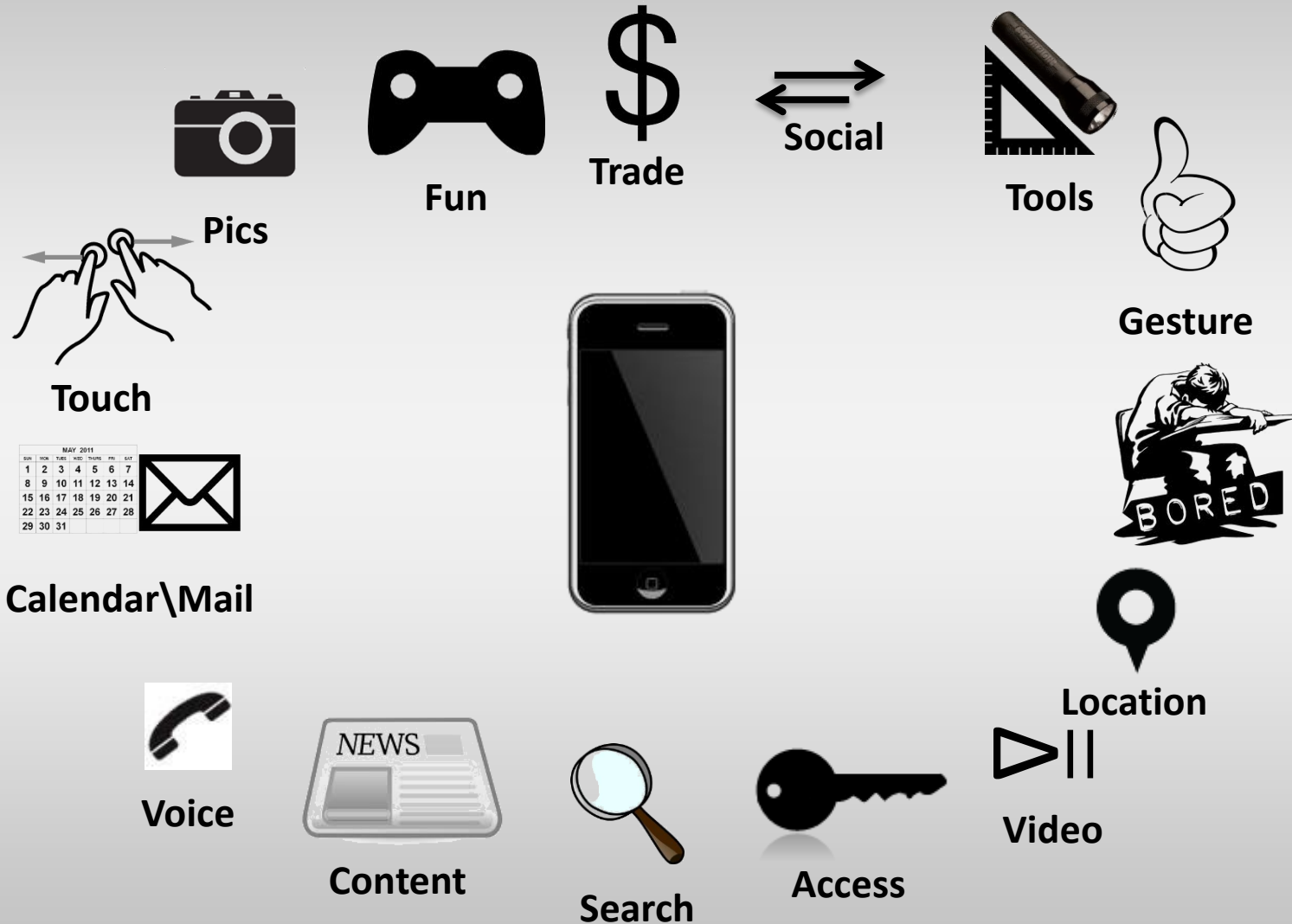


A top-down view of an office cubicle. In the center, a large magnifying glass is positioned over a computer monitor. The monitor displays the title 'Payments Market Trends 2012'. The cubicle desk has a keyboard, a mouse, and some papers. A yellow sticky note is on the left side of the monitor. The background shows other cubicles and office furniture.

Payments Market Trends 2012

*Tell me and I'll forget
Show me and I may remember
Involve me and I'll understand*

Mobile Outsourcing



PROJECTED MOBILE FORECAST BY 2015

788 MILLION
SMARTPHONE-ONLY
WEB BROWSERS
CISCO

1 BILLION
SMARTPHONES
SHIPPED GLOBALLY
IDC

By 2015: **\$670 billion**
Worth of global
transactions
-Juniper Research



That's like almost
Every Cow
on the planet
getting a smartphone

Israel (expected end 2012):



