

The power of 'and' - innovating at Nokia

NOKIA

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Do we **have** to
choose?

Most Important Innovations ever

1. Weapons
2. Mathematics and number zero
3. Money
4. Printing
5. Free markets and capital markets
6. Domestic animals and agriculture
7. Property ownership
8. Limited liability
9. Participatory democracy
10. Anesthetics and surgery

Source: BusinessWeek.com

Most Important Non-Medical Innovations of the last 25 years

1. The Internet
2. Cell phone
3. Personal computers
4. Fiber optics
5. E-mail
6. Commercialized GPS
7. Portable computers
8. Memory storage discs
9. Consumer level digital cameras
10. Radio frequency ID tags

By CNN.com Sunday, June 19, 2005; Posted: 5:10 p.m. EDT (21:10 GMT)Top 25 non-medical innovation of last 25 years



Technology innovations
AND
Product innovations
AND
Business model innovations

'Make me smaller'



Power consumption

Computing power

Product innovations



Personalization
1993



First imaging phone with an integrated camera,
2001



Multimedia computer,
2007

Industry in major transition


- Business environment continues to change with both existing and new competitors
- Internet business models have enjoyed huge success – mobile domain is the next battleground for business model innovations
- Web 2.0 - community-created content - is the magnet of innovations
- New ways of working complement long-term research; based on speed, customer discovery, trial and error, beta, co-creation, open innovation
- The next game: human mobility systems of the **fused physical and digital world**

DoubleClick ^{Click}

flickr

 **myspace.com**
a place for friends

You **Tube**
Broadcast Yourself™

 **del.icio.us**
social bookmarking

ovi

The **Way** ^{We} **Live** **Next**

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Find a **solution** to a **problem**
AND
Find a **use** for a **solution**



