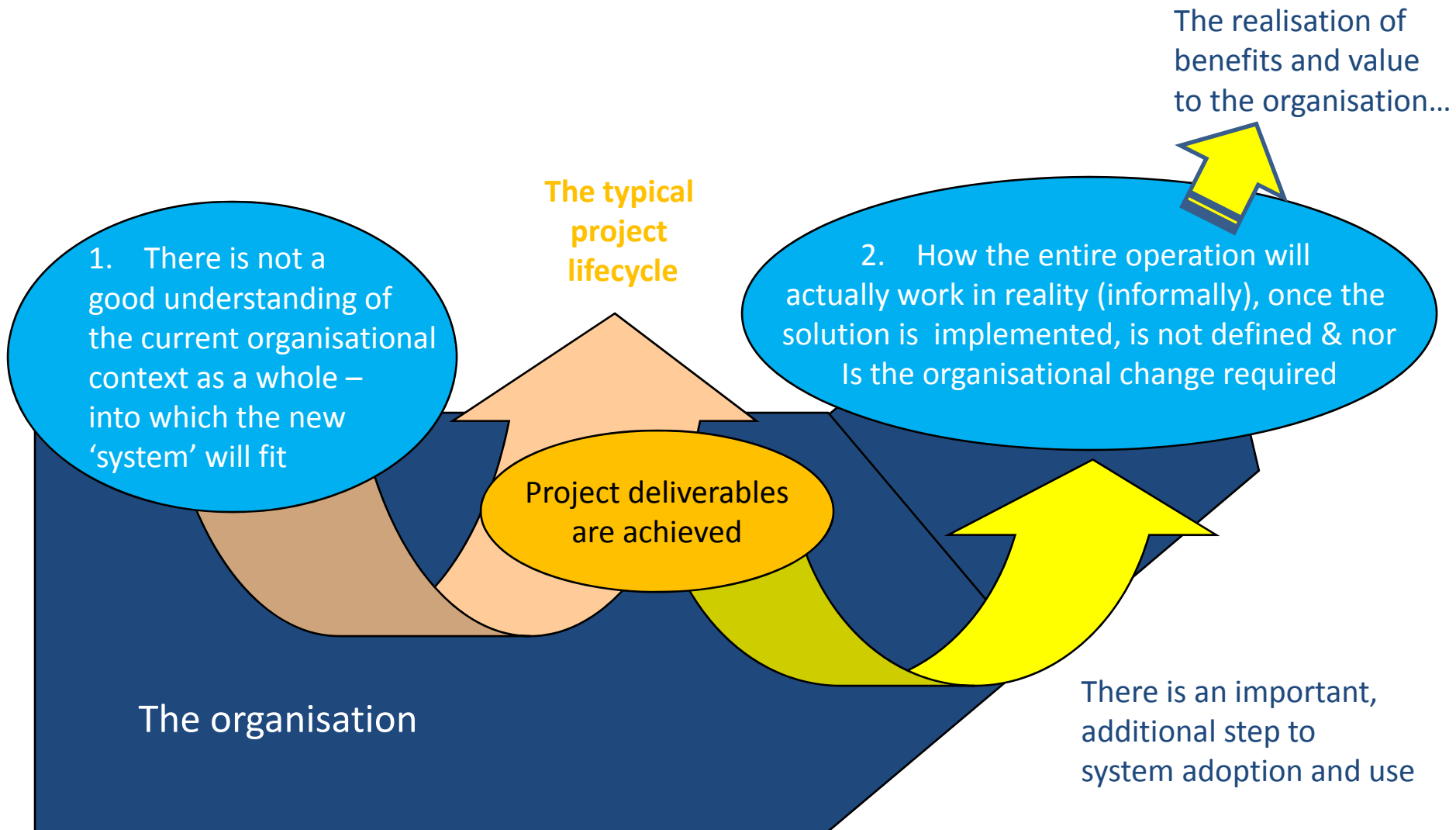
Formal definition of what is or should be done



