

# Adelaide Connected 2.0

## Innovation: Creating Opportunities for SA

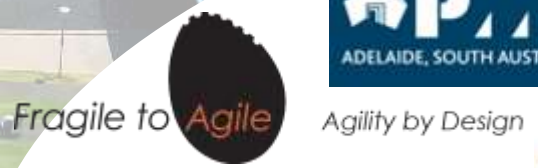


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And to our Connected Associations



AN NRI COMPANY



# Toby Evans



## Senior Manager Digital Transformation SA Water



With a proven track record in IT project management and program management, Toby is responsible for leading and delivering SA Water's ambitious digital transformation program. Part of the senior leadership group, Toby leads change management and project deployment for digital transformation across SA Water's customer operations. Having already delivered significant business benefits both for customers and efficiencies at SA Water, Toby is fast-tracking SA Water's digital capability to deliver world class services for customers.

# SA Water's digital journey

Innovation and customer led design

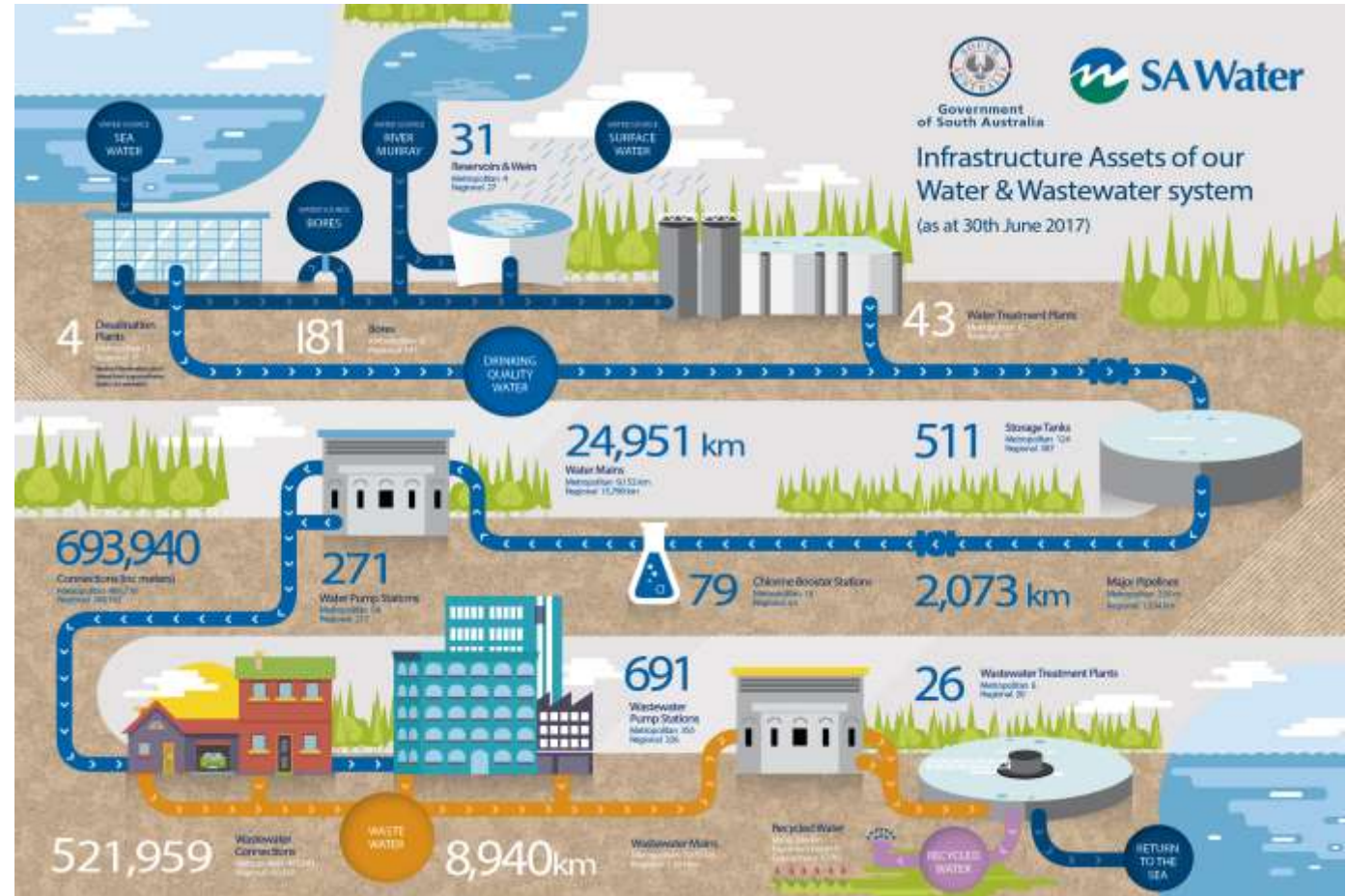
Toby Evans

Snr Mgr Digital Transformation

November 22<sup>nd</sup> 2018

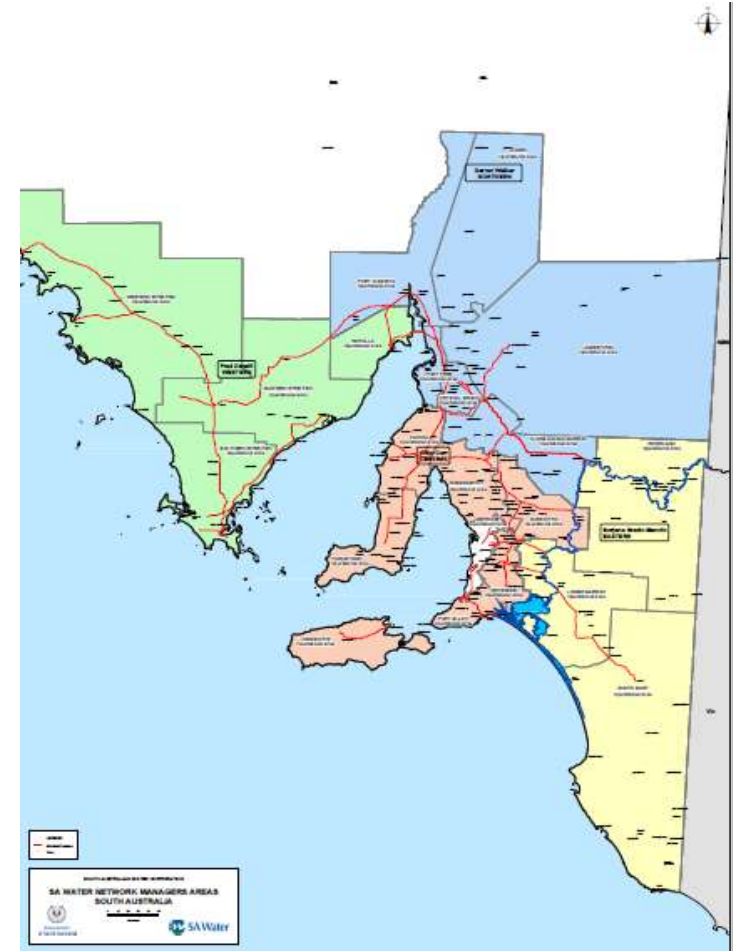
# About SA Water

- Owned by the South Australian Government
- We operate and maintain \$13B worth of assets
- We provide water and wastewater services to 1.7 million customers
- We are a source to tap business
- 20 years as SA Water but our history can be traced back over 150 years.

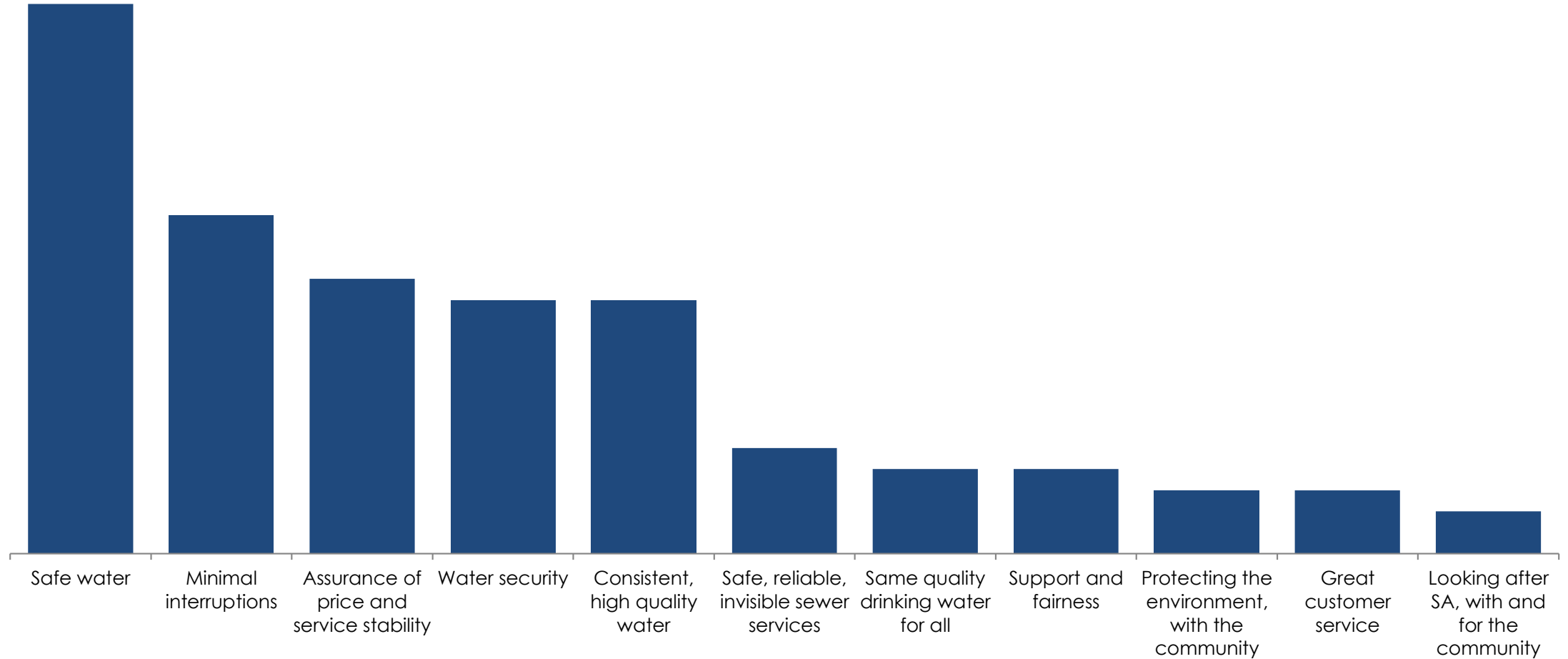


# State-wide focus

- We have approx. 1500 employees
- We partner with external providers to help us deliver our services efficiently
- SA Water plays a critical role to enable a thriving state
- More than just water



## The main outcomes that customers want us to deliver and their relative importance



# SA Water's journey to a digital utility



Government of  
South Australia



A person is holding a smartphone in their hands, displaying the mySAWater app logo on the screen. The background is a blurred indoor setting with a person sitting on a couch.