iPads: 400,000
iPhones: 1,500,000



Tablets: 100,000
Phones: 800,000



By the end of 2012
W8 will be a
REAL COMPETITOR

Wintel: Q42011 compared to Q42010
Desktop PCs: -25% Notebooks: -35%

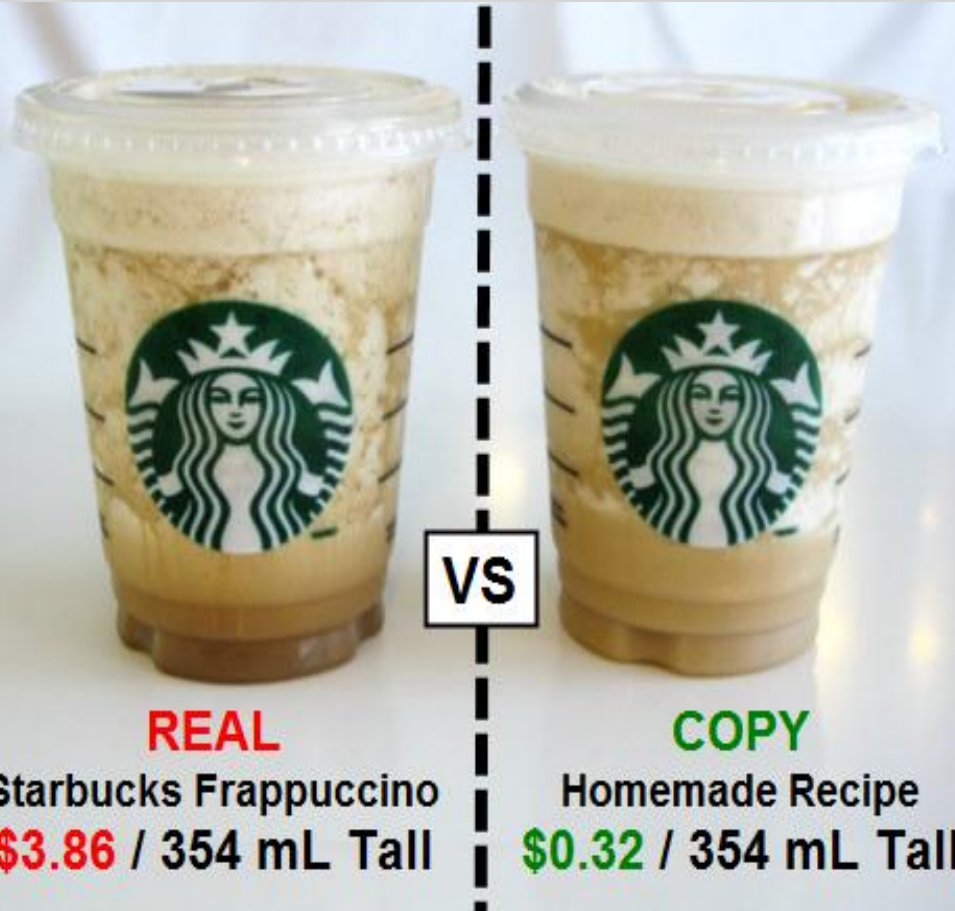
Experience Economy > Age of the Customer

- From 1900 to 1960, **Age of Manufacturing**, if you owned a factory, you owned the market.
- From 1960 to 2000, **Age of Distribution**, if you owned the distribution channels, you owned the market.
- From 2000 to 2011, **Age of Information**, if you owned the information, you owned the market.
- From 2011, **Age of the Customer**, if you engage the customer, you own the market

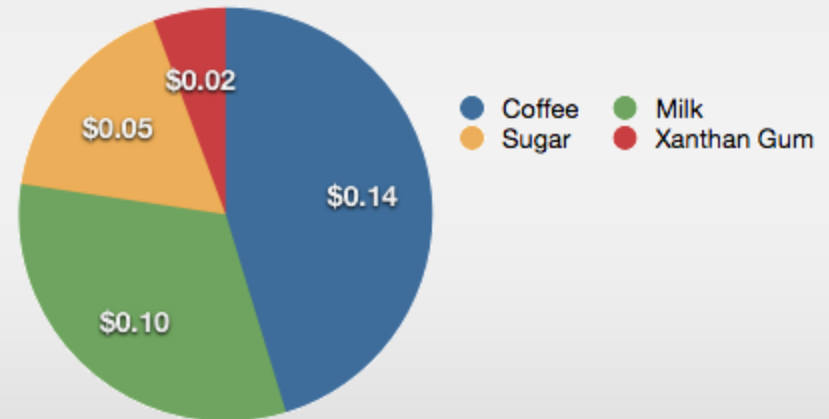


“the NEW experience economy”

Starbucks Frappuccino or not? Why not?



Homemade Cost Breakdown: Coffee Frappuccino, 354 mL Tall



Total drink cost: \$0.32

It's a Buyer Market



Mobile consumers



From mobile devices to mobile users



Mobility v1: serving many devices



Mobility v2: serving users in many locations with many devices

IT will support it ALL

This is what a device knows about you.....

1. **Activity based context:** What are you doing?
2. **Social context:** With whom are you?
3. **Spatial-Temporal context:** Where are you?
What time is it?
4. **Physiological context:** Heart rate,
movement, temperature
5. **Environmental context:** In what environment
are you?
6. **Mental context:** How are you feeling?
7. **Virtual context:** What is happening with you
in the virtual space?
8. **My context:** Who are you?



The value of mobile is in the apps ...

"specialized local services

running in conjunction with

cloud-based services

(private/public)

