



**A MANUAL FOR
THE SECOND
INTERNET
REVOLUTION**

MOBILE MANIA

**Always on.
Always with you.
Always
connected.
The world is
changing as
the cellphone
becomes the
computer.**

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MOBILE MANIA

When computers were first invented, they were the size of a room.

By 1970, they had shrunk to the size of a car.

By 1982, they would sit on a desk.

By 1995, they were portable.

Today we have reached the age where a big, powerful computer fits neatly inside a cellphone.

Small enough

This latest stage is the most important.

For the past fifty years, using a computer has always meant sitting down in front of that computer.

Followed by a start up process.

And then launching applications.

This desk-centric process has been so fundamental to computing, it has defined the way people think of them.

The first menu command in 80% of computer software today is still the desky word 'File'.



Computing has always been done at desks.



But baristas don't have desks.



Nor do teens.



And no one takes a desktop computer shopping.

And when you delete a file, you move it from a 'desktop' to a 'trashcan'.

This is a problem

The deskiness of computers has stopped them getting into every corner of our lives.

They aren't there when we socialize.

They aren't there when we shop.

Or travel.

Or go to bed.

And they are just not designed for the 80% of humans who don't sit at a desk all day.

Not so with the phone

A cellphone is a very different device.

It's always on.

It's always connected.

And it's always with you.

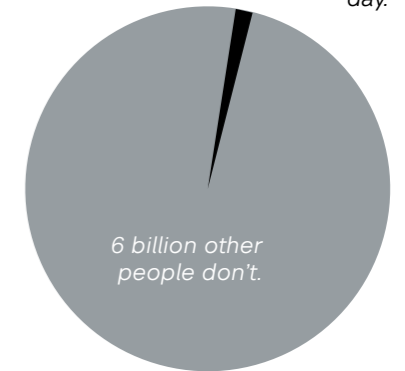
It's a paradigm shift

Putting computing power into such a small device is likely to change computing out of all recognition.

And our lives with it.

Thirty years after the invention of the personal computer, computing is about to get intimate.

65 million mainly desk-bound information workers use Google every day.



6 billion other people don't.

MOBILE MANIA: SUMMARY

- The biggest thing happening at the moment is not social networking. It is the shift to **computing on cellphones**. (page 3)
- At the time of the internet boom of the late nineties, there were around 200 million computers connected to the internet. Today, there are already around three and a half billion people with cellphones – half the population of the planet. The cellphone computing boom could be the **biggest in history**. (page 6)
- Unlike the last internet boom, this one is unlikely to be localized in the United States. Cellphone ownership, networks and needs are greater in **other parts of the world**. (page 14)
- To succeed in this revolution, you'll need a **paradigm-shifting insight**. But such insights are hard to come by. (page 23)
- The successful **new mobile apps** will be above all simple to understand and easy to use. Most tech products fail because they are neither. (page 29)
- New mobile innovations will be launched into a much **colder climate** to that of the 1990s internet boom. Cost cutting may be an important part of them. But cost cutting can be a very **creative act**. (page 39)
- Will mobile data save the telecoms industry? It depends whether the telecoms industry sheds its 'me too' mentality and starts to **think different**. (page 44)
- The shape of the future will come from studying the **teen society** of today. It is already much more networked than that of older people in their mid 20s. (page 50)
- **Cloud computing** will be a big part of the next revolution. But will cellphones become just dumb terminals? Phones are status symbols, and there's not much status in a dumbphone. (page 54)
- In the last internet boom, most people lost most of their money. You will need a **cool head** to keep yours this time. (page 58)
- As search goes mobile, it should transform from its current office orientated format to something more intuitive and less demanding on the user. (page 68)
- It could perhaps combine with mobile augmented reality to provide new 'Terminator' style vision, and perhaps the **first leap forward in user interfaces** since the graphical user interface appeared in the 1980s. (page 74)
- For marketers, the cellphone is important because so many traditional



marketing media are collapsing at the moment. In certain cases, the cellphone may be the **only marketing medium** available in the future. (page 78)



- For packaged good marketers, the issues are even greater. Many of their brands were designed with big budget television an ingredient as **essential** to them as vegetable oil. They will continue to struggle to adjust to digital as lead medium. (page 82)
- The other marketing issue is that of target audiences. Brands cannot transition to digital mobile media whilst retaining a broad **demographic target audience** – demographics were invented in the TV era to sell airtime. (page 86)
- Mobile media could transform **loyalty schemes** into something much more powerful over the next few years. (page 89)
- Mobile media may also lead to the **24/7 campaign** – the one that is as immersive as a video game or FarmVille (page 94)
- Mobile phones bring information and data to consumers as they shop. It should force marketing into a new mood of **openness** with its end user. (page 99)
- But it will all work only if marketers shift over to better **measurement of campaigns**. (page 104)



- Cellphone based computing should **revolutionize medicine**, as the cellphone becomes a nerve centre for health and fitness monitoring, for people both healthy and ill. (page 108)
- It is already **merging with the credit card**, for both near field and distance payments, and transactions both large and small. For poorer people without bank accounts, **mobile minutes** are proving a better currency than cash. (page 113)
- Mobile digital marketers however should not dismiss **TV thinking** from the past. The web is going video. (page 116)
- Above all, **society should think carefully** about the implications of everyone sharing so openly their movements through GPS and personal details through social networking. Politicians are not using the data at the moment because they don't get digital. **Beware the politician who does.** (page 121)



1. IS MOBILE SUCH A BIG DEAL?

In 1997, the internet was the biggest thing on earth.