*mySAWater*

# Expectations of a digital utility



## World class water services for a better life



Together we deliver safely and stand accountable,  
genuine and innovative every day.

# In the beginning...

- Development and approval of technology/digital roadmaps 2016 – 2020
- Distributed technology leadership across the business  
Business & Customer led programs
- Establishing mode of delivery (agile, waterfall, hybrid)

# The importance of co-design with our customers and employees



# Digital unlocking new services and ways of working

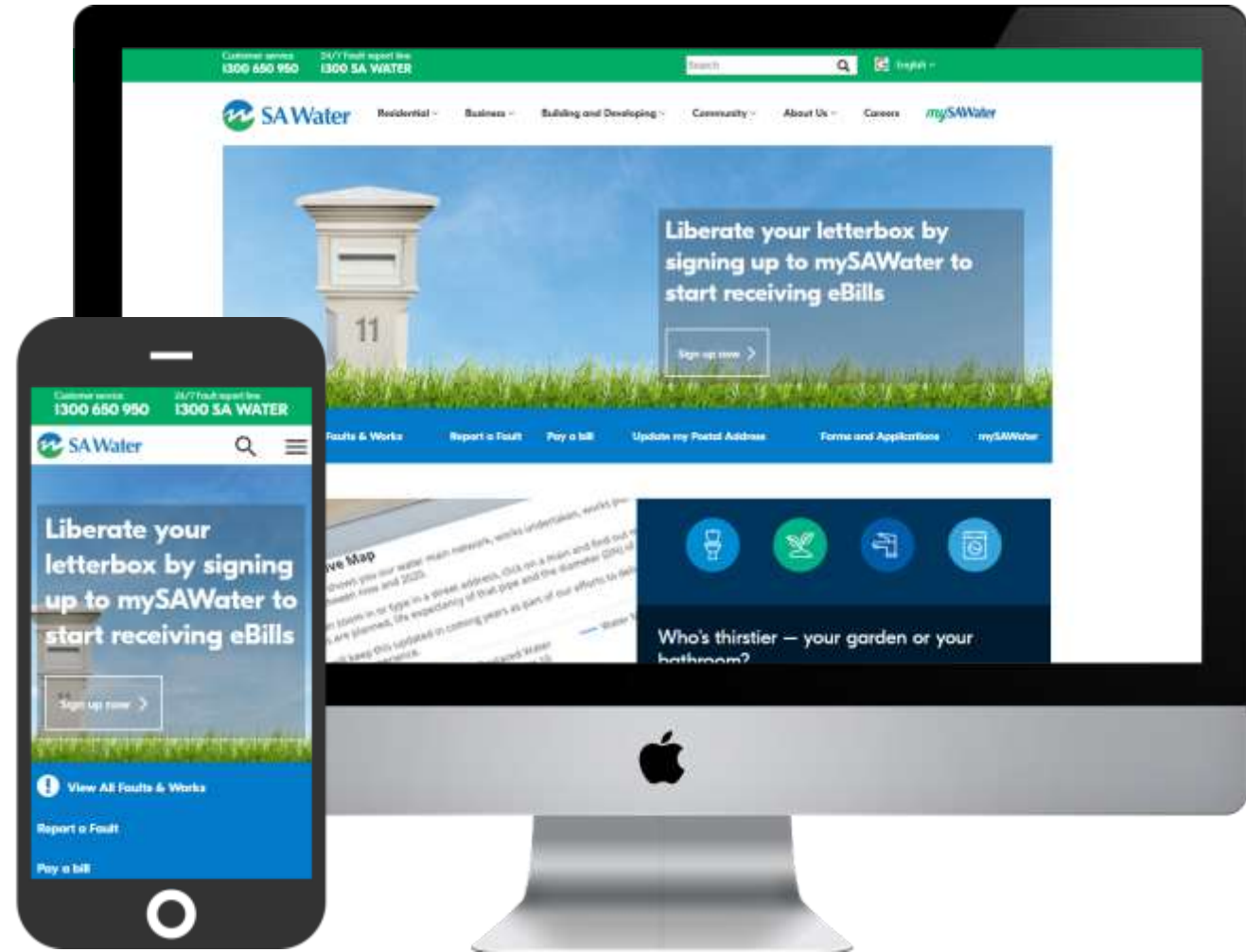


Government of  
South Australia



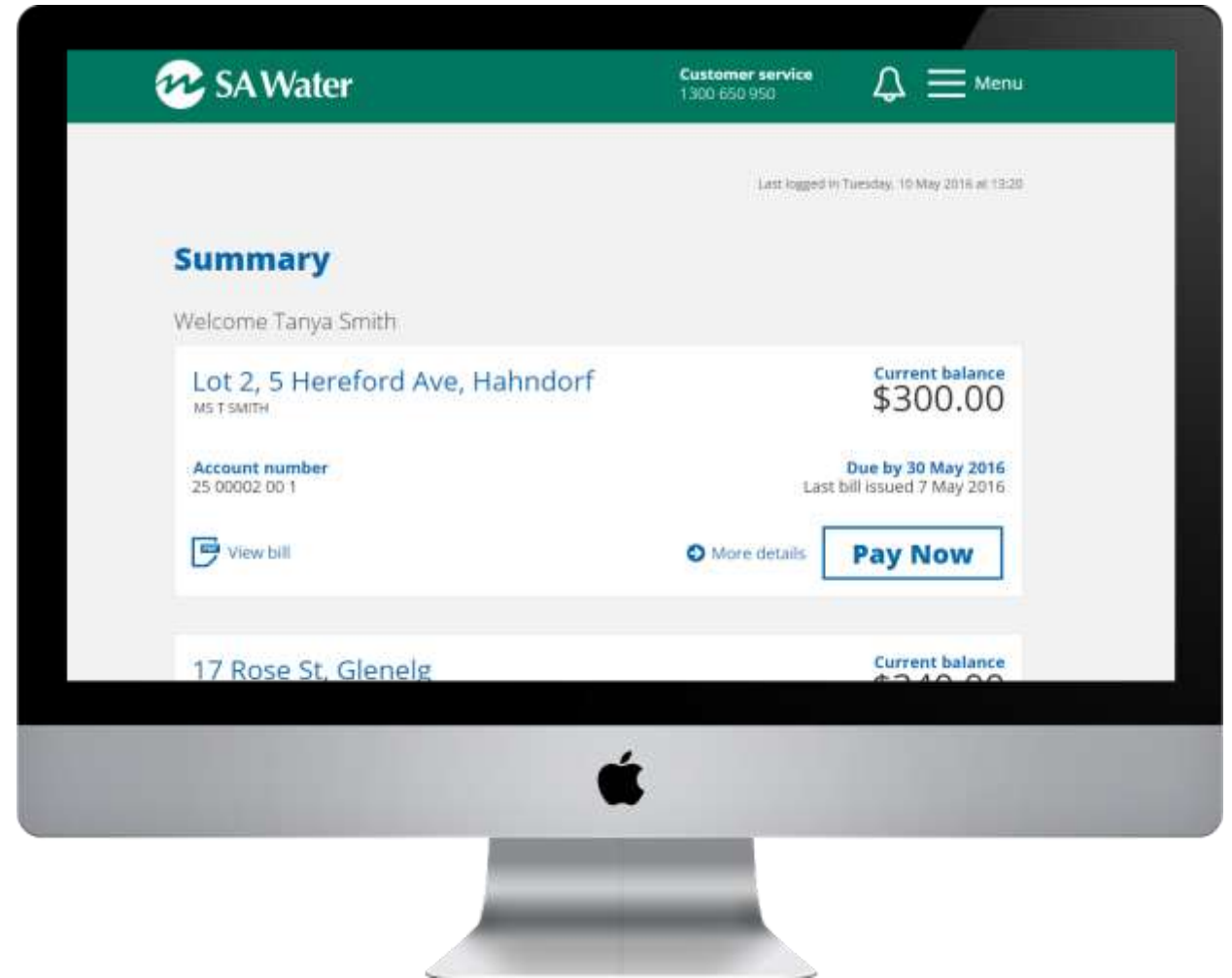
# A customer centric website

sawater.com.au



# Self-service and ebilling

*my*SAWater



# Service Interruption Notifications

Keeping our customers informed

Water OFF



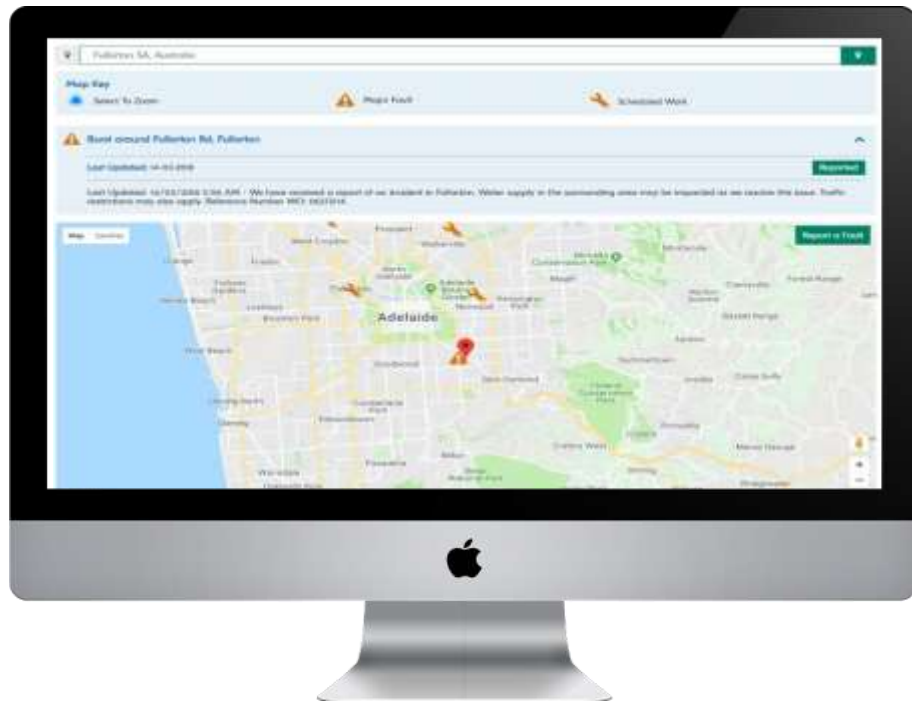
Temporary water supply interruption in Adelaide St Adelaide until 2:00 pm for main repairs. See [sawater.com.au/outages](http://sawater.com.au/outages)

