

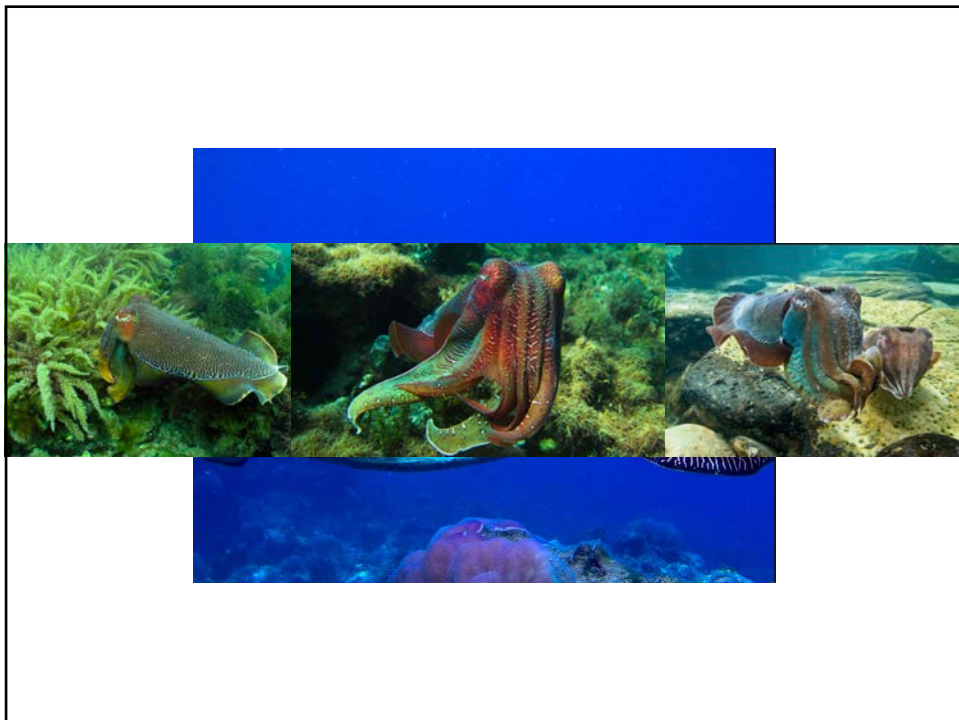


# Design Evolution and Innovation for Livable Cities: Toward A Circular Economy

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James Cook University

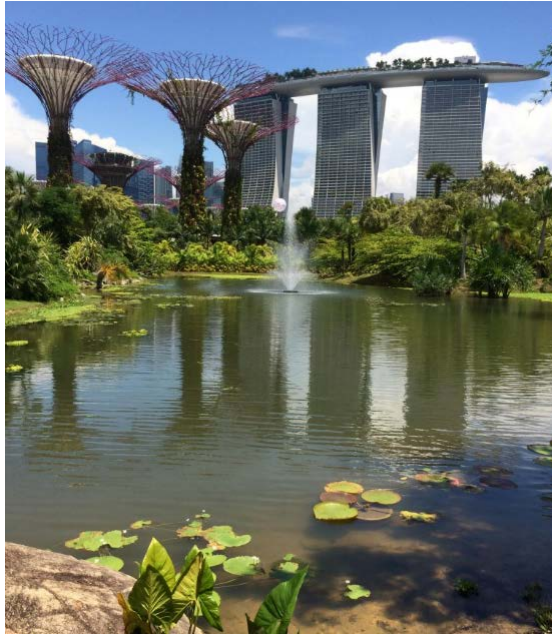
Tropics of the Imagination conference Living Cities: Tropical Imaginaries,  
6 - 9 September 2017, Singapore





Why not learn from the best?







