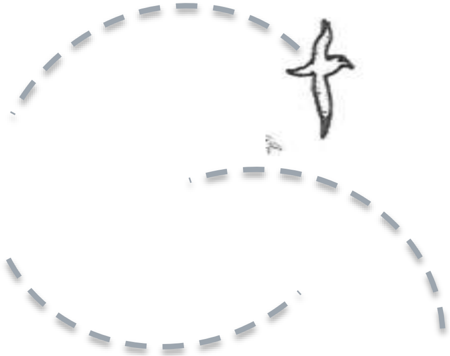
2013

Attempting to fly: Deployment of system-oriented design methodology conducted by the Norwegian Design Council

Wildhagen, Benedicte, Bang, Knut and Paulsen, Adrian

Attempting to fly

Deployment of systems oriented design methodology – conducted by the Norwegian Design Council



RSD2, 11.10.2013

Benedicte Wildhagen, Knut Bang, Adrian Paulsen

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Agenda

- Background
- Take off
- Flying
- Landing
- Key observations

Background:

The need for new methodology in the design field

- The Norwegian Design Council and AHO have been collaborative partners for several years

Our contribution

- sensors for the SOD master course
- recruiting business cases
- using SOD in our own work

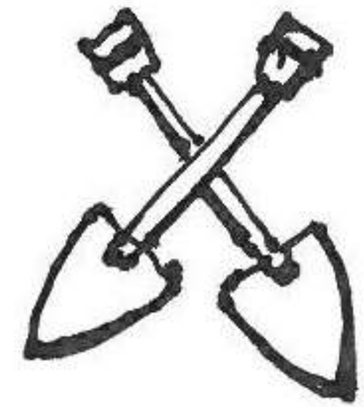
- deep understanding

Bridging partner

- We see our role as a "bridging partner" between the academic, research-based development at AHO and the "real world".

Ground-braking partnership

- collaborate with other governmental organizations
- navigate within very complex structures
- research + design



Take off:

Orchestrating Celerway

- turning a research result into a commercially viable idea
- product oriented

Why choose systems oriented design?

- wicked problem
- explore and understand
- co-create business- and product concepts

[Celerway video](http://vimeo.com/81847079)

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Challenge assumptions

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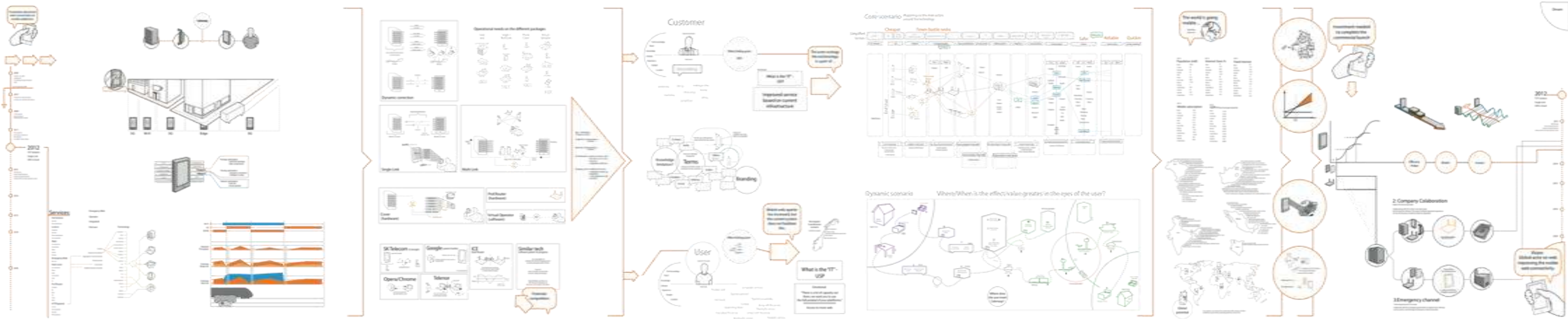
Understanding + Exploration + Scale + Potential **= 4,3m**



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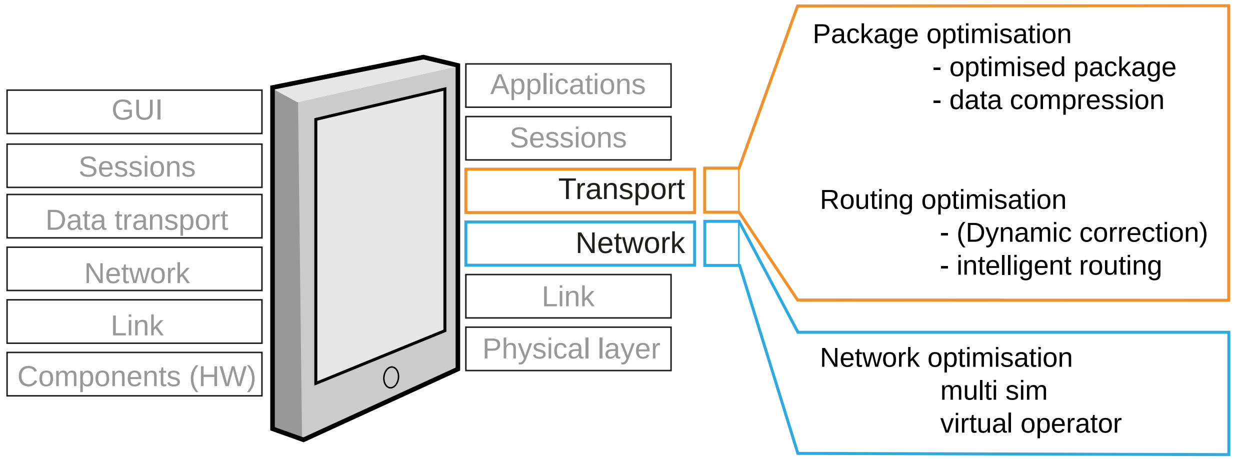

