

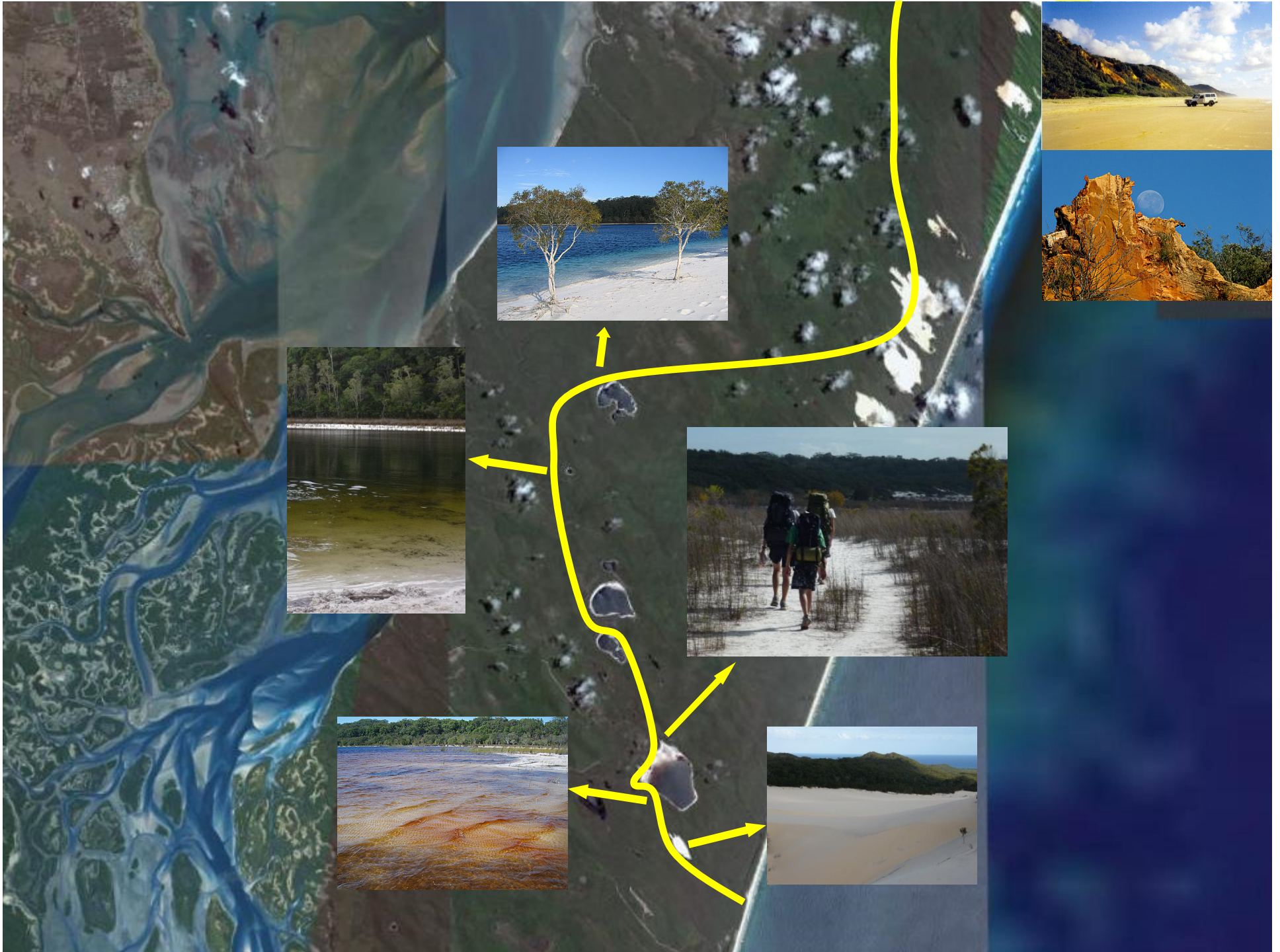
Automation – A Case Study in Change Management

Harnessing rather than being harmed by change



A satellite-style map of the eastern coast of Australia, showing the coastline and the surrounding ocean. The land is depicted with various shades of green, brown, and yellow, indicating different vegetation and terrain. The ocean is a deep blue. A small white square with a crosshair is positioned on the coast, marking the location of Fraser Island. To the right of this marker, the text "Fraser Island, Queensland, Australia" is written in white.

