

# Value: Creating New Markets in the Digital Economy



Keynote, Bristol and South West NextGen  
Roadshow, 17 Jul 2012

**Irene C L Ng**

Professor of Marketing & Service Systems, WMG  
Director, International Institute of Product & Service  
Innovation

[irene.ng@warwick.ac.uk](mailto:irene.ng@warwick.ac.uk)

@ireneclng

<http://uk.linkedin.com/in/ireneclng>

[bit.ly/vcssblog](http://bit.ly/vcssblog)

[www.warwick.ac.uk/go/sswmg](http://www.warwick.ac.uk/go/sswmg)

[www.ireneng.com](http://www.ireneng.com)

THE UNIVERSITY OF  
**WARWICK**



## Value was exchange (what I got for what I gave)



**\$\$\$**

13 September, 2012

Copyright Irene Ng, 2012. All rights reserved.

WVG  
UNIVERSITY OF WARWICK

But it wasn't exchange that made us happy. It was experiencing what we bought that gave us the outcomes we wanted




We buy because of the service of the object, even if it was an emotional 'service' i.e. things are **service avatars**\*

Mike Kuniavsky, 2010

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

WVG  
Innovative Solutions


We (co) create value through 'use' in context\*



The object (firm) propose value, we create it through use/experience


(Vargo & Lusch, 2004,2008; Ng & Smith, 2012)

THE UNIVERSITY OF  
WARWICK



## Ownership was the only way to get the 'service' of an object

- Previously, the only route to service/outcomes was through ownership
- Marketing have *talked, promoted and sold on the basis of* benefit and use of things but benefit (outcomes) and use is not aligned to revenues – we still only buy ownership and not outcomes



13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.



## Digitisation makes it possible to render a 'service' without ownership

Case Study of Music



THE UNIVERSITY OF  
WARWICK

WVG  
UNIVERSITY OF  
WARWICK

## Where we used to get our music




But we needed to buy before use, we needed to acquire, to know that we MIGHT want it

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

WVG  
Innovative Solutions

## Due to digitization, acquiring music (exchange) and use of music (creating value) has collapsed into the same time & context



Collapse into context creates new markets, expanding existing ones

THE UNIVERSITY OF  
WARWICK

Digitisation of music makes it able to serve use contexts, faster, on demand, and wherever

Choice of access and ownership ↑

unserved market ↑

New use contexts ↑ Change in the content ↑

**EXPONENTIAL DEMAND FOR USE**  
(even if we struggle with revenue model)

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

Digital Music Sales Surpass CDs in 2011

BY HILARY SAUNDERS - Published at 2:47 PM on January 9, 2012

Likes: 11 | Tweet: 67 | Plus | Embed: 164

Lovers of physical media are currently commiserating over the fact that digital sales just won the war on music, because according to Nielsen SoundScan, digital outsold physical music for the first time ever in 2011.

Both digital singles and albums saw a sharp increase in downloads, as individual track sales rose 5.4 percent and full-length records were up 19.5 percent. Combined, these statistics revealed that the digital market surpassed physical media by the narrow margin of 50.5 percent to 49.7 percent.

nielsen

- music sales as a whole increased between Jan. 3, 2011 and Jan. 1, 2012.
- Music consumers bought approximately 6.9 percent more music last year

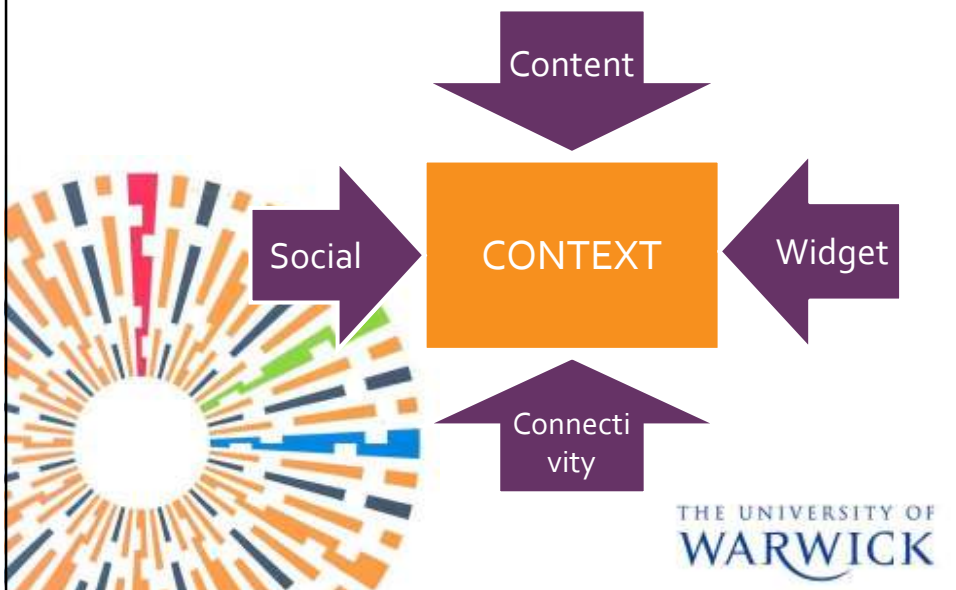
13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.