WIBREE – radio experts and business developers collaborate

Sports



Mobile device,
watch, laptop



Home electronics



Healthcare



Business



Games & toys



Making sense of what you see

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N95

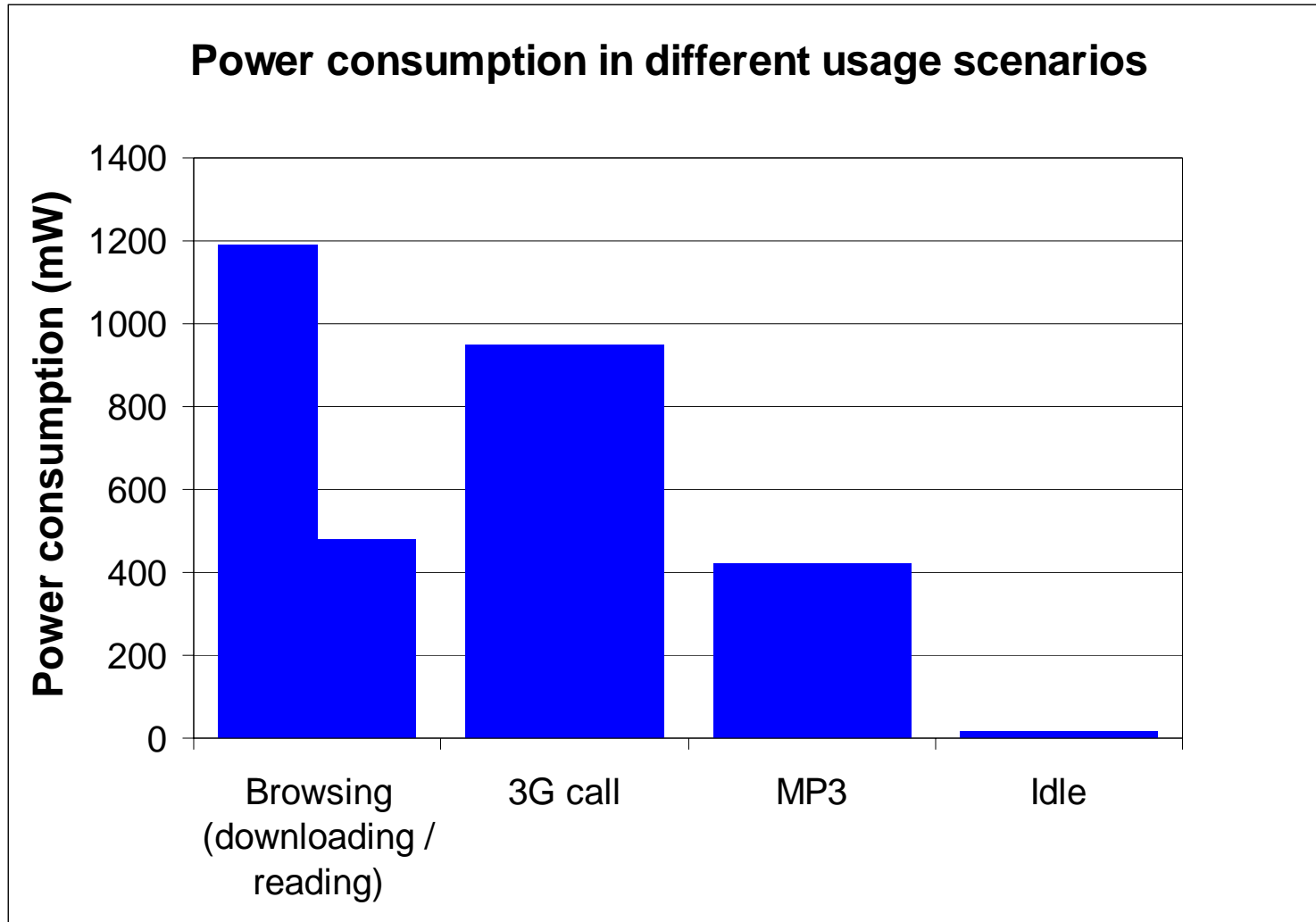
L'Arc de Triomphe, 50m



The Way We Live Next

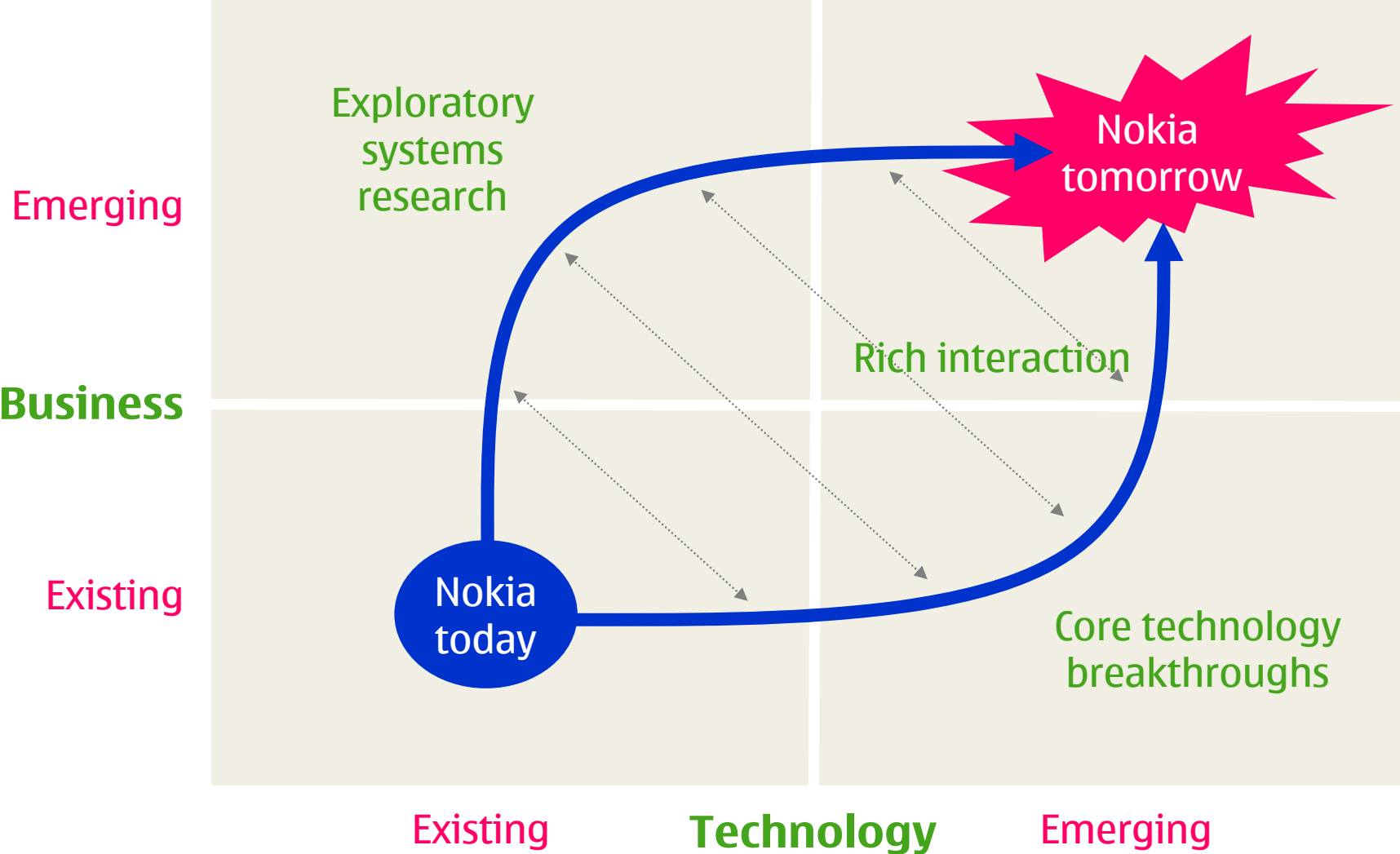
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Power consumption in different usage scenarios





Dual approach to future success



Fail creatively
AND
Get it right
first time



Success ... or creative failure

Beta culture: Learn from it ... Jazz it up!



Research initiatives in 1990's

- Digital audio broadcasting DAB
- Network-based mobile positioning
- All-optical Broadband Access network



Work in **teams**
AND
Support **geniuses**

Collaboration is in our DNA...



**Massachusetts Institute
of Technology**



STANFORD UNIVERSITY



**UNIVERSITY OF
CAMBRIDGE**





The genius of teamwork



Have flashes of **inspiration**
AND
Do a lot of **hard work**

A person's hands are shown holding a blue, ergonomic device, possibly a controller or a specialized tool, against a white background. The device has a curved, finger-like shape with a yellow band across the middle. The hands are positioned at the top and right of the frame, with the device held in the center. The background is a plain, light-colored surface.

The power of **AND**....

- An open mind is the most powerful innovation tool
- Innovation at NRC is not just about what we do, but how we do it
- There's no recipe for creativity – you have to take a lot of different approaches, and some of these will even be contradictory!
- Creativity doesn't end with the great idea. To make technology work, it has to get into people's hands.....

Xform research to business program
AND
Extra mile to product development
AND
Venture, trial, outlicence