And the killer app of the internet, the gurus said, was email.

But what exploded amongst people in Asia and Europe in 1997?

Not email.

It was their discovery, unpromoted by mobile network operators, that they could send each other 160 character SMS texts.

Unlike email, texts came without pictures.

And without attachments.

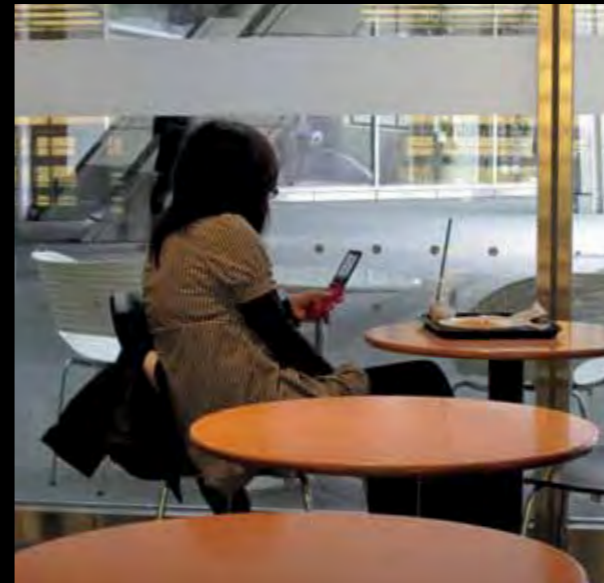
And unlike emails, each text cost money.

But they went instantly to their family, boyfriend or girlfriend.

At any time of day.

Or night.

In corporate fraud trials, the lawyers go for the emails.



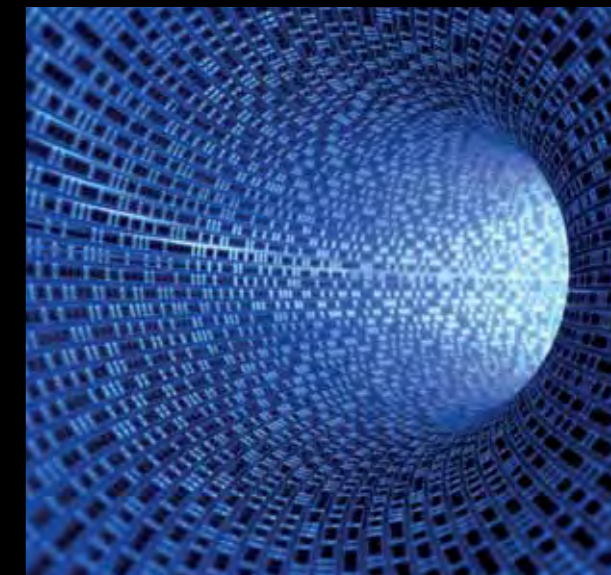
She's watching TV on her cellphone.



He's selling his catch using his cellphone.



She's checking her friends' GPS using a cellphone.



Convergence is finally happening.

But in divorces, it's the texts that contain all the intimate details.

The need for always on, always connected, always there has become critical for ordinary people.

What will change next?

How will the way people use computers change as they start to carry powerful ones with them all the time?

Probably as much as the way computers changed when they stopped being the size of rooms and started fitting on desks.

When this happened in the seventies and eighties, it wasn't just about a change in size.

People started doing things that were thought uncomputery at the time.

Things like writing letters and playing games.

And drawing pictures.

And installing screensavers and wallpapers.

As computers move into phones, computing will change yet again.

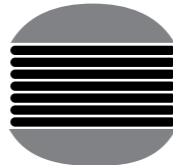
And the new uses of the computer will feel as weird as the idea of listening to a song on one did in 1980.

Phones are smarter

Things will also change because phones are more 'conscious' than desktop computers.

Thanks to GPS location, accelerometers and compass functions, a modern cellphone increasingly knows where it is, and what it's looking at.

Soon, cellphones will know other things such as the



*The seven-patty burger
created by McDonalds
Japan to launch Windows
7 may have left diners
bloated.*

*But Windows 7 is part of
the trend towards faster,
more agile computing
systems.*



Usage of the BBC's mobile iPlayer app peaks at midnight. It's under-the-covers TV.

temperature, and how many of your friends' phones are close.

They will feel less like a tool, and more like part of your brain.

The change is already happening

The shift from desktop computers to cellphones is already happening:

- More and more tweets come from mobile devices. If they had to go home to tweet, most people wouldn't bother.
- No one would organize a party on Facebook if they could only check Facebook at home.
- People are starting to watch TV on cellphones - even when they are at home. The phone is in their hand. The remote is buried somewhere in the sofa.
- If indeed they still have a remote, as phones can now control TVs, music systems and air conditioners.
- Ten years ago, most people did most of their writing in word processors. Today, Japanese professors complain that students now routinely *write and submit their dissertations* from cellphones.

