携帯
するということ
Interaction &
Carrying Behaviours
Jan Chipchase &
Fumiko Ichikawa
NOKIA

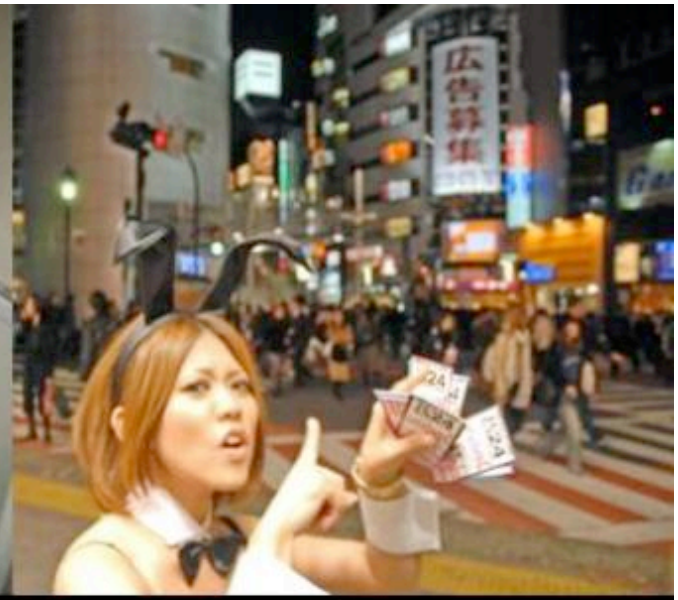
~ 6.6 billion

3.3 billion cellular connectivity

1+ billion products sold per year

16 phones per second NOKIA

Nokia Design

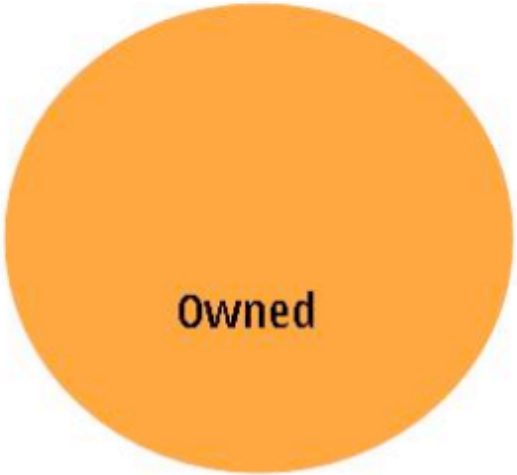


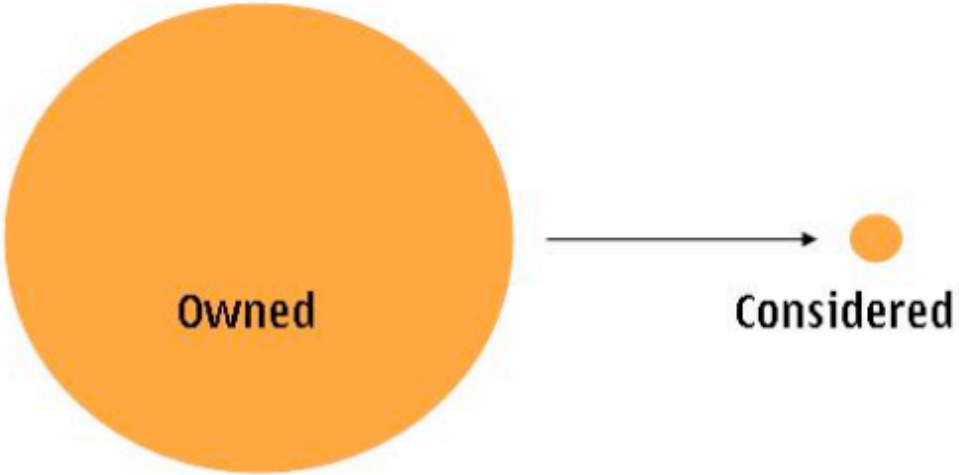
exploratory design research

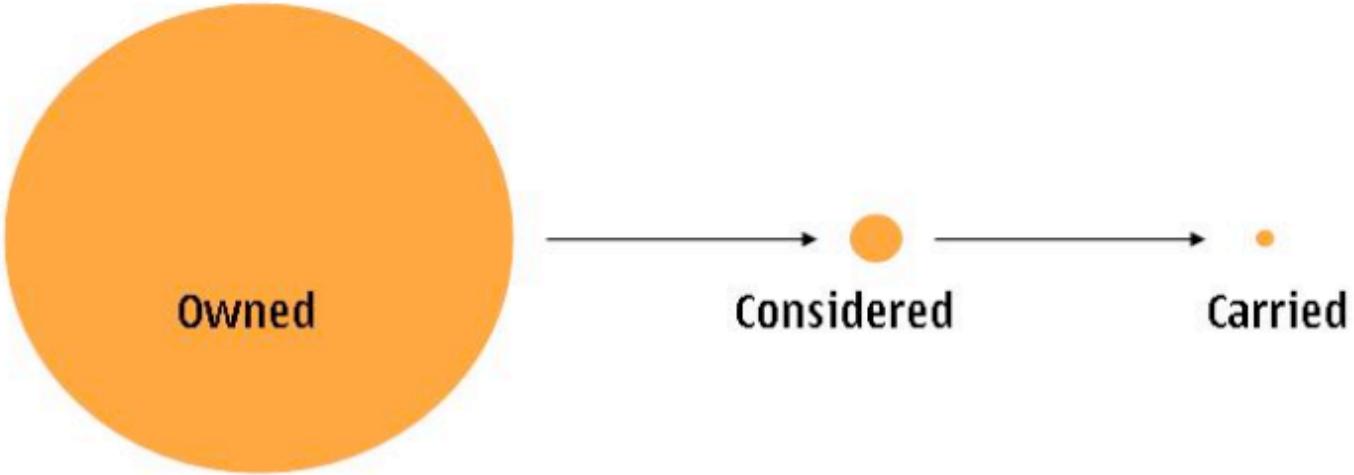
3 – 15 years

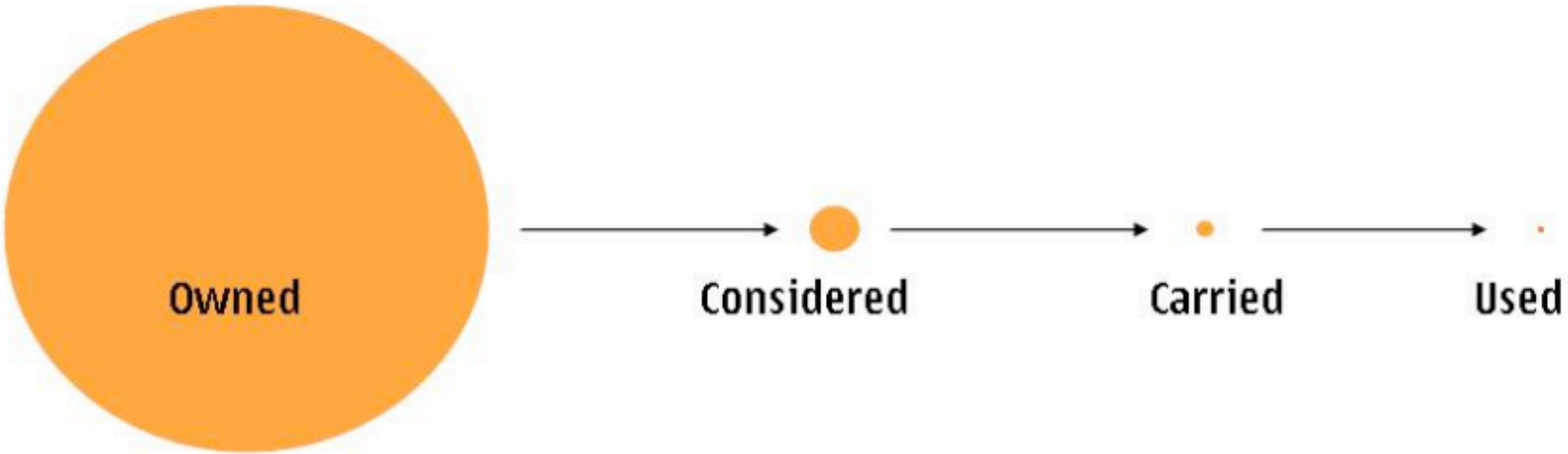
NOKIA

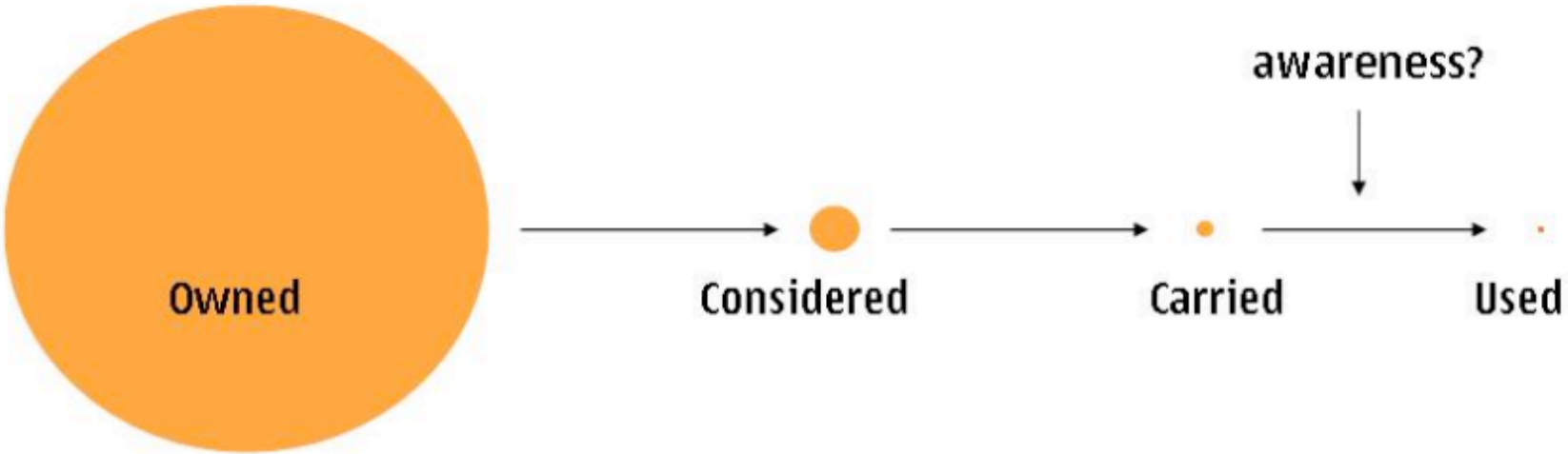
what do people carry,
where & why?
NOKIA