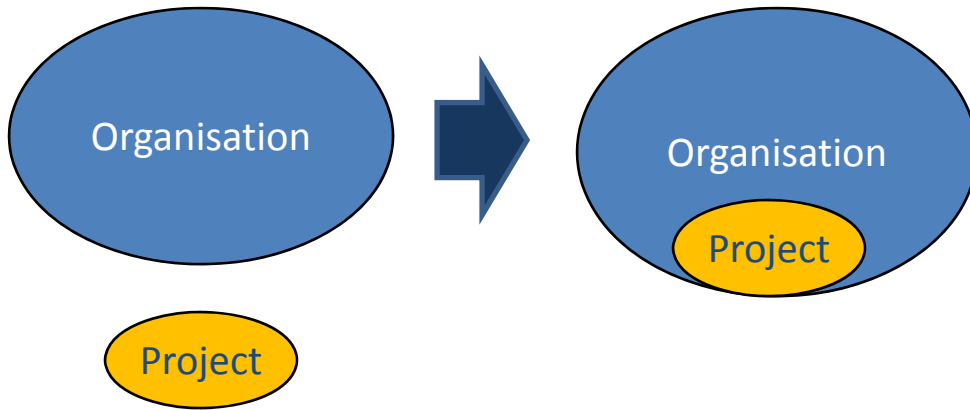
The informal reality of what and how things are actually done



With the organisational perspective, two critical steps are typically missing from many projects, leading to significant issues, risks and lack of project success