Fraser Island, Queensland, Australia



PATRICK

**Technology &
Systems**







Keeping on the right side of creative destruction:

- Context – Brisbane AutoStrad™ Terminal Overview
- People centric
 - The hard side of change management
 - Principles
 - Practical framework
 - Case study : a project going sideways
- Process centric
 - Attacking the weaknesses in your processes
 - Case study : More efficient handling of last minute empty and FCL in a fully automated terminal
- Technology centric
 - System functional issue
 - Improving truck exchanges
- Q&A

AutoStrad™ Terminal



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Hard Side of Change Management

- French novelist Jean-Baptiste Alphonse Karr wrote
 - *“Plus ça change, plus c’est la même chose”*
- Focus has been on the ‘soft’ elements of change management
 - Amazon.com: 55140 books on “Change Management” vast majority on ‘soft’ issues
- Two out of three transformation initiatives still fail
- The more things change, the more they stay the same!
- Exercise: Name the one factor critical for the success of transformation/improvement programs
- So what is missing ... the hard stuff ... things that can be:
 - Measured
 - Communicated
 - Implemented

Hard Side of Change Management

Guaranteed
failure

Guaranteed
success



Long, drawn-out project
Executed by an inexperienced, unenthusiastic, and disjointed team
No top-level sponsors and targeted at a group that dislikes the change
A lot of extra work by the BU



Short project
Led by a skilled, motivated, and cohesive team
Championed by top management and implemented in a department that is receptive to the change
Very little additional effort by the BU

Four factors for success

1. **Duration** : Reviews every 2-8 weeks
 - Milestones vs day-to-day activity
2. **Integrity** (Team attitude and aptitude) :
 - Ideal leader
 - good problem-solving skills
 - results oriented
 - methodical but tolerate ambiguity
 - organisationally savvy
 - willing to accept responsibility for decisions
 - don't crave the limelight

Four factors for success

3. Commitment : C1 and C2 covered off
4. Effort :
 - 10% rule
 - What daily tasks do members stop
 - Cull / delay less essential projects
 - Temps / retired managers

Charting likelihood of success

- Duration [D]**

Ask: Do formal project reviews occur regularly? If the project will take more than two months to complete, what is the average time between reviews?

	Score
< 2 months apart	1 point
Betw. 2 & 4 months	2 points
Betw. 4 & 8 months	3 points
> 8 months	4 points

- Integrity of Performance [I]**

- Ask:** Is the team leader capable? How strong are team members' skills and motivations? Do they have sufficient time to spend on the change initiative?

	Score
All dimensions are yes	1 point
Lacking in all ways	4 points
Some elements	2 - 3 points

Charting likelihood of success

- **Senior Management Commitment [C1]**

Ask: Do senior executives regularly communicate the reason for the change and the importance of its success? Is the message convincing? Is the message consistent, both across the top management team and over time? Has top management devoted enough resources to the change program?

	Score
Senior execs fully support	1 point
Senior execs neutral	2 - 3 points
Senior exec reluctant	4 points

- **Local-Level Commitment [C2]**

Ask: Do the employees most affected by the change understand the reason for it and believe it's worthwhile? Are they enthusiastic and supportive or worried and obstructive?

	Score
Employees eager for change	1 point
Employees willing to take on the change	2 points
Reluctant or strongly reluctant	3 - 4 points

- **Effort [E]**

Ask: What is the percentage of increased effort that employees must make to implement the change effort? Does the incremental effort come on top of a heavy workload? Have people strongly resisted the increased demands on them?

Extra work required	Score
< 10%	1 point
10 – 20%	2 points
20 – 40%	3 points
> 40%	4 points

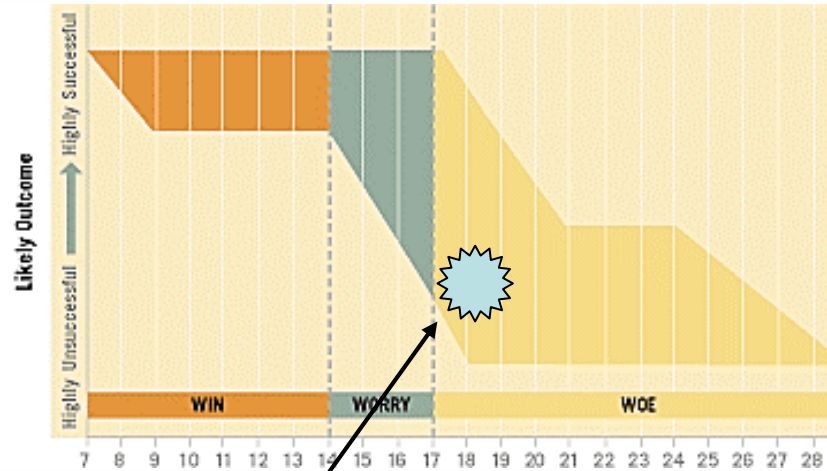
Charting likelihood of success

[D]	[I]	[C ₁]	[C ₂]	[E]