Owned


Owned
Considered

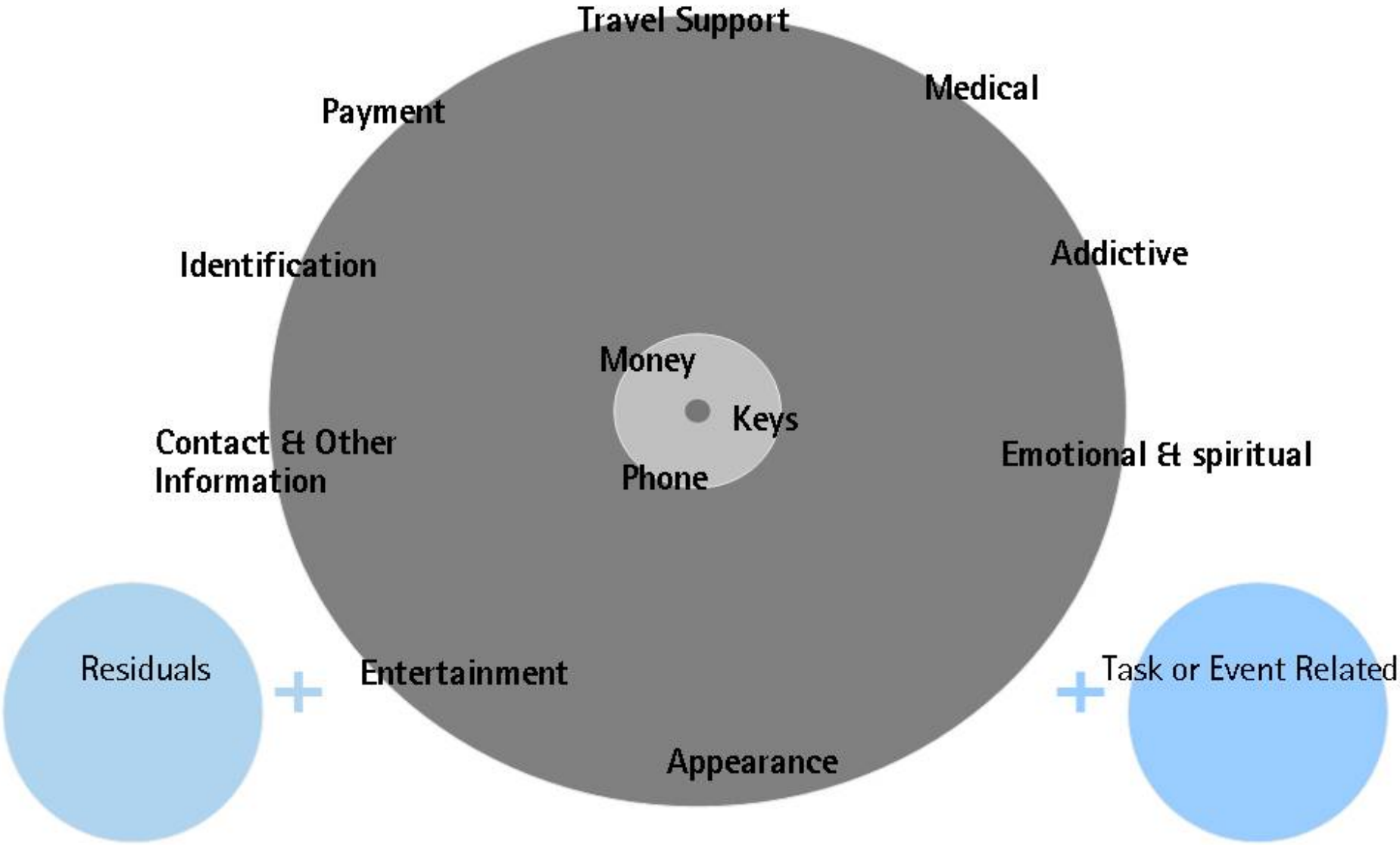

Owned
Considered
Carried

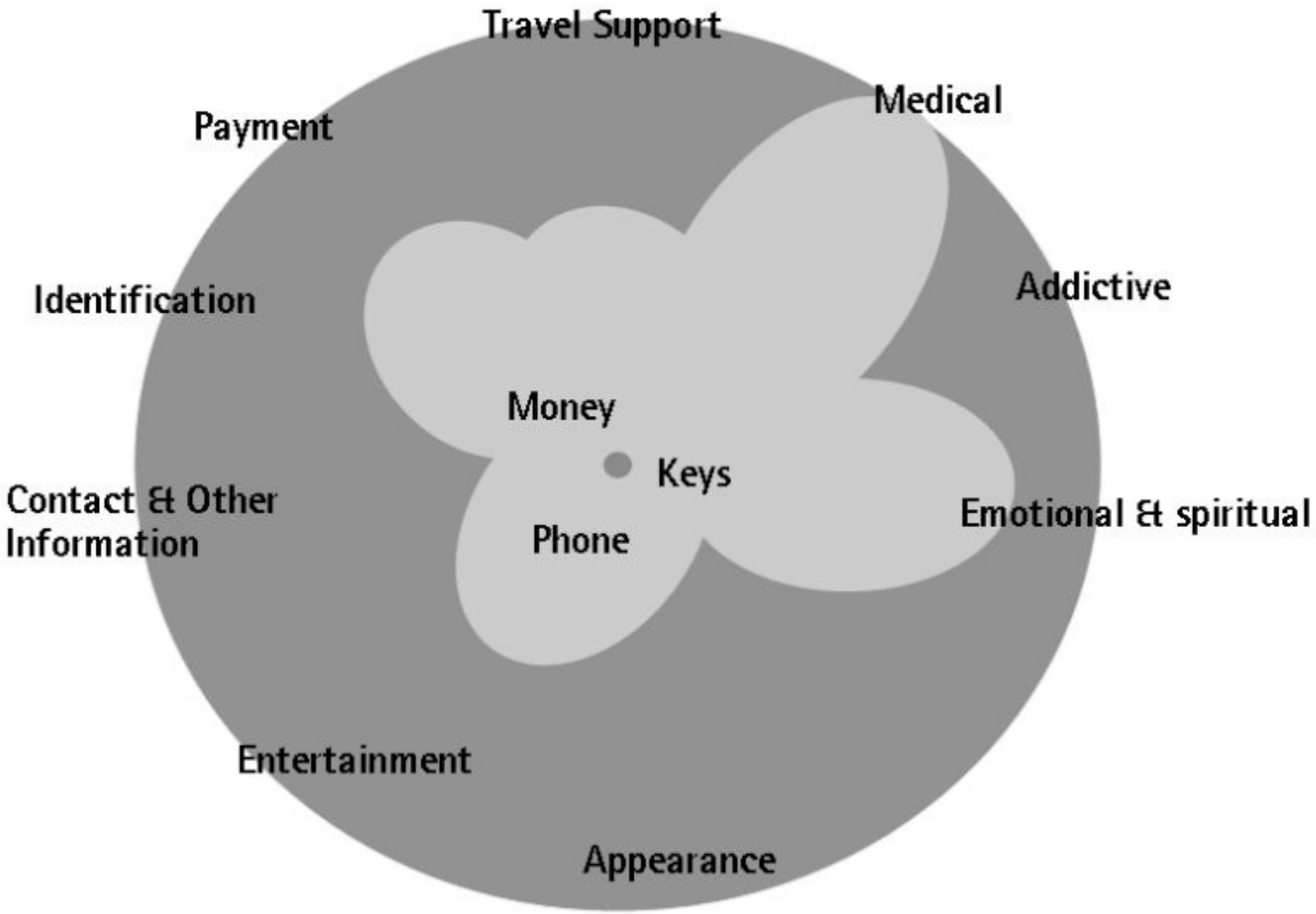

Owned
Considered
Carried
Used

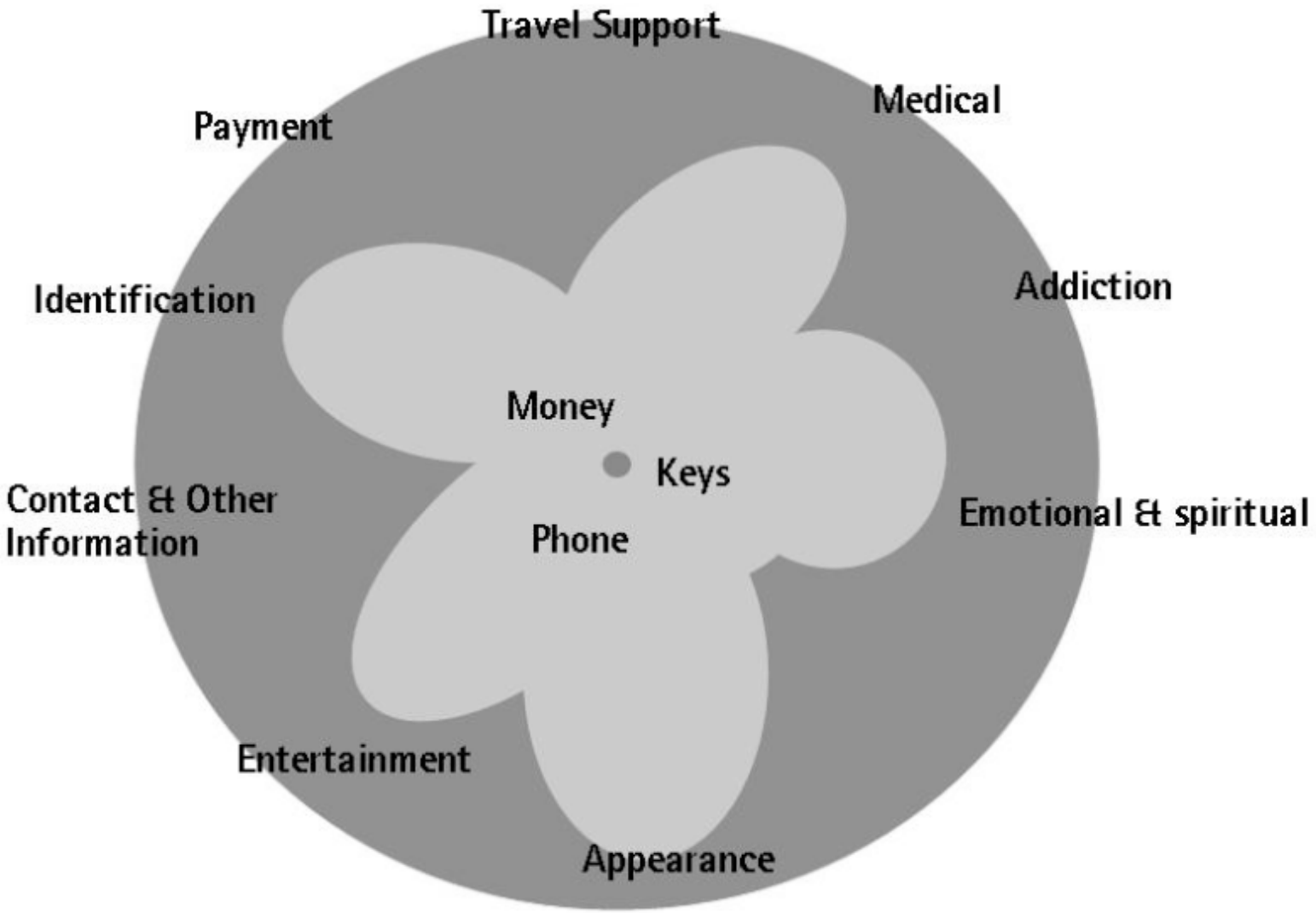

awareness?
Owned
Considered
Carried
Used

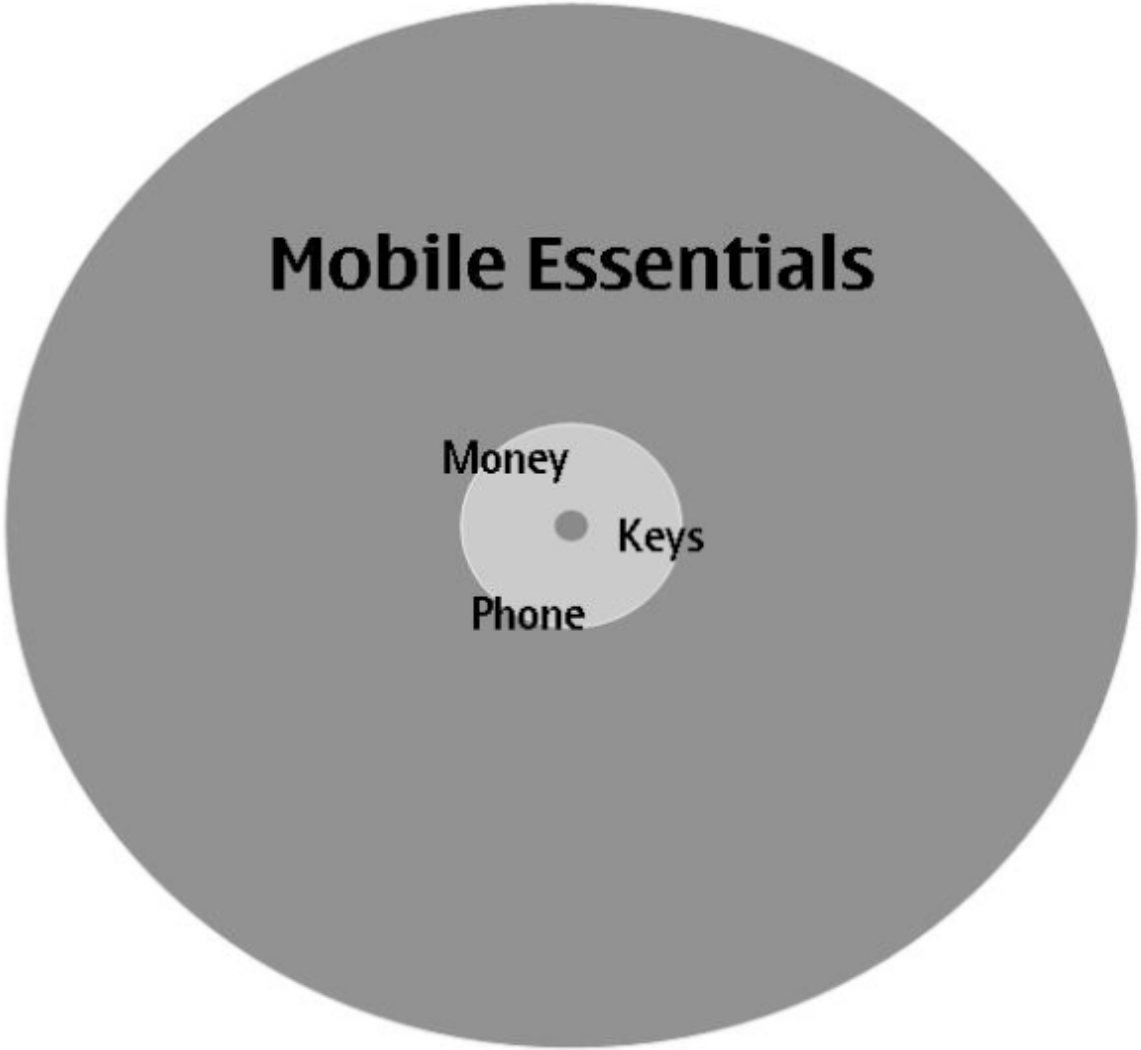
cultural, age & gender differences
NOKIA

BVG
Ausbildungs-ticket
MONATSKARTE
Azubi
Lohnsteuerkarte 2002
VIDEO-LAND
BONN
jetzt
NOKIA


Travel Support
Medical
Payment
Identification
Addictive
Money
Keys
Contact & Other Information
Phone
Emotional & spiritual
Residuals
Entertainment
Task or Event Related
Appearance


Travel Support
Medical
Payment
Identification
Addictive
Money
Keys
Contact & Other
Information
Phone
Emotional & spiritual
Entertainment
Appearance


Travel Support
Medical
Payment
Identification
Addiction
Money
Keys
Contact & Other Information
Phone
Emotional & spiritual
Entertainment
Appearance