But to bring your digitised offering  
(content) into context, you need a  
medium (widget), connectivity, and a  
social space



## The New Battleground



QWVG  
UNIVERSITY OF WARWICK

## VALUE IN CONTEXT

This camera is available so it is a resource in context





This camera is not



Value created is Contextual. Resources are therefore also Contextual.

Things become more valuable *in context* because they enable resources for value creation

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.



QWVG  
UNIVERSITY OF WARWICK




Two functionally the SAME cameras but not the same value for the user in context. Because one camera is less **competent** in context, one is a lesser service avatar (or is just simply not around!)

**COMPETENCY OF OFFERING IN CONTEXT IS KEY TO NEW MARKETS**



13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.



## Once upon a time, our contexts were rather homogenous

- Where/when we ate meals
- Where/when we listened to music
- Where/when we exercised
  - \*Technology liberates us from constraints of
    - time, when things can be done
    - place, where things can be done
    - actor, who can do what
    - constellation, with whom it can be done

13 September, 2012 \*Reframing Business, Normann, 2001  
Copyright Irene Ng, 2012. All rights reserved.



## Mobile phone as the medium to propose digitised offerings in context

- Why is the mobile phone one of the most popular device for digitised offerings today?
- because it is often present in MANY lived experiences (contexts)
- It may not be the only widget in the future serving multiple contexts, but it is now

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.



## Markets are forming at where service creates most wealth – in context



Digitisation allows new offerings to be resources available, accessible on demand, in context

The better you are able to serve context, the bigger your market

WVG  
THE UNIVERSITY OF  
WARWICK

## Abundance of revenues in service-ability of objects in Context

write-ability in context (when taking down a number) ..... \$5,000!!!

bandage-ability in context (when wounded)

Fasten-ability in context (when trousers are busted)

The entrepreneurship trading game

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

No, not price gouging (although possible)



But more  
CHOICES of  
offerings in  
context

## Who is digitising to serve use context next? Tea? ;)

- Digitisation enables traditional offerings to become a resource in context, reducing time between acquiring a resource and using a resource - expanding demand



Digitisation+Data is the  
new oil, Context is the new  
oil-field

QWMG  
UNIVERSITY OF WARWICK

But context is messy! How to digitise to serve context? Who carries the digitised offering?

---

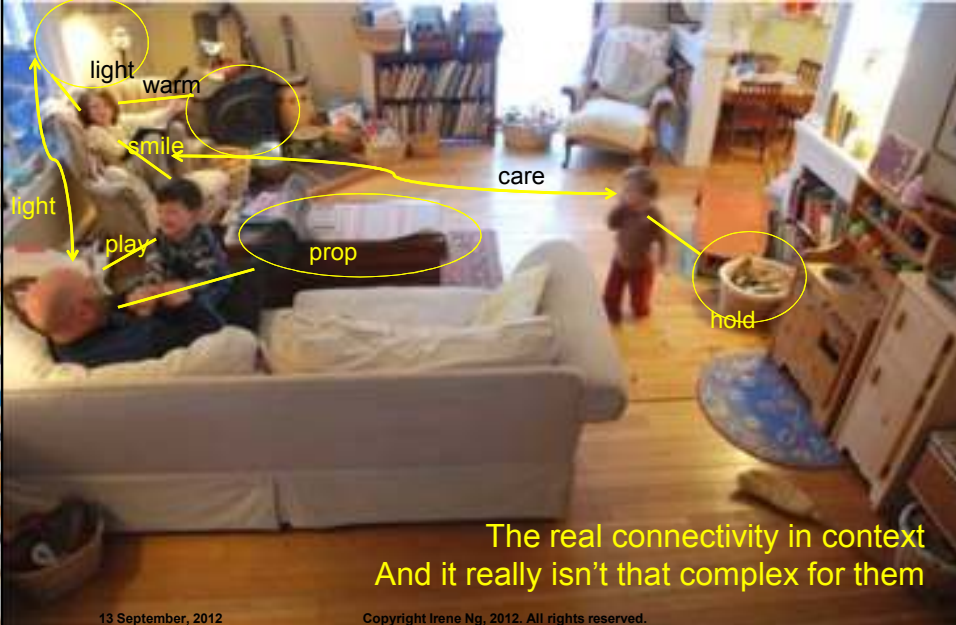
No processes, All social practices



13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

QWMG  
UNIVERSITY OF WARWICK

Look closer – connectivity in context is held together by interactions (verbs) – the interventions are already there



