

Using hypotheses to hold together your learning, thinking and making

Interaction 20, Milan
Friday 7 February 2020



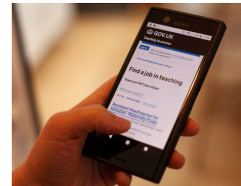


John Waterworth
Head of User Research
@jwaterworth



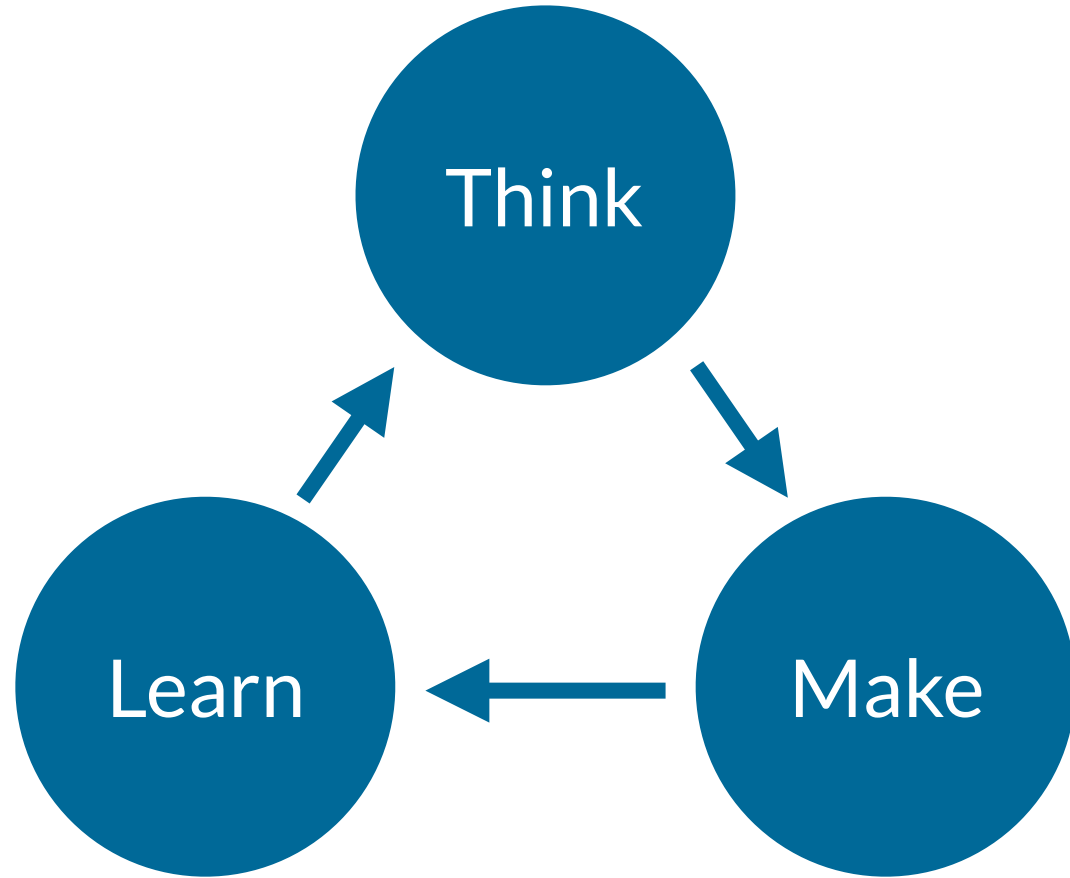
The public sector can become something recognisably, radically better, and we're here to help make it happen

dxw helps create public services that improve people's lives. We influence government policy from the outside.



We work with the public sector to research, design, build and operate services that make life better for people.

Technology is just one of the answers. We support strategy, planning, process and organisational culture too.