Mobile Essentials
Money
Keys
Phone

survival
home
Freigabe
NOKIA

Keys

Money

Phone

NOKIA

Keys
Money
} provide access to shelter, food, warmth
Phone

NOKIA

Keys
Money
} provide access to shelter, food, warmth

Phone transcend space and time

NOKIA

but

NOKIA

often forgotten
NOKIA

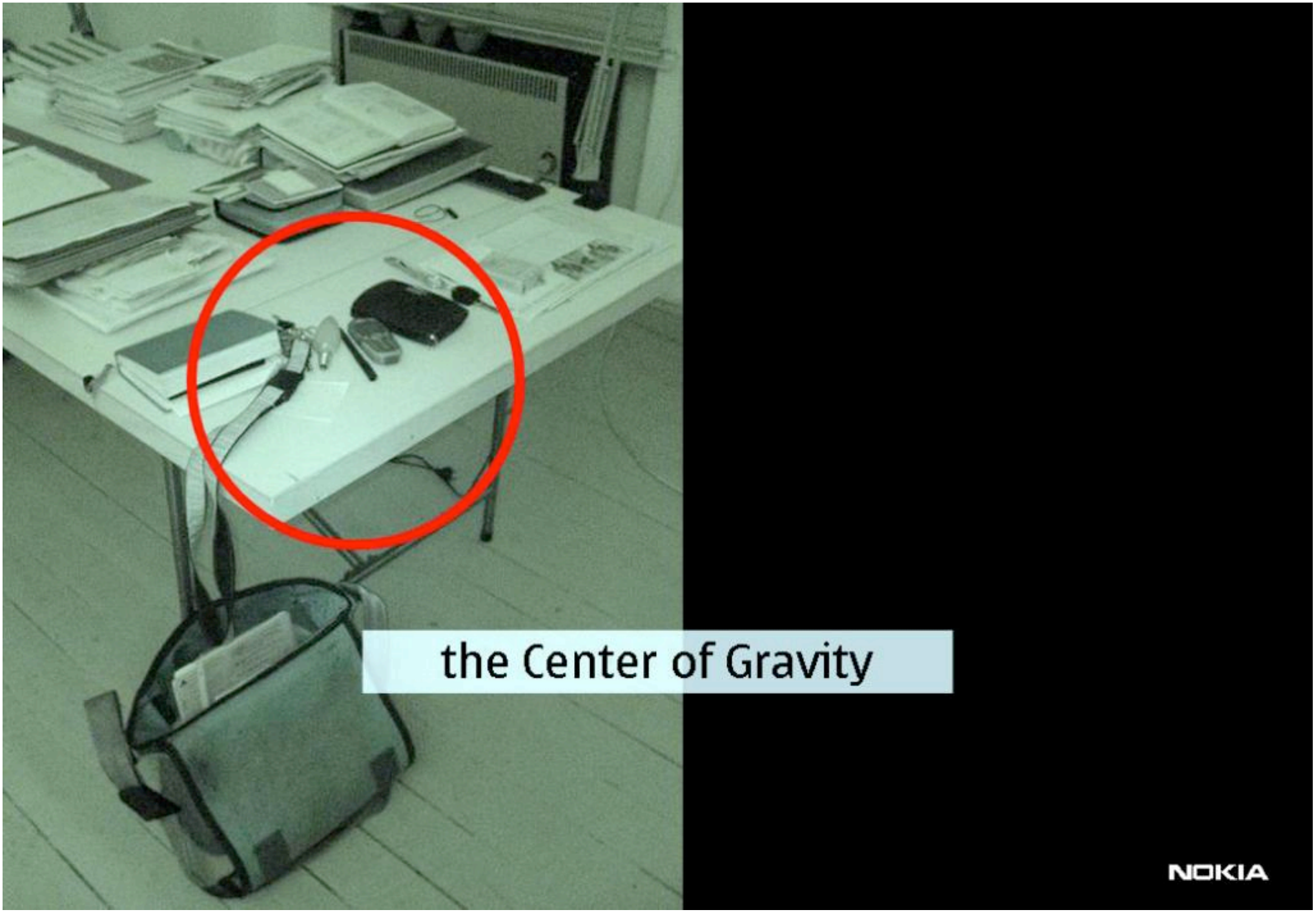
strategies to remember

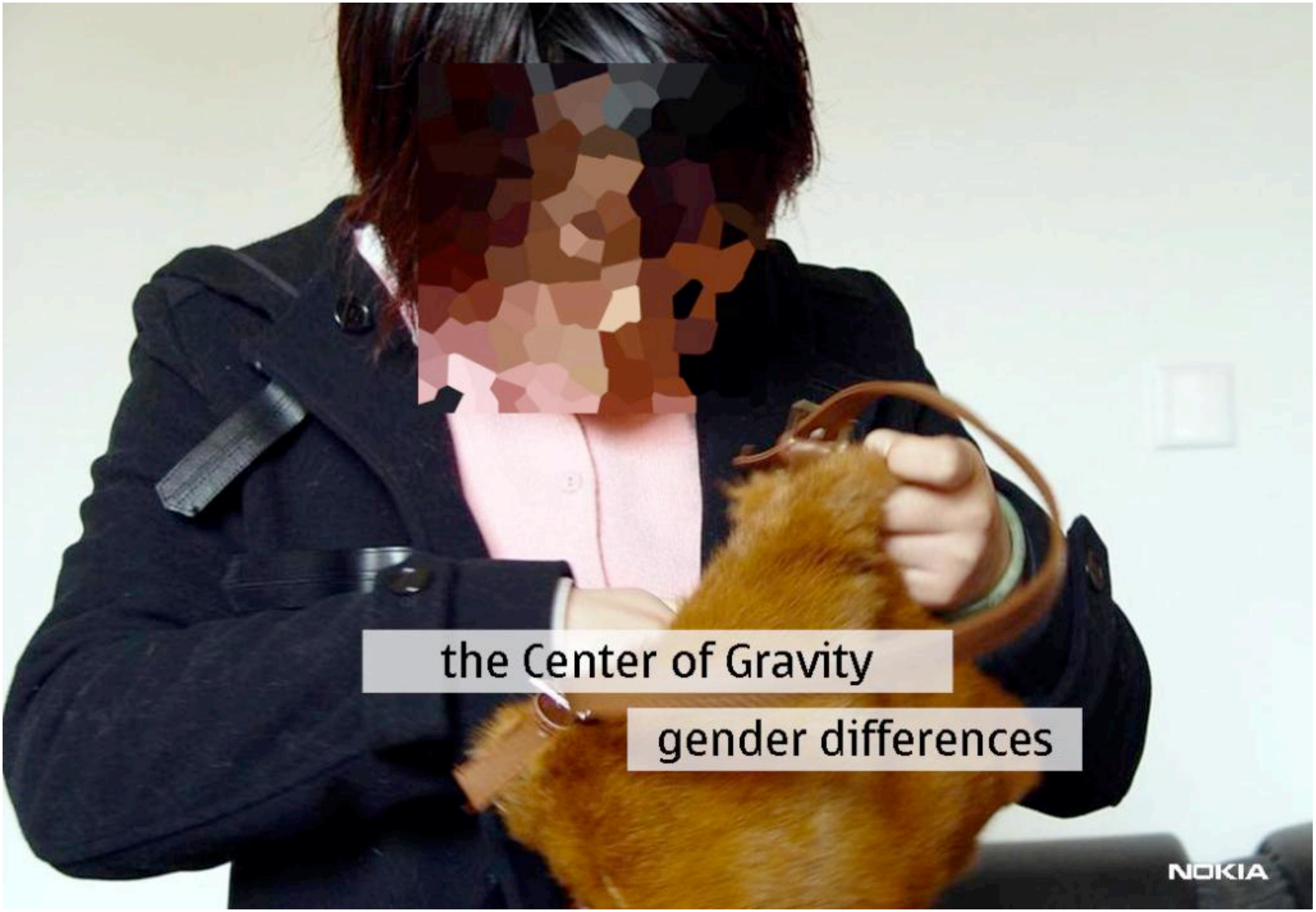
NOKIA

the Point of Reflection
NOKIA

the Center of Gravity

NOKIA

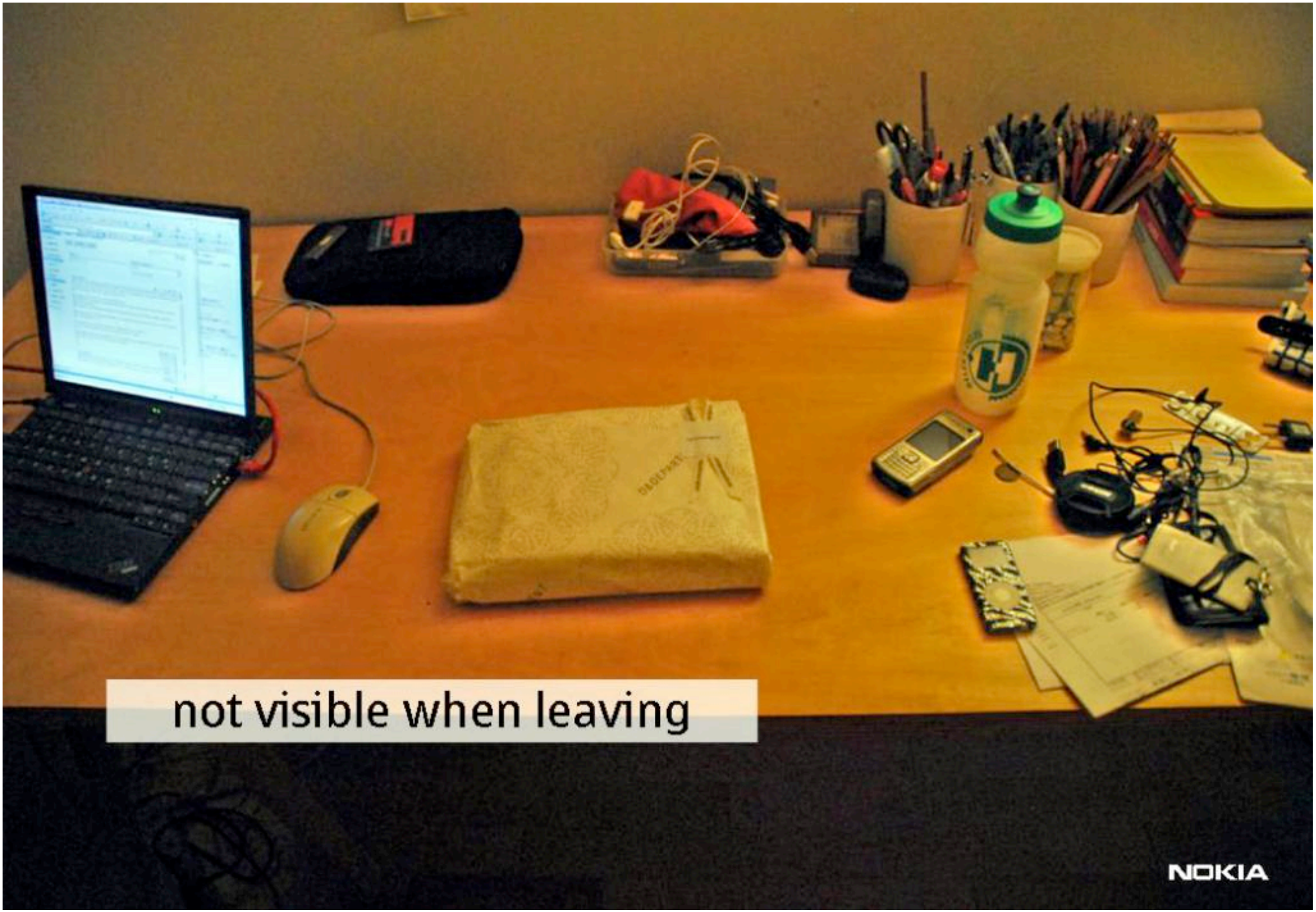

the Center of Gravity
NOKIA


the Center of Gravity
gender differences
NOKIA

despite these strategies

people still forget

NOKIA


not visible when leaving
NOKIA

impaired awareness
NOKIA

priorities change

no longer important, multitasking