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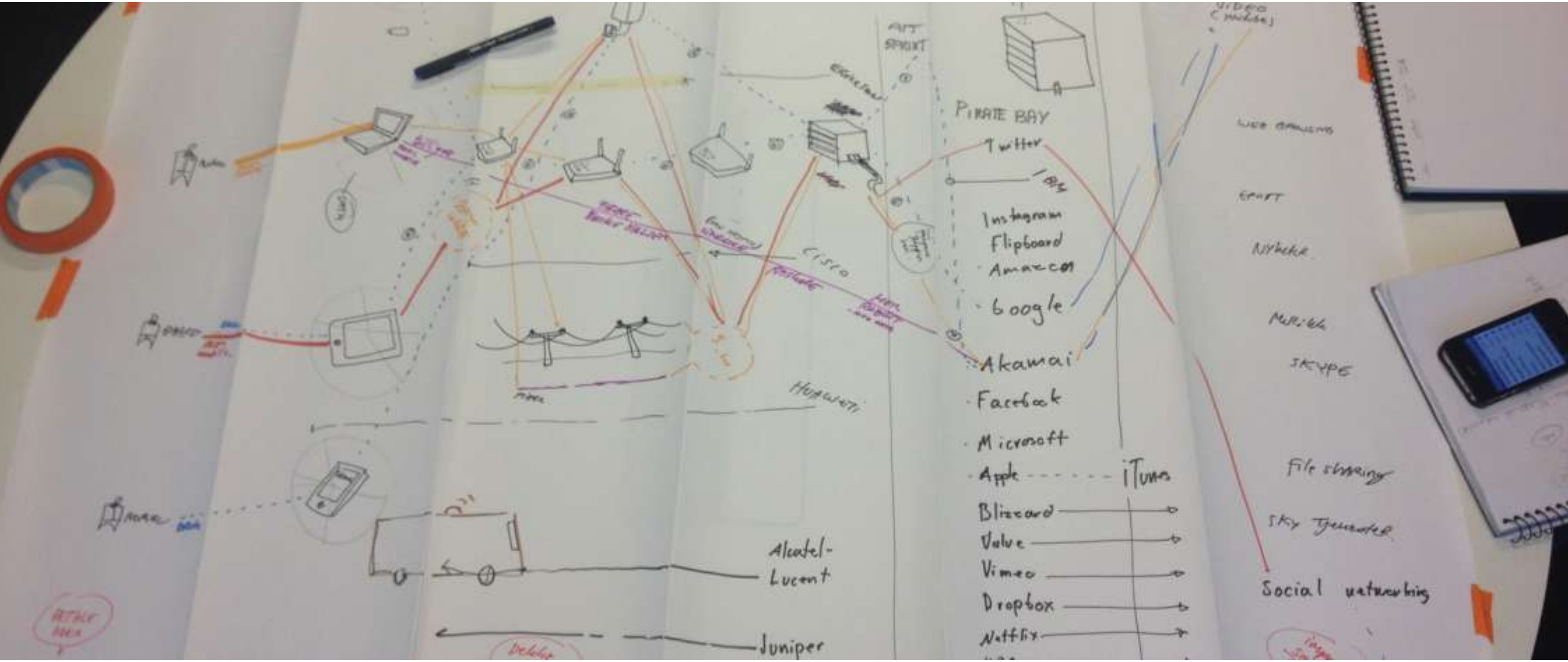

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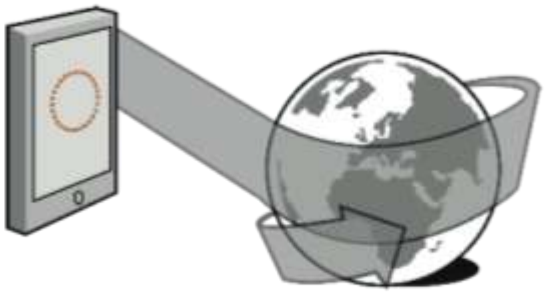

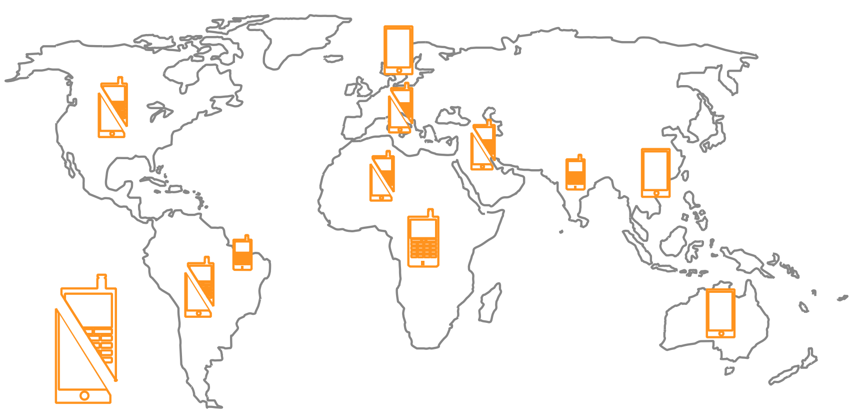

65% mobile penetration (incl WAP)

Cable situation cause 3G boom

average business has several connections
#1 mobile internett user in Africa
95% prepaid users
mobile operators 30% = non voice income
over 50% surf the web on the mobile
95 mb monthly use
735 million mobile subscriptions by end of 2012.
Mobile is a game changer
Fastest growing mobile market in the world

South Africa

Mobile teaching plattforms

10.000 newly registrated m-pesa users every day
10.000 newly registrated m-pesa users every day
Arrival of cheap smartphones (from Ethiopia)
20% smartphone users
2x mobile 3G than 3G USB modems
Significantly more 3G mobile broadbands than DSL subscribers
3G mobile network launched in over half of all african contries
More oceanic fiber cables support mobile broadband growth
Drivers: handset price, language and education
(missunderstanding of services)

