DEVOPS
CULTURE
EMPOWERMENT
OWNERSHIP
and good patterns
DEVOPS

IDENTIFY CUSTOMER PROBLEMS

RESOLVE CUSTOMER PROBLEMS (WITH SPEED)

SUPPORT CUSTOMER SOLUTIONS
Three 'states' of an enterprise:

- **Leadership**: Permafrost
- **Enablement**: Liquid
- **Teams**: Air

Corresponding layers:

- **Teams**
- **Enablement**
- **Leadership**
- **Processes**
- **Culture**

- **Tools**
Finding Agility

- Culture
- Behaviours
- Experiences
- Actions
AGILITY
BEHAVIOUR
MODEL
• CULTURE EMERGES FROM SHARED EXPERIENCES AND COMMON BEHAVIOURS – DevOps and Agility require/demand that culture be addressed

• DEVOPS IS AN ENTERPRISE INITIATIVE – The entire enterprise must understand, accept and embrace it

• DEVOPS IS LED BY SENIOR LEADERSHIP – This cannot be delegated or handed off.

• DEVOPS IS NOT AN IT OR OPS PROBLEM – It is a customer problem and demands shared experience across the enterprise
DEVOPS & THE FOCUS AREA FOR TODAY
VALUE STREAMS

Visualise the steps needed to deliver something of value to customers/clients.
• Use the information in the handout to map out the ‘made up’ value stream

• Important pieces
  • Steps/Activities
  • People
  • Systems
  • Process time
  • Waiting time
• **Ownership** is a result of being involved in the big picture – Value streams provide the input and opportunity for everyone with an interest to co-create.

• **Value streams** must be visualised by the people that work in them – Local knowledge is better than extrapolated knowledge.

• **Value streams** must be managed – Potential work must be validated for its potential improvement on value streams and customers.

• **Value stream mapping** cannot be skipped – It will challenge old thinking, will receive immediate resistance and will shift an enterprise 90°.
<table>
<thead>
<tr>
<th></th>
<th>(1) EXPLAIN THE PROBLEM TO BE SOLVED:</th>
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<tr>
<td></td>
<td>SHORT, SIMPLE STATEMENT DESCRIBING THE PROBLEM TO BE SOLVED</td>
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<td>(2) HOW DOES THIS PROBLEM IMPACT THE CUSTOMER?</td>
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<td>EXPLAIN WHY THIS STATE IS UNDESIRABLE (PERCEIVED OR REAL) TO THE CUSTOMER</td>
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<td>(3) WHAT IS THE ROOT CAUSE OF THE PROBLEM?</td>
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<td>WHAT ARE THE PRIMARY REASONS (PEOPLE, PROCESS OR TECHNOLOGY) THAT ALLOWS THIS PROBLEM TO REMAIN?</td>
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<td>(4) WHAT IS THE DESIRED TARGET STATE AFTER THE PROBLEM IS RESOLVED?</td>
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<td>HOW WOULD CUSTOMERS KNOW THAT THE PROBLEM HAS BEEN SOLVED?</td>
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<td>HOW WOULD THE ENTERPRISE KNOW THAT THE PROBLEM HAS BEEN RESOLVED?</td>
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<td>(5) WHAT ACTIONS ARE NEEDED TO ADDRESS THE ROOT CAUSES?</td>
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<td>WHAT WORK NEEDS TO BE DONE TO RESOLVED THE ROOT CAUSE OF THE PROBLEM?</td>
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<td>(6) WHAT ARE THE CURRENT METRICS?</td>
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<td>BASED ON THE DEFINED PROBLEM, WHAT METRICS ARE AVAILABLE TO QUANTIFY THE EFFECT OF THE PROBLEM?</td>
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<td>(7) WHAT ARE THE EXPECTED FOLLOW UP METRICS?</td>
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<td>WHEN AND HOW SHOULD THE FOLLOW UP CHECK BE CONDUCTED?</td>
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<td>WHAT ARE THE EXPECTED METRICS AT THE FOLLOW UP DATE?</td>
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• Using the value stream you mapped,
  • Identify a problem (waste, handoffs, delays etc)
  • Work through the A4 worksheet to identify possible ways to resolve/improve the problem
A4 Planning – Exercise – Sample Solution

(1) Explain the problem to be solved:

Wasted time between order capture and payment confirmation

(2) How does this problem impact the customer?

Customer has to wait 2 days from order payment before order commences processing

(3) What is the root cause of the problem?

There is no automated link between the web portal and billing system.

(4) What is the desired target state after the problem is resolved?

As soon as a client captures the order and processes the payment, the billing system should be updated and the next step in the process should be triggered.

(5) What actions are needed to address the root causes?

- Web portal to be linked to billing system.
- Billing system to notify solution designer

(6) What are the current metrics?

- 2 day delay in payment confirmation

(7) What are the expected follow up metrics?

- When: Tuesday
- What: Automated payment reconciliation
• **Empowerment** is the freedom to act with the best interest of customers in mind, without fear or hesitation – the people that observe the problem are best placed to solve the problem and should not require permission to act.

• **A4 Planning is a Continuous Activity** – time, effort and skill must be expended in identifying and resolving root causes.

• **Step Changes are Better than Big Bets** – it is wiser to make frequent, smaller changes for improvement than large, infrequent (and risky) changes.

• **Customer Problems are Critical** – problems caused to or experience by customers are the highest priority.
AGILE TEAMS = DEVOPS TEAMS

TEAM: CONSTITUTED TO ADDRESS THE IMPACT AREA OF PROPOSED WORK. WITH ALL THE RELEVANT SKILLS.
Results of coaching

Health Assessment February – May – August
Scale 1 – 5

February
May
August

Hypothesize
Collaborate
Architect
Synthesize
Develop
Build
Test
Deploy
Verify
Monitor
Respond and Recover
Release
Stabilize
Measure
Learn
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<tr>
<th>Name</th>
<th>Role/Function</th>
<th>Skill</th>
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<th>Knowledge</th>
<th>Ability</th>
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• Using the skill matrix provided, identify missing skill sets (Awareness, Knowledge and/or Ability) in the 'team'.
• Suggest actions to close those gaps.
PATTERN 4

• **TEAMS MUST BE COMPOSED OF T-SHAPED PEOPLE** – HIRE FOR SPECIALISM, INVEST IN DEVELOPING GENERALIST SKILLS

• **FULL CAPABILITY TEAMS** – TEAMS MUST ADDRESS THE END TO END IMPACTS (PEOPLE, PROCESS AND TECHNOLOGY) AND INCLUDES THE CUSTOMER, BUSINESS AND TECHNOLOGY INTELLIGENCE

• **CUSTOMERS AT THE HEART OF EVERYTHING WE DO** - CUSTOMER VALIDATION TELLS TEAM/S WHEN TO STOP WORKING ON A PROBLEM
• **DevOps is a people based ‘enterprise goal’**
• **Agility is spearheaded by people in a leadership role**
• **Culture can not be ‘mandated’ – it emerges**
• **Actions, experiences, behaviors & beliefs must be crafted**
• **Agility is hard to pursue – understand it, accept it and move on**
• **Arguing about a problem will not resolve the problem**
THIS WORK WOULD NOT HAVE BEEN POSSIBLE WITHOUT THE CONTRIBUTIONS OF THE FOLLOWING PEOPLE

CORE CONTRIBUTION
RENESH MOODLEY
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GABRIELA JOHANNES

SUPPORTING CONTRIBUTION
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JACO MARAIS
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FOR MORE INFO OR TO CO-CONTRIBUTE TO THE AGILITY BEHAVIOUR MODEL.
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