NOKIA

the easiest way to never forget

NOKIA

the easiest way to never forget

is to have nothing to remember

NOKIA

the easiest way to never forget

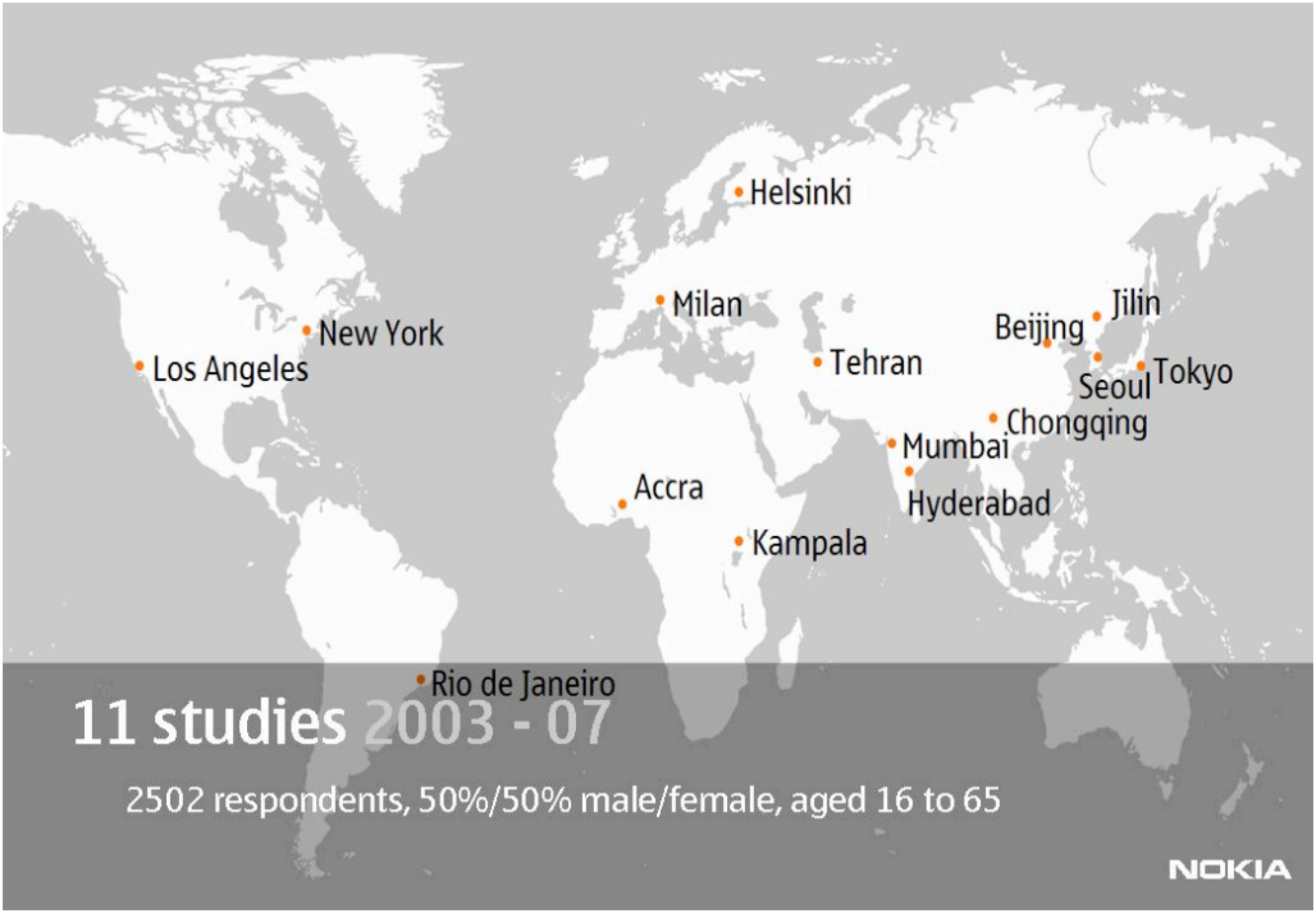
is to have nothing to remember

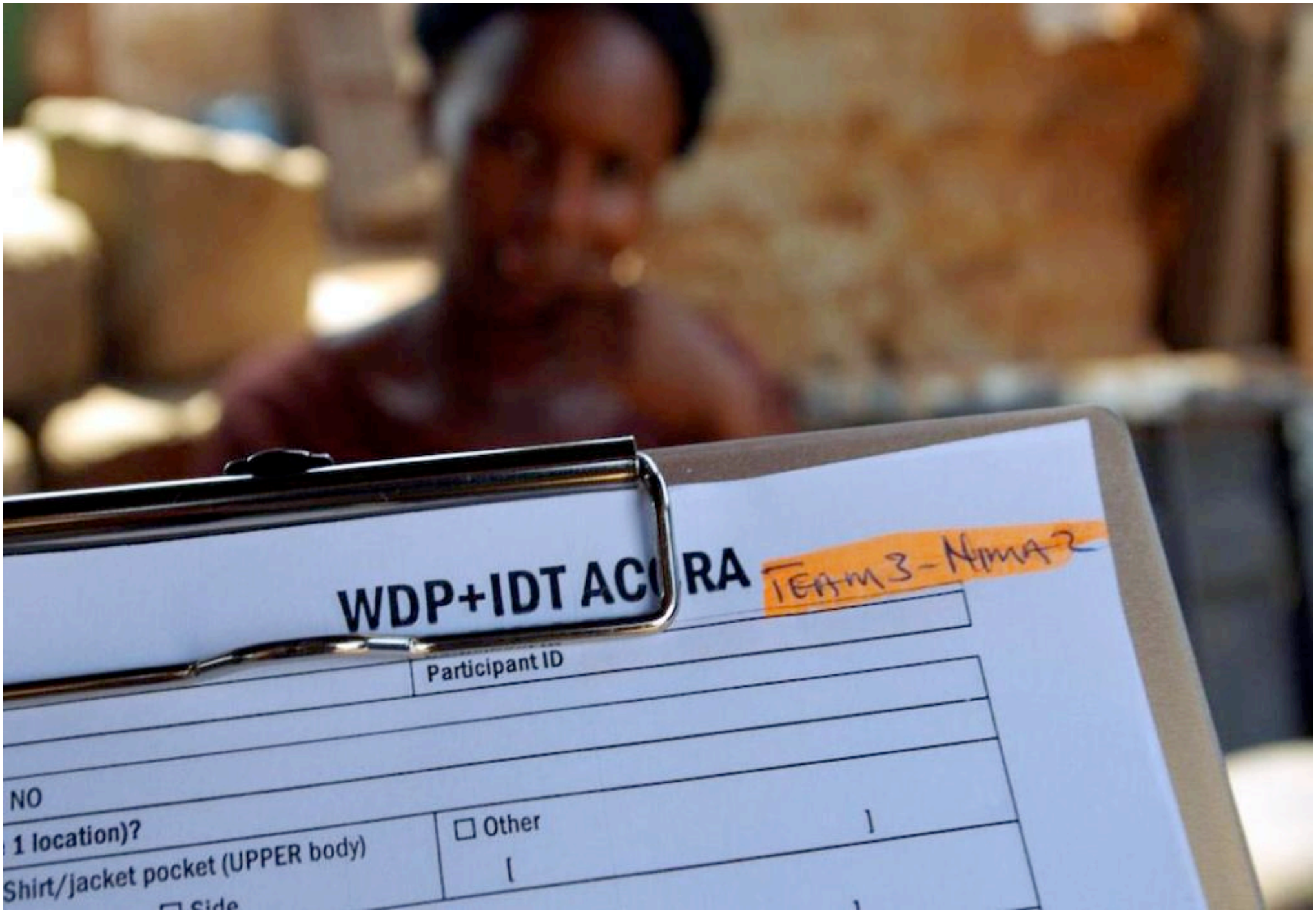
the art of delegation

NOKIA

what do people carry,
where & why?
NOKIA

where do people
carry phones?
NOKIA


Helsinki
Milan
New York
Los Angeles
Tehran
Beijing
Jilin
Seoul
Tokyo
Chongqing
Mumbai
Hyderabad
Accra
Kampala
Rio de Janeiro
11 studies 2003 - 07
2502 respondents, 50%/50% male/female, aged 16 to 65
NOKIA

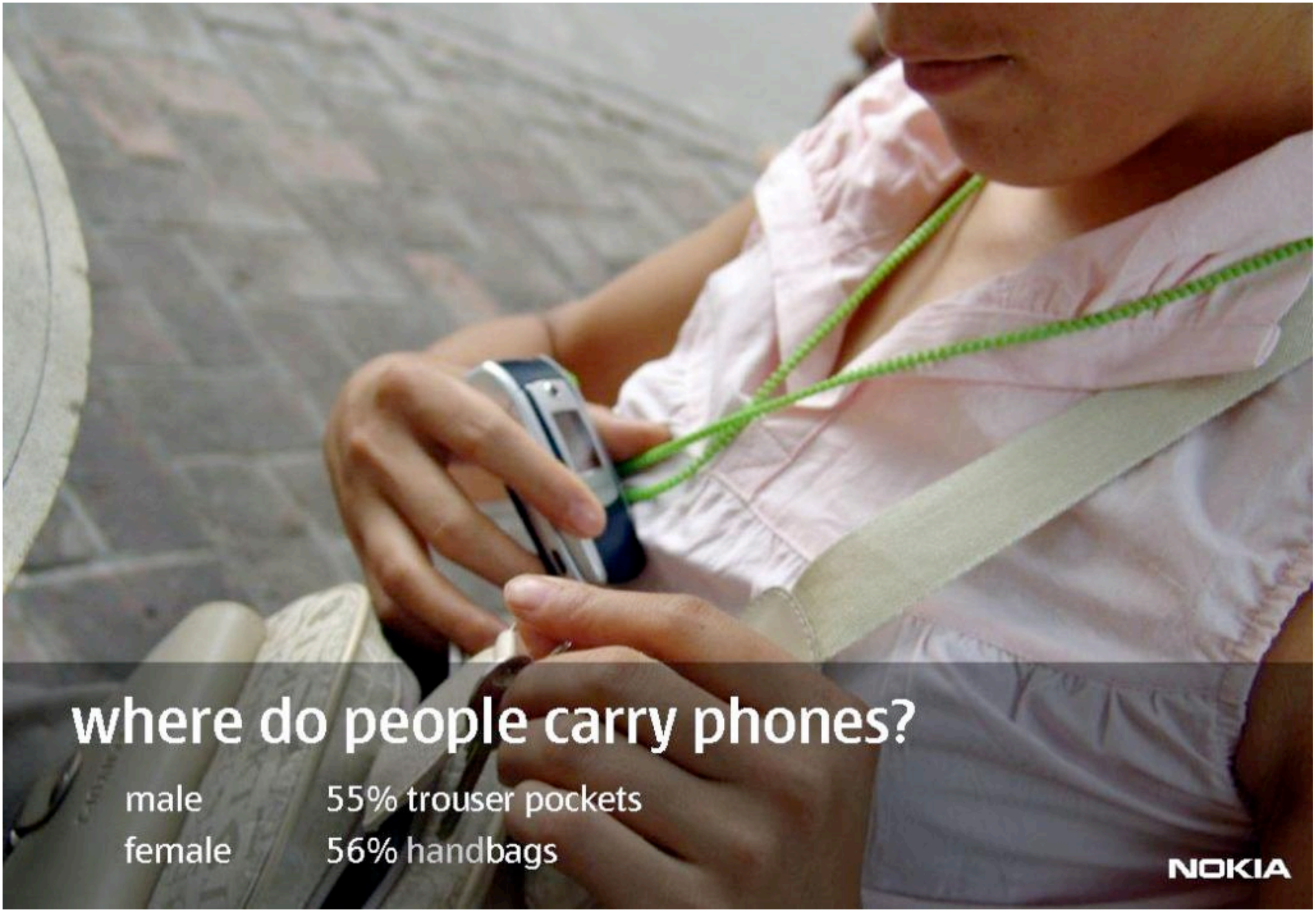

WDP+IDT ACCRA
TEAM 3 - NIMA 2
Participant ID
NO
1 location)?
Shirt/jacket pocket (UPPER body)
Other