"Comfort, convinience and fun"

Brand driven development (commercial activity)
165% smartphone increase year-by-year
mobile web means increased inclusion
Want deals, not annoyances
78 mill online population
93% of smatphoneowners shop with them
Android #1
Not security focused (yet)
80% Prepaid subscription
78% say: "next will be web enabled"
2011: 4 mill subscriptions
12% with regular 3G use
26.6 mill mobile web access
26.6 mill mobile web access
Not at tipping point yet
Due to instability, unofficial web actors
Smartphones becoming less of a luxury item
2015: 100 miill mobile web connections

Brazil

2013: Mobile commercereach 2 billion $

3 $ (ARPU)
1.2 Billion people
600 mill under age 25
9th largest economy in the world
22 languages
30 mill pc`s
50 mill mobile data subscriptions
5 mill mobile only web citizens

India

Rural web Growth

WAP dominated, but changing
Online revolution, not evolution
Web 1.0 & 2.0 at the same time
Government funded Wi.Fi roll-out
100 mill mobile internett user mark in 1 year
41% preffer mobile internett access
250 mill consumer class
75% Entertainment (video, music & games)
50% Communication
2015: 300-400 mill internett users
2011: 600 mill unique mobile subscriptions (900 mill total)
Mobile First

Media hungry (4.5 hours daily)

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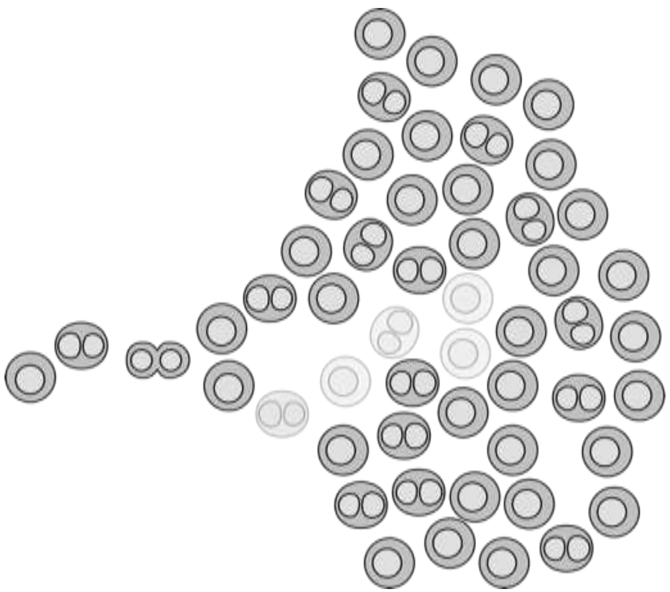
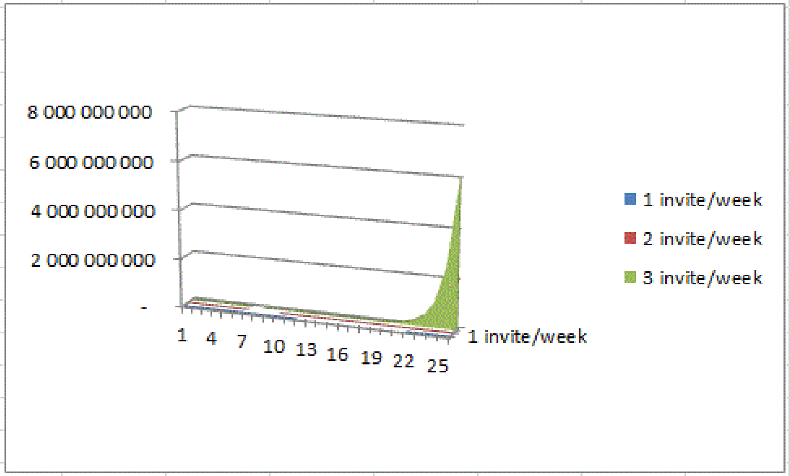


	1 invite/week	2 invite/week	3 invite/week				
1	-	-	-	1	1	1	insertion points
2	-	-	-	100	100	100	initial invites
3	-	-	-	4	4	4	weeks free trial
4	30	30	30	50 %	50 %	50 %	% accept trial
5	36	51	66	30 %	30 %	30 %	% converting to paid
6	47	95	158	30 %	30 %	30 %	% paying users quitting
7	67	186	392				
8	82	340	932				
9	103	628	2 230				
10	130	1 160	5 337				
11	160	2 132	12 753				
12	199	3 922	30 484				
13	246	7 215	72 864				
14	304	13 270	174 154				
15	375	24 409	416 254				
16	463	44 896	994 910				
17	571	82 577	2 377 979				
18	705	151 884	5 683 716				
19	870	279 359	13 584 908				
20	1 073	513 821	32 469 905				
21	1 324	945 064	77 607 794				
22	1 634	1 738 245	185 493 912				
23	2 016	3 197 131	443 357 419				
24	2 487	5 880 442	1 059 688 691				
25	3 069	10 815 819	2 532 810 035				
26	3 786	19 893 393	6 053 784 219				