# A simple, practical and holistic organisational model for any project

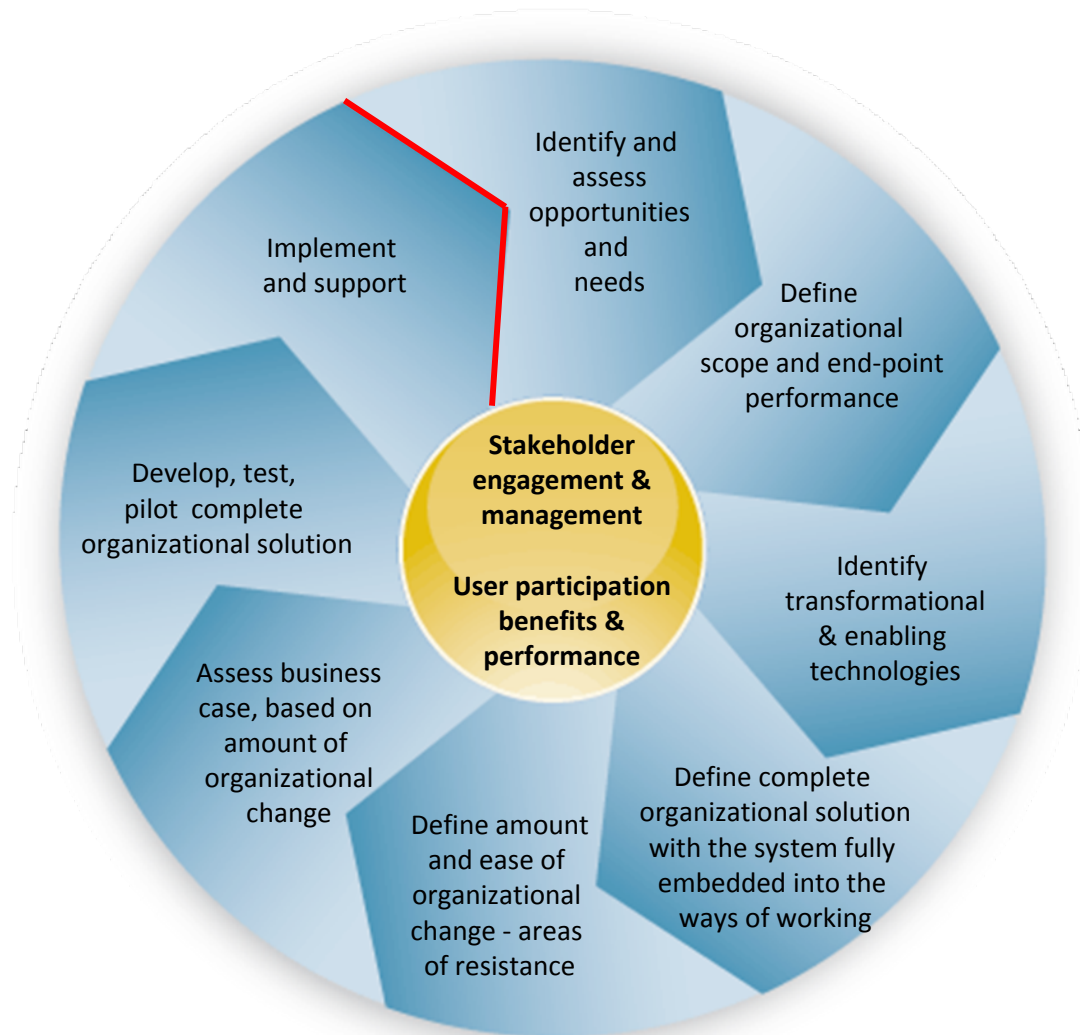


Answering the key organisational change questions:

1. What needs to change
2. What is it like now
3. What does it need to change to
4. Who needs to change, and how
5. What is the gap, how big is it
6. What are the barriers to change
7. How are we going to manage the change
8. What is the optimum sequence of change

Main organizational dimensions
Activities
Policies
Terms / language
Metrics
Processes
Structures
People knowledge, skills & understanding
Documents / information
Data
Systems

A different focus for IT-based projects –  
modular, and complementary to existing methodologies –  
to achieve greater success



## Part 2

## To Alaska



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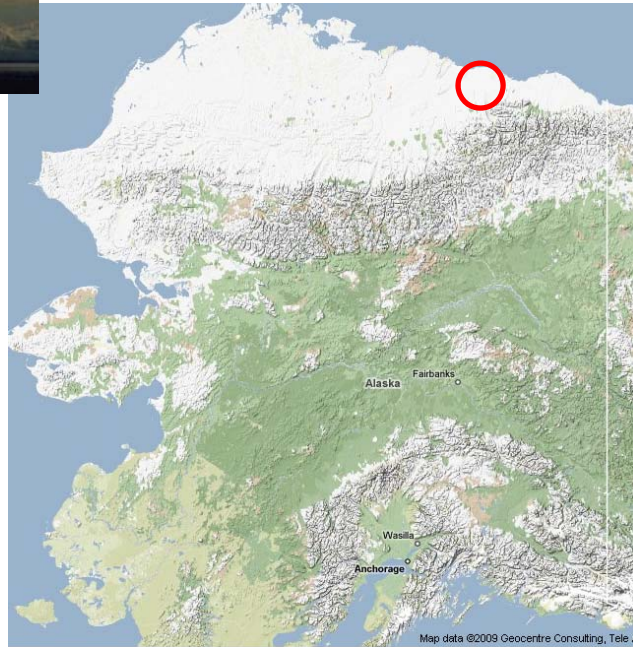
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# The North Slope

## North Slope

There are 23 producing fields on the North Slope. The largest oil field is known as Prudhoe Bay Field

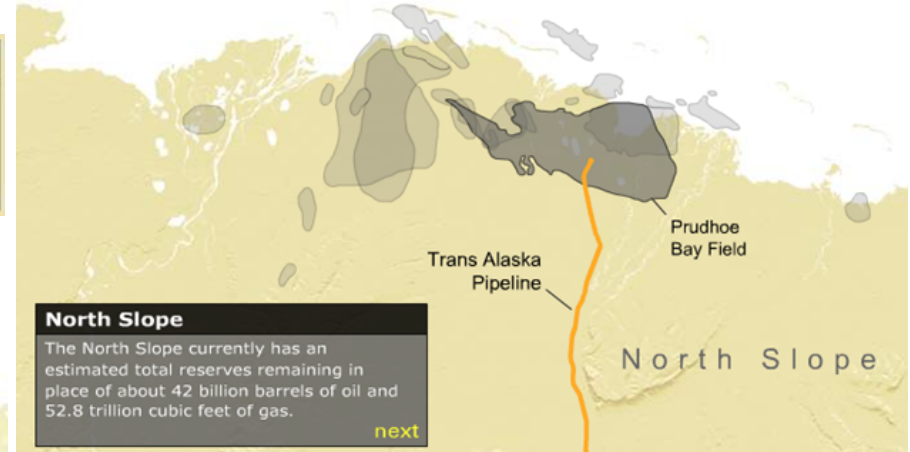
[more](#)