Hypothesis

Because [research findings]
we believe [improvement idea]
will achieve [desired outcome]
measured by [performance indicator]



Hypotheses can be the glue
that holds together our
learning, thinking and making



Good hypotheses depend on several other practices

Practices that organisations can be struggling to do well



If you want to introduce hypotheses
you need to get those other practices
working well first



Problem

Work starts without clear,
agreed outcomes



Hypothesis

Because [research findings]
we believe [improvement idea]
will achieve [desired outcome]
measured by [performance indicator]



Example brief

We need an online portal for people to fill in feedback surveys



Solution

Ask questions in a structured way
to reshape poorly defined briefs
into clear and valuable outcomes



Example outcome

More and better feedback that
we can use to improve our services



Possible performance indicators

Proportion of users giving feedback

Proportion of feedback that's useful
to improve services





How to Re-Shape Projects (without antagonising people)

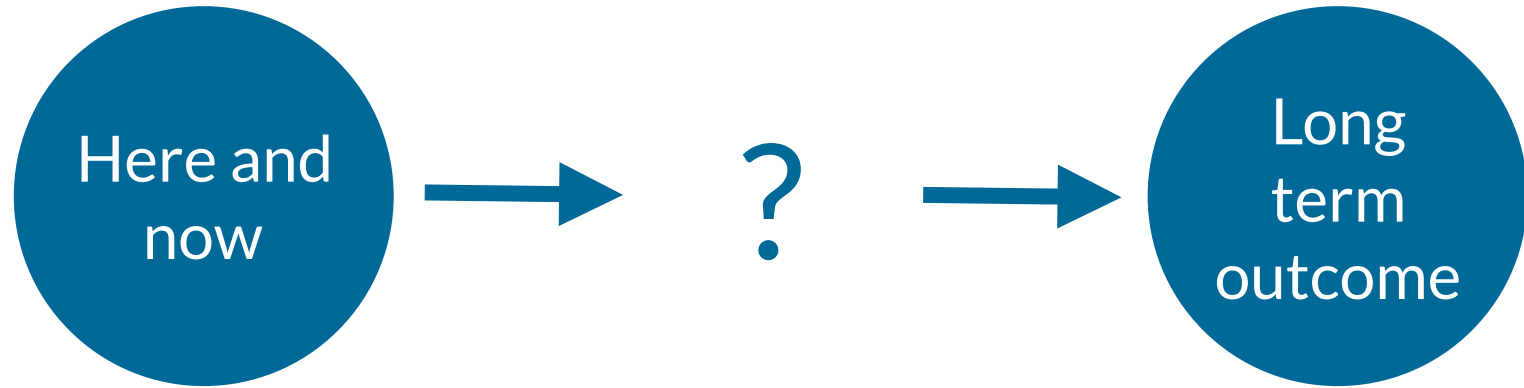
Kate Tarling
2018.nuxconf.uk



Problem

Outcomes are too big for any practical hypothesis

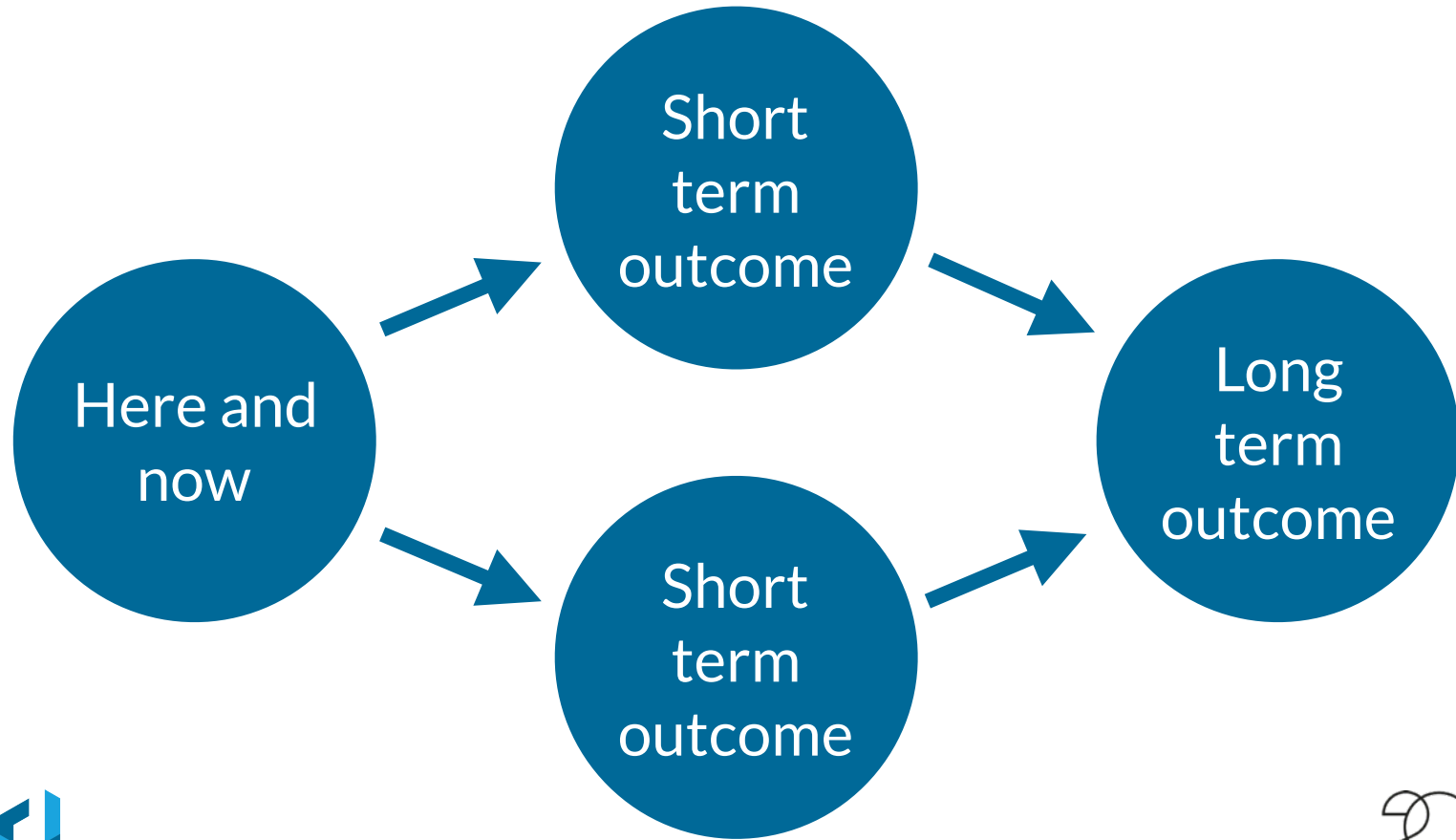




Solution

Break down the long term outcome into a number of achievable and measurable short term outcomes