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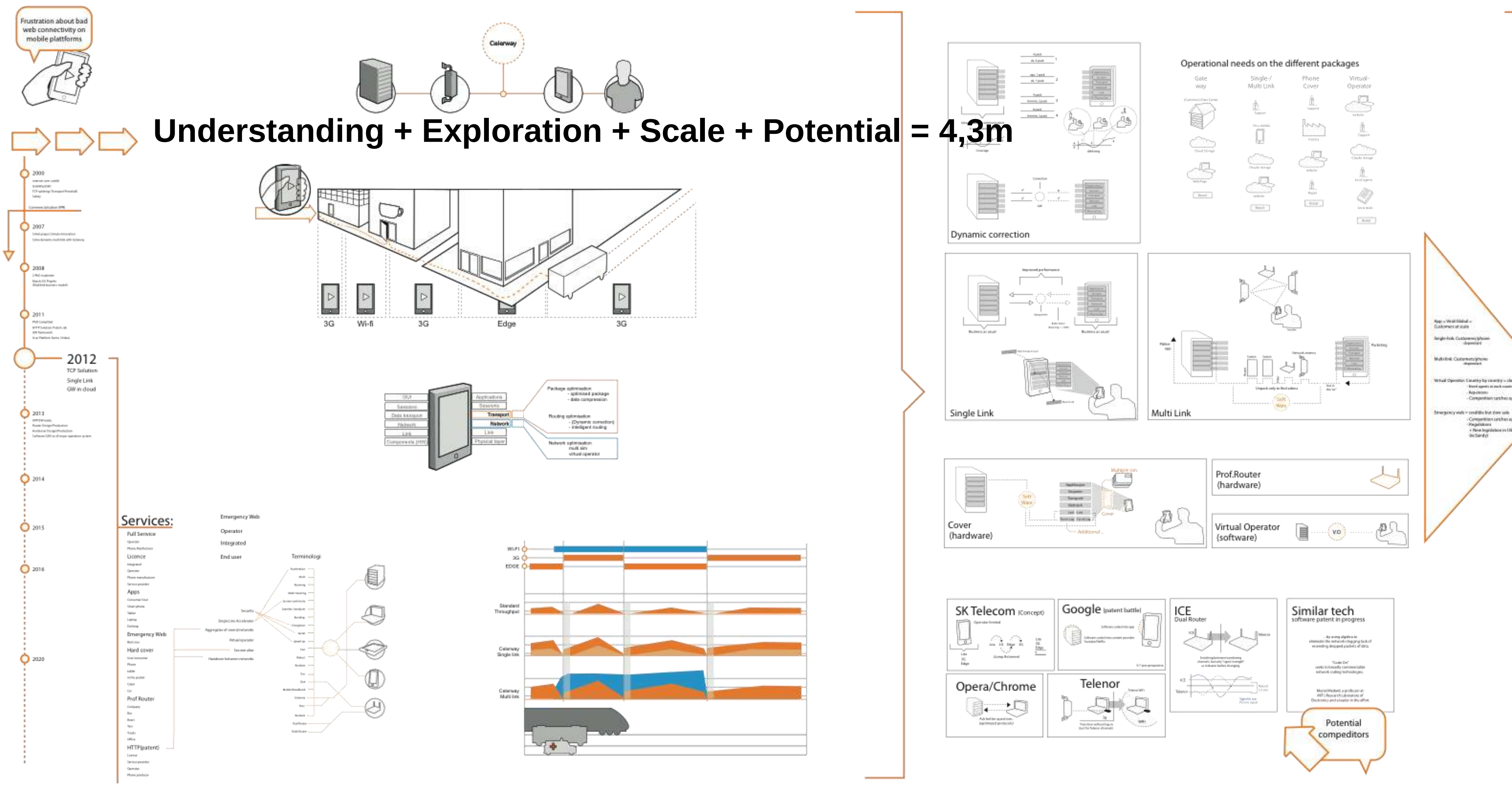

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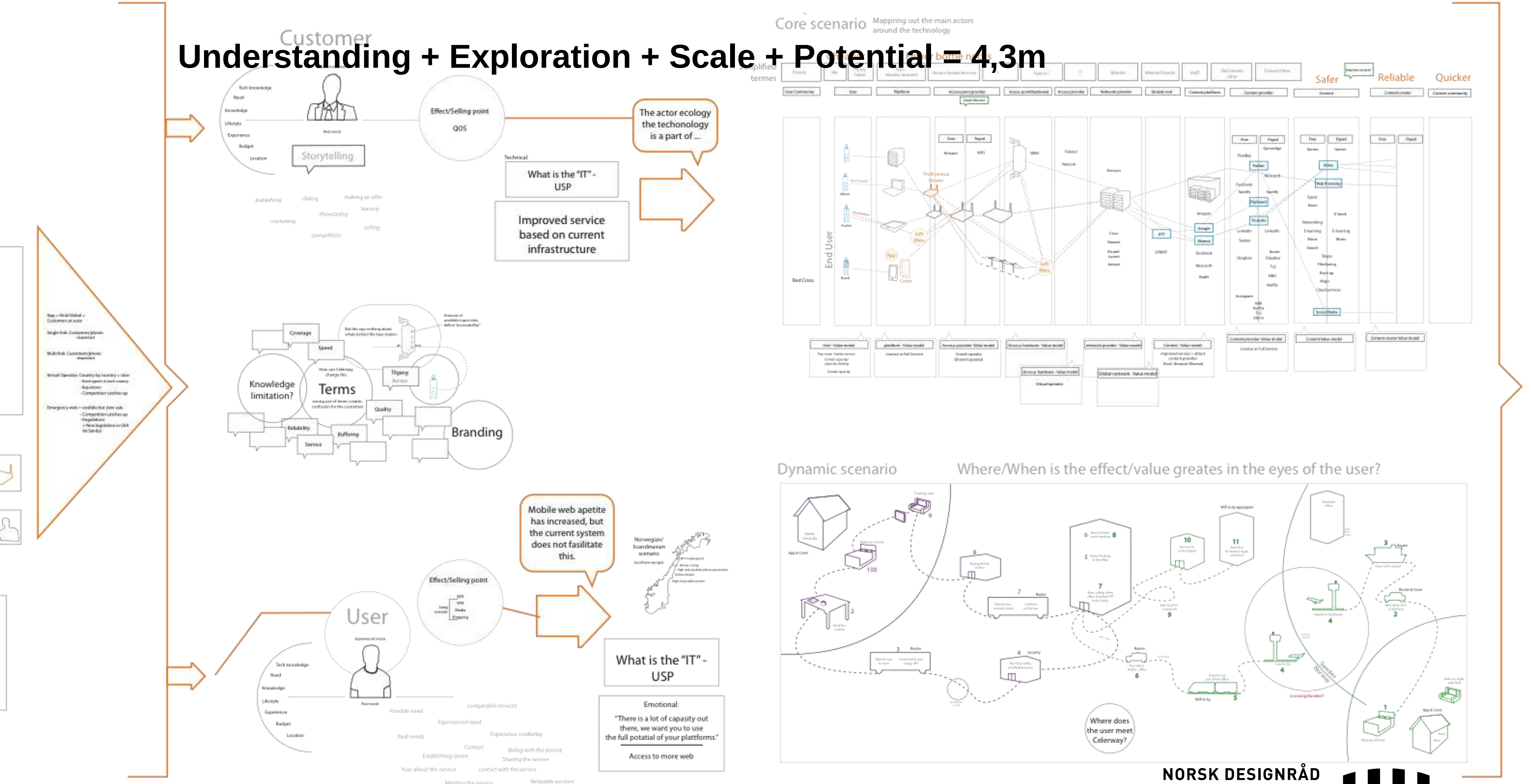