that mostly do

A2P messaging

**messages between a user and an
automated application**

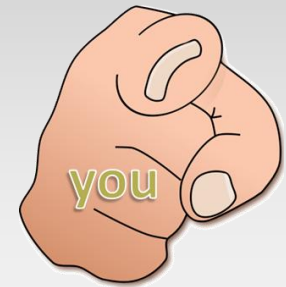
in

location aware devices

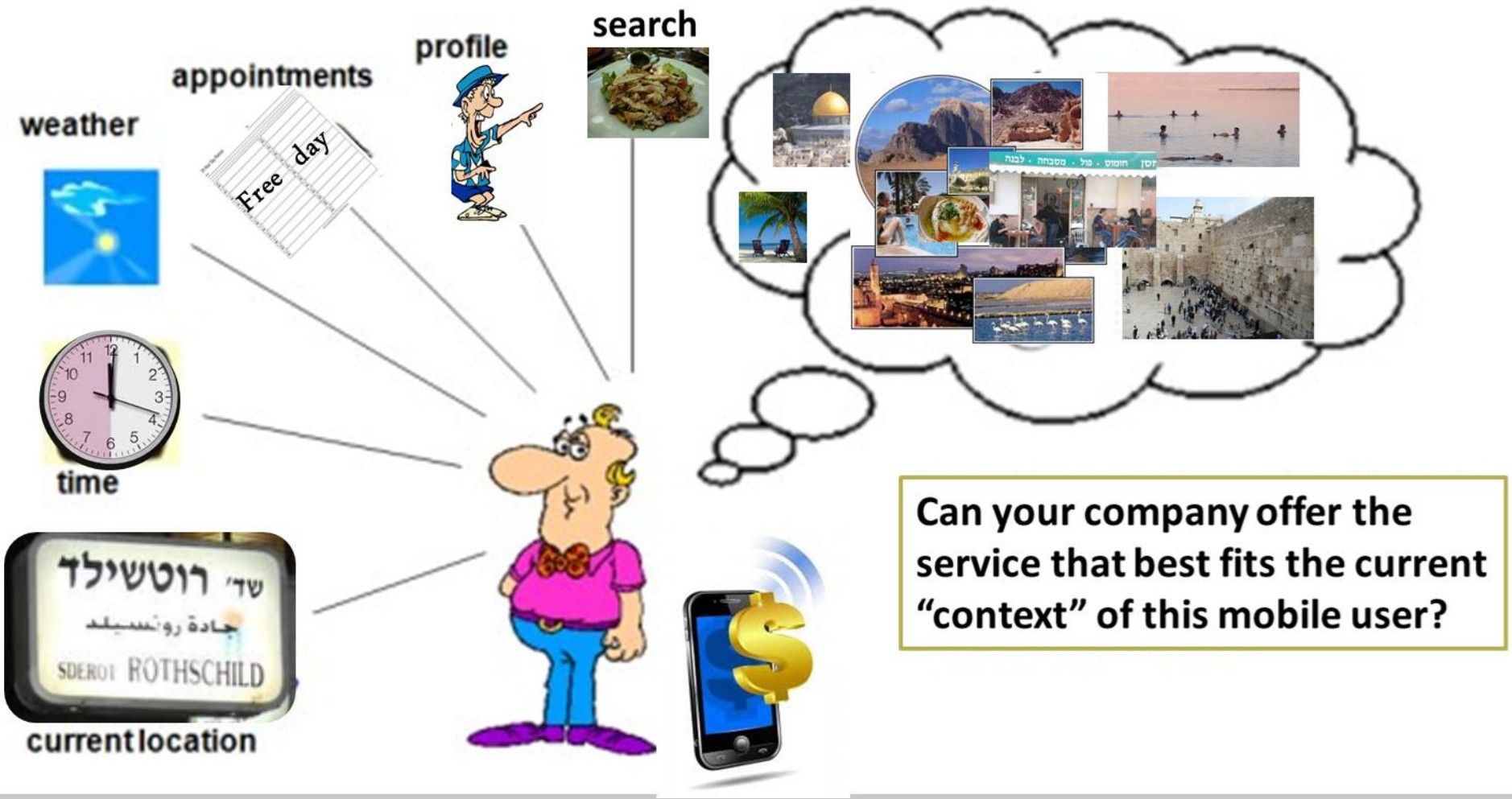
processing to figure out the

context and state of the user"-

App-lifation



NBA – Next Best Action



Design Thinking: to create experiences



Understand actions
so that you can
create experiences

Defining a problem defines
a solution
To tame a *wicked problem*,
we have to agree on goals
and actions
This requires knowledge
about actions, not just facts

DESIGNERS MAKE THINGS



manage by designing

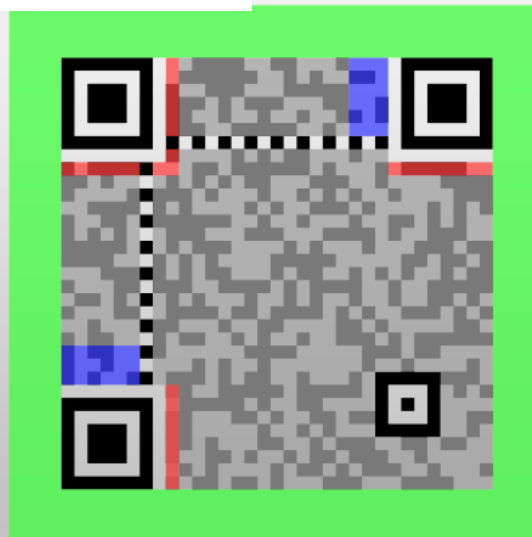


Solving simple problems may lead to improvement—but not innovation.
For innovation, we need to re-frame wicked problems.

Decision-making in the Digital World



What is a QR Code Reader?



- 1. Version information
- 2. Format information
- 3. Data and error correction keys
- 4. Required patterns
 - 4.1. Position
 - 4.2. Alignment
 - 4.3. Timing
- 5. Quiet zone

The Rise of Mobile Retail



On-screen

In-store



Retailers compete directly with each other -customer using mobile for smart purchase while inside their store

Virtual Supermarket

Simply clicking and immediately delivered

SuperPharm example



Smart Shopping

Self Service

Relevant discounts

No line

Guide and direct in
context of what you
need

How to influence in-store, online and mobile shopping ?

- **SHOPKICK** automatically recognizes when someone walks into a store.

- “kickbucks” to the user for:

walking into a retail store

trying on clothes

scanning a barcode

other actions



- “kickbucks” redeemed across all partner stores for

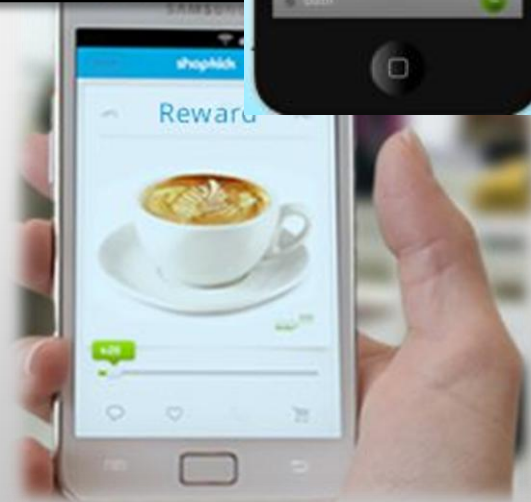
gift card rewards

Facebook credits

special discounts



- **SHOPKICK** expects to pass 1 billion product views this year



Social Shopping



“follow us on Facebook” has replaced the website, what will be next?