Example long term outcome

More and better feedback that
we can use to improve our services



Possible short term outcome

Make it easier to give feedback so
fewer people dropout

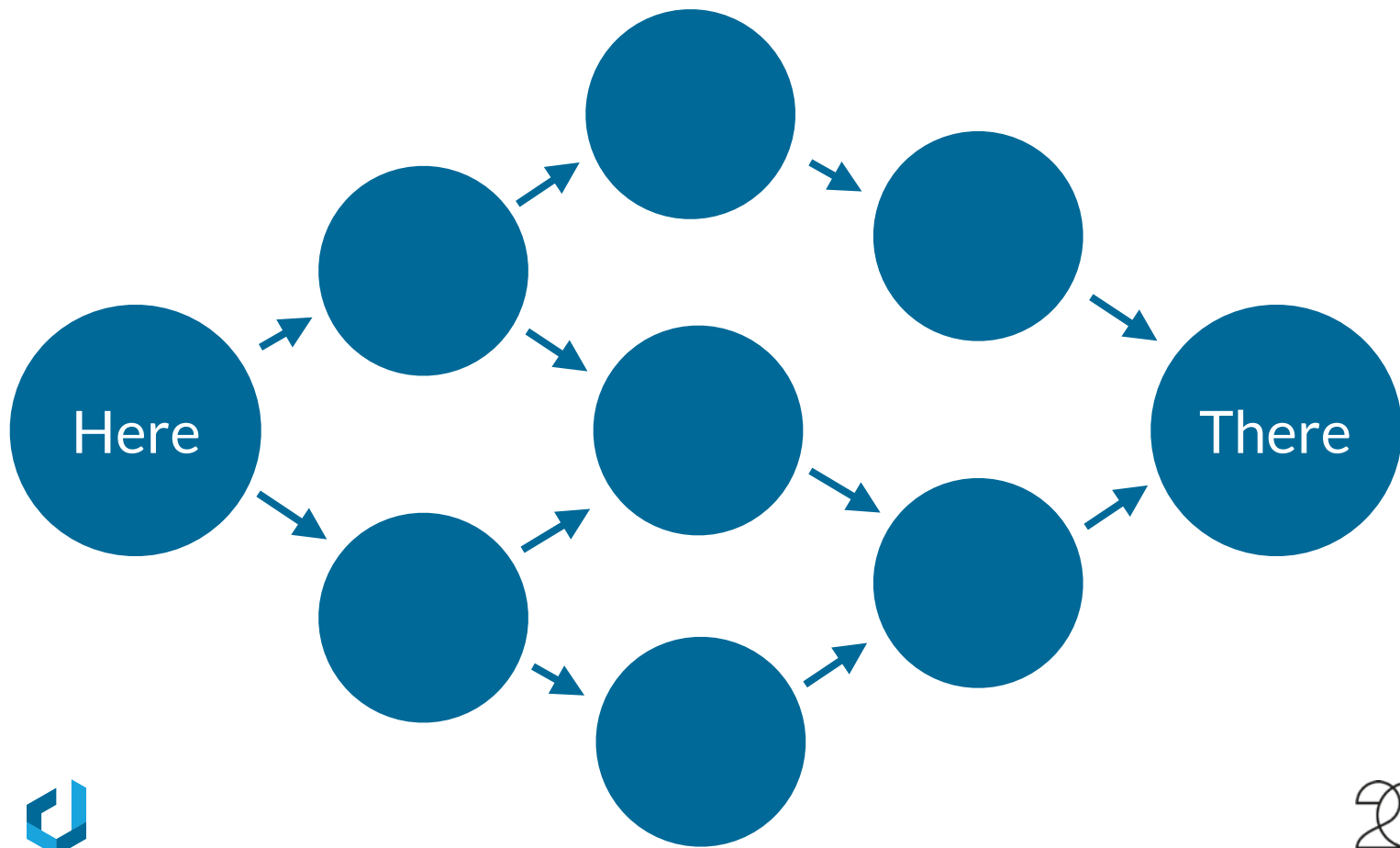


Theory of change

“... description and illustration of how and why a desired change is expected to happen ...”

www.theoryofchange.org/what-is-theory-of-change/





ActKnowledge
365 Fifth Avenue, 6th Floor
New York, NY 10016
Telephone 212.817.1906
www.actknowledge.org



Theory of Change Basics

A PRIMER ON THEORY OF CHANGE

Dana H. Taplin, Ph.D.
Hélène Clark, Ph.D.

March 2012

ActKnowledge
365 Fifth Avenue, 6th Floor
New York, NY 10016
Telephone 212.817.1906
www.actknowledge.org