Teams, participants, and phones
NOKIA

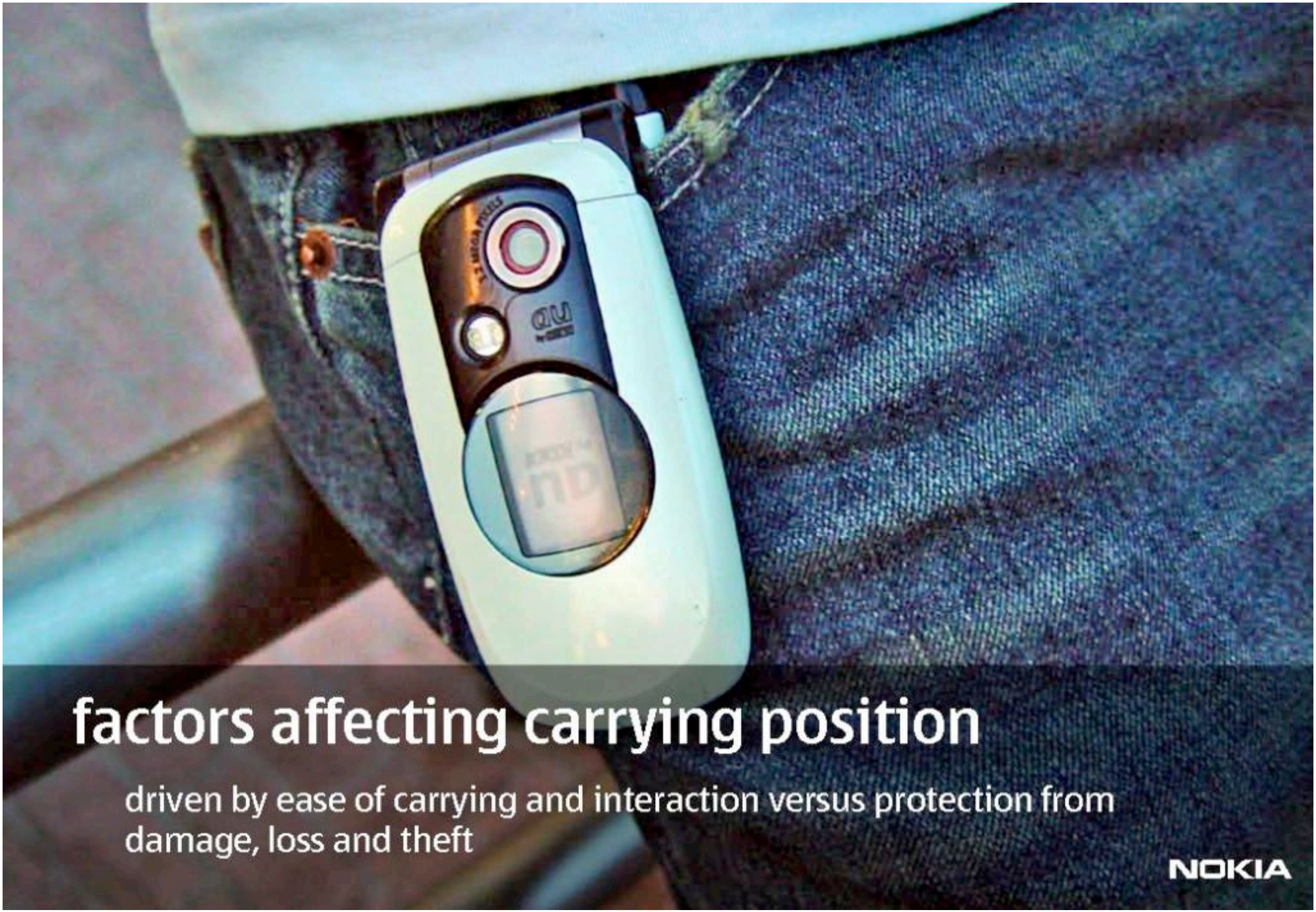
limits of this research

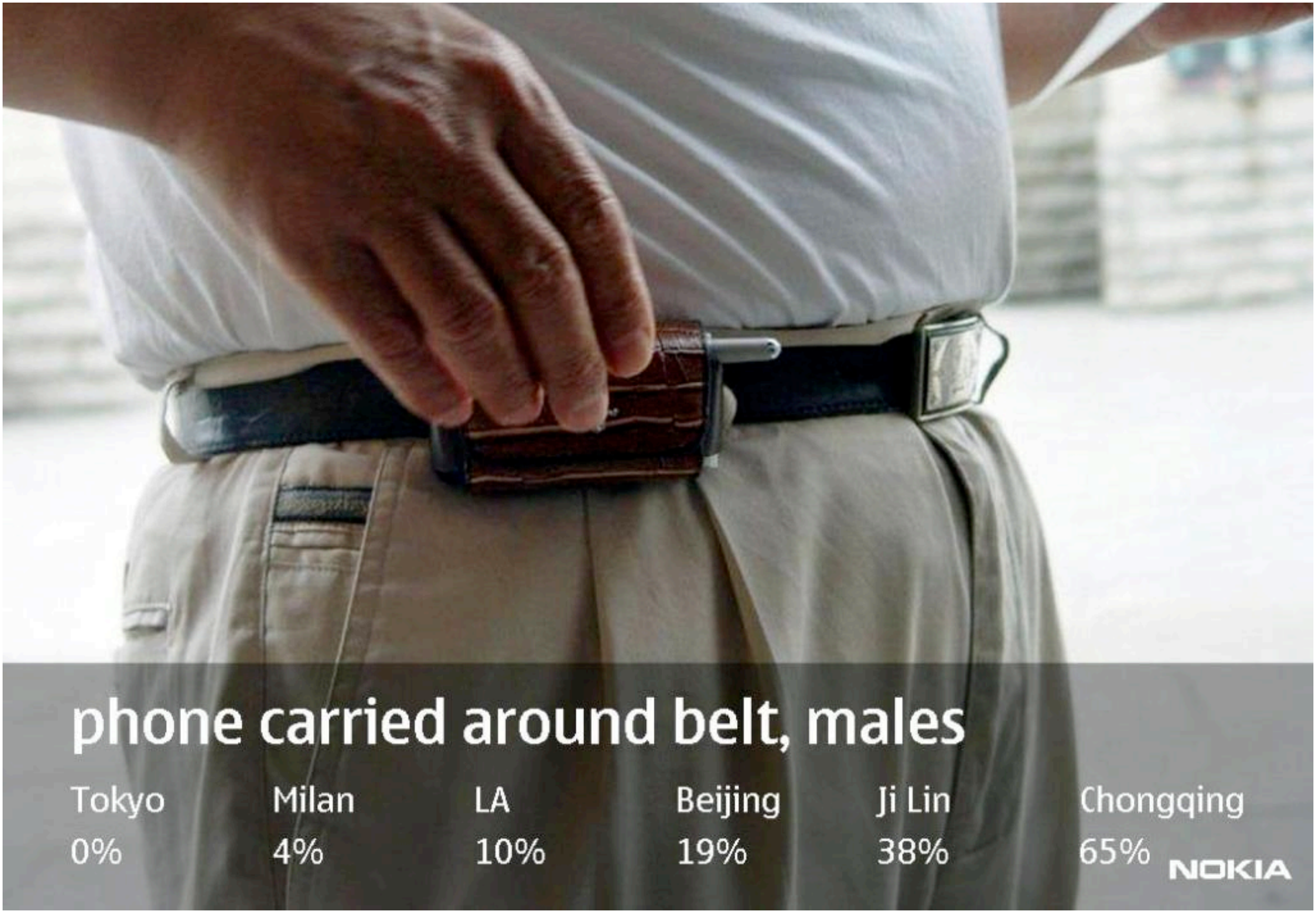
Carrying position changes: over the course of the day; according to context; related to tasks; weather conditions; seasons; clothing; perception of safety; expectation and importance of expected incoming communication, forms of transport and for many other reasons. This data simply provides a snapshot of 100+ people per location over a three day period when the data was collected.

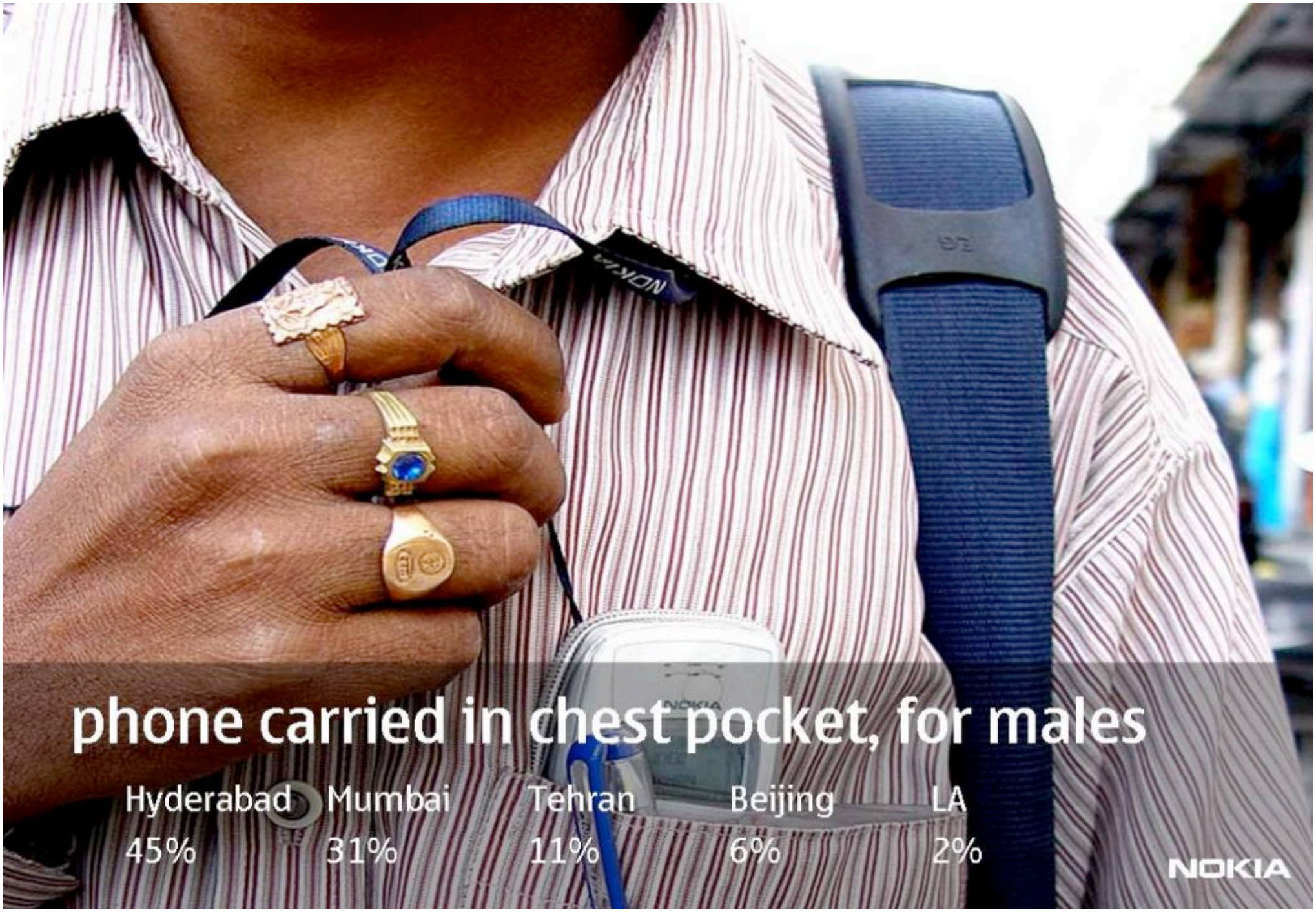
The data is used in conjunction with more in-depth qualitative techniques to inform and inspire the design process.