Water ON

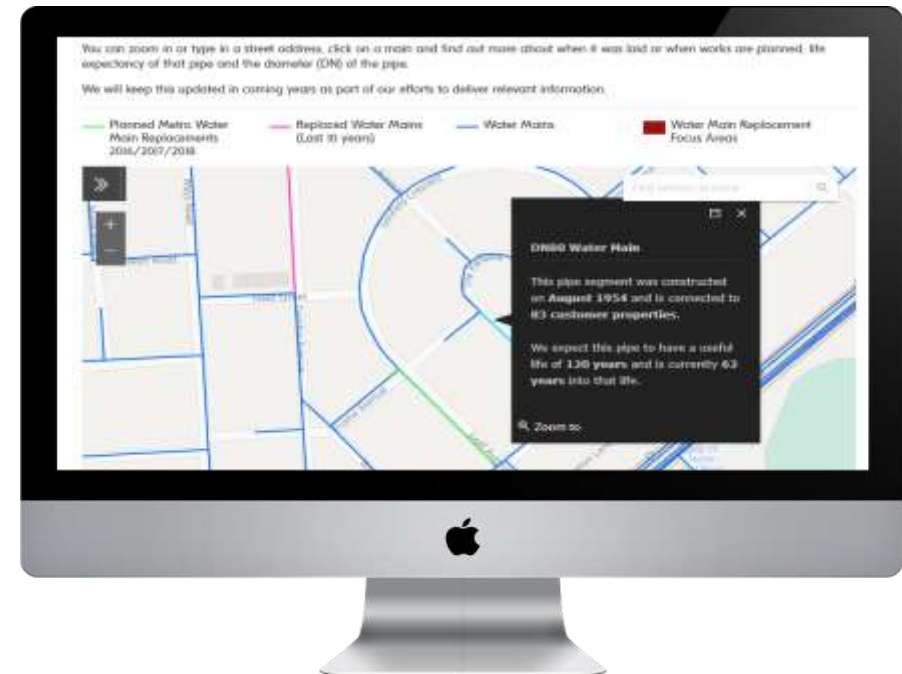


Water's now back on in Adelaide St Adelaide. Please run an outside tap until water runs clear before using your appliances. Thanks for your understanding.

# Interactive Fault Map



# Interactive water main replacement map







# Changing the way we work



Government of  
South Australia

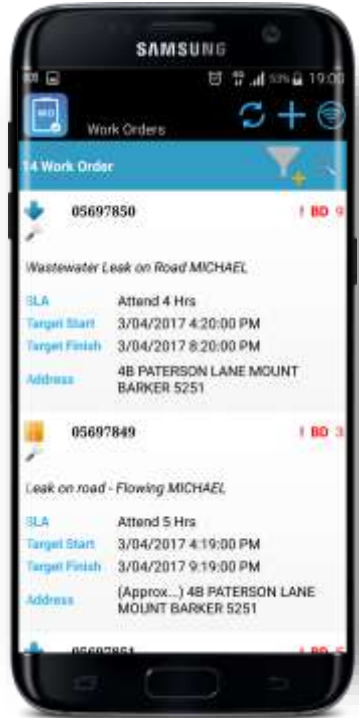


# Digital Field Force



## Work Order App

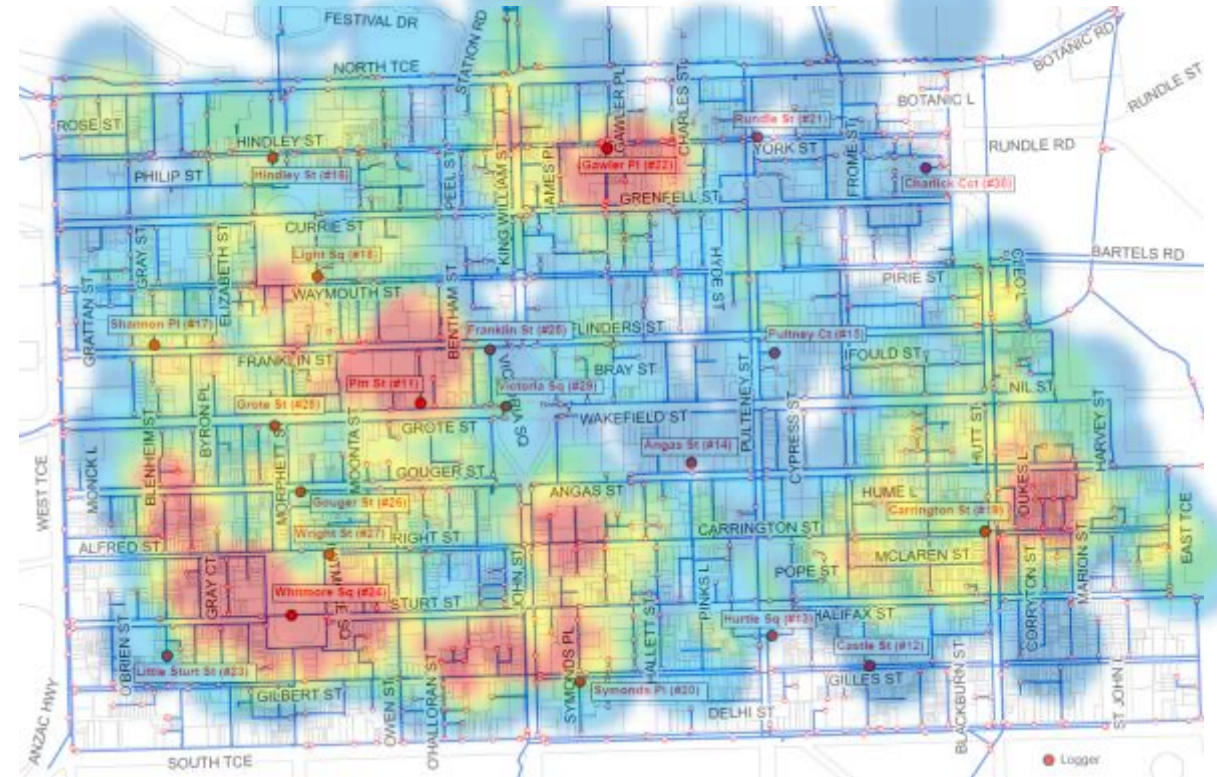
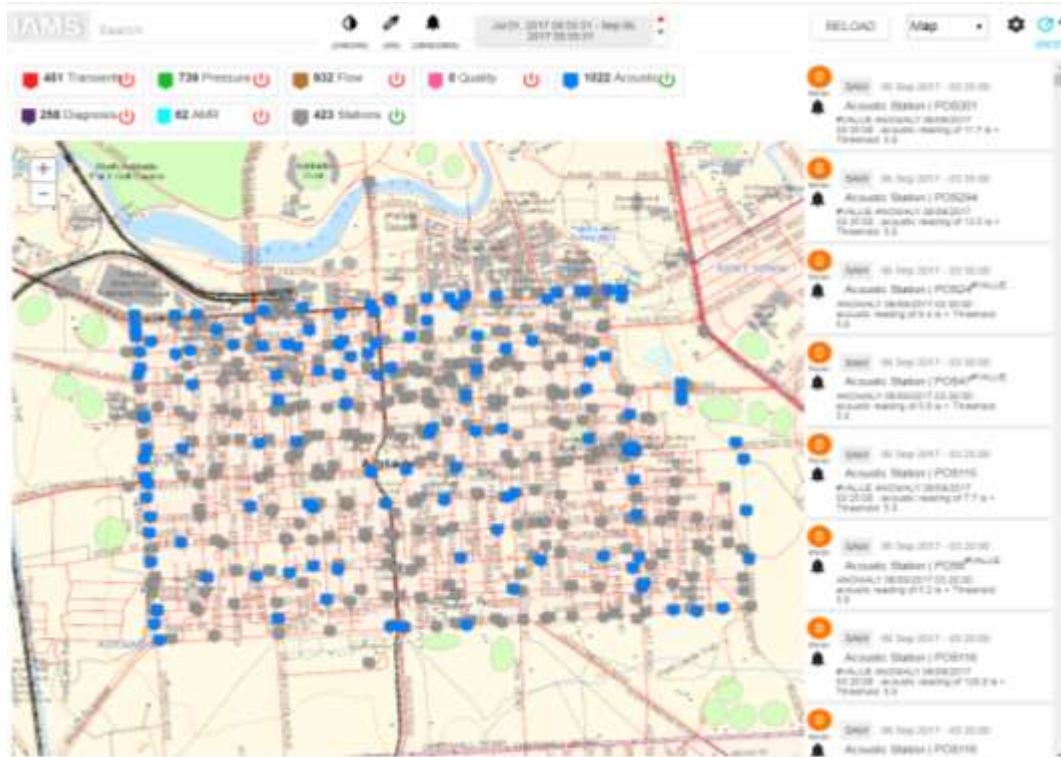
### Advanced scheduling



