

2019 Teaching and Learning Conference

INSPIRE | TRUST | EDUCATE

Thursday 16 & Friday 17 May | RACV Torquay Resort



11.00am – 12.00pm

Break the Mould with Design Thinking!

Dr. Christine Murphy



#VDCTL19



/VETDevelopmentCentre

hise

Ideate

Define

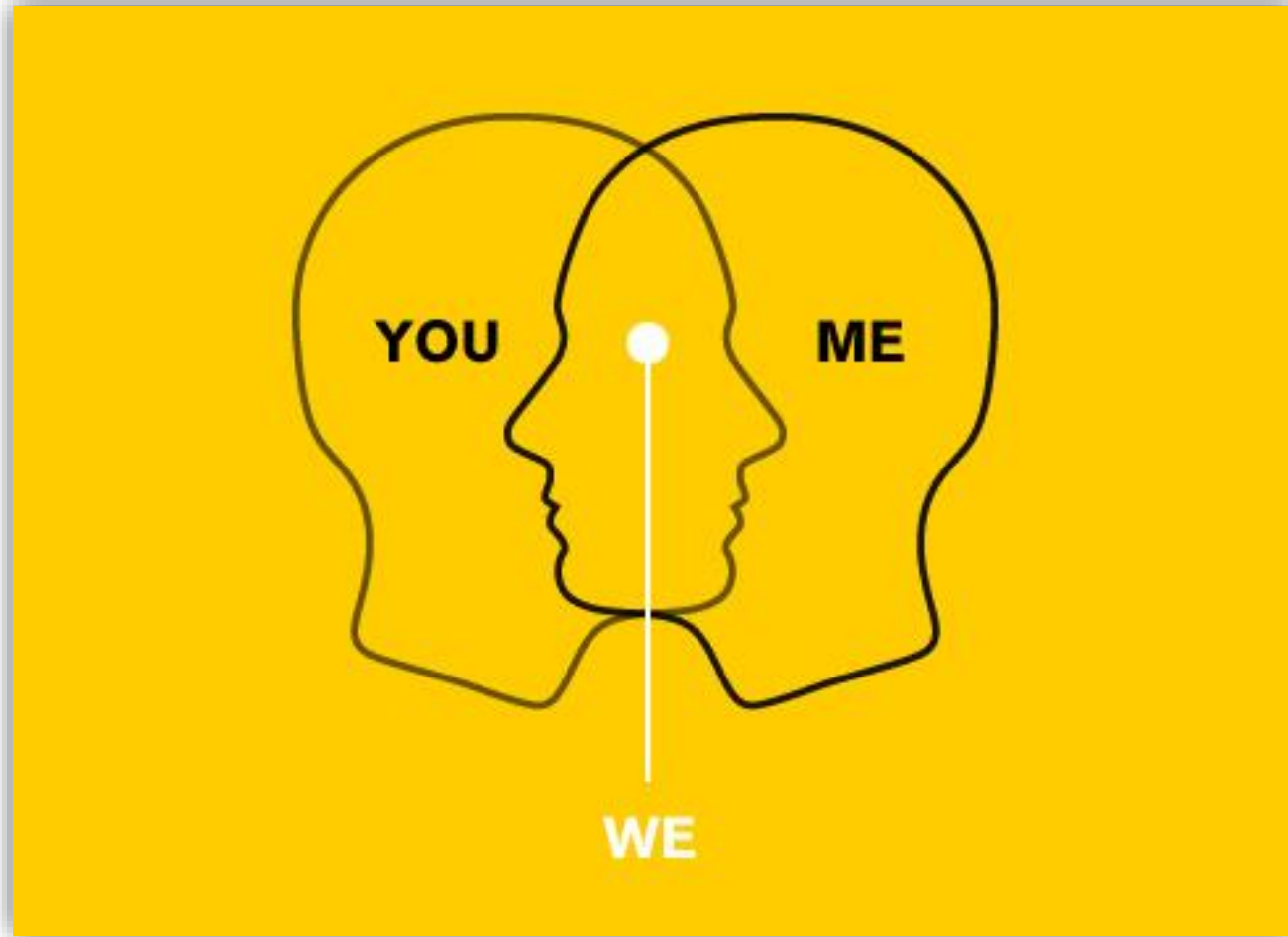
Prototype

Test

So what is design
thinking about?