- ✓ People will have a simple payment credential attached to their account
- ✓ With one click they will be able to complete a transaction
- ✓ Facebook credits and payments could be the airline miles of the next decade
 - consumers will be rewarded with Facebook Credits for brand loyalty

2012/3: Social Media will enter in context/A2P/payments



	2009	2010	2011	Projected 2012
Year over Year Growth		359%	336%	300%
Facebook Revenue from FB Credits	\$39	\$140	\$470	\$1,410
FB Merchant Sales	\$130	\$467	\$1,567	\$4,700
FB Credits Total	1300	4667	15667	47000
Facebook's Cut (30%)	390	1400	4700	14100
Merchants Cut (70%)	910	3267	10967	32900



The Evolution of Trade



Credit

Lydian coins

Barter

Mobile
Payment

4 Types of Mobile Payment

Mobile at the point of sale



It's paying for things at a store with a smart phone using NFC or "**tap and go**"

'Put it on my bill'

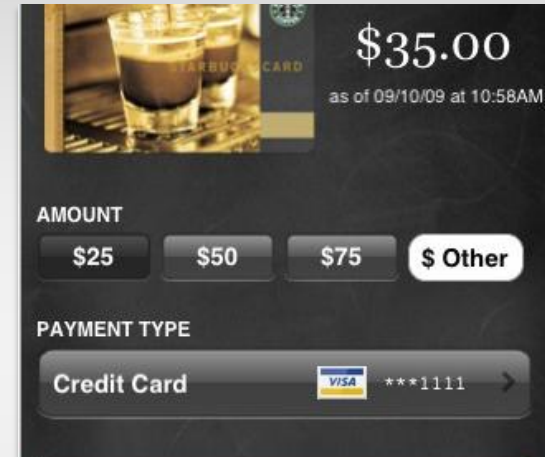
Consumers buying ringtones or games or digital content by putting the charges on their cellphone account

Smartphone is a cash register



This is merchants using a mobile device to process credit cards payments. Square – 1M merchants (1/8th of all US card retailers) Do not confuse this with mobile wallets. They are not the same thing.

Store mobile credit card



If a company doesn't want to wait for someone else to build a wallet or a platform, it can always build its own. Is it expensive? You bet. Is it worth it? Ask Starbucks. 25% of all in-store payments are made via a mobile phone

mWallets & Payments in Action

Google Wallet

Nexus S 4G Android devices for Citi Master or Visa cards holders

*SingleTap experience,
Open platform*

Google Offers -save coupons directly on Google Wallet

PayPal

Mobile peer-to-peer payments in its iPhone and Android apps "bump style"

"One-stop shop" for retailers

*Payments from any portable device.
Flexibility and CRM to customers after they have checked out*

ISIS

HTC, LG, Motorola, RIM, Samsung and Sony Ericsson

Transactions for physical products at retail locations, redeem coupons, store merchant loyalty cards via the mobile phones

Source: <http://nikosdrak.wordpress.com/2012/03/01/mwallets-nfc/#>

Payment Chase are Growing Demand by Consumers

Download more graphics at www.stki.info



VS



Dozens of retailers working together to turn cellphones into payment devices

Galit Fein's work Copyright 2012 @STKI

Do not remove source or attribution from any graphic or portion of graphic

What are Big Banks Afraid of?

people prefer to make e-payments
through their banks



but they "live"
in Facebook
Google & iTunes

VS

It is possible that one of them may try
to build a platform for easy
P2P payments



We are Ready! But what about NFC?

- Great mass is ready for mobile payments NOW
- Dozens of millions of NFC devices will arrive this year
- However, a poor experience, the lack of consumer education, lack of real standards and complex NFC infrastructure will inhibit use in 2012



What's In a Mobile Wallet?

Secure Element (SE), which holds:

One or more payment, mass transit, and/or offer applications

Each application emulates a particular “card” in the wallet

Near Field Communications (NFC) chip

Two-way communication with the point of sale

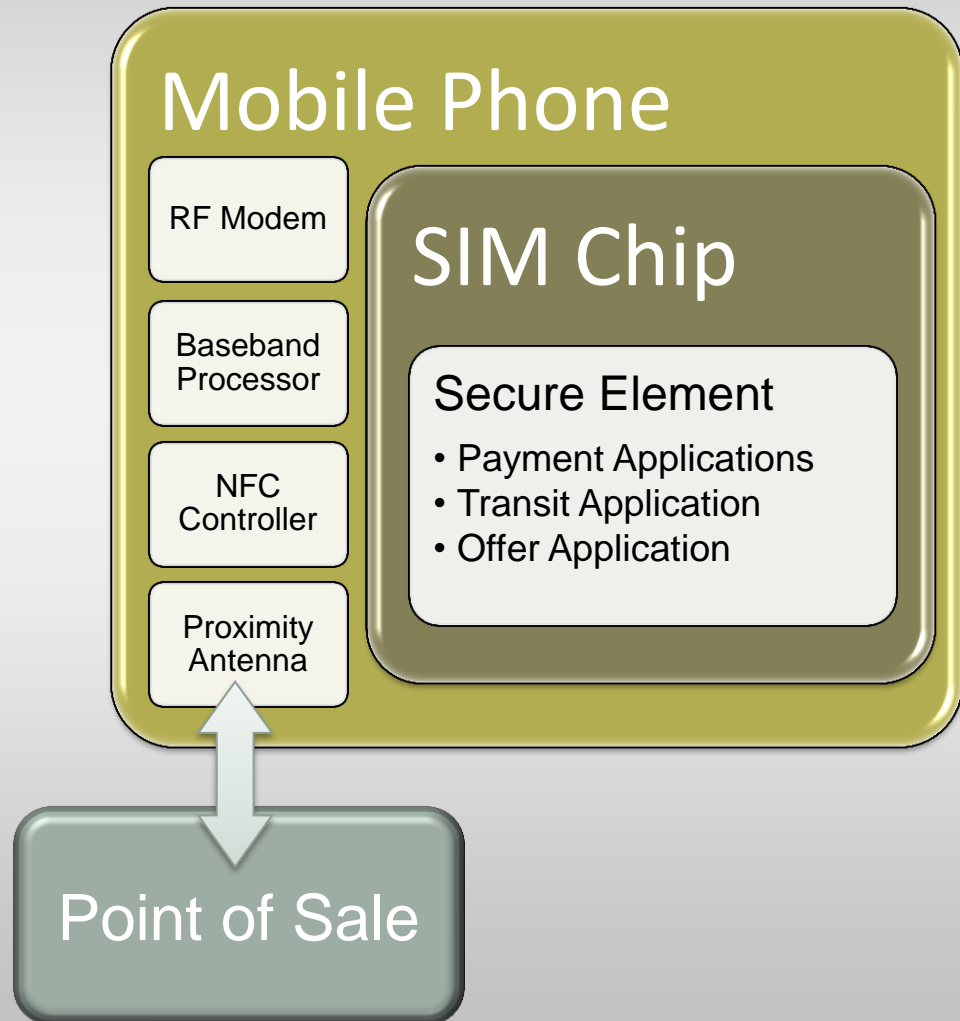
Compatible with existing contactless payment standards