### eMap Shutoff Block App

# Acoustic

# Transient



Overview of acoustic sensors from operational platform

Transient/hydrophone (existing location) ○

Transient/hydrophone (new/modified location) ●



**31** PRESSURE SENSORS



**11** MASS FLOW METERS



**305** LEAKAGE SENSORS



**3** WATER QUALITY SENSORS



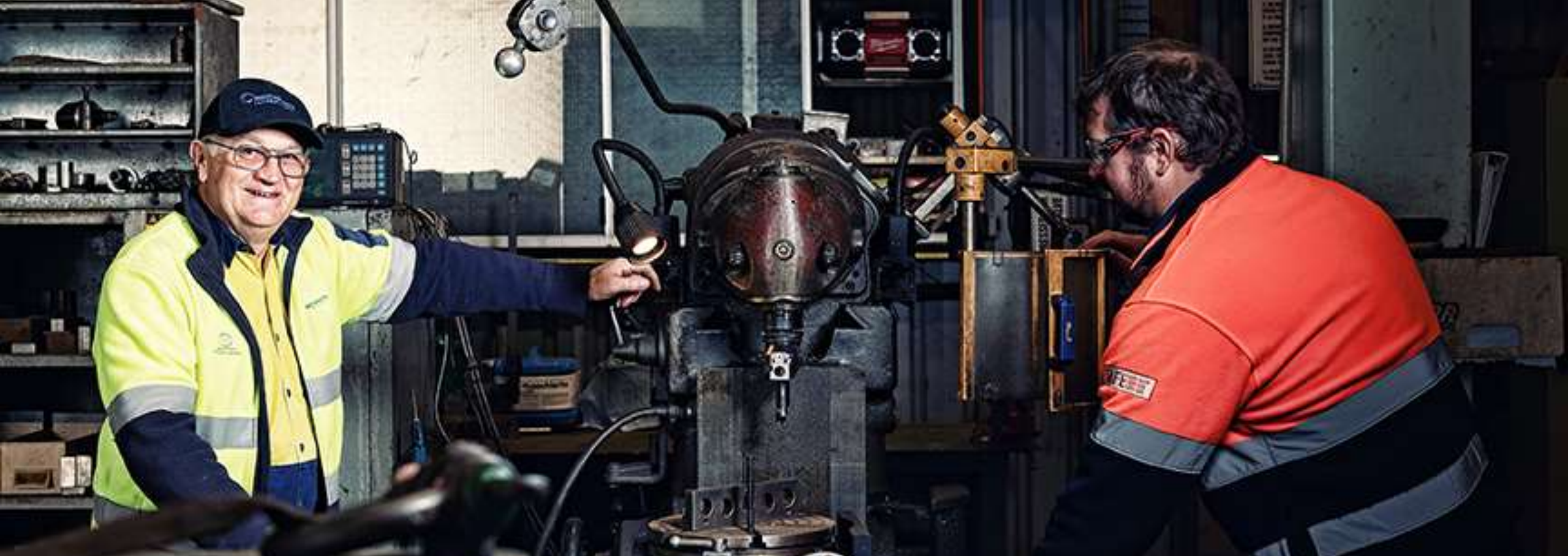
**100** SMART METERS

Where to next for the industry?



# An industry driven by technology innovation

- Personalised and proactive customer experiences
- Smart meters
- AI/chat bots
- Omni-channel call centre
- Field Drone Application
- AR Enabled Safety
- Smart Maintenance



Thank you





The background is a light gray topographic map with contour lines and a grid. A solid yellow horizontal bar is positioned above the text.

*Light* **FORCE**®

**We instil confidence  
in our customers to  
explore, after dark.**

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The logo for LightFORCE, featuring a yellow horizontal bar above the word "LightFORCE" in a stylized, italicized font.

# FROM

A traditional business that manufactures and distributes products to automotive and hunting resellers and retailers.

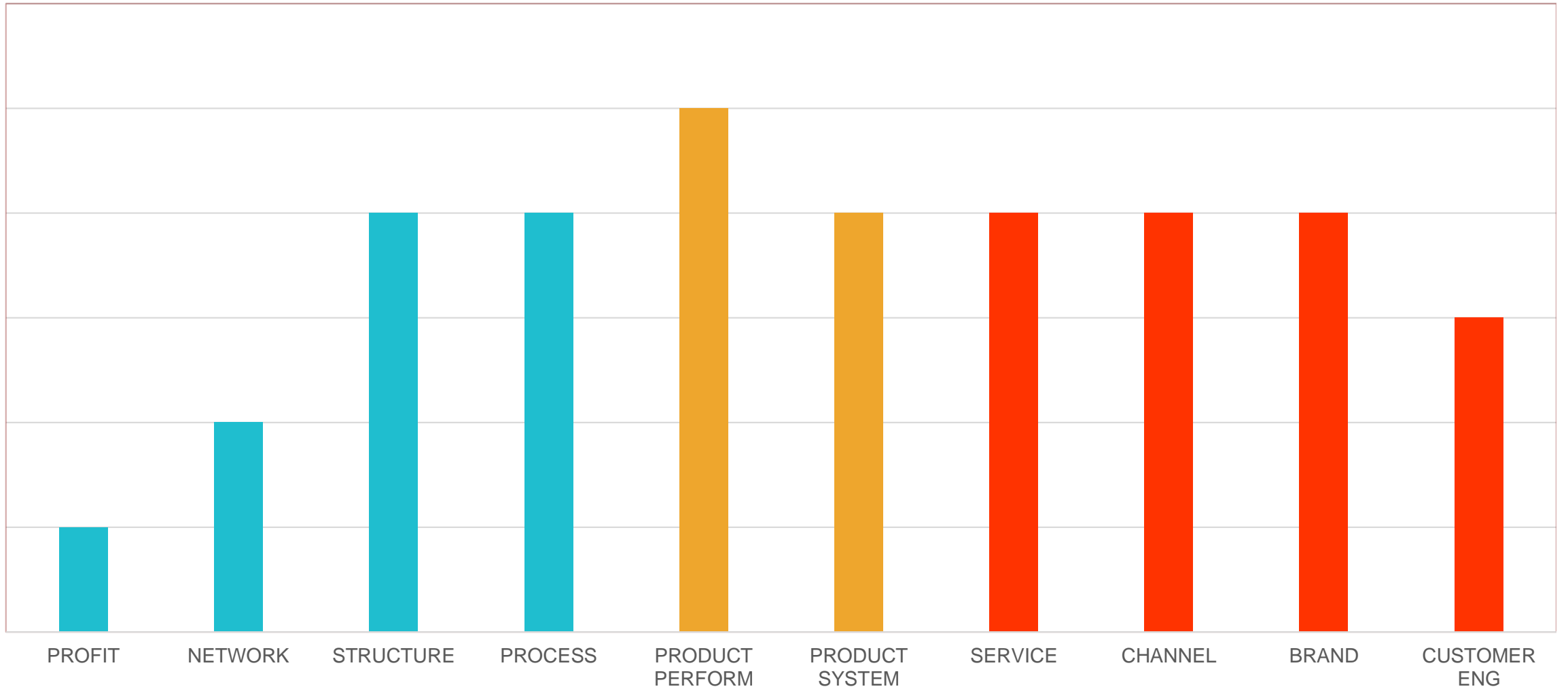


# TO

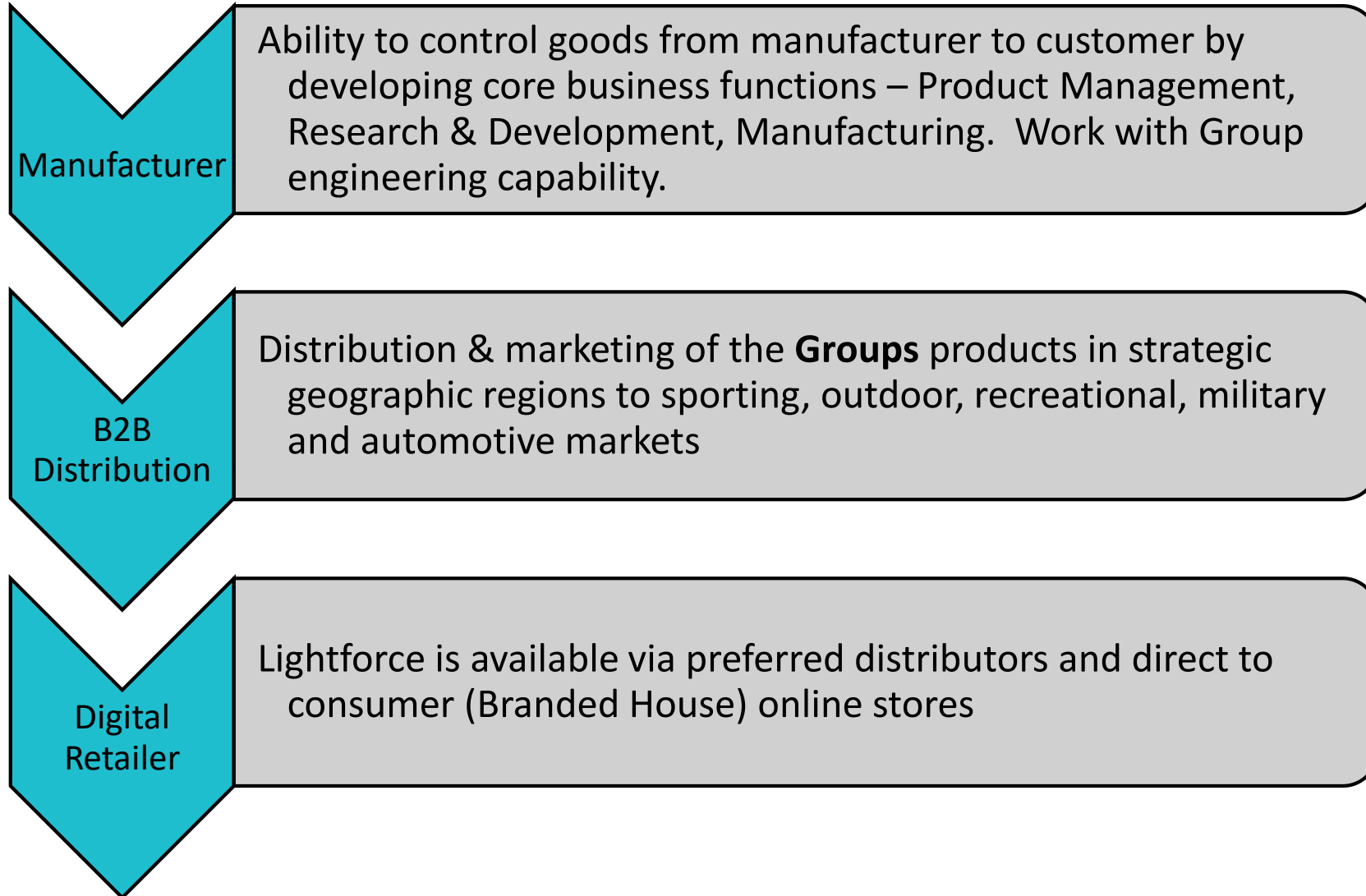
**Technology** first brand that enables its customers to *select and master their environment* via its range of products and services as a member of a wider group.