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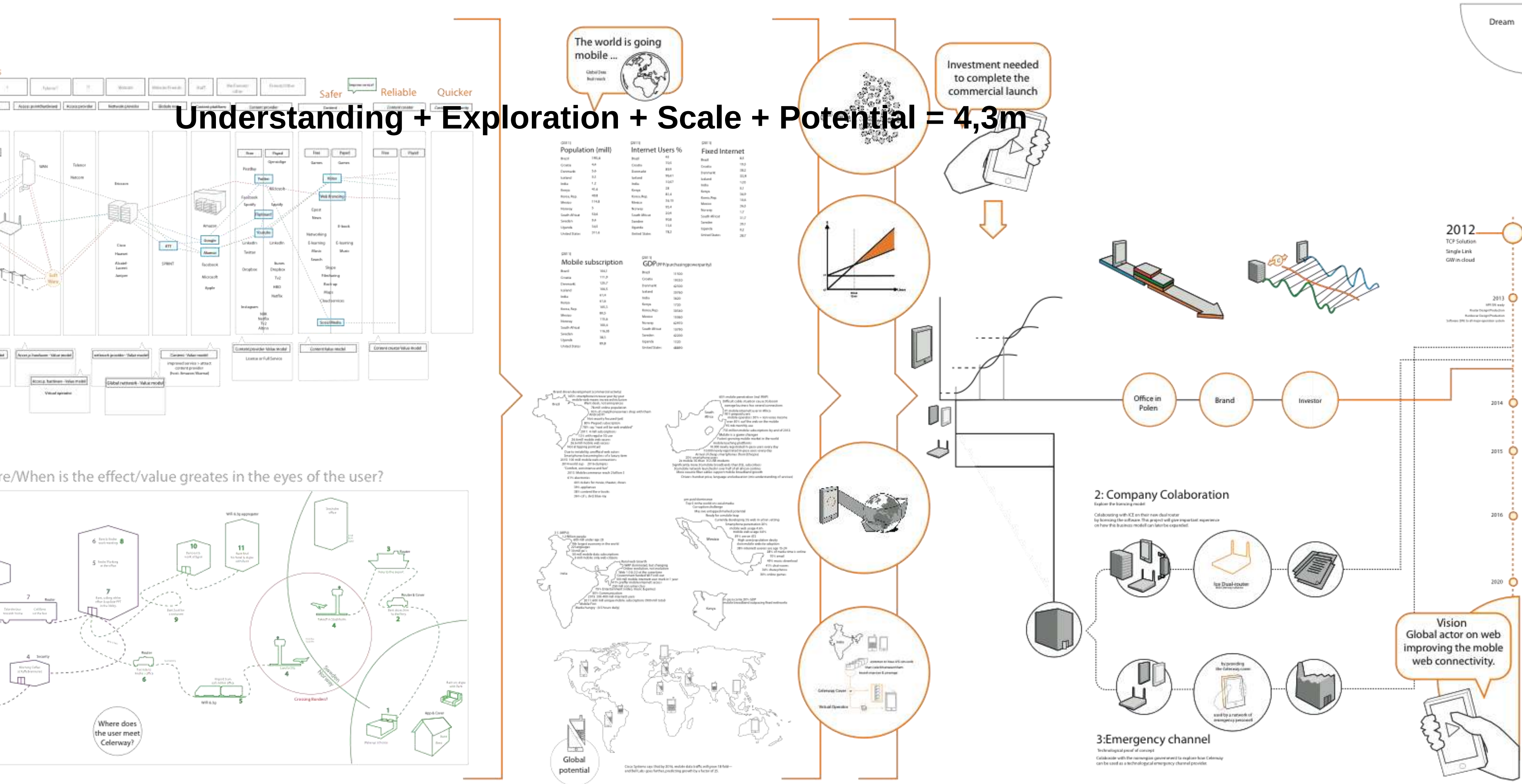