## North Slope

Alaska's North Slope oil fields cover an area of about 693,484 acres (1,083 square miles).

[more](#)

## Oil Fields



## North Slope

The North Slope currently has an estimated total reserves remaining in place of about 42 billion barrels of oil and 52.8 trillion cubic feet of gas.

[next](#)

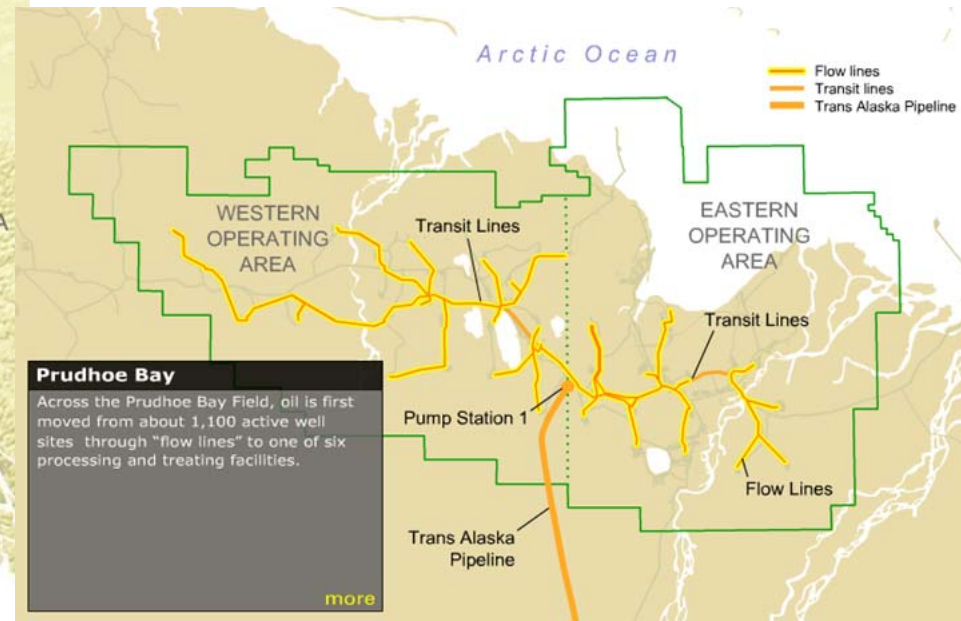


## Trans Alaska Pipeline

The Trans Alaska Pipeline stretches 800 miles, transporting oil from across the North Slope of Alaska to the port of Valdez.

Opened in 1977 at a cost of about \$8 billion, the Trans Alaska Pipeline had an average throughput of 891,000 barrels a day in 2005.

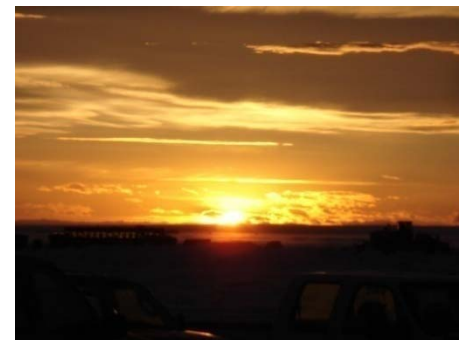
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## Prudhoe Bay

Across the Prudhoe Bay Field, oil is first moved from about 1,100 active well sites through "flow lines" to one of six processing and treating facilities.