light warm smile care prop play hold

The real connectivity in context  
And it really isn't that complex for them

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

QWIMG  
UNIVERSITY OF WARWICK

## Context as the focus

- we can focus on *contextual invariances* - clusters of contexts that are similar.
- when we focus on value in context, we need to shift our focus, onto *activity sets* i.e. the context of the experience.
- Instead of profiling individuals or analysing data about things, we should be profiling contexts – not just **people**, not just **things**, but the relationships between them, the value creating *flows*
- We can focus on the constellation of the context (ie the propositional entities & resources)

10 September, 2012 Copyright Irene Ng, 2012. All rights reserved. 7

QWIMG  
UNIVERSITY OF WARWICK

## Contextual invariances

The diagram shows four activity sets, each with a central square and four surrounding starburst shapes representing propositional entities and resources:

- TEA MAKING** (purple square): Objects/Nouns, People, Rules, Verbs
- AFTER DINNER CHAT** (green square): Objects/Nouns, People, Rules, Verbs
- ENJOYING PLAY & KIDS** (blue square): Objects/Nouns, People, Rules, Verbs
- EXERCISE WITH MUSIC** (black square): Objects/Nouns, People, Rules, Verbs


13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

QWIMG  
UNIVERSITY OF WARWICK

## Is there a method for this?

- How do we analyse 'messy' contexts?
- How do we analyse digital offerings & current technologies – how could they be connected in context to enable value creation?
- Is there a method to understand the mess for new exchanges/markets?

'Exploration techniques' for the new oil



13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

QWIMG  
UNIVERSITY OF WARWICK

## New markets/econ models

- New transactions (markets) come in two ways:
  - Convergence of existing resources/offerings in the constellation creating experiences in context (because they are already there) - (impact on Business Models – workshop later)
  - New Resource in context (a resource/offering that does not currently exist)

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.



QWVG  
UNIVERSITY OF WARWICK

## New Resource (a resource/offering that does not currently exist)

- First: **Understanding Systemic Stress:** Systemic stress is the inability of resource integrators (actors) in a system to cope with the existing system (thereby needing new/modified resources)
- Second: **Modularisation:** Modularity is the degree to which a system's components may be separated and recombined, to accommodate the new resource

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

QWVG  
UNIVERSITY OF WARWICK

## Systemic Stress & potential resource/solution



There's always food, but it may not exist in context.....

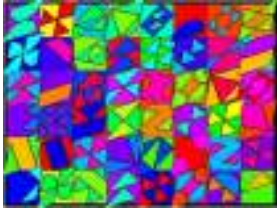
13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.



QWIMG  
UNIVERSITY OF WARWICK


## From contextual mess to contextual modularity

---



- People are willing to modularise their lives for more resource intervention
- Successful Technology intervention comes from **the ability to modularise contexts** and **fit of offering to the modularised context as a resource**

e.g. Father, Mother & a Baby at home, systemic stress, modularisation



13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

QWIMG  
UNIVERSITY OF WARWICK

## Why is this important

---

- Future 'internet of things' connectivity for innovation and new markets;
- Understanding how current products should evolve for connectivity (e.g. biopharmaceuticals) – new business models, new econ models, exchange & new ways to serve
- Innovating offerings/service that is scalable and replicable in creating value in context
- Every company will be a digital company. If you are not, watch your back, coz you competitor is likely to be

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

QWIMG  
UNIVERSITY OF WARWICK

## Today (recap)

- Data & Digitisation – OIL for new markets
- Context – OIL FIELD
- Bigger/New exchanges/markets will come for new digitised offerings, sitting on different widgets, connected to everything
- The land grab for 'drilling' in context is on, with new tangential players coming in (TV, fridges, surfaces)

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.

QWIMG  
UNIVERSITY OF WARWICK

## Want more?

Read the book!

Value: Creating New Markets in the Digital Economy

- out January 2013

[www.innovorsa.com](http://www.innovorsa.com)



\* Tentative cover

13 September, 2012 Copyright Irene Ng, 2012. All rights reserved.




WVMS



UNIVERSITY OF WARWICK

---



# Thank you

13 September, 2012

Copyright Irene Ng, 2012. All rights reserved.