Ministry of Environment and Water Resources: 200.000t solid waste and incineration ash

Green city-state - Singapore: Design-led innovation to solve problems



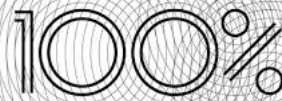
**100% design**  
singapore

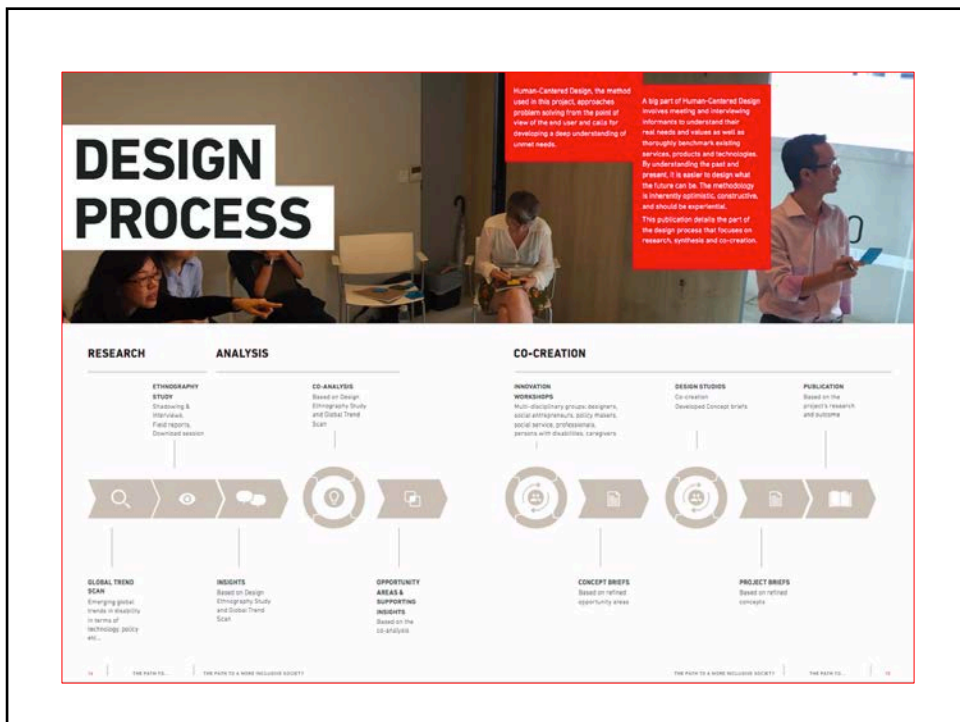
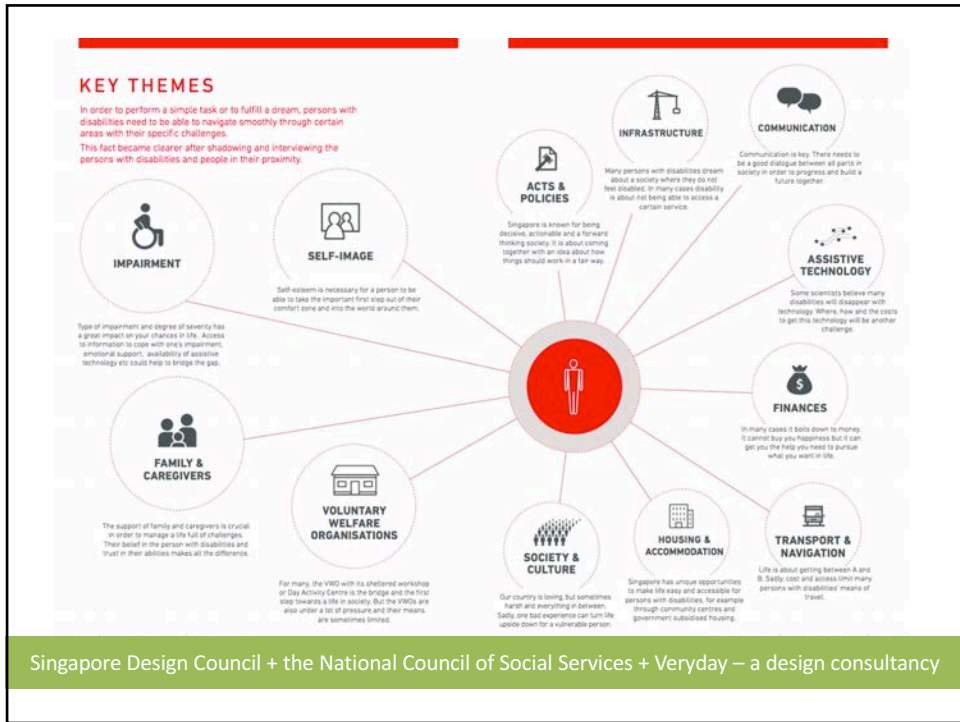
The tropical mega city Singapore  
has been on the policy forefront to push design-led innovation.