Which requires empathy....



We must understand before we can judge



design thinking

A systematic approach to problem solving

Using 3 things : empathy, invention and iteration.

Greatest Value



A Venn diagram consisting of three overlapping circles. The top circle is labeled 'Desirability', the bottom-left circle is labeled 'Feasibility', and the bottom-right circle is labeled 'Viability'. A large white arrow points from the top-left towards the center intersection of the three circles, with the text 'Greatest Value' written inside it. Three red speech bubbles are positioned around the circles: one near the top circle containing the text 'Do they want it?', one near the bottom-left circle containing 'Can we do it?', and one near the bottom-right circle containing 'Should we do it?'.

Desirability

Do they
want it?

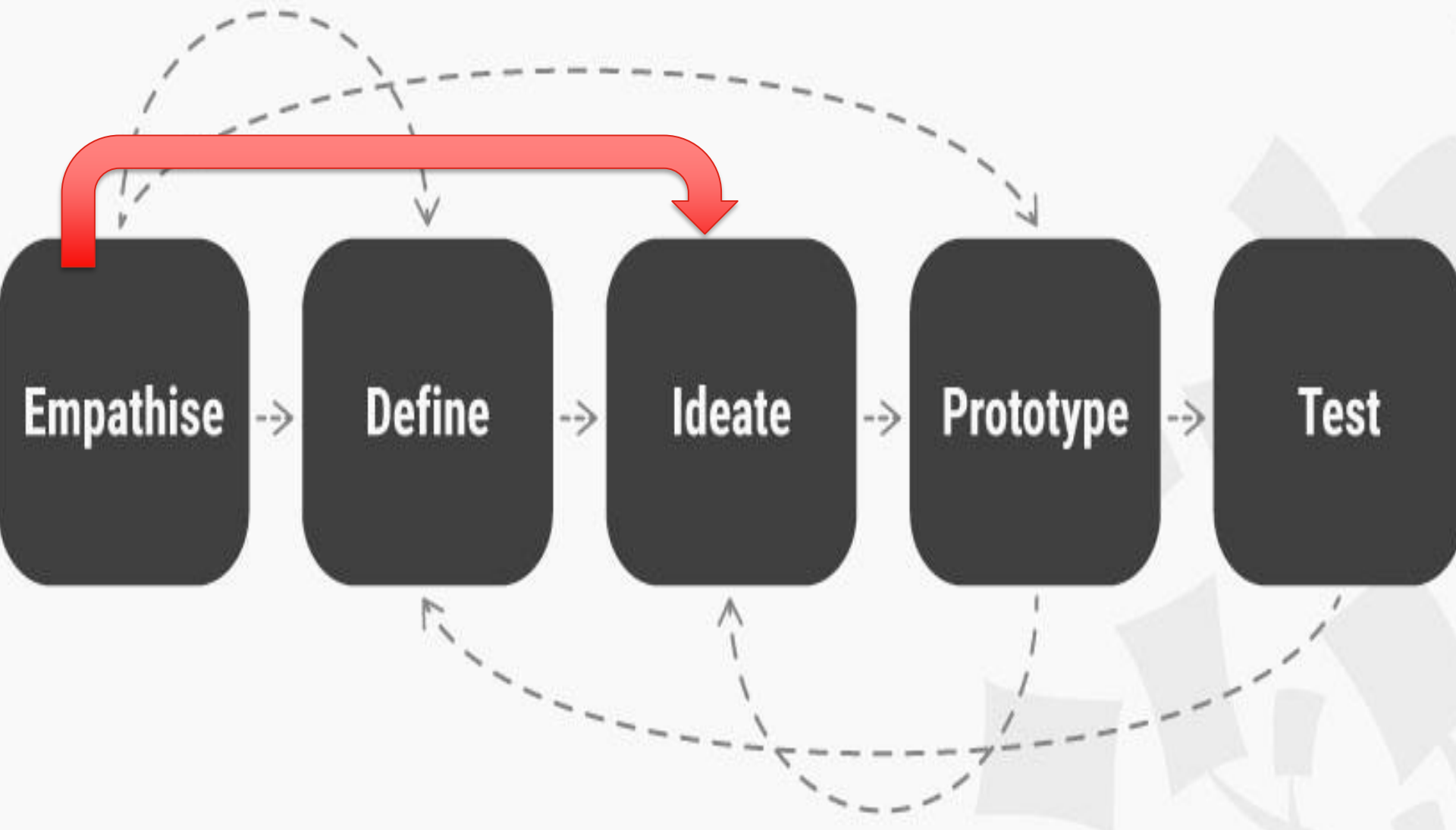
Feasibility

Can we
do it?

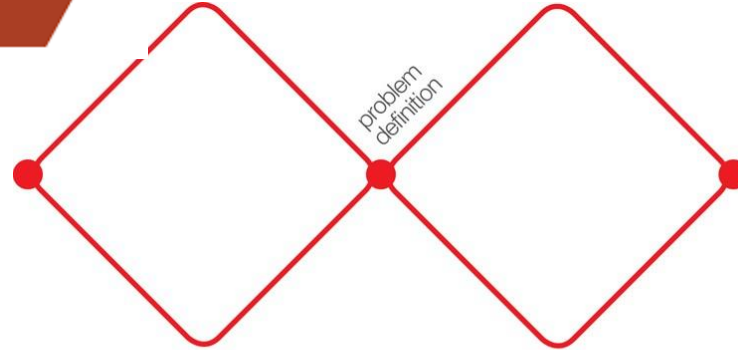
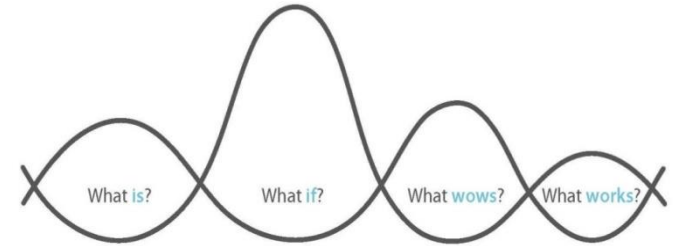
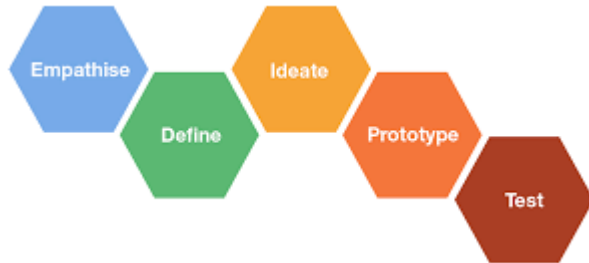
Viability

Should
we do
it?

Design Thinking: A 5 Stage Process



What are the most common process models of design thinking?

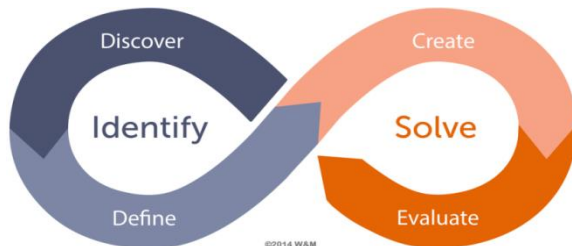


Discover
Behaviour-led
design research

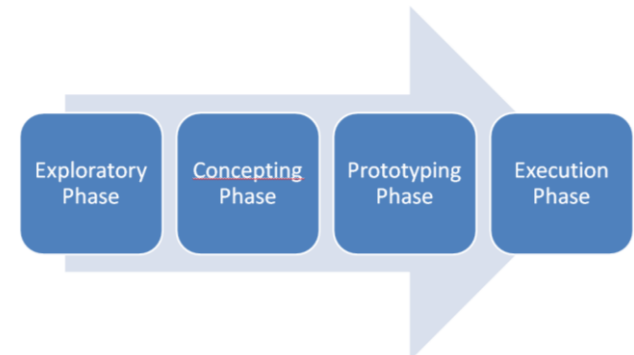
Define
Creative work
shops and idea
generation