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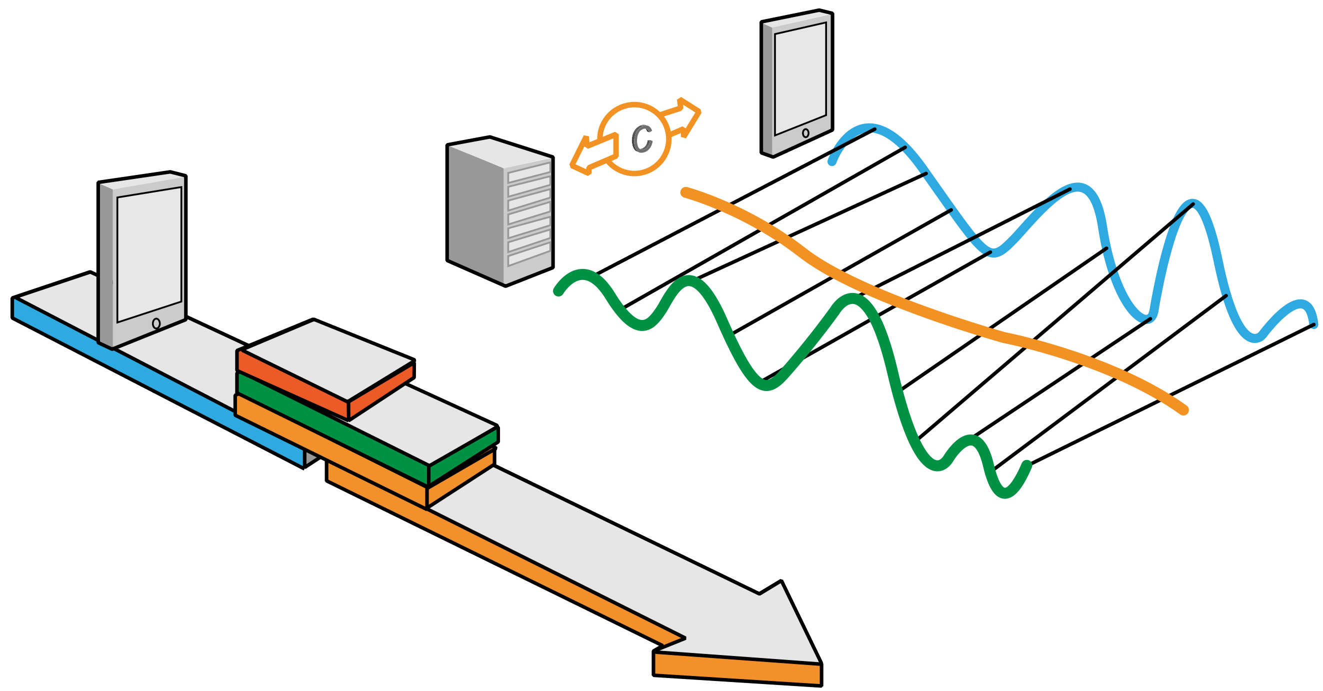
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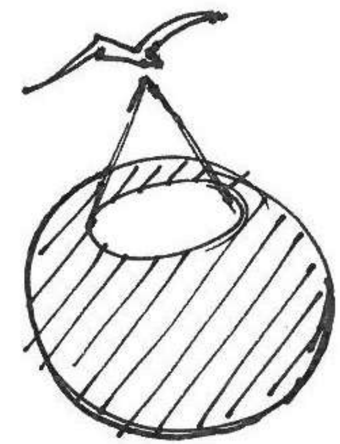
Landing:

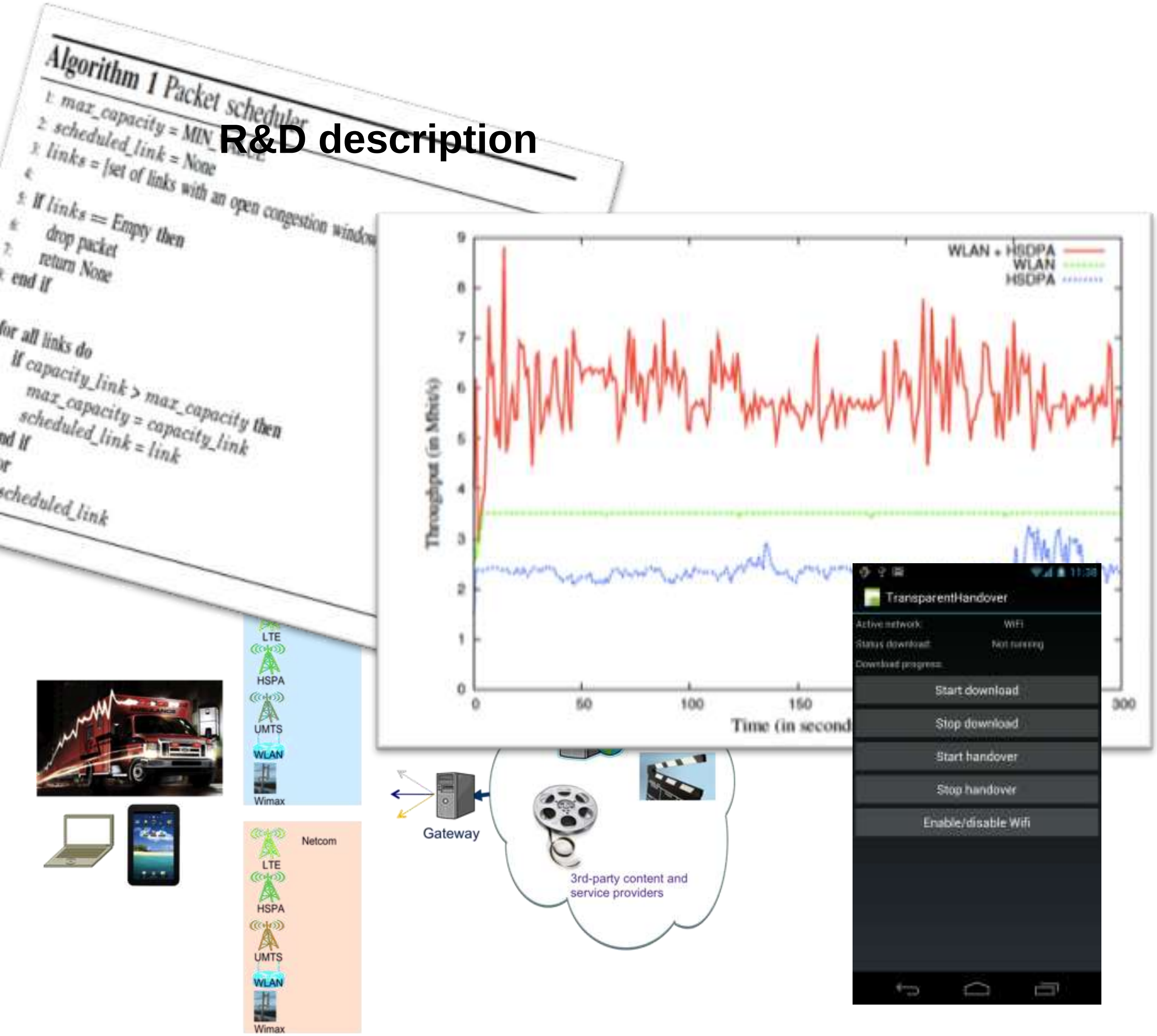
The client perspective

Audun Fosselie Hansen, CEO Celerway

- Stepping out of the technology-silo
- The companys first year



R&D description



There is a global need for low cost utilization of existing infrastructure for better quality and robustness for mobile services

Handover between networks

Increase bandwidth by simultaneous use

Keeping sessions alive in low coverage areas

Roam dynamically between operators

We see several viable business models and positions in the value chain

Selling apps and gateway services in the consumer market

Establishing a virtual operator SIMTEL COMMUNICATIONS

License a mobile platform that can be used by virtual operators globally

Build a platform for robust communication to public sector and enterprises

Partnering with or supply operators/vendors or other actors

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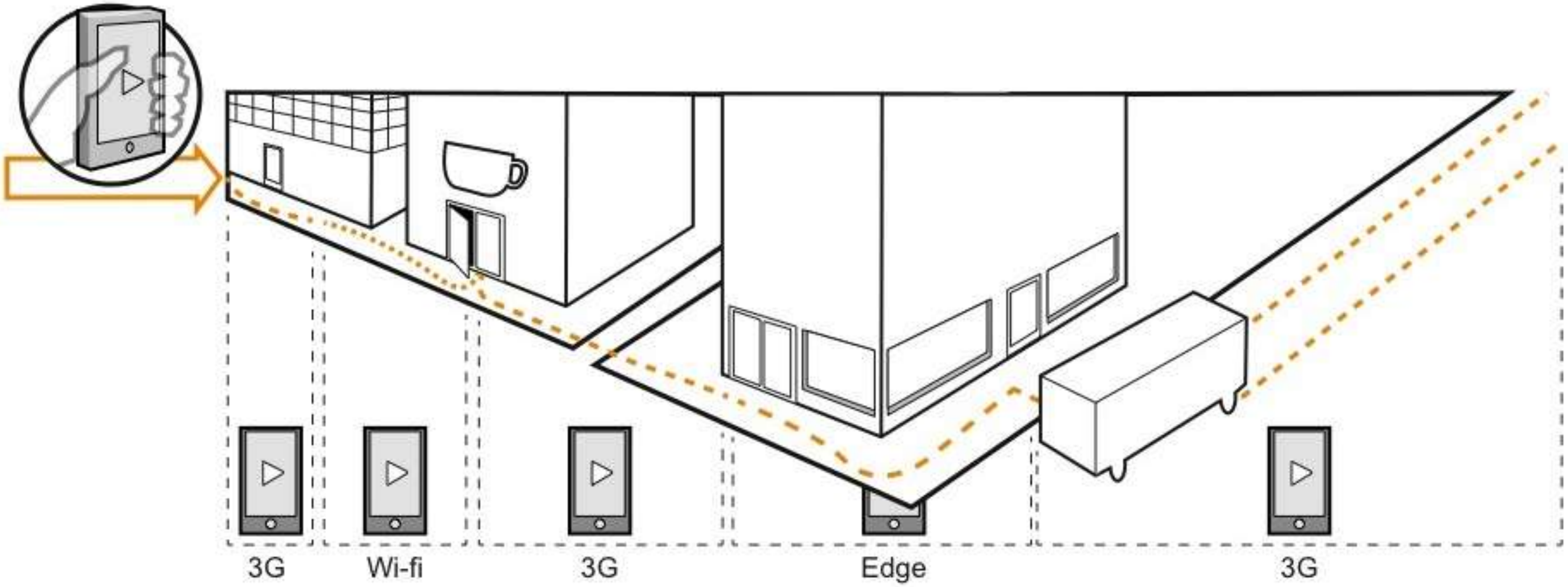
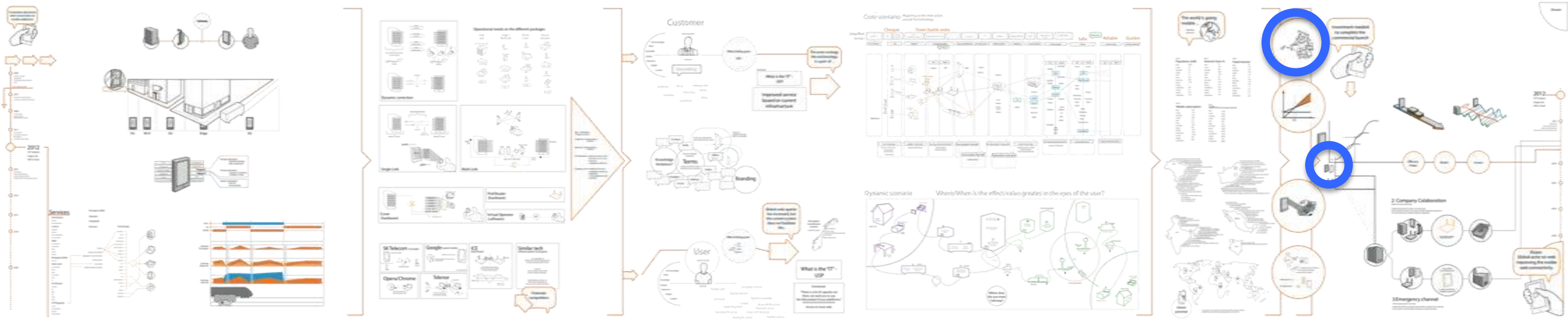
Design description