Singapore integrates design and creativity in its everyday life.



100% design  
singapore



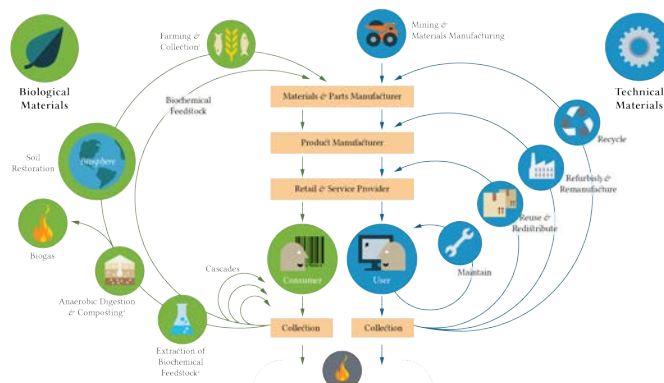


# Service Design Thinking –

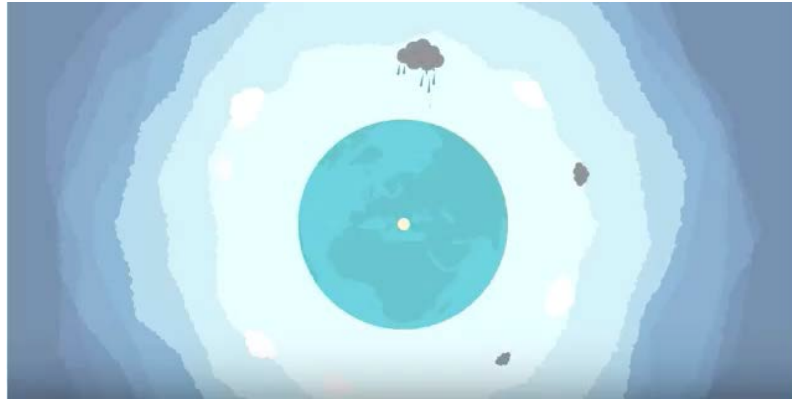
User-Centered : Co-Creative : Holistic

# Service Design Thinking – in the Circular Economy

User-Centered : Co-Creative : Holistic



Circular Economy Video



[Ellen MacArthur Foundation](#): Re-thinking Progress: The Circular Economy

Circular Economy: slowing, closing and narrowing material and energy loops.

Service Design Thinking

Waste avoidance through creating ideas for **repair, reuse, remanufacturing, refurbishing, and recycling**

Example: Light as a Service = max. resource reduction + Fairphone: reducing e-waste

ZeroWasteSG

Agy Textile Artist

Jimmy Lea & Chartered Engineers  
**Jimmy Lea**  
Chartered Engineers

green collar asia

Connected Threads Asia

Connected Threads Asia

GREEN FUTURE SOLUTIONS

Singapore Circular Economy Group

One Maker Group

Geometria

Repair Kopitiam

directgreen

One Maker Group

GEOMETRIA

Repair Kopitiam

directgreen









The cover page features a background image of hands holding a green plant. The title "Waste Reduction Management Plan" is prominently displayed in white text on a dark red background. A green horizontal bar contains the goal: "reduce waste production 20% - improve recycling rate 70%". Below this, the date "December 2015" and the author "Developed By: Estate Directorate" are listed. The James Cook University Australia logo is in the top right, and a list of campuses (Cairns, Singapore, Townsville) is in the bottom right.