Three options for hosting the SE:

On the SIM chip (shown here)

Elsewhere in the handset

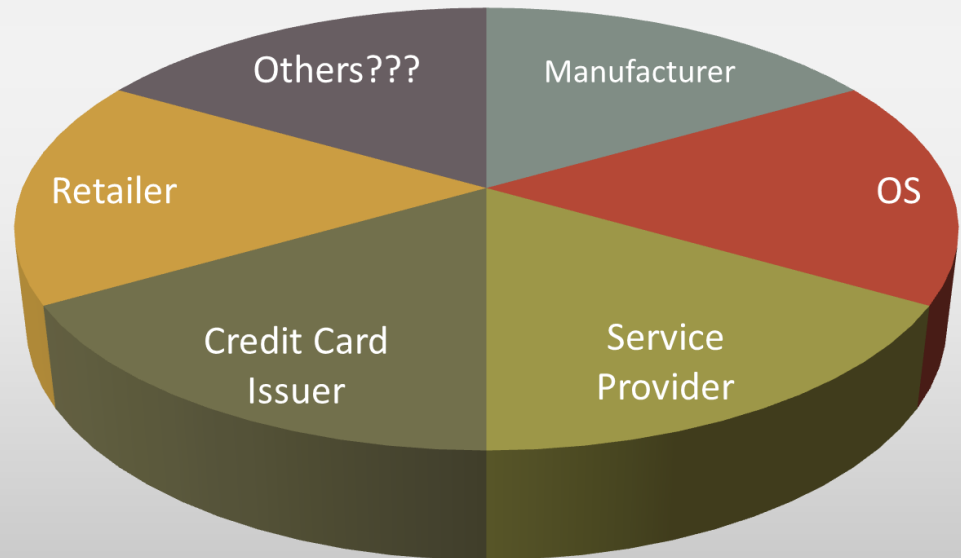
On a MicroSD card



Okay, So What's the Catch?

Lots of unresolved questions:

- Who controls the secure element?
- How much does it cost to rent space in the wallet?
- Who gets to provide the offered application(s)?
- What if the merchant doesn't support contactless cards?



NFC is Great, BUT it's not being any faster or easier than your credit card



**M-Payment is nice, but it's not enough VALUE
to sway all consumers**

Mobile Payment v1:



Money



Credit Cards



M-Payments



NFC

Leumi Card –PayPass



Payments – the new generation

Mobile Payment v2:

- Manage your expenses on a variety of cards
- Manage your club/ gift cards
- Link between coupon and credit card
- Social commerce
- Pay bills/ save receipts
- Boarding passes/ Movie e-tickets
- LBS offerings

It's all about Value!!!



Example of new payment technologies:



Build apps for cards

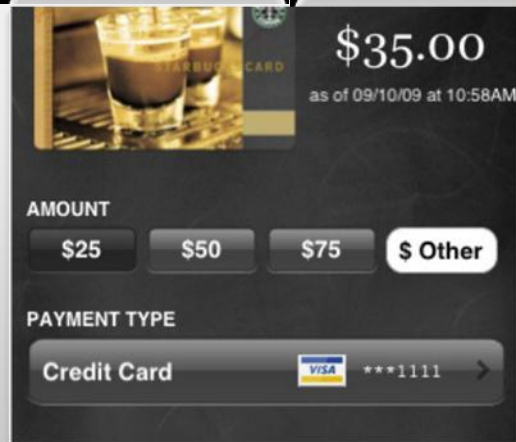
CARDSPRING lets developers add web and mobile applications like:
coupons, loyalty programs and digital receipts

to **payment cards**

Consumers add apps to their card by simply entering their card number on apps website.

When the card is swiped, the app is executed in real time.

Wallaby Card



The **WALLABY CARD** is:

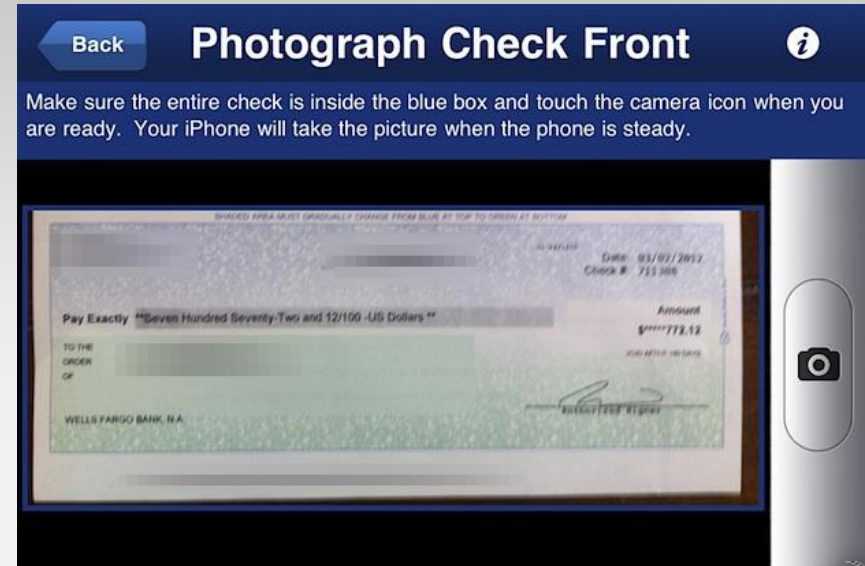
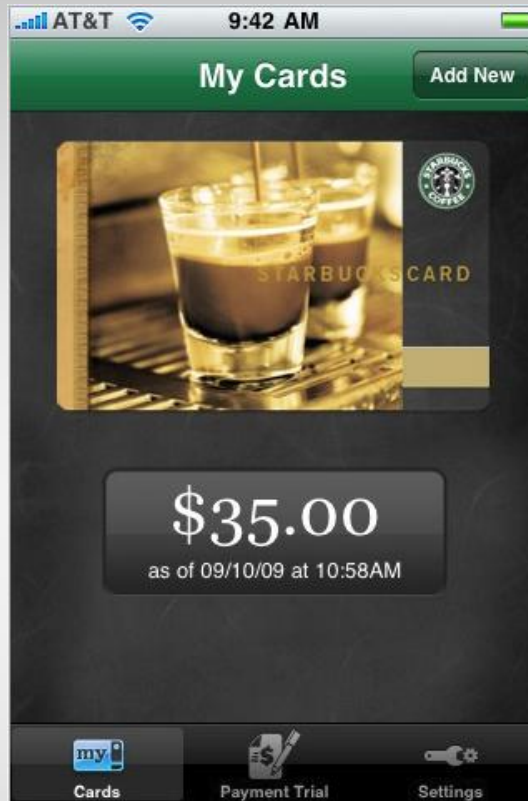
1. advanced cloud-based digital wallet
2. stores the information about each of existing credit cards
3. **automatically picks** the best card to charge in each transaction

Decisions based on user preferences and A2P communications

Expect more. Pay Less.



Apple: already a Payment Provider



Apple has 400 M iTunes accounts
PayPal – 100 M active accounts



By Using Passbook you can:

- call up bar codes on the screen to check in for a flight
- get into a movie or redeem a coupon
- see when coupons expire
- pinpoint where their car is
- check the balance of a loyalty card

Passbook could be very much like Apple's Game Center



מגיע לך קפה מתנה!

חבר שלנו בפייסבוק?

מגיע לך קפה על חשבון הבית!
תגיע לתחנת "פז יריד קטנה"
הראה לנו את השובר
וקבל קפה!



1 or lesser value Free.
included.
1 valid with any
Not for resale
ed.

החל מ 01.06.2011 חתמה על רשיון להפיק את החשבה בכל עת

BUT it's not the kind of game changer that everyone is looking for from Apple

Today's consumers want more capabilities:

- make charges to a variety of cards
- monitor their account balances
- pay bills
- make returns and save receipts
- manage coupons based on a person's interests