[more](#)



# Project context and goals

- Drivers
  - Institutionalize best practice
  - Big crew change - create materials for new hires
  - HSE improvements = risk mitigation
  - Standardization across the operation
  - Broad cultural change around more formalized use of documentation
- Deliverables
  - Accurate and updated procedures
  - New, intuitive, procedure portal for procedure location
  - New policy with associated processes & roles
- Goals
  - Improved HSE performance
  - Improved quality and use of procedures – behaviour change

# Organizational context

- General characteristics
  - All facilities are different
    - Assets & equipment
    - Operations, ways of working, cultures (e.g. Union – non-Union), previous owners
- Human factors
  - Belief (rewarded in past) that individual knowledge is power
  - Many years of experience – know everything, no need for procedures
  - Lack computer literacy for some Operators
- Roles
  - Not clear enough accountabilities related to procedures and documentation
- Process & workflow
  - Slightly informal approach to procedures
- IT System factors
  - Difficult to find procedures in the old system & poor control

# Organizational context

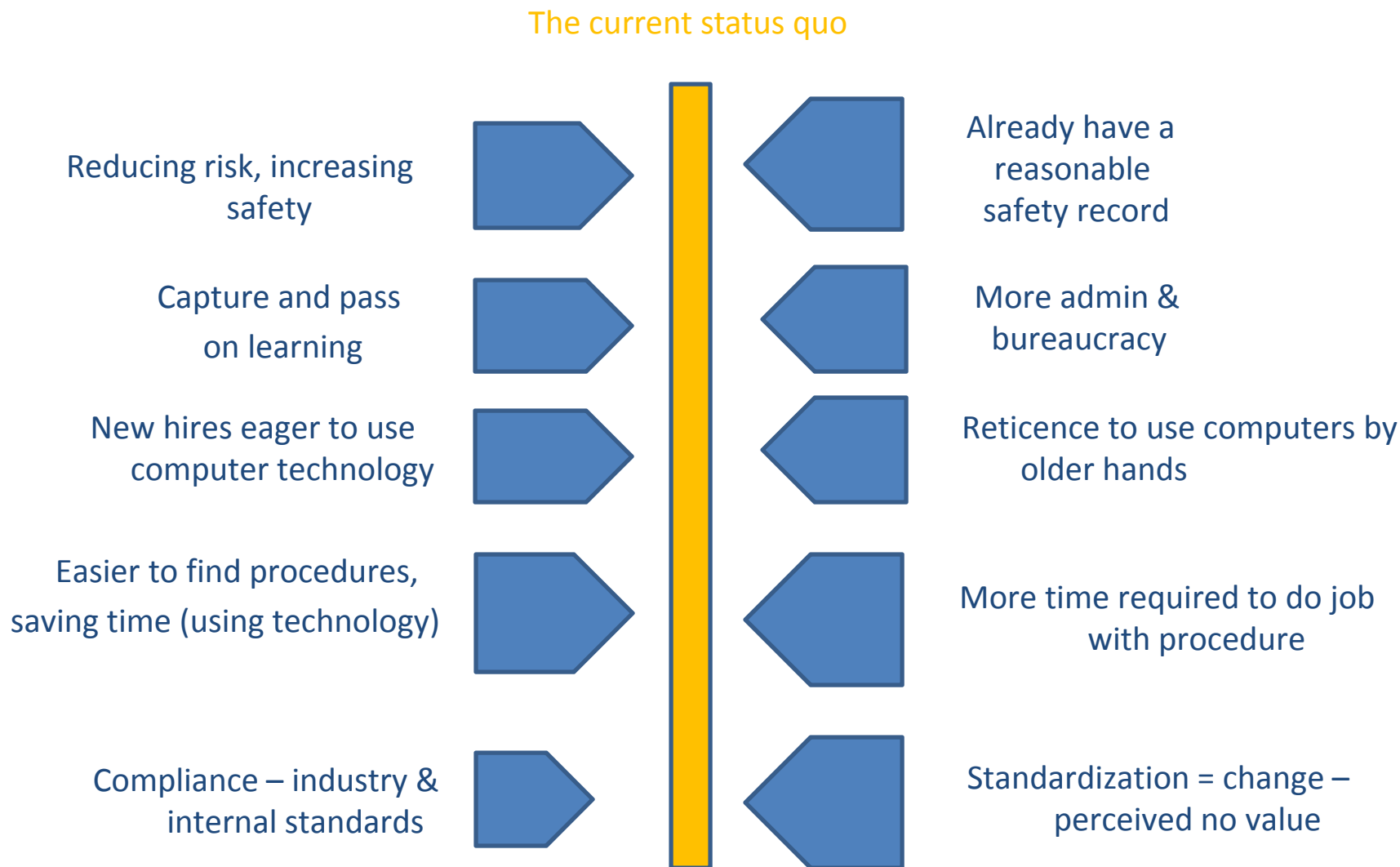
- Policies
  - External/Industry standards
    - US has OSHA
    - 1910 standard = primary PSM legislation – defines required documentation and standards around chemical & process hazards
  - Internal standards
    - IM
    - OMS