# LIGHTFORCE 2018



# STRUCTURE





# PRODUCT PERFORMANCE

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*Light FORCE*



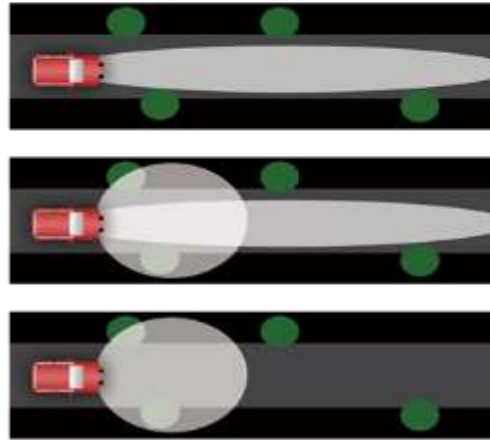
  
*Light FORCE*<sup>®</sup>



# PRODUCT SYSTEMS



Switch off  
dash lights on



The LightForce logo, featuring the brand name in a stylized, handwritten font with a yellow horizontal bar above the 'i' in "Light".

# SERVICE



Search by Vehicle

-- Make -- -- Model -- -- Year --

## Custom Switch to suit Mitsubishi

\$23.00

This LED colour combination is Blue/Blue.

LED 1: This LED illuminates the custom icon only when the switch is in the ON position.  
LED 2: This LED illuminates the custom text and is active continuously when the dash light circuit is active.

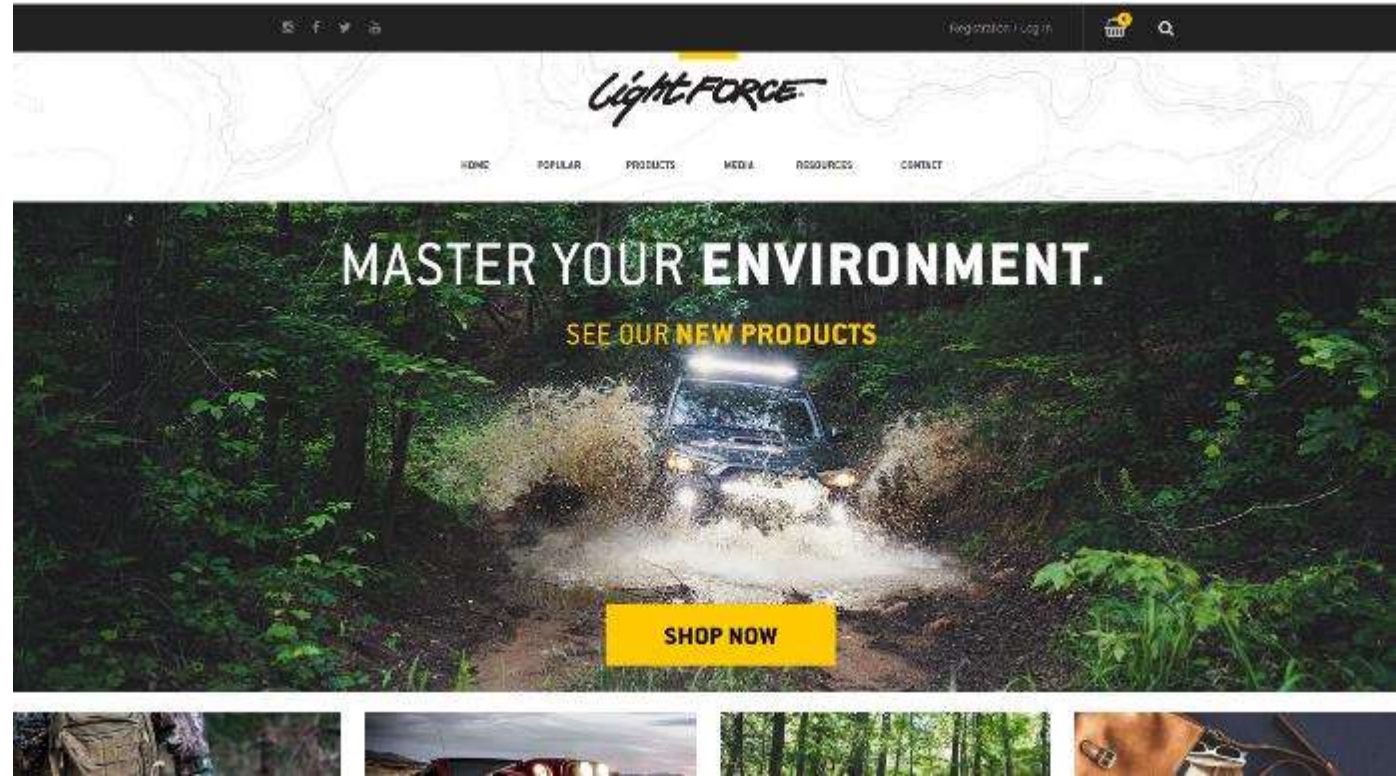
1

SKU: CBSW2-R  
Category: Custom Switches, Mitsubishi Compatible



The Light Force logo, featuring the brand name in a stylized, handwritten-style font with a yellow horizontal bar above the word "Light".

# CHANNEL



**Light Force**

# BRAND

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**TRUSTED  
ON ALL 7  
CONTINENTS**

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*Light FORCE*

# BRANDING - GROUP PEDIGREE

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**euro-optic**  
Australia

  
**HORUS**

  
PAROO PASTORAL COMPANY (PPC)

  
**APRS**  
ACE PRECISION RIFLE SYSTEMS

**NIGHTFORCE**

**FORCE ORDNANCE**

  
*Light FORCE*





**THANK  
YOU**

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*Light FORCE*







**TICKETY**  
VIEW



# Innovation in VR/AR

What to use, when to use it, when to let it go

**Matt Hill - CEO**

22/11/2018

**Adelaide Connected 2.0**



**TICKETY**  
VIEW



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# Training Applications





**TICKETY**  
VIEW

# Visitor Experience



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VIEW

# Multi-site Access



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# Retail Applications





**TICKETY**  
VIEW

# Off-the-plan Exploration



22/11/2018

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# INNOVATION SPRINTS

- ✓ FAST PACED IMMERSIVE ENVIRONMENT
- ✓ 10 to 12 WEEKS OF FULL TIME COMMITMENT
- ✓ OUTCOMES VALUE FOCUSED ONLY (remove clutter)



# INNOVATION SPRINTS

- × NO PROJECT MANAGER
- ✓ INNOVATION LEADER
- ✓ REQUIRE ENORMOUS DISCIPLINE AND RIGOR (by all)
- ✓ KNOW WHAT ADDS VALUE & WHAT IS OVERHEAD



# INNOVATION SPRINTS

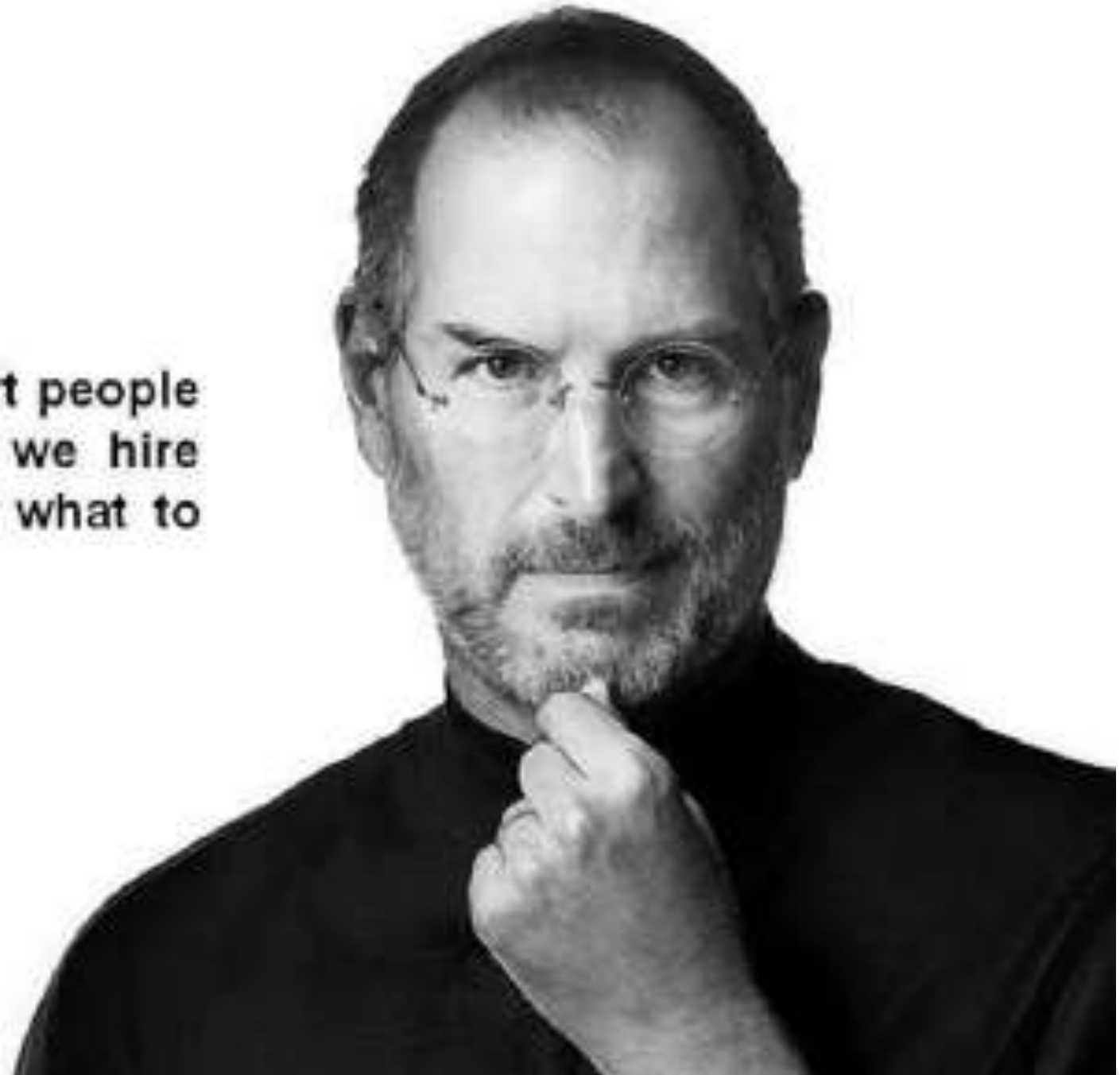
TOTAL RELIANCE ON 'SMART'  
INDIVIDUALS WITH THE RIGHT  
FIT FOR SQUAD

WHY?