Calculate

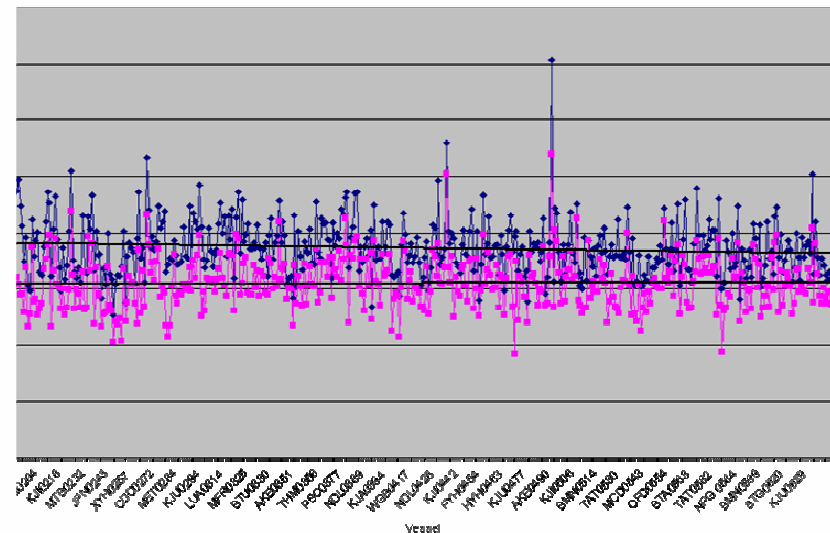
$$\text{SCORE} = D + 2I + 2C_1 + C_2 + E$$

Plot →



Initial

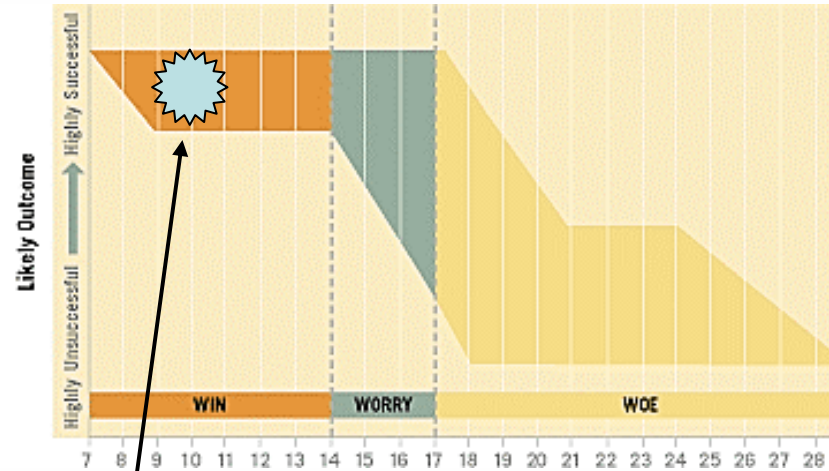
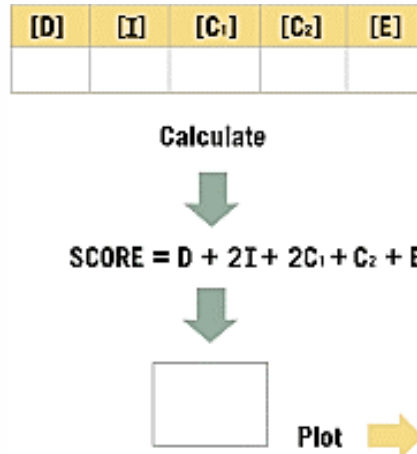
- D - 3
 - I - 3
 - C₁ - 3
 - C₂ - 2
 - E - 1
- 18 points ...
WOE territory