# Waste Reduction Management Plan

reduce waste production 20% - improve recycling rate 70%

December 2015

Developed By: Estate Directorate

JAMES COOK UNIVERSITY AUSTRALIA

Cairns  
Singapore  
Townsville



This dashboard page features the same background image and title as the cover page. It includes the "warpit" logo with the tagline "get. give. loan." and the text "Successful projects" and "The Warp It Furniture Re-use System". A data visualization section shows five metrics in a grid format.

# Waste Reduction Management Plan

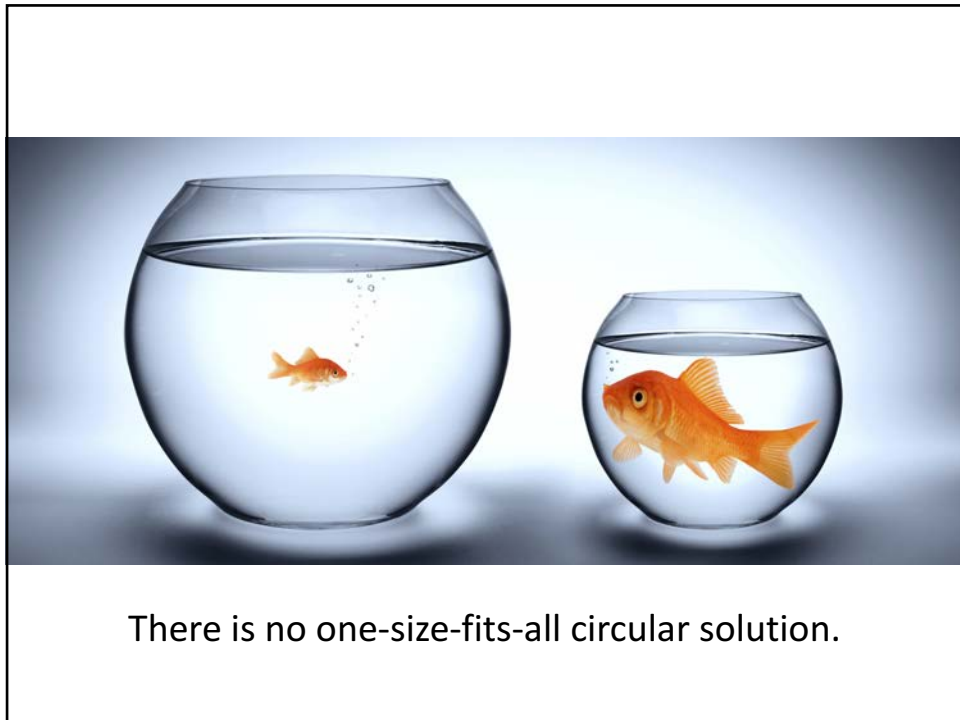
Successful projects

The Warp It Furniture Re-use System

warpit  
get. give. loan.

TOTAL SAVINGS (\$)	WASTE AVOIDED (KG)	CO2 (KG) SAVED	CARS OFF THE ROAD	TIME SAVED (MINS)
0030522	0002532	0006815	0000002	0004200

<https://au.getwarpit.com/JCU>



There is no one-size-fits-all circular solution.



## Is Townsville ready to innovate?

Growing the creative industries in Townsville

Developing a regional economy through creative industries: innovation capacity in a regional Australian city