FACILITATOR'S SOURCE BOOK

SOURCE BOOK FOR FACILITATORS LEADING THEORY OF CHANGE DEVELOPMENT SESSIONS

Dana H. Taplin, Ph.D.
Muamer Rasic

March 2012

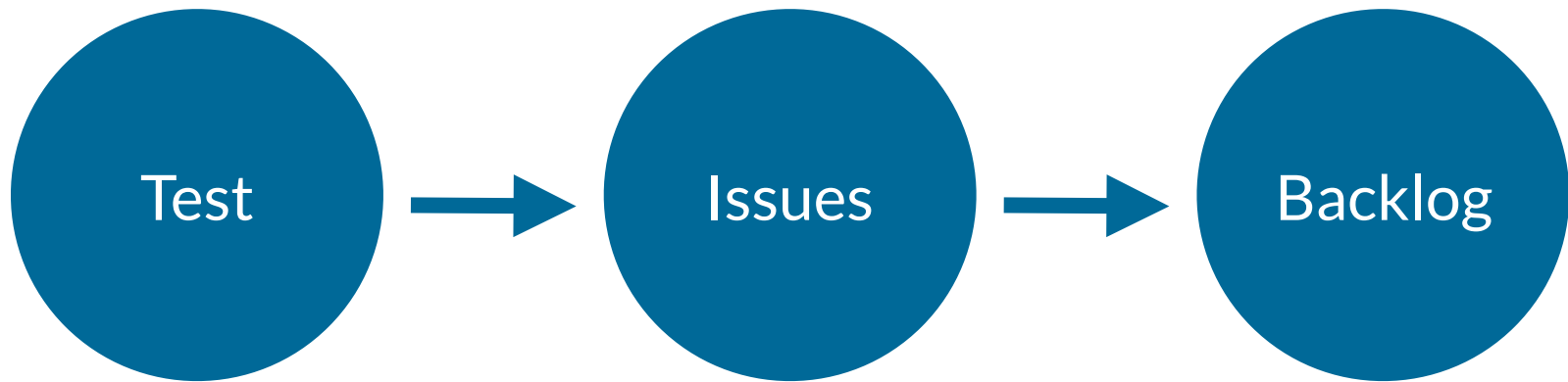
Center for Theory
of Change
theoryofchange.org



Problem

Most user research is rapid
usability testing





Hypothesis

Because [research findings]
we believe [improvement idea]
will achieve [desired outcome]
measured by [performance indicator]



Research findings

Distilled statements of the important things we've learned



Research findings (insights)

“... a provocative statement of truth about human behavior ...”

“.. ‘big rocks’ of innovation: statements about the future to hang your design hat on.”

Jon Kolko, Trusting the Design Process
www.jonkolko.com/writingProcess.php



Solution

Agree the most important things the team needs to learn, then look for the simplest ways to get good answers