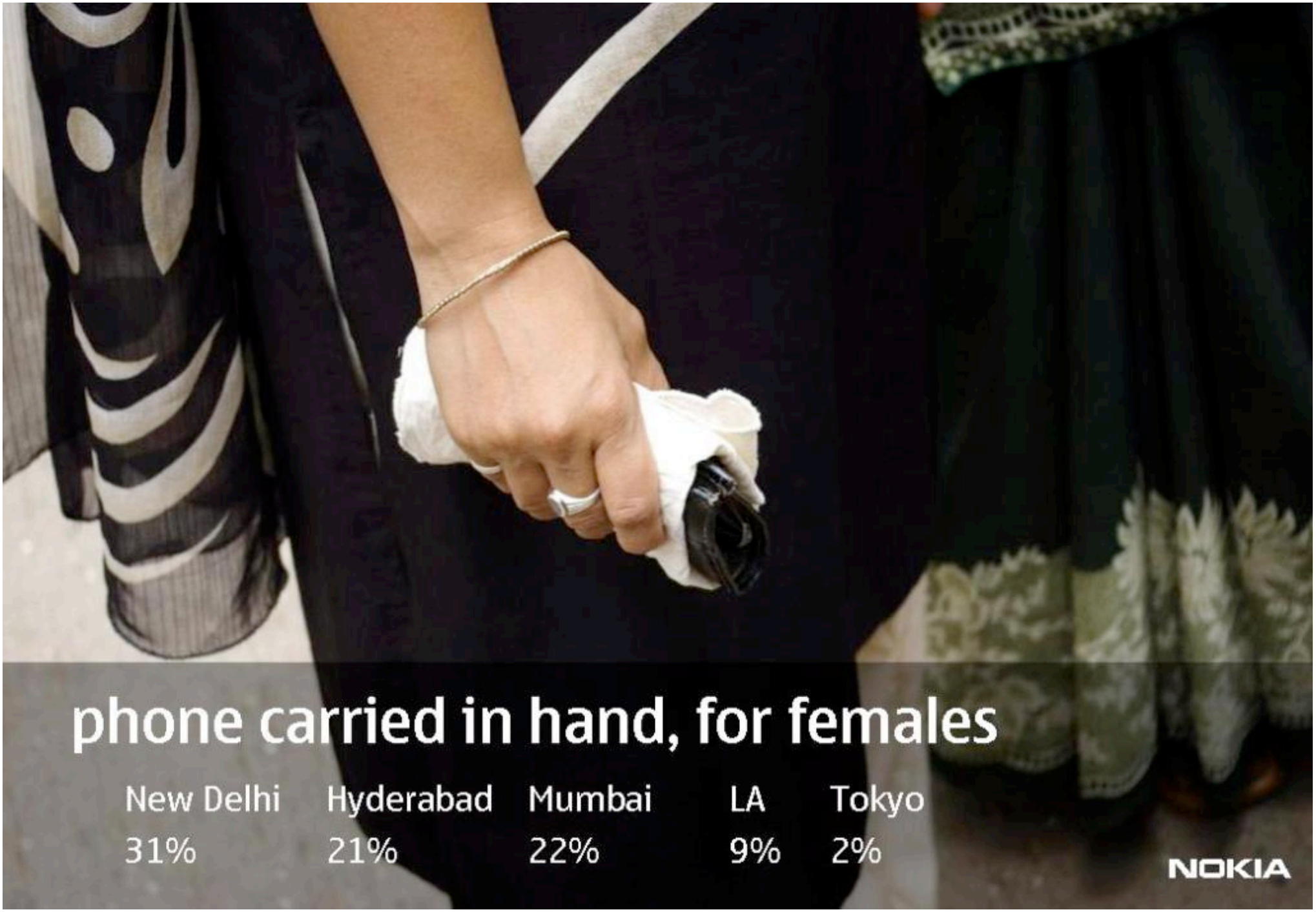

where do people carry phones?
male 55% trouser pockets
female 56% handbags
NOKIA

NOKIA
frequency of missed communication?
30% of pocket carriers and 50% of handbag carriers sometimes or always miss incoming mobile phone communication
NOKIA


factors affecting carrying position
driven by ease of carrying and interaction versus protection from damage, loss and theft
NOKIA


phone carried around belt, males
Tokyo
0%
Milan
4%
LA
10%
Beijing
19%
Ji Lin
38%
Chongqing
65%
NOKIA


phone carried in chest pocket, for males
Hyderabad 45%
Mumbai 31%
Tehran 11%
Beijing 6%
LA 2%
NOKIA


phone carried in hand, for females
New Delhi
31%
Hyderabad
21%
Mumbai
22%
LA
9%
Tokyo
2%
NOKIA