**Katja Fleischmann, Ryan Daniel & Riccardo Welters (2017)**



**CITY LANE**

## Is Townsville ready to innovate?

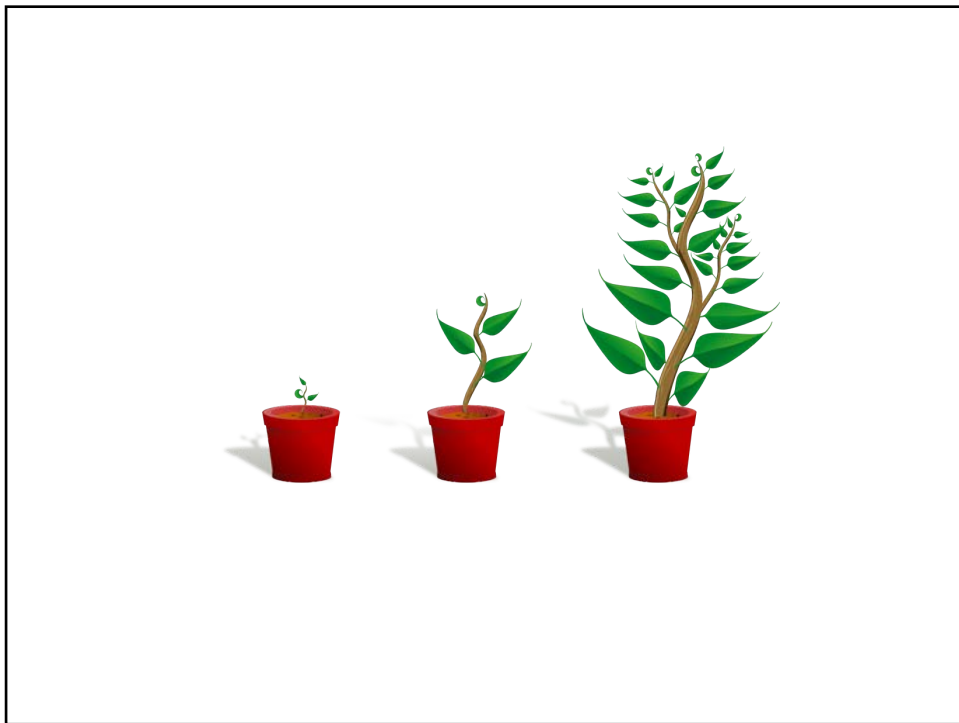
**Table 2.** Creative processes actively promoted as part of the service package of creative businesses.

Which of the following do you offer or actively promote as part of your service package to your clients?	
Design Thinking	52%
Brainstorming	49%
Co-creation	37%
Prototyping	17%
None of the above.	29%

creative industries in Townsville

Design-led innovation?

JAMES COOK UNIVERSITY



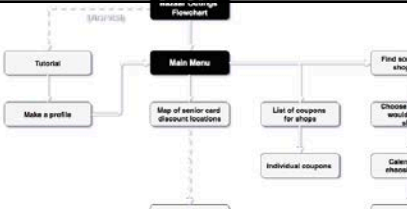




**Service Design Thinking in Education**  
design-led innovation for a better future



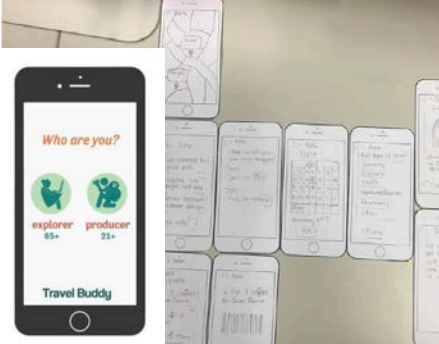



Source: Actv8rlives, n.d.

**Designing for the Elderly**



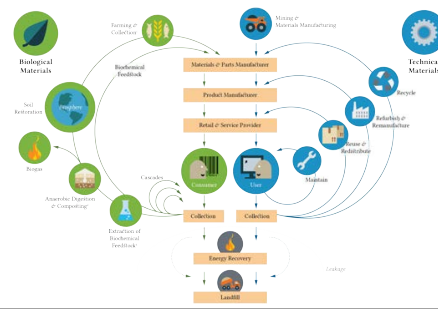
**“How can we change the social stigma surrounding the elderly?”**  
**“How can we encourage companionship in elderly lives to fight loneliness?”**

**Travel Buddy**



## The future designer - a creative and circular thinker

Learn to design and think for circularity



### Research

**How can Service Design Thinking  
be employed in the Circular Economy to drive  
innovation?**

**Ideas? Collaboration. Interested?**

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