Changing course

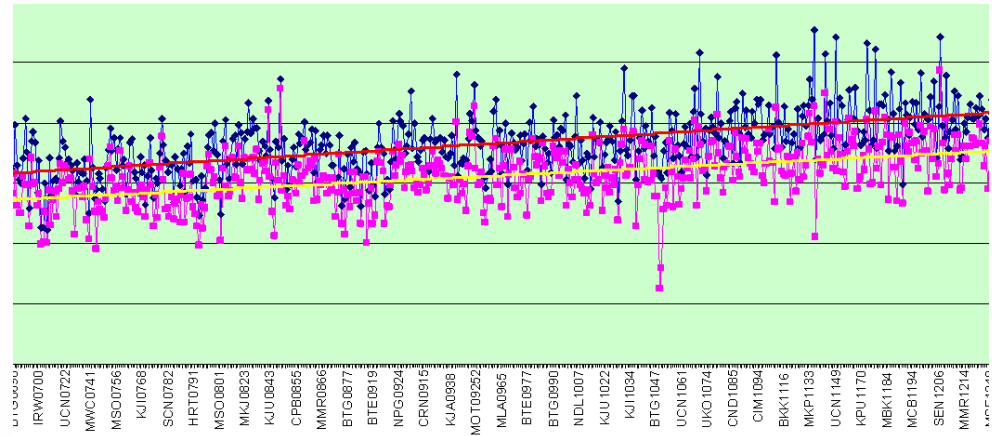
- **Duration [D]**
 - Steering committee group revamped
 - Mini-milestones established
 - Reporting and communication plans revamped
- **Integrity of Performance [I]**
 - Detailed resourcing review undertaken
 - Broadened and revamped the team
- **Senior Management Commitment [C1]**
 - Deliver something first, then ask for more.
 - Incrementally addressed sceptics, based on irrefutable evidence.
- **Local-Level Commitment [C2]**
 - Regular and frequent updates
 - Solution scrums involving local staff
 - On-site visibility
 - Immediate and detailed responses to feedback
- **Effort [E]**
 - Increased effort required by local staff ... with concessions

Reassessing after changing course



12 months later

- D - 1
 - I - 2
 - C₁ - 1
 - C₂ - 2
 - E - 1
- } 10 points ... WIN territory



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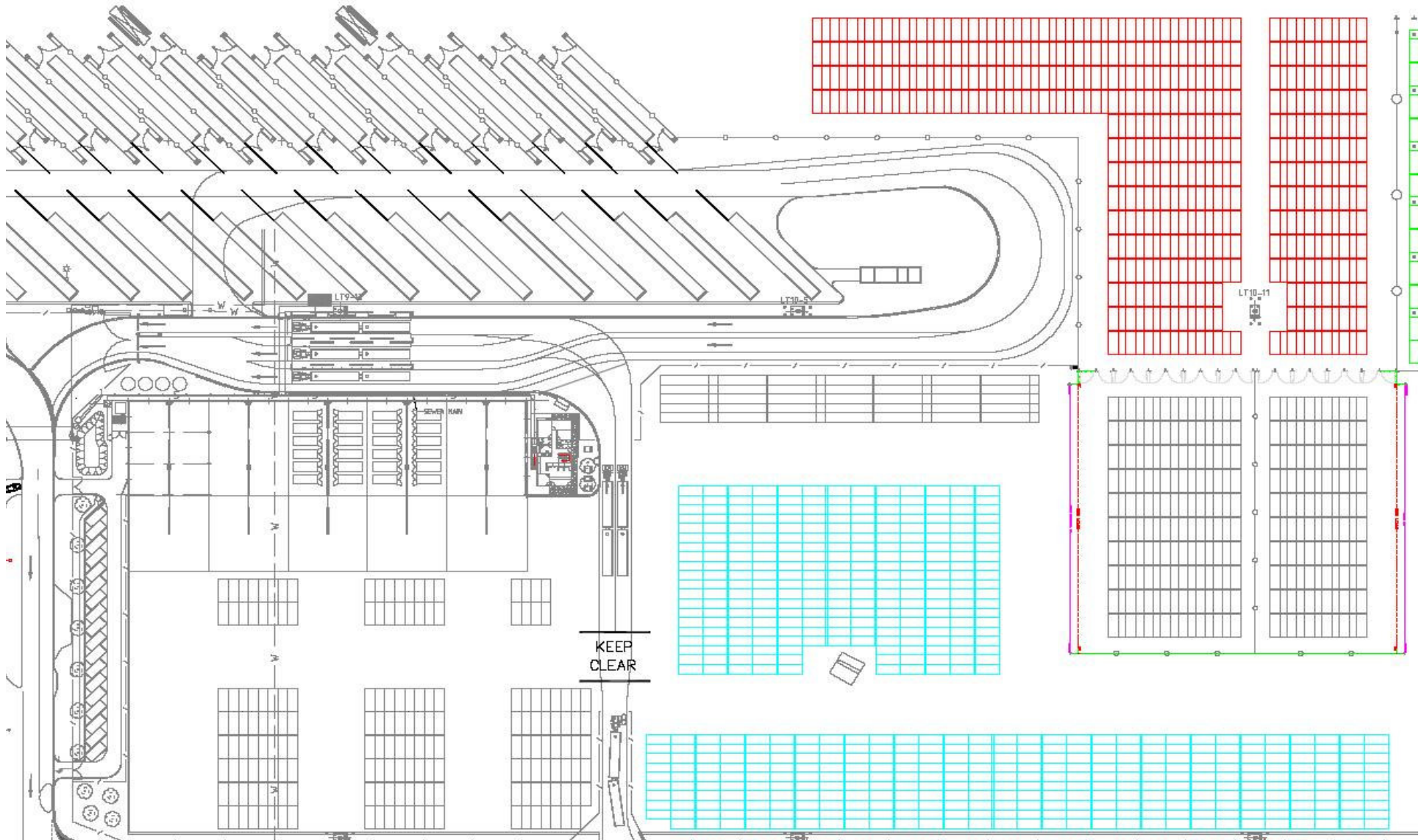
Challenge