Roadmap



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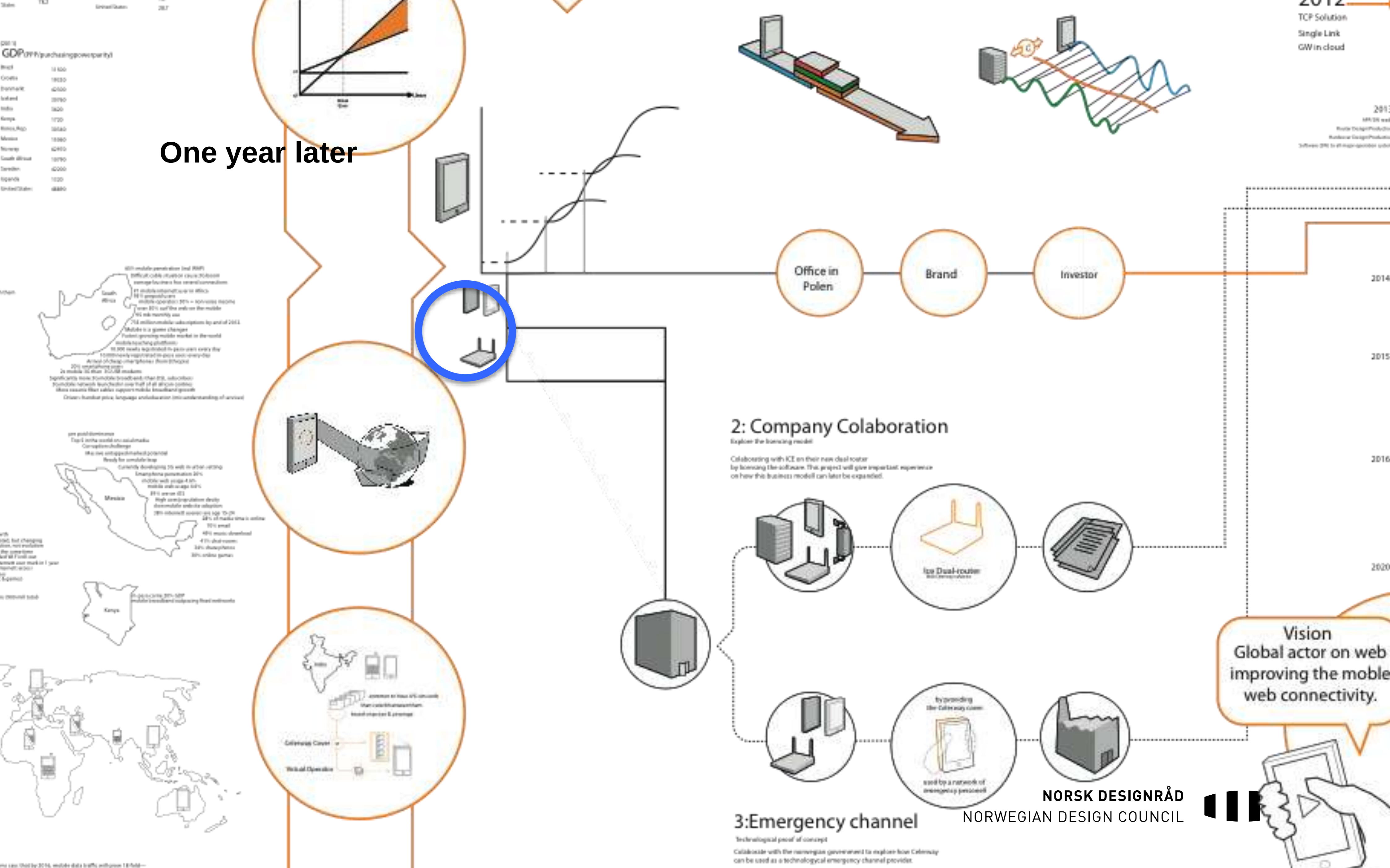

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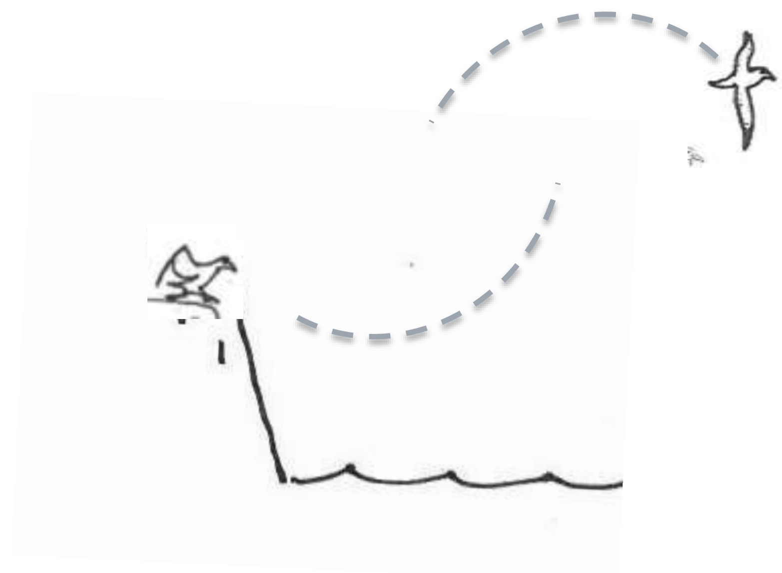
Key observations

- Pain points
- Framework
- Facing complexity



The future…

"…as a designer, if you want to get to the big issues of today, the systemic issues, you got to find a way to work with governments"

Patrick Frick
Global Agenda Council on Design & Innovation
(September, 2013)

A harbinger of good fortune…