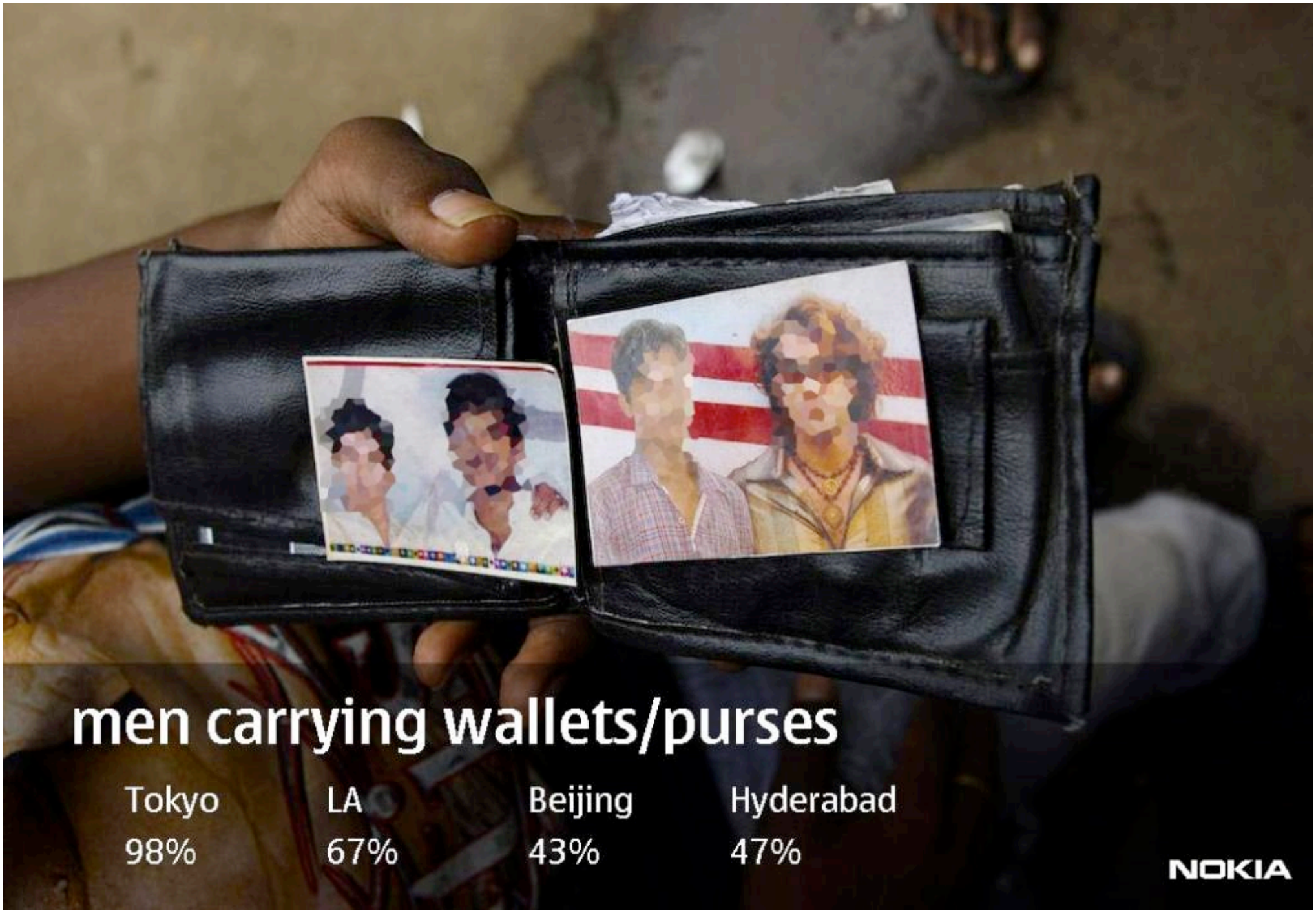
phone carried in bags, for males
Tokyo
20%
Milan
14%
Beijing
10%
Tehran
2%
Mumbai
2%
NOKIA

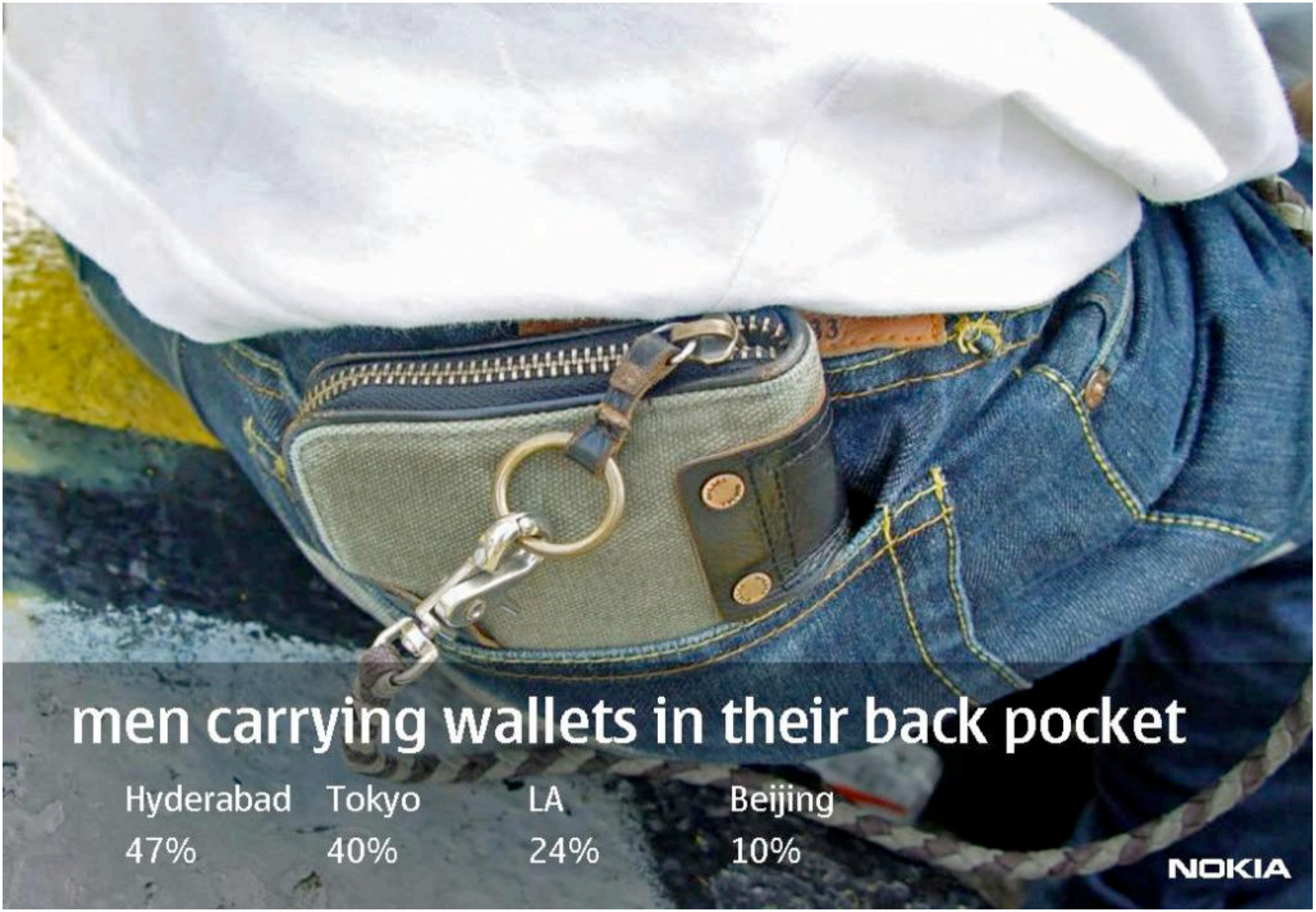
phones carried in bags, for females
Milan
80%
Tokyo
70%
Beijing
63%
Accra
44%
Los Angeles
30%
NOKIA