# The Organisational changes involved or require - based on those 8 core change questions

- General characteristics
  - All facilities are different - **increased standardization = change**
- Human factors
  - Belief that knowledge is power – **Need to decide and agree on 1 'best way', and share**
  - Lack computer understanding – **need to be able to use computers**
- Process & workflow
  - Procedures – **greater formality, control, discipline**
- Roles
  - Not clear enough accountabilities - **New formalized, document-related roles**
- IT System factors
  - Difficult to find procedures in the old system – **need to learn new system – easy/intuitive, but different**

# The organisational, and individual, change challenge - drivers for, and barriers to, change – focusing on the users

Based on Kurt Lewin's Force Field Analysis Model



# Project Approach

## – Use of change levers to ensure win-win-win

- Social Levers

- Involvement and participation in design from the start – leading to ownership
- Project kick-off involving all key stakeholders
- Constant communication – Newsletters, workshops, competitions
- Identify resistance and barriers to change through surveys & dialogue
- Continuous check & validation

- Political Levers

- Active and visible sponsorship, championship by senior staff
- Communication of the value, benefits.. \$\$
- Clear communication and decision-making channels

- Technical Levers

- System functionality – easy, intuitive, helpful, meets needs
- Integration, evolution of what have today, not revolution

# Project Solution

- Technology design concept
  - User value based – providing benefits and greater value to users than today's system
  - Quick, simple and easy to use, even for computer illiterates
  - Combines what they know today, with a better way
  - Powerful search engine
  - Able to handle over 30 pieces of metadata/attributes per procedure

# The Procedure Portal

1. Drill down hierarchy just like legacy systems

2. Quick-search using keywords

3. Advanced-search

The screenshot shows the Alaska Operations & Maintenance Site Operating Procedures portal. The header includes the Alaska logo and the title "Alaska Operations & Maintenance Site Operating Procedures". Below the header is a navigation bar with "Welcome to the BP Alaska Operations & Maintenance Site Operating Procedures View" and "hide directory return to home".

The main content area is divided into four sections:

- Document Directory:** A sidebar on the left with a tree view showing folders like "ACT" and "GPB".
- Welcome:** A central text area with a "Welcome" heading and instructions for users. It includes a list of four points explaining the portal's navigation and search methods.
- Search:** A search bar at the top right with a "quick search" input field and an "advanced search" link. A checkbox for "include full text" is also present.
- Other Information:** A sidebar on the right with a list of links: "SOP Practice Doc", "SOP Template", "Management of Change", "Integrity Management", "Search/View Tips", and "E-book".

Red circles and arrows highlight the "Document Directory", "advanced search" link, "Other Information" sidebar, and the "quick search" input field.

4. Reference information

# Project results and learnings

- Results
  - All project goals achieved
  - Organizational benefits realized
  - High User satisfaction
- Learnings
  - Keep stakeholders informed
  - Operations Division is king
  - Escalate issues early
  - Recognize the strong influence of history
  - Recognize the multiple sub-cultures and deal with them appropriately
  - Criticality of messaging and positioning of initiative

Thank you.

Questions



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