Apple charges companies 30 % each time they sell anything on iTunes

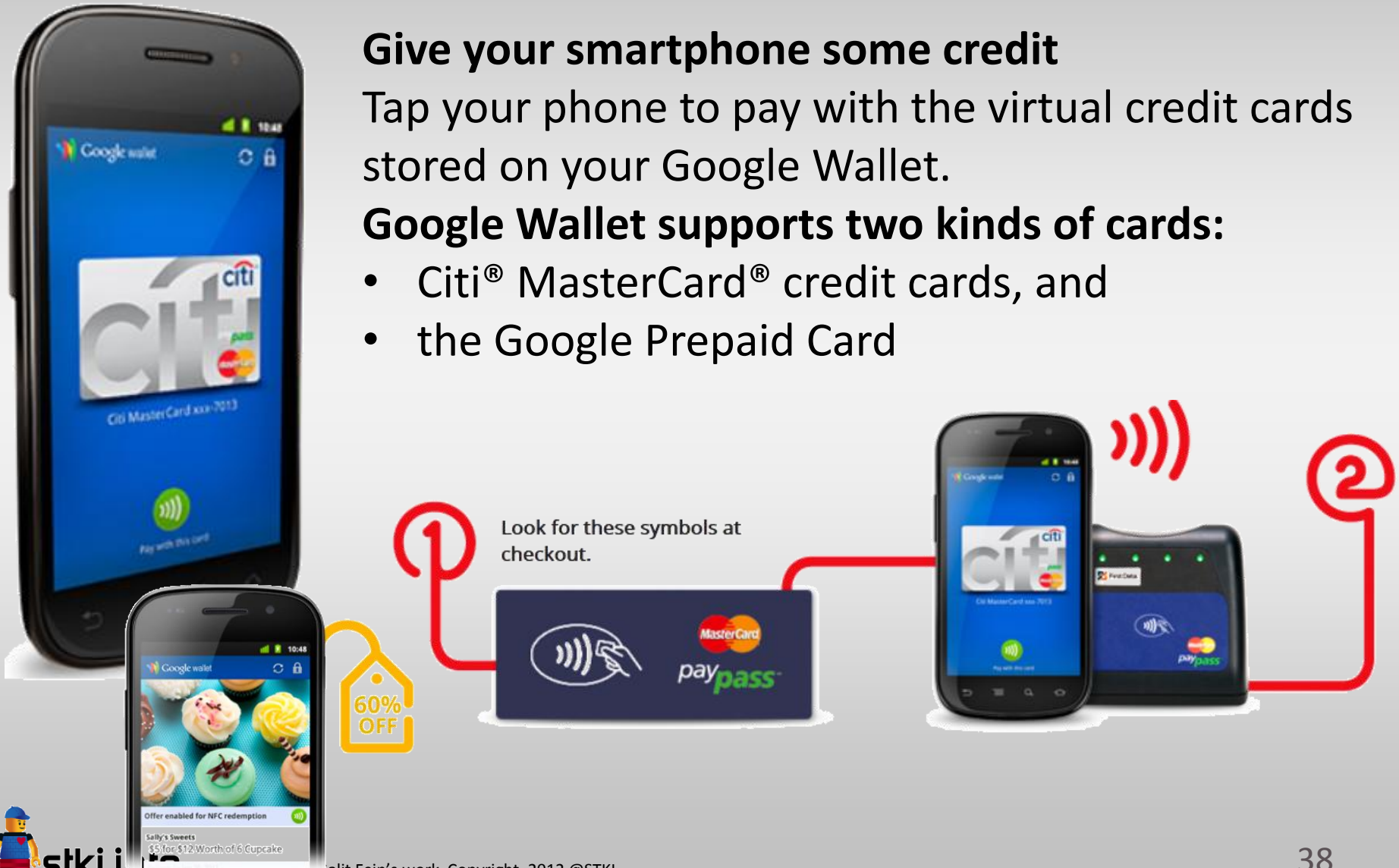
Google - We're building a better wallet

Give your smartphone some credit

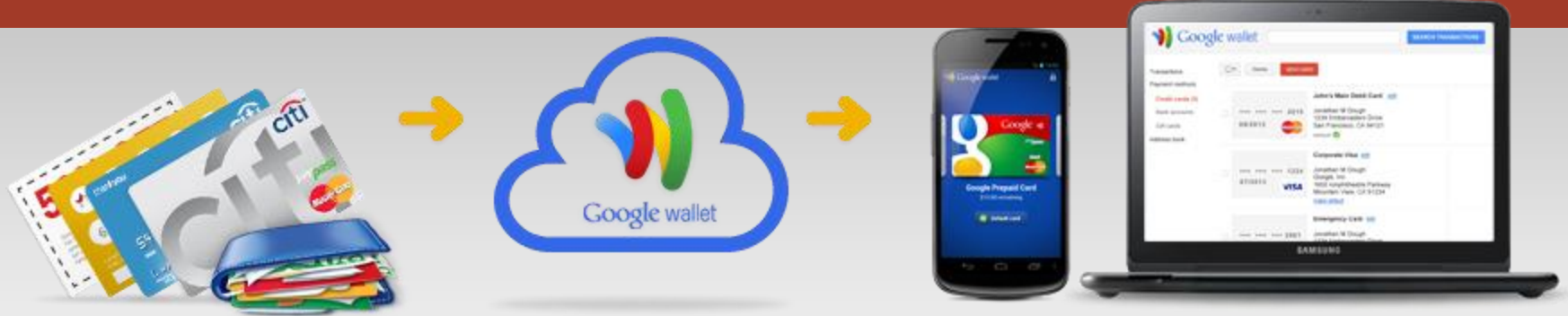
Tap your phone to pay with the virtual credit cards stored on your Google Wallet.

Google Wallet supports two kinds of cards:

- Citi® MasterCard® credit cards, and
- the Google Prepaid Card



Google Wallet



- Google has faced several setbacks with its Wallet app
- Especially when it comes to partnering with the carriers, banks, retailers
- NFC has been slow to get off the ground, and carriers (Verizon, T-Mobile, AT&T) have blocked Google's Wallet from appearing on Android phones!!!

Google Wallet PIN Vulnerability



Square Hardware Vulnerability



Square Card Reader
Accept credit cards anywhere.



Square Register
Turn your iPad into a register.



Pay with Square
Never swipe your card again.

Sign In

Start accepting credit cards today.

Sign up and we'll mail you a free Square Card Reader.

Get Free Card Reader

2.75% per swipe for all major credit cards. No additional fees ▶



<https://squareup.com/>

The Real Issue With Credit Card Payments

Don't Believe The FUD: Square Is Only As Insecure As You Let It Be



GREG KUMPARAK ✓

Wednesday, March 9th, 2011

0 Comments

Early this morning, VeriFone CEO Doug Bergeron **wrote an "open letter"** to the financial industry. In it, he decries Square and their little smartphone-credit-card-reader-that-could, calling for its recall. His reasoning? The Square dongle is easily available and it handles data passed between the dongle and whatever device it's plugged into without encryption (though everything transmitted over the network is *heavily* encrypted), making it too easy for criminals to "skim" (read: steal) credit card information. They even built a phony Square app to prove it.

Of course, the letter barely (and even then, indirectly) touches on the fact that VeriFone has their own, **competing smartphone credit card reading system**, giving them a bit more skin in the game than the whole white-knight approach might let on. Toss in the fact that these "flaws" are by no means exclusive to Square, and the whole thing reeks of mudslinging and desperation.



PCI DSS\ P2PE –Vital For Mobile Payments

PCI DSS was set up by the major credit card companies to try and improve the Information Security of financial transactions related to credit and debit cards. It essentially pushes the responsibility of looking after card data onto merchants who may store, process and transmit this type of data.

Implement Strong Access Control Measures

Regularly Monitor and Test Networks

Maintain a Vulnerability Management Program

Protect Cardholder Data

Maintain an Information Security Policy



Too crowded is not good...