people carrying wallets/purses

NOKIA

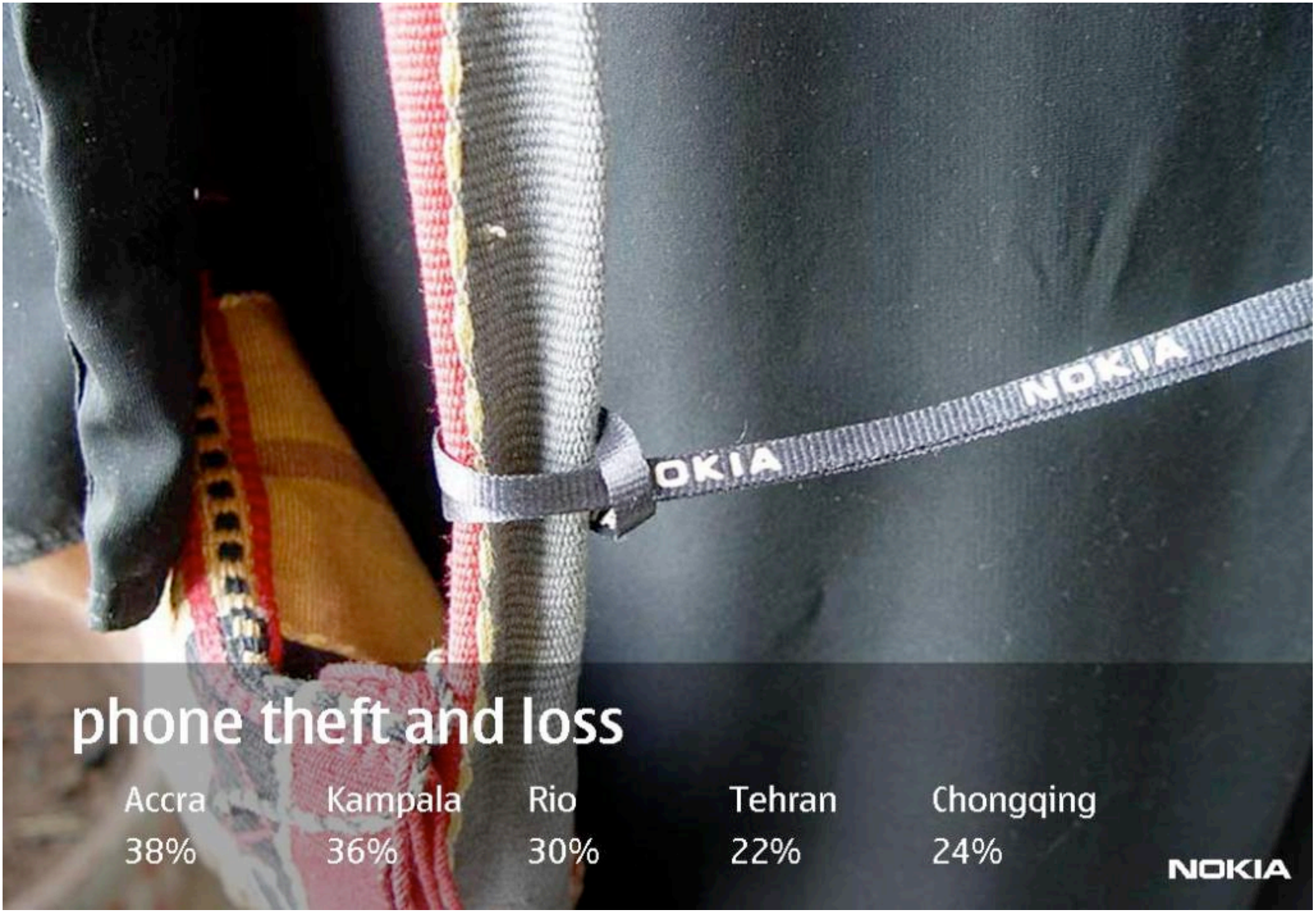
people carrying wallets/purses
Tokyo
98%
Seoul
90%
Beijing
54%
Ji Lin City
35%
NOKIA

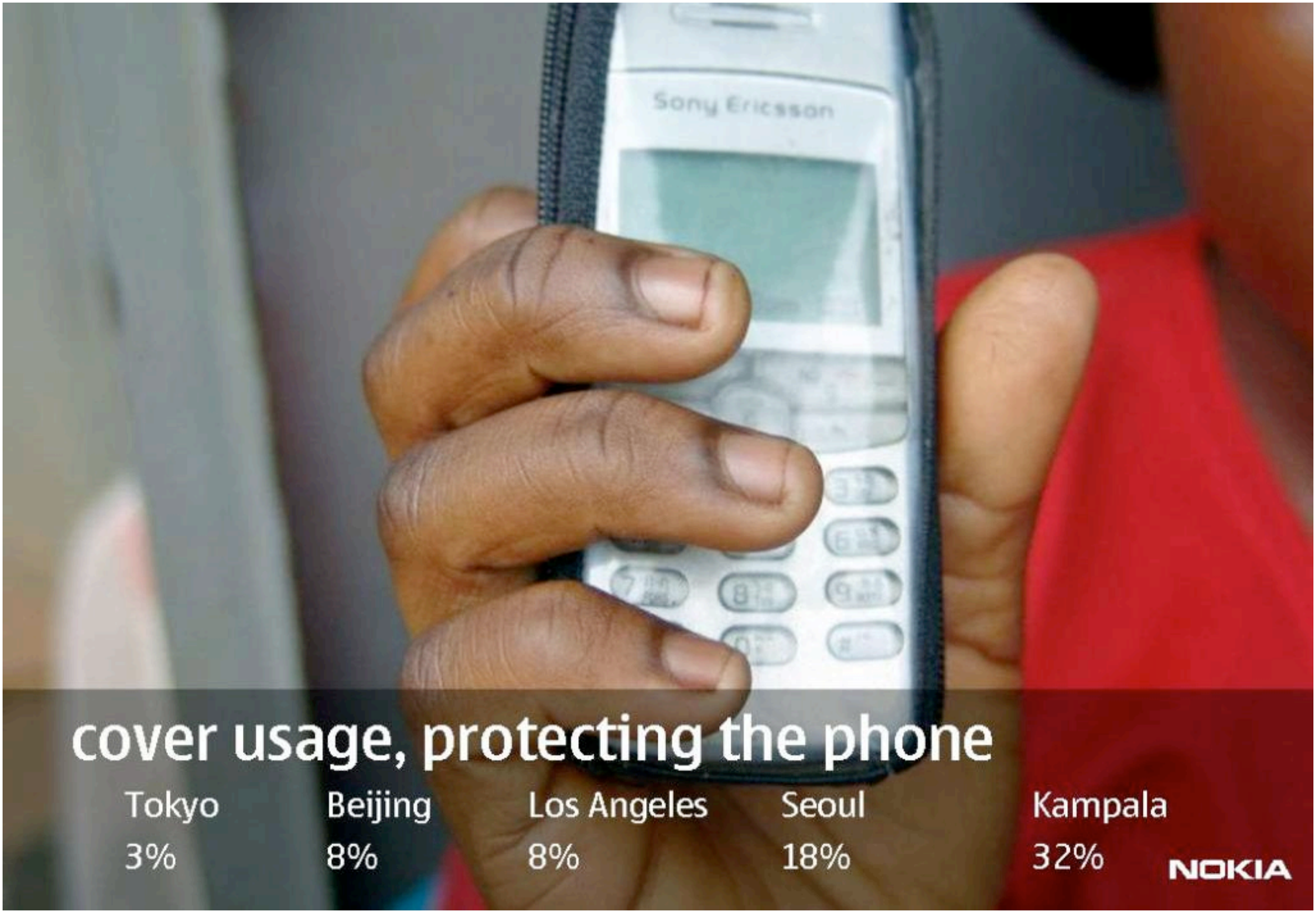

men carrying wallets/purses
Tokyo
98%
LA
67%
Beijing
43%
Hyderabad
47%
NOKIA


men carrying wallets in their back pocket
Hyderabad
47%
Tokyo
40%
LA
24%
Beijing
10%
NOKIA

Signals

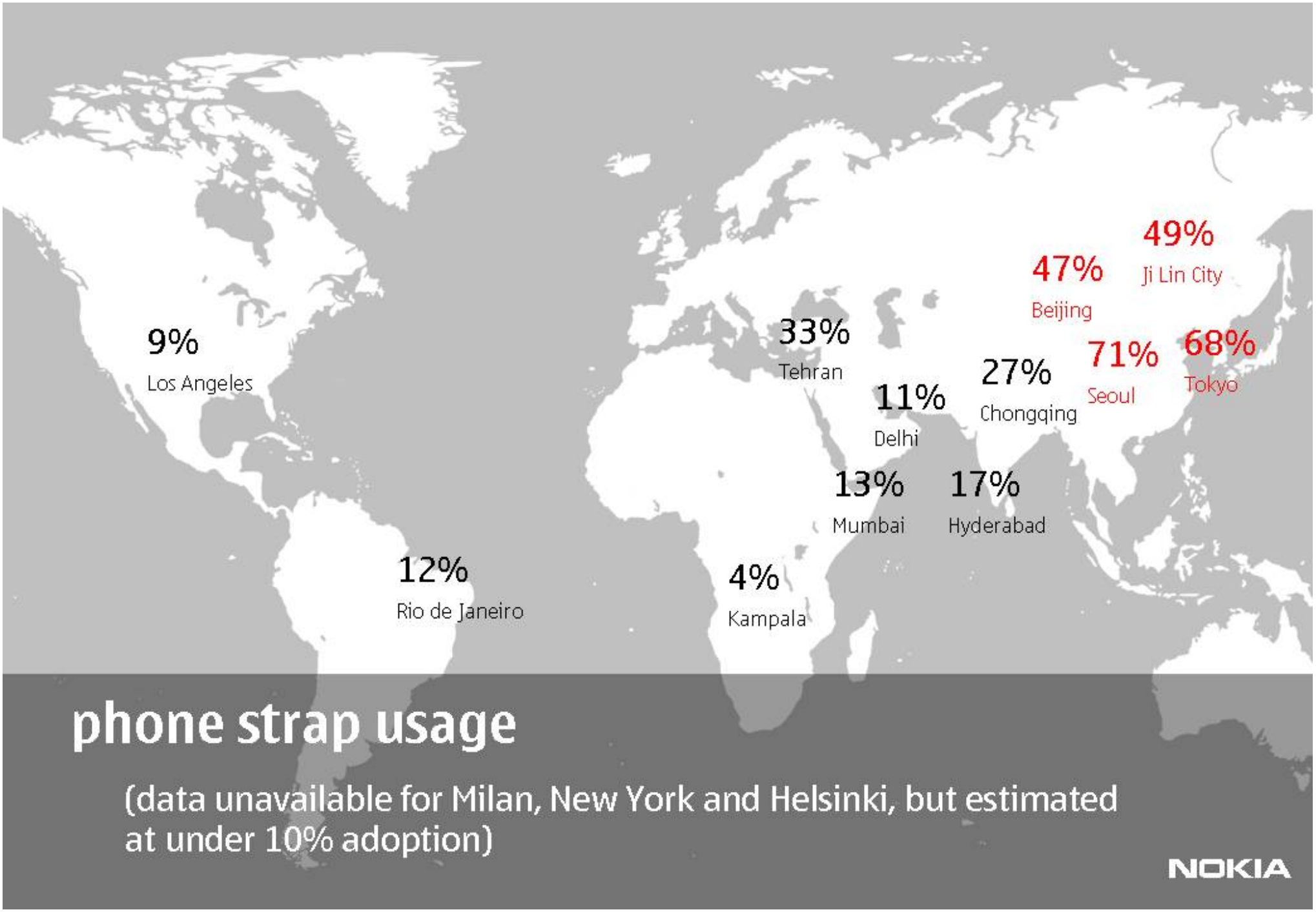
NOKIA


NOKIA
NOKIA
phone theft and loss
Accra
38%
Kampala
36%
Rio
30%
Tehran
22%
Chongqing
24%
NOKIA


Sony Ericsson
cover usage, protecting the phone
Tokyo
3%
Beijing
8%
Los Angeles
8%
Seoul
18%
Kampala
32%
NOKIA

multiple devices owned, how people carry?
Accra
30%
Rio
28%
Mumbai
16%
Chongqing
9%
NOKIA

China
NOKIA



phone strap usage

(data unavailable for Milan, New York and Helsinki, but estimated at under 10% adoption)

NOKIA

thoughts

Even though people consider their mobile phone to be an essential object to be carried, many people, in particular females using bags frequently miss incoming communications.

The data helps us understand:

- The effects of age & gender on likely carrying position
- Strategies for clustering, containing and protecting objects, in particular once they go below a certain size and/or share a common form factor
- The likelihood and type of physical personalisation
- Challenge assumptions such as the prevalence of wallet/purse use

It also feeds into our growing knowledge-bank of consumer understanding from around the world and informs the concept creation process

NOKIA

looking forward

NOKIA

/end