It doesn't make sense to hire smart people and then tell them what to do; we hire smart people so they can tell us what to do.

Steve Jobs





# INNOVATION SPRINTS

## WHAT DOES THIS MEAN?

- ✓ ADMIN COLLATERAL= YOU ARE SHOT DOWN
- ✓ HOLD A MEETING & WASTE PEOPLE'S TIME FOR YOUR DECISION MAKING = YOU ARE SHOT DOWN



# INNOVATION SPRINTS

## WHAT DOES THIS MEAN....

- ✓ IF YOUR ROLE REQUIRES YOU TO MAKE DECISIONS, MAKE THEM!
- ✓ DO NOT ASK FOR CONSENSUS, YOUR ROLE HAS PERMISSION



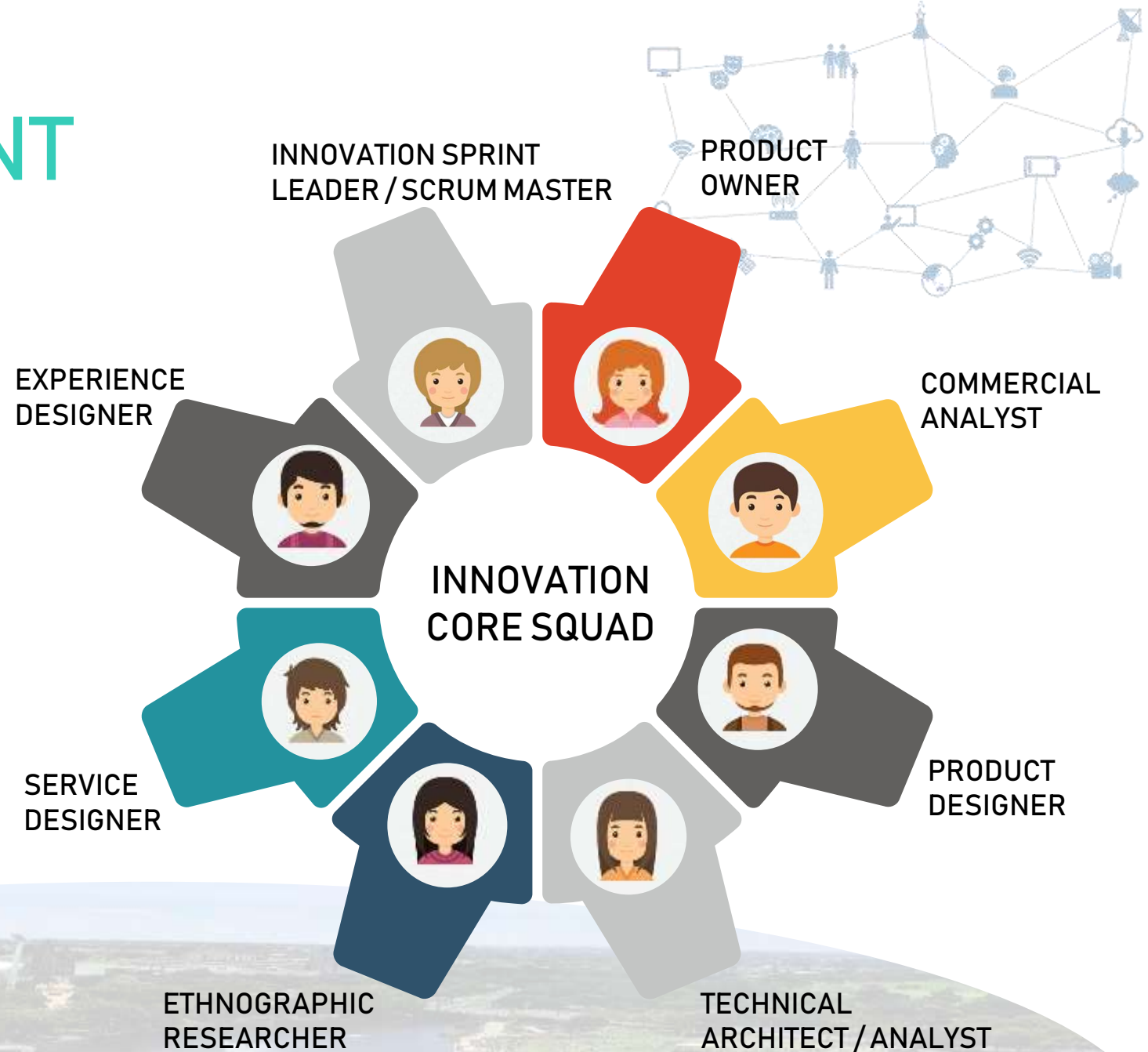


# INNOVATION SPRINT

## CORE SQUAD

### HIGH PERFORMING / SELF ORGANISING

- Know the Sprint's outcomes
- Know what needs to be done
- Know what DOES NOT need to be done
- Know who's best to do what
- Works to the squads flow & speed
- No detailed role descriptions

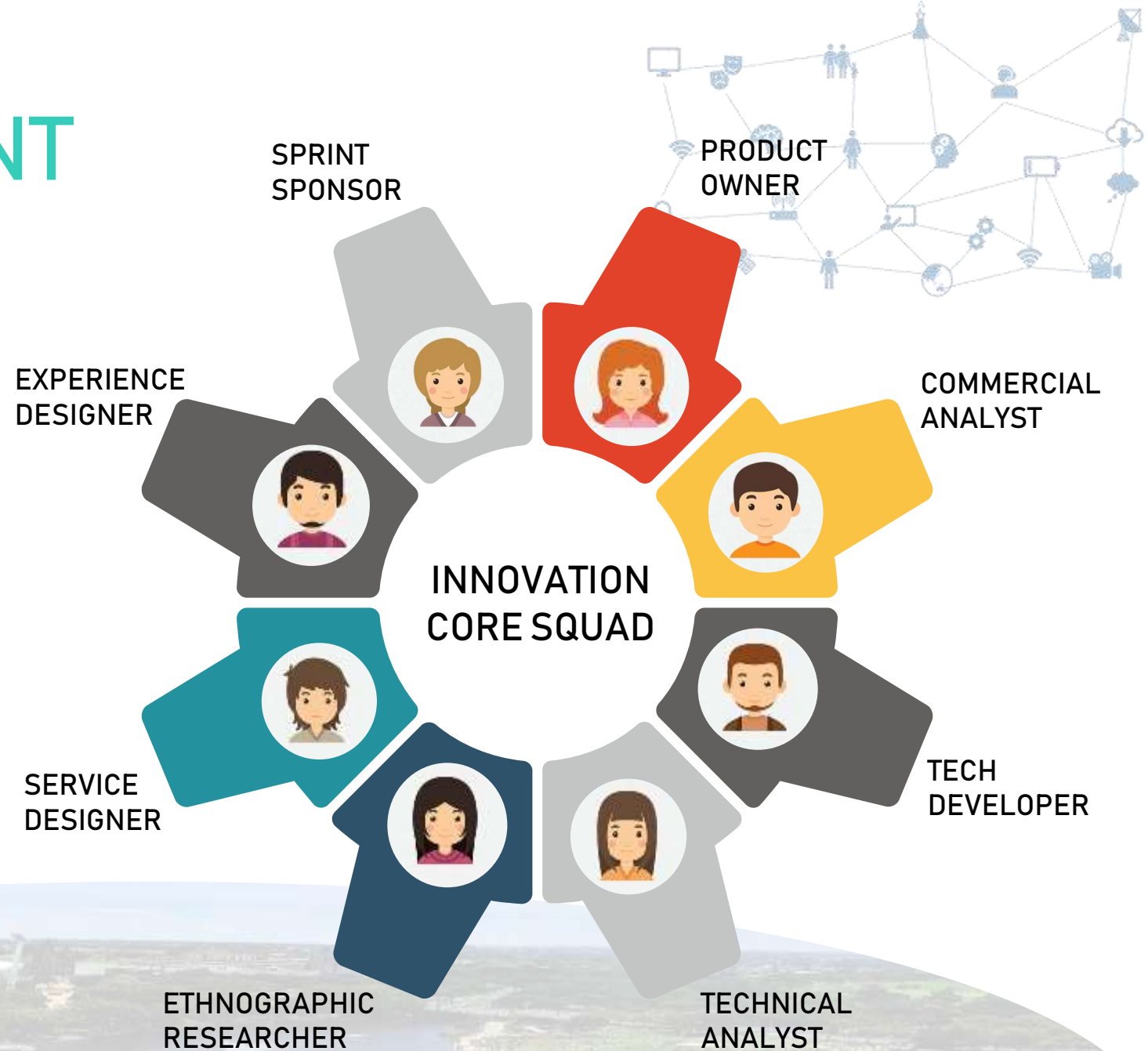


# INNOVATION SPRINT

## CORE SQUAD

### HIGH PERFORMING / SELF ORGANISING

- Daily Standups
  - Issues raised then & there OR taken off line & solved quickly
- No Status Reporting (you attend the showcases if you need to know)
- No documentation UNLESS it adds value to the outcome
- Fortnightly Showcases (your responsibility to attend)