Might be

Starting usability test sessions with
more open interviews

Visiting your users' homes and
workplaces to run tests in context





Erika Hall
abookapart.com/products/

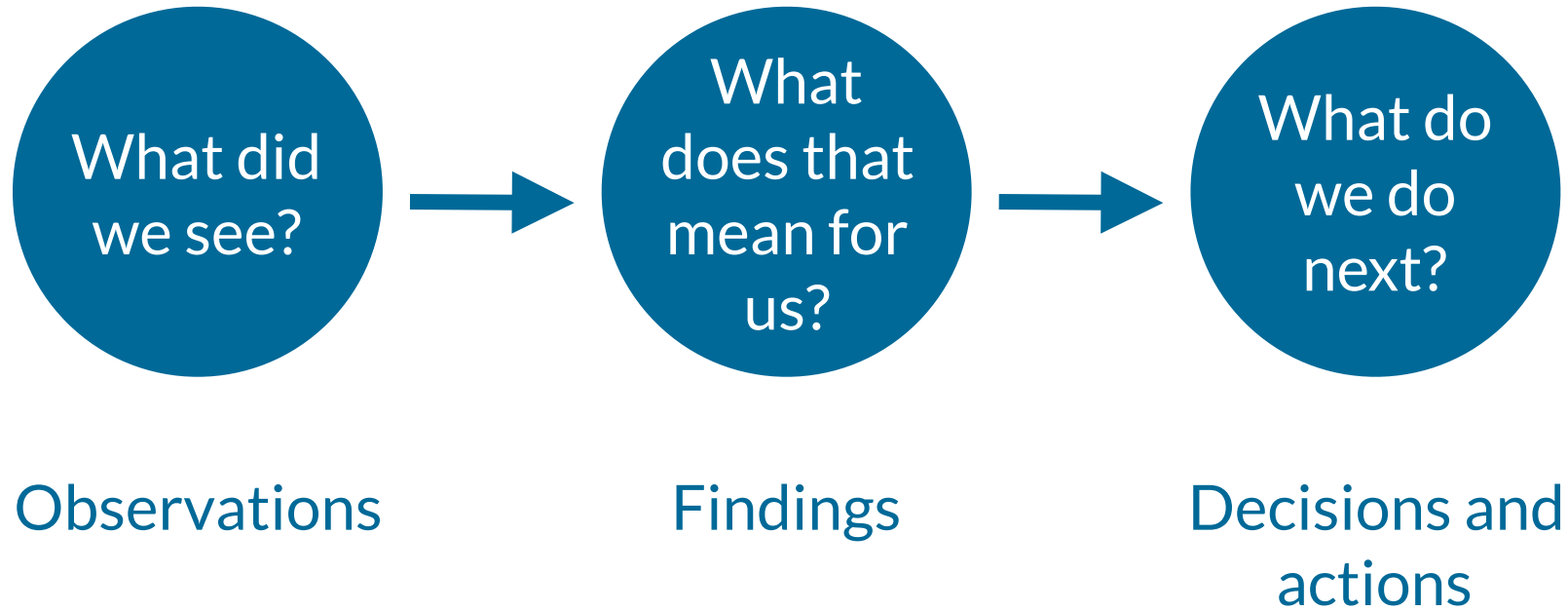
Stephanie Marsh
koganpage.com



Problem

Weak analysis means research
produces observations not findings





Solution

Researchers run good, regular analysis sessions with the team that produce useful findings



Examples

People are motivated to give feedback to improve the service

The current registration step is a significant barrier

It's important to everyone that feedback is from real users

Other services have good lightweight authentication

We have good contact details for users





EXPOSING THE MAGIC OF DESIGN

A Practitioner's Guide to the
Methods & Theory of Synthesis

Jon Kolko

With contributions from Beth Johnson, Gianna Marzilli Ericson, Paul Gould,
Colleen Murray, Hugh Dubberly, Lauren Serota, and Rachel Hinman

HUMAN TECHNOLOGY INTERACTION SERIES OXFORD

Indi Young

indiyoung.com/pubs-apps/

Jon Kolko

www.jonkolko.com



Why is collaborative analysis so important?



Vita Mangan

September 10th, 2019

“ Unseen research is wasted research – Gregg Bernstein

Analysis which turns research data into valuable findings a team can act on, is the most important part of what we do as user researchers. But tends to be the least visible and least understood.

You can have well designed research questions, conduct lots of research, and do it well. But without enough and proper analysis, you won't see the impact you're hoping for. That detailed research report or slick journey map might just end up collecting 'digital dust'.

At dxw digital, we believe that research is a team sport. And co-analysis is a big part of that.