- Many benefits for using free ranging automation
- Significant down-side though
 - Last minute evacuation of empties and FCL
 - Processing via truck grids critical path
 - No other option in an auto yard

Response

- Change the process to skip truck grids - Cargolink

Cargolink Overview



Cargolink features

- The technology employed is independent of container handling equipment.
- Move large numbers of import and export containers within a single operating window
- Utilises
 - Twin lifting both into and out of interchange area
 - Dual cycling of the straddles for interchange moves
 - “Twin-able” stacks in terminal for twin loading of the vessel
 - Three high stacking in interchange

- Additional service offering for shipping line and specialised road transport operators
- Environment
- Utilises AutoStrad™ flexibility and capability (e.g. full pooling, twin-lift, straddle dual cycle)
- Reduction in terminal dwell time
- Extremely safe operation
- Facility operates external to the Terminal
 - **Competitive tension between the truck grids and the Cargolink facility**

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System functional challenge

Problem

- Straddle moves per hour at truck grids at 50 – 60% the rates on quay-side and in the yard

Solution

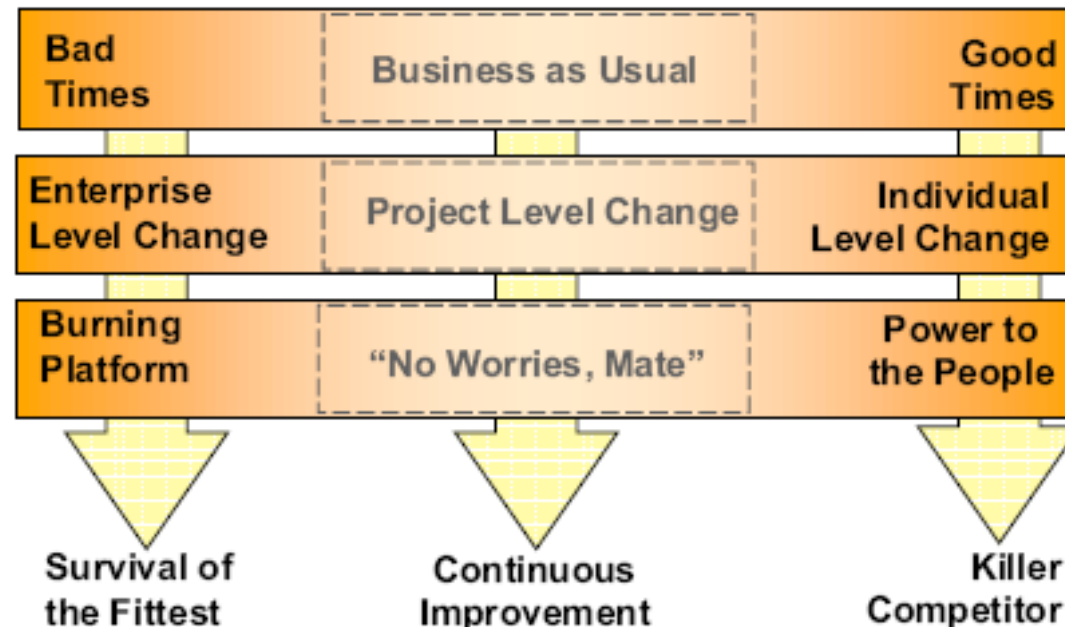
Through more sophisticated use of sensors and control systems:

- Constrained tele-operation
- Automated pick from trucks



Benefit

- Straddle moves per hour at truck grids improvement of 30%



Whichever 'change' personality is in operation
... a holistic approach will help