# STAKEHOLDER MANAGEMENT

## Flip the conversation



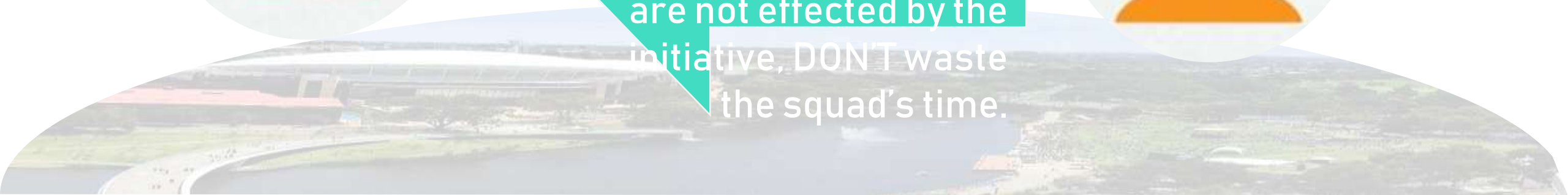
PRODUCT  
OWNER



STAKEHOLDER



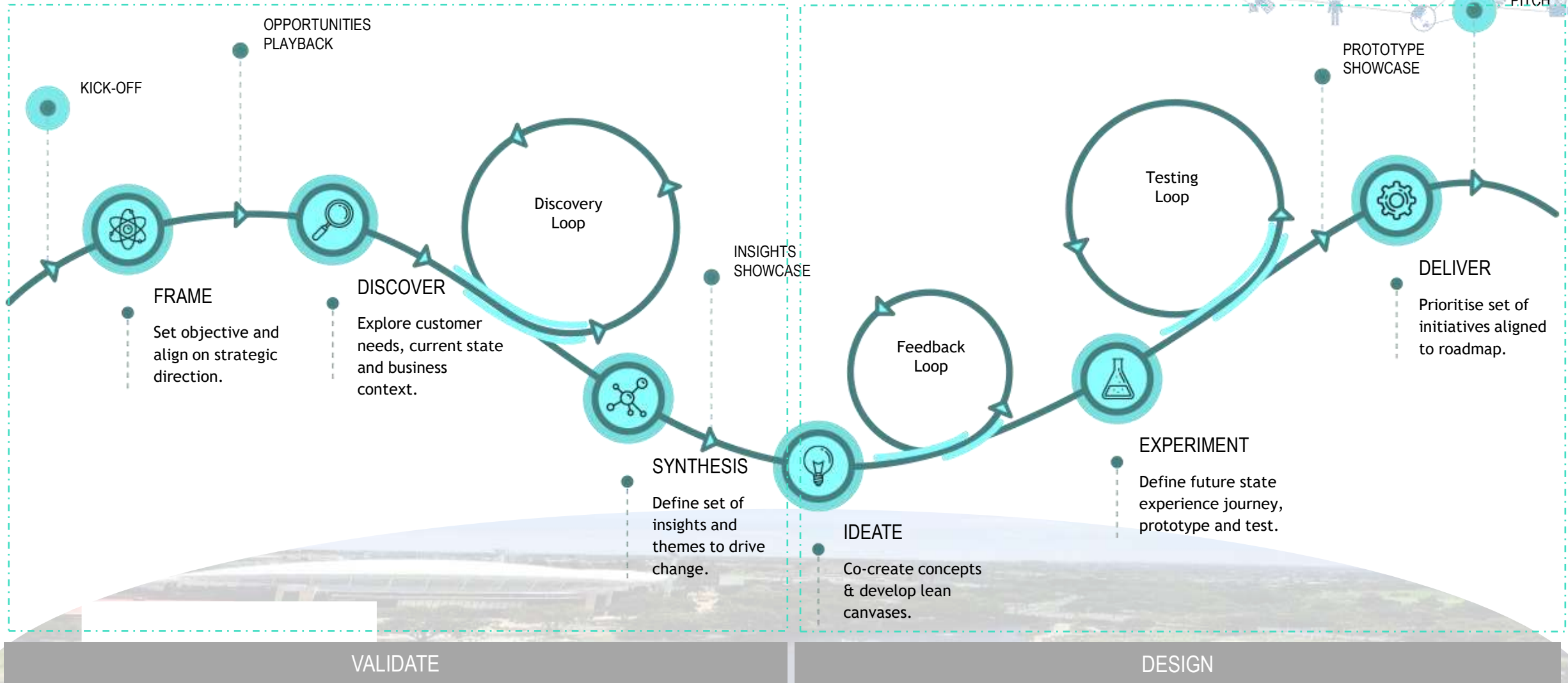
Stakeholder's responsibility to seek out the info they need to know. If their decisions are not effected by the initiative, DON'T waste the squad's time.







# VALIDATE & TEST APPROACH (repeatable)



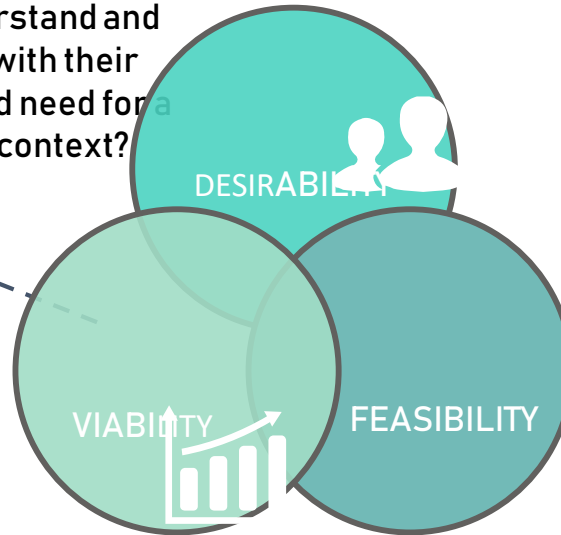
# THE 'DVF' STREAMS



Who are we designing for and what is their desirability for the problem to be solved

Can we understand and empathise with their problem/s and need for a solution in context?

Undercovering their motivators, needs, wants & pain points



What is the size of the opportunity?

What are the constraints that need to be overcome (technical, regulatory, legislative etc)?

Does the potential solution/s provide a compelling benefit to the business?

Is there emerging technology we should be looking to solve this problem?

How do we measure success?

Can we build for scale and growth?