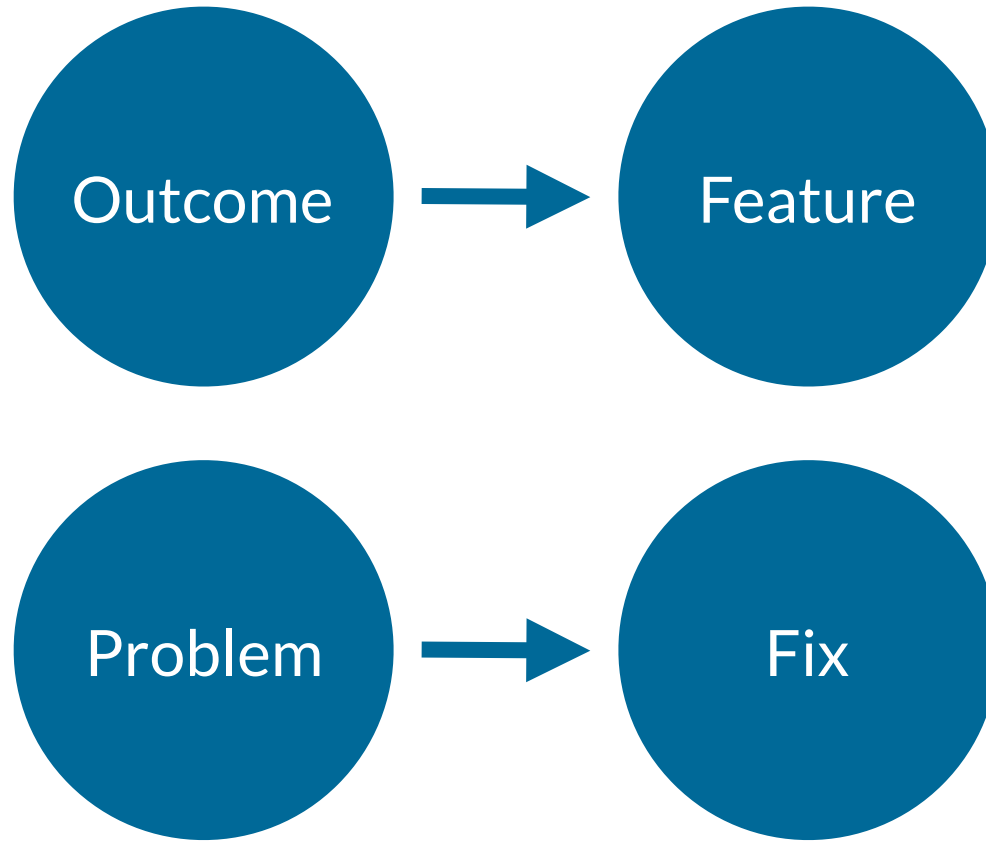
Vita Mangan
dxw.com/blog



Problem

Only one idea allowed
(and no failures)





Hypothesis

Because [research findings]
we believe [improvement idea]
will achieve [desired outcome]
measured by [performance indicator]