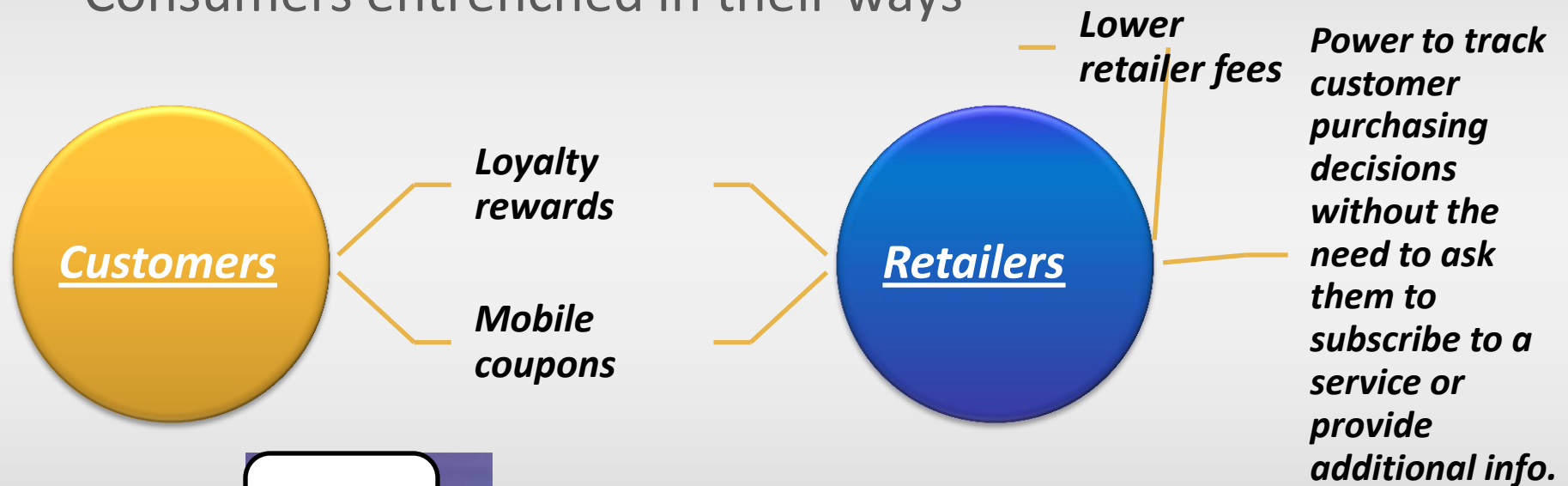


Don't lose the mainland!



M-Payment faces a chicken-and-egg problem

- Retailers reluctant to suffer the cost for terminals without clear shopper demand
- Consumers entrenched in their ways



“Everyone loves a discount, except for retailers”...

An Updated Presentation can be downloaded Here:



Backup Slides...

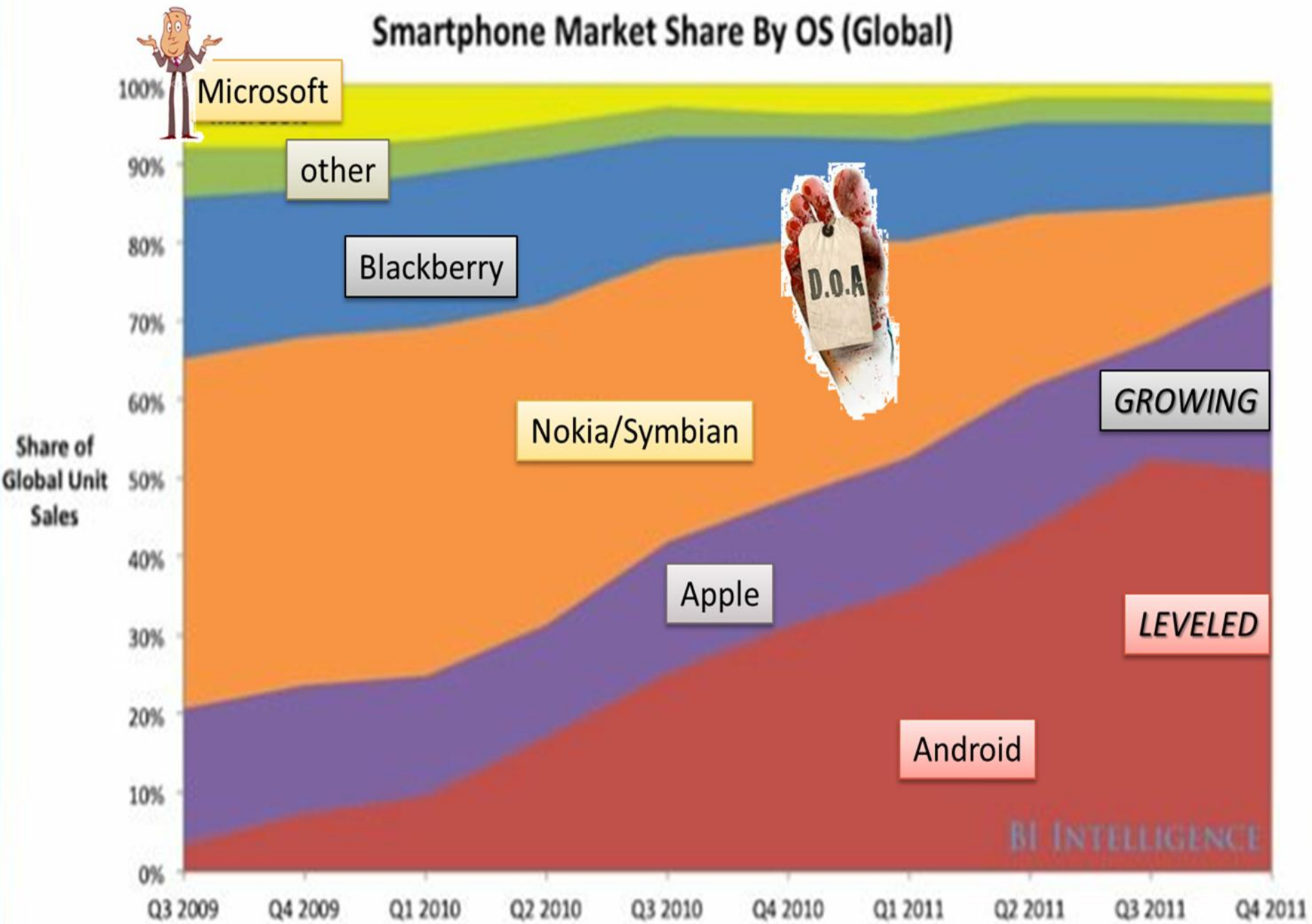
Israeli Smartphone Marketshare in 2011

Operating System	Market Share
Android	39.39%
iOS	36.62%
BlackBerry OS	9.48%
Symbian	9.00%
Other	5.52%

Source: IDC

**1.5 M smartphones sold in 2011 in Israel
(Out of a total of 2.4 M cellphones)**

Smartphone Market Share By OS (Global)



Source: Gartner

Apple VS Microsoft

The Consumer is the King



The Employee is the King



Productivity Software (office)?



With **Office 15**, Microsoft will simultaneously update :
cloud services, servers, mobile (iOS, Android, W8Metro) and PC clients (W8,MacOS) for
Office, Office 365, Exchange, SharePoint, Lync, Project, and Visio

BUT Vision VS Execution???