Develop
Review ideas
through culture
thinking and
design

Deliver
Prototyping,
selection and
mentoring



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Your Challenge!



Design a ground breaking innovative education program that attracts, retains young indigenous people and transforms their lives



You have just been advised that your organisation has been given part of an overall grant funding of \$100 million over 3 years to set up and deliver an innovative nationwide program to address indigenous youth incarceration, substance abuse, mental health & suicide.
Your organisation will receive a total \$25 million of this grant!

The name of the innovative program is entitled: **“All Rise”**

This new program design is expected to address the multiple issues in an integrative way that is completely different to the programs that are currently out there. Your focus is on the education piece of the puzzle.

There have been billions of dollars spent in this area in the past and currently, but it is STILL not working in fact the issue is worsening rapidly. So you need to approach this entirely from a NEW angle – traditional methods of attracting and as importantly, retaining indigenous youth in the education system.

One hurdle is that because this is an election promise, the government minister wants to announce the broad details of the program at a press conference tomorrow – and your input is critical.

Follow your client home -



Young indigenous man - Jayden



JAYDEN

I was a pretty wild kid and hung out with my cousins and mates but always respected my mum and didn't do anything that hurt anyone. I promised myself I would never be violent after my dad hurt mum. I never have.

AGE: 20
Status: single, unemployed
 Live with mum
 Year 3 High School
Location: Outside Perth
Health: Good

Snapshot

I love life and have always strived to make my mum proud. She has had a pretty hard life – had her jaw busted by my dad before we moved out. I am a champion skater in my home town won lots of awards and just love hanging around with my cousins and mates. We sometimes get into trouble and that has landed me in jail a few times but for nothing much. That has made mum sad. I promise myself that I won't muck up again. It is not worth it.

My goals and motivations:

My goals are to get a good job maybe an apprenticeship in Perth, or join the police force. To get a career and to earn some money and so I can help mum find a better place to live in.

I want to get married someday and have kids and maybe even get a house. I want to give my mum grandkids too. She lost my twin brother when we were born so she has always felt sad about that.

Needs:

Once I get a job I want to find my own flat to live in and I don't need much really, although apart from a job I would like to have a car so I can do some travelling and help mum with shopping and take my mates out.

Key questions to answer:

How can I apply for an apprenticeship – what do I need

What qualifications would I need? Can I get into TAFE with a criminal history.

Triggers and influencers

- My mates are great but I get into trouble when we hang out together!
- I love hip hop music and rap and like to write rhyme just like my grandad who was a real poet and playwright.
- I love comics and movies but also love watching car racing.

Technical Savvy

People reckon I am pretty handy with electronic stuff. I have played around a bit with electronics. I wish I had been able to stay at school but with my juvenile detention I missed too much to pick up where I left. But I taught myself lots of stuff inside and can do most technical things. Once I work it out.

Delighters

- Listening to music and dancing hip hop. Practicing my skating and pulling off aerials in the half pipe in front of a crowd. Being with my dog and writing Rap songs.
- Working on my mates cars and fixing them. Sometimes getting paid to do it!

Thoughts and emotions

- My life has been a bit hit and miss because I keep getting into trouble – and I don't want to keep wasting time as I am getting older. I only have mum since my grandma and grandpa died – so I want to do something good with my life to make her proud. My grandfather was a famous poet – I think I could write too. Maybe get famous. Mum would like that.
- She gets sad sometimes.