Solution

Open up some space to create and try out lots of improvement ideas

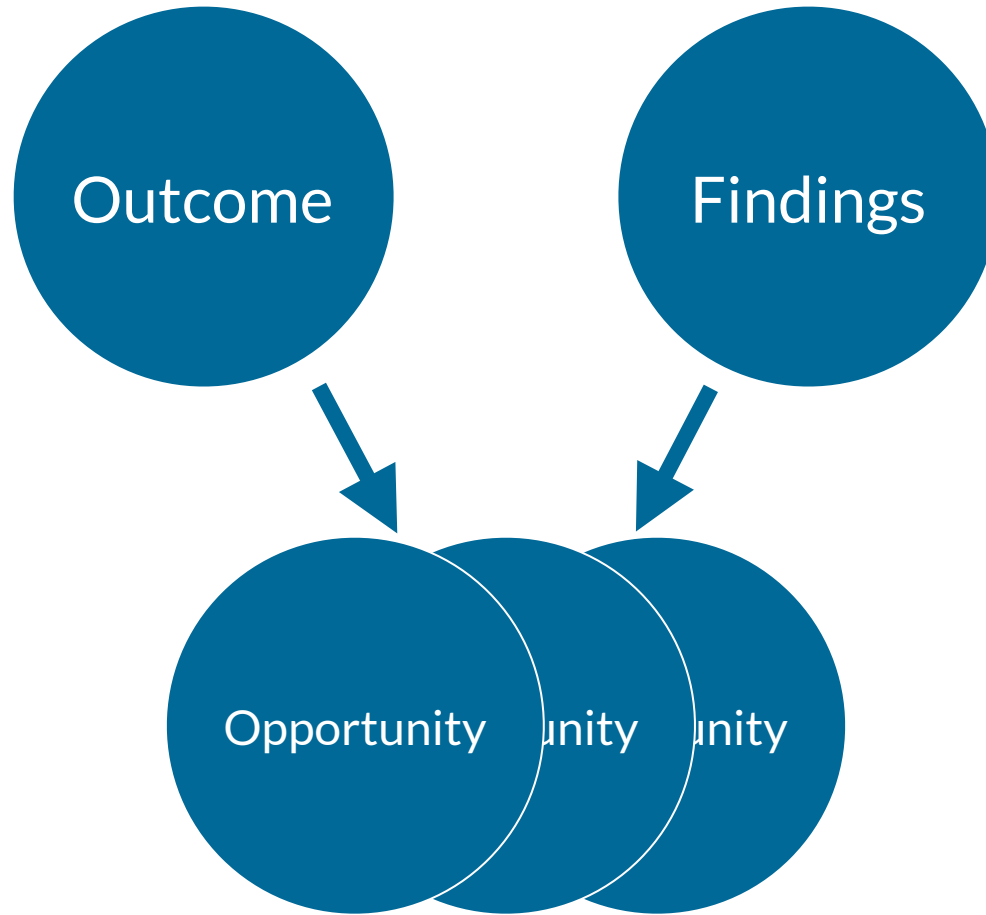


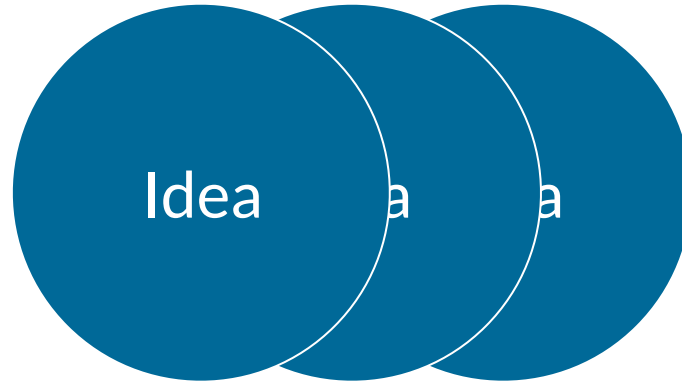
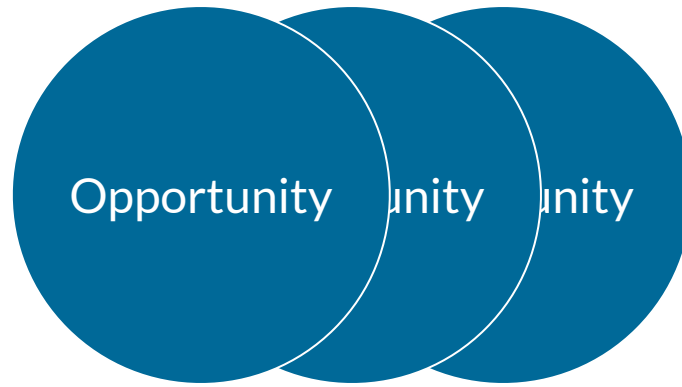


Opportunity solution tree

Teresa Torres
producttalk.org







Example opportunity

Replace the problematic registration
with a lighter weight authentication



Possible improvement ideas

Generate and send a unique code in the feedback invitation

Confirm contact details and check against records



All the ingredients for a good hypothesis



Example long term outcome

More and better feedback that
we can use to improve our services



Possible hypothesis

It's important to everyone that feedback is from real users
but the current registration step is a significant barrier

We believe that replacing the problematic registration step
with a simple confirmation of contact details

Will make it easier for people to give us feedback

Which we'll measure by the numbers of dropouts in the feedback process



Theory of change for introducing hypotheses



Before adopting hypotheses ...

Does work start with clear and valuable outcomes?

Are outcomes an actionable size?

Are teams producing solid and useful research findings?

Do teams have the space to create and try out different improvement ideas?



Thanks!

dxw.com

@dxw