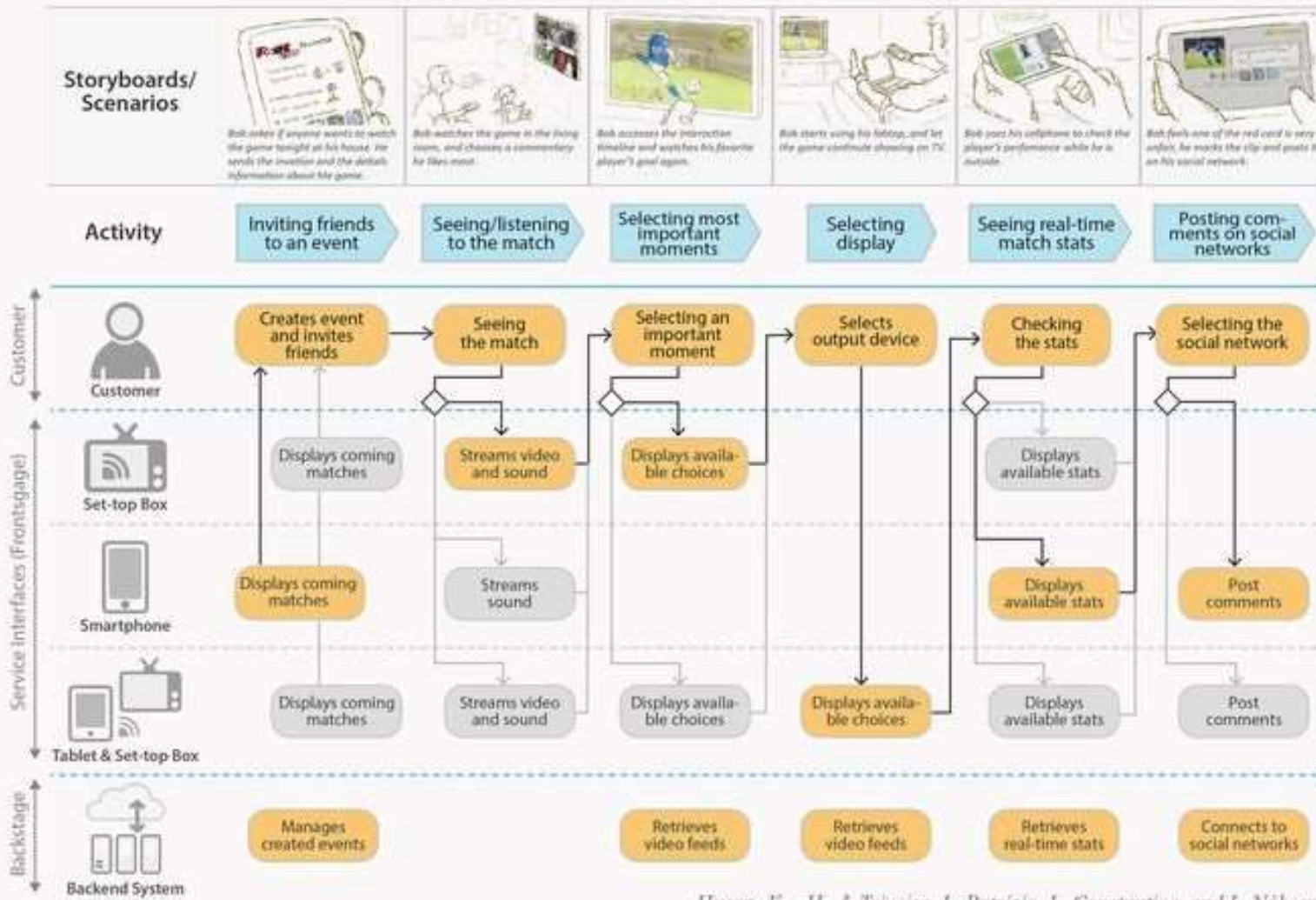
# SPRINT

## ARTIFACTS (examples)



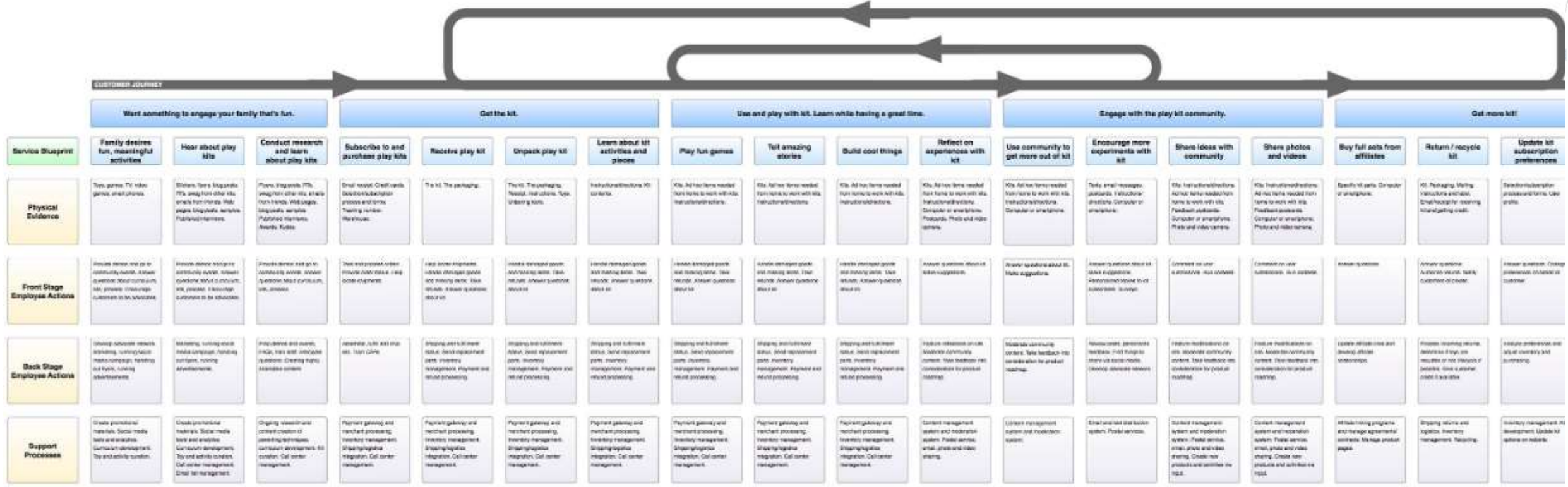
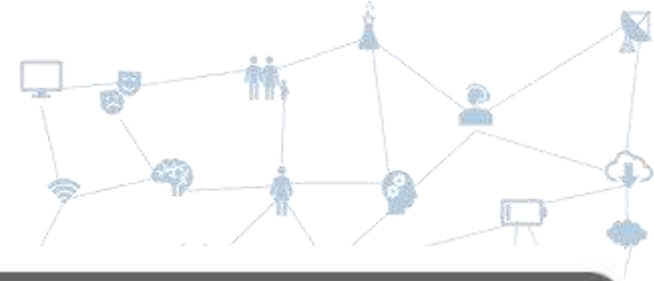


# SCENARIOS, STORYBOARDS, & SERVICE DESIGN NAVIGATION by Ko-Hsun Huang



Huang, K. - H., J. Teixeira, L. Patricio, L. Constantine, and L. Nöhrega,  
 "A Model-Driven Service Design Toolkit: From Co-Design to Implementation",  
 5th IASDR 2013 Tokyo, Tokyo, Japan, 08/2013





AC40 | IDSE262  
 Chuck Hildebrand  
 Jesse Jack  
 Bethany Stolle

# Play Kit Service Blueprint





**DESIGN PROCESS ENGAGEMENT**  
 supporting service experiences using appropriate digital journey & interface

**INTRODUCTION TO SERVICE & USER INTERACTIONS**  
 WHY THIS SERVICE? WHO WE SERVE? HOW DO WE SERVE? WHAT IS A SERVICE DESIGN & SERVICE DESIGNER? WHY IS IT IMPORTANT?

**OPENING A SERVICE DESIGN PROJECT**  
 EXPLORE, DISCOVER & DISSEMINATE. FUTURE OPPORTUNITIES.

**FORMAL TASKS**  
 MANAGING IN A TEAM GROUP

**DEFINING THE PROBLEM**  
 DEFINE THE PROBLEM. DEFINE THE USER. DEFINE THE GOALS.

**RESEARCH & ANALYSIS**  
 RESEARCH: USER NEEDS, USER BEHAVIOR, USER ATTITUDES, USER EXPERIENCES.

**ANALYZING & SYNTHESIZING**  
 ANALYZE: IDENTIFY PAIN POINTS, IDENTIFY OPPORTUNITIES, IDENTIFY INSIGHTS.

**CONCEPT DEVELOPMENT**  
 CONCEPT DEVELOPMENT: IDENTIFY SOLUTIONS, IDENTIFY FEASIBLE SOLUTIONS, IDENTIFY DESIRED SOLUTIONS.

**PROTOTYPING & TESTING**  
 PROTOTYPE: BUILD A PROTOTYPE, TEST A PROTOTYPE, IMPROVE A PROTOTYPE.

**IMPLEMENTATION & EVALUATION**  
 IMPLEMENT: IMPLEMENT A SOLUTION, EVALUATE A SOLUTION, IMPROVE A SOLUTION.

**CREATE A SERVICE PROTOTYPE**  
 CREATE A SERVICE PROTOTYPE: DEFINE A SERVICE PROTOTYPE, BUILD A SERVICE PROTOTYPE, TEST A SERVICE PROTOTYPE.

**PERSONIFY YOUR SERVICE**  
 PERSONIFY YOUR SERVICE: DEFINE A SERVICE PERSONA, BUILD A SERVICE PERSONA, TEST A SERVICE PERSONA.

**WORK UP + DELIVER**  
 WORK UP + DELIVER: IMPLEMENT A SOLUTION, EVALUATE A SOLUTION, IMPROVE A SOLUTION.

**Hand-drawn diagrams and sketches:**  
 - A flowchart showing a process flow with steps 1, 2, 3, 4, 5.  
 - A diagram showing a person interacting with a service.  
 - A diagram showing a person interacting with a service, with a focus on the user's experience.  
 - A diagram showing a person interacting with a service, with a focus on the user's journey.  
 - A diagram showing a person interacting with a service, with a focus on the user's needs.  
 - A diagram showing a person interacting with a service, with a focus on the user's behavior.  
 - A diagram showing a person interacting with a service, with a focus on the user's attitudes.  
 - A diagram showing a person interacting with a service, with a focus on the user's experiences.

**Color-coded sticky notes:**  
 - Yellow: Introduction, Formal Tasks, Research & Analysis, Prototyping & Testing, Implementation & Evaluation, Work Up + Deliver.  
 - Orange: Opening a Service Design Project, Concept Development, Analyzing & Synthesizing, Create a Service Prototype, Personify Your Service.  
 - Pink: Service Design Process, Service Design Principles, Service Design Challenges, Service Design Opportunities.  
 - Blue: Service Design Definition, Service Design Scope, Service Design Objectives, Service Design Constraints.  
 - Green: Service Design Benefits, Service Design Risks, Service Design Success Factors, Service Design Failure Modes.









# Service Design Tools & Methods

A SELECTION OF OUR FAVORITES



## Alignment & Problem Framing



### HYPOTHESIS JOURNEY MAP

A visualization of the customer journey over space, time, and across touchpoints, based on the team's current understanding of the experience rather than on research.



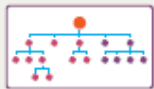
### STAKEHOLDER INTERVIEWS

Interviews with project stakeholders that help clarify the problem space and define successful outcomes.



### ALIGNMENT WORKSHOP

A tailored set of activities that help the team and key stakeholders define project expectations and create a shared understanding of the problem space.



### STAKEHOLDER MAP

A visual diagram of project stakeholders, their roles, and their relationship to one another.



### CURRENT-STATE BLUEPRINT

An operational diagram that depicts how a service operates today, with enough detail to understand, implement, and maintain it.



### ECOSYSTEM MAP

A tool that visually communicates the relationships between the customer and the people, services, and touchpoints that surround them.



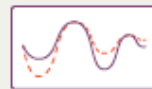
### QUALITATIVE RESEARCH

In-depth research (typically interviews) done with customers to better understand their needs, motivations, perspectives, and behaviors.



### RESEARCH INSIGHTS

Patterns synthesized from research that reveal underlying customer needs, motivations, goals, and context.



### EXPERIENCE MAP

A visualization of the holistic customer experience, demonstrating the highs and lows people feel while interacting with a product or service.



### EXPERIENCE PRINCIPLES

Definitive guiding statements that explain what the future customer experience should feel like and enable objective design decisions.



### ARCHETYPES

User profiles that represent group behavior patterns—or, what the customer is doing and what they desire to achieve.

# Service Design Tools & Methods

## Ideation & Envisioning



### IDEATION

A structured idea generation activity used to come up with concepts within a fixed time limit, often using research insights, experience principles, and personas as prompts.



### PRIORITIZATION FRAMEWORK

A method for evaluating and ranking ideas based on value and feasibility.



### STORYBOARDING

A visual method for envisioning the components of a future experience, while also setting the context and telling a human story.



### SERVICE STORMING

A collaborative (and fun!) method for generating and iterating on service experience concepts through acting.



### VISION STORIES

A story that captures both the emotional and functional aspects of the customer's experience with the ideal future service.

## Evolution Planning & Piloting



### FUTURE-STATE BLUEPRINT

An operational diagram that depicts how a service will operate in the future, with enough detail to understand, implement, and maintain it.



### PROJECT / FEATURE CARDS

A collaborative planning tool used to identify and define the chunks of work necessary to realize a future vision. Helpful in evolution planning.



### EVOLUTION PLAN (OR ROADMAP)

A framework that outlines the incremental releases of a service from its current state to an ideal future state. Each phase should offer a complete, valuable experience.



### PILOTS

Prototyping and testing the complete minimal viable service (MVS) to gauge value, gather insights, and understand the real-life mechanics that make up the future experience.

## Core Principles of Service Design



### HUMAN CENTERED

Focuses on the people for whom we are designing and extends beyond the customer to include the experience of staff and the business



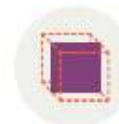
### CO-CREATIVE

Includes stakeholders and customers in the design and delivery of service experiences



### ORCHESTRATED

Considers how the various elements and processes of a service organization should be aligned for optimal service delivery



### TANGIBLE

Reveals the value and interactions of an intangible service through physical and digital touchpoints that can be seen and experienced



### HOLISTIC

Looks toward the end-to-end experience, not just a single moment, service encounter, or experience stage



INNOVATION  
UNION

WANT TO KNOW  
MORE?

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Sydney NSW 2000





**We'll connect again next year, 2019**



22/11/2018

**Adelaide Connected 2.0**