Channel preferences

- I watch Youtube a lot and listen to Spotify and other music channels. I have an old android phone and a clapped out donated laptop that I worked on in prison and got to keep it when I got out. It works ok but its slow. I can use it to follow my hip hop and rapper heroes.

Frustrators

- Getting pulled up by the cops all the time. Doesn't matter if I am sitting at MacDonalds just eating food or walking up the street with mates, They are always stopping me. They should concentrate on the real crooks. There are plenty of bad kids and dealers on the street – I am just an easy target.
- I want to get off the dole but there are no jobs here – and its hard when I have been 'inside'.

SEEING

THINKING & FEELING

I want to be cool and have money! I want to get out of this hole, Or I might end up hanging myself like my best mate did last year. If my twin brother was alive – I wonder if my life would have turned out like it has

I see the leaking roof and the water stains on the walls of my bedroom, I see my mum cooking on a camp stove 'cos the stove doesn't work – I see the way she looks sometimes – sad. I see the magazines with the latest converse skate shoes that cost too much

SAYING

I want to have a car and a job and I don't want to go back 'inside' I have wasted too much time there.



Jayden

HEARING

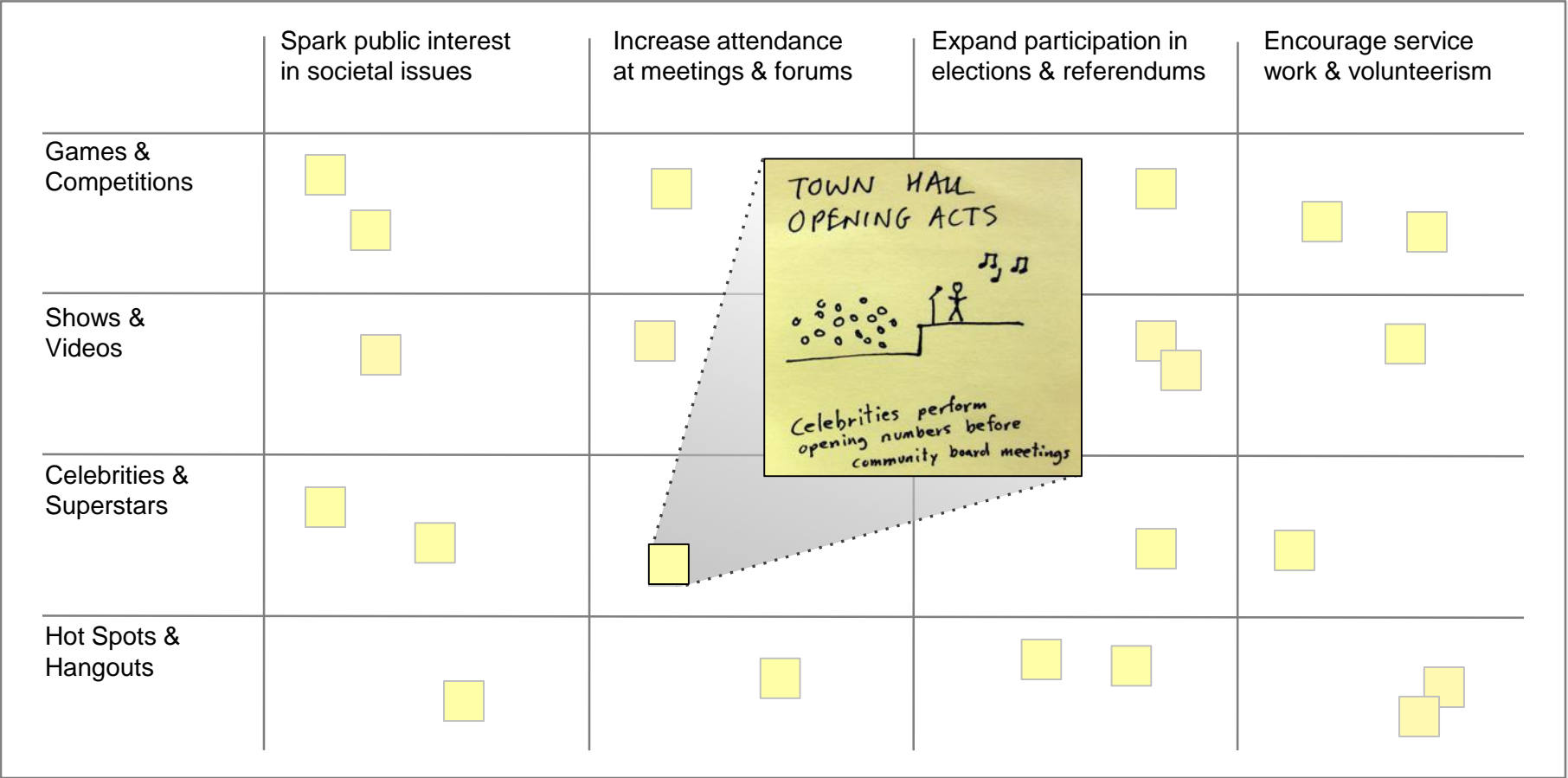
I can hear the trains on the tracks outside my window, and the shouts and fights at night when there are parties and lots of beer. I hear my favourite rappers when I block out the noise with my earbuds. – I hear my mates laughing and the sweet sound of the skateboard hitting the rail perfectly and the clack of board as it slides.

I hear the cops – telling me to empty my pockets

Use the 'first person'


CREATIVE MATRIX: EXAMPLE A

How might we increase civic engagement?



CREATIVE MATRIX: EXAMPLE B

How might we engage and transform the educational experience to enable indigenous people to reach their potential

	 What if schools were >accessible	 What if staff were indigenous	 What if school was cool?	 What if industry, government, schools & GPs were partners
Places and people	 		 	  
Facilities & Environments	 	   	   	  
Technology Devices & Apps	 	  	 	
Programs & Policies	 		 	
Wildcard				

OUTDOOR ENTHUSIASTS



Nat'l Park
rushing beehives



Custom beehives based
on personal interests

What to take
with you.



W/ doing x on y while
in z location. I bring

Outdoor Albums



Pictures of outdoors
- personal - lists
- professional - package
- links - for you!

Anyone can
narrate a
travelogue

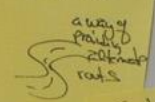


SOCIAL MEDIA

BUSINESS COMMUTERS



Super Secret
Short Cut



Text
Alerts
for delays



Best Gas mileage

how to
get the
best
50mpg

Find dinner
companion w/
similar interests
in my town

TWEET-
REPLACE
BLACKBOARD



GPS ENABLED
HUNTING VESTS



Find you
when you're lost

Personal
shirt display



become
a historical
character
- show facts

Breakdown
mixing shoes



shows what
you're wearing

Path Tracker



App follows your
GPS & shows it
on link to friends

TRAIN TICKET
OVERCOATS



RF in
seat ->
your train
ticket

BRIEFCASE
HOT SPOT



Your brief-
case is
a WiFi
router

SEAT BELT
SENSING BLANKETS



Gloves open
if seat belt
on - no more
waking up by
accidentally

BOARDING PASS
JACKETS



Traveling
cost projects
the code on
arm

Smart Travel
Watch



plane is
on time
or late

SCHEDULE
TIES



look down to
see what's
next

HEATING
WATCHES



WEARABLE/ MOBILE TECH

* WILDCARD

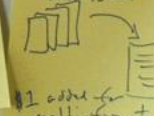
Get first aid
info from
experts when
needed



CAR
RENTAL
DIN'S



Analogue to Digital
multiformat



e-spit



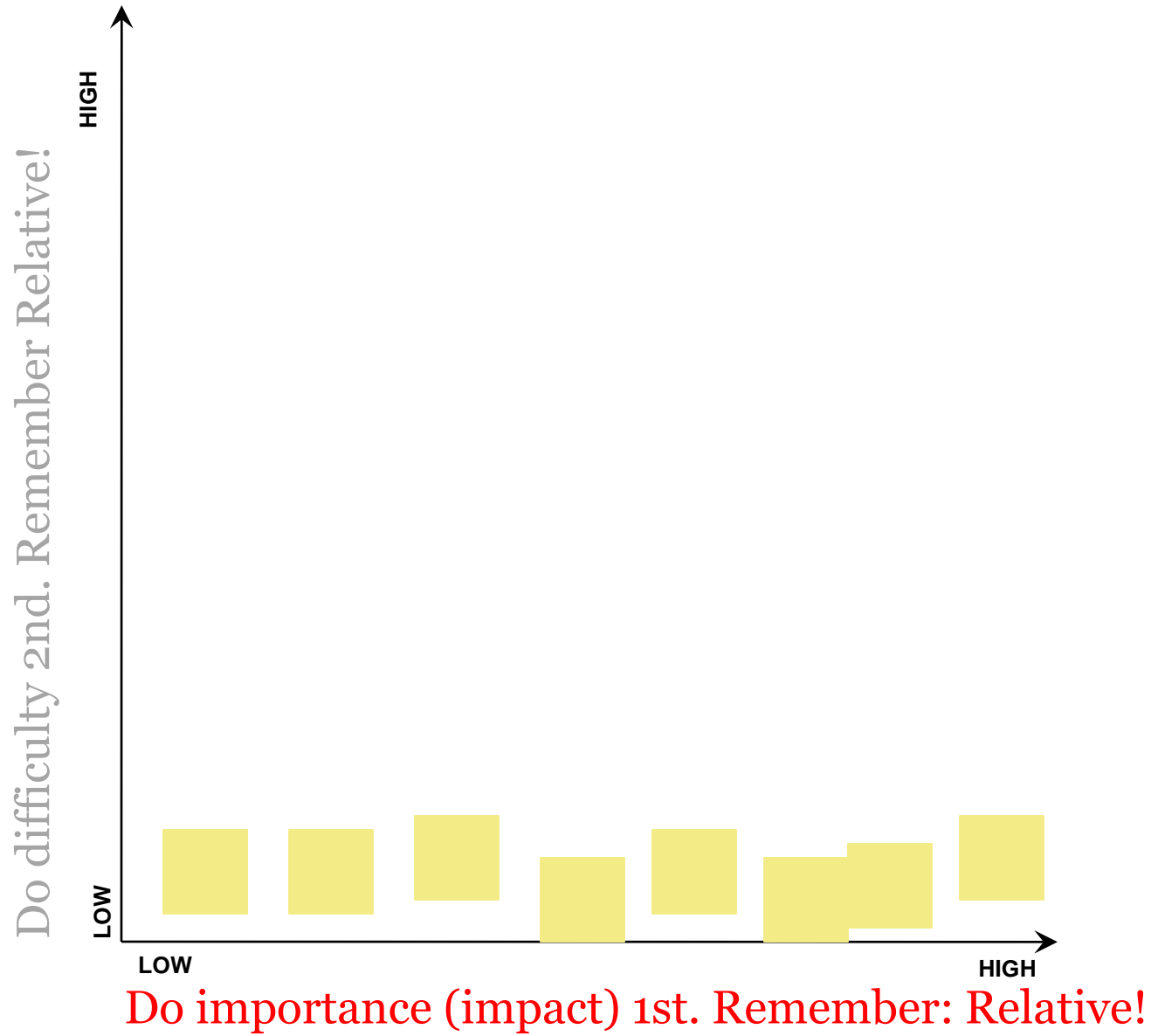
ASSIGNMENT

Creative Matrix

- Break into your teams and get set with a Sharpie and Post-its
- Work individually to generate as many ideas as possible
- One idea per Post-it
- Include a quick sketch if you can
- Bonus points if you fill in all of the quadrants



Importance / Difficulty matrix



Do difficulty 2nd. Remember: Relative!