However they communicate, consumers do it more and more from cellphones.

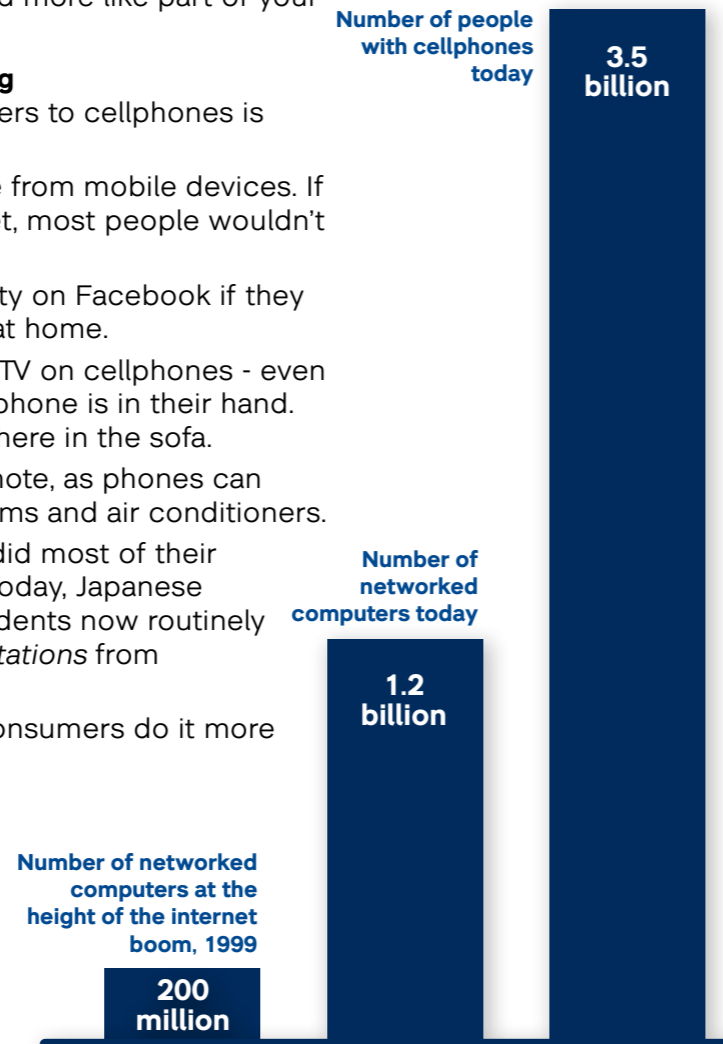
Cellphones have small screens.

And small keys.

But they are always with you, always connected, and always on.

For most people, that is what matters.

THE MOBILE BOOM WILL BE HUGE



But isn't social networking the bigger trend?

Many would argue that social networking has been the biggest computing trend of the past few years.

And in many ways they are right.

It's just that mobile devices are the things that make social networking so compelling and so useful.

Social networking only exploded around the US and Europe in 2006/7 as mobile got going.

In Korea, where telecoms are more advanced, social networking was alive and well in 2002.

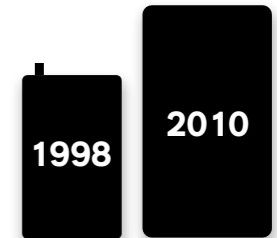
Mobility is the underlying force behind social networking.

Is it just phones?

No. The broader trend is about any pocketable device that's always with you and always connected.

At the start of the 2010s, all sorts of small, mobile devices are appearing:

- The Nintendo DS is now wifi-capable.
- The PlayStation Portable is connected too.
- Apple's iPod Touch is a powerful wifi-connected computer that just happens to play songs.
- The latest tablet computers are always connected, and becoming easier to use.
- The two kilo laptop of the 1990s has become the lightweight netbook of today.
- That netbook's typical eight-hour battery life and built-in cellular connection make it a truly mobile laptop.



If voice and text were all people wanted, cellphones would be getting smaller. But they have been getting bigger ever since 2000. It's clear evidence that consumers want more from their phone.

- Meanwhile the rapid falls in prices continue. The computing power that was state of the art in 2000 will soon be in a \$30 handset.

It will happen fast

The speed of change can be seen from the iPhone app store. *Three billion apps* have been downloaded from it since it opened in 2008.

Nokia, BlackBerry and other handset makers have also opened stores.

The speed of change can also be seen from the rate of sale of smartphones.

At the height of the 1990s internet boom, there were 200 million computers in total connected to the internet.

180 million smartphones were sold in 2009 alone.

And it will be huge

Half the people on the planet carry a cellphone with them all the time.

Nearly all use them constantly.

It is therefore likely that cellphones will become consumers' main computing device of the future.

There will be problems along the way

Of course, there are still many problems to be solved in the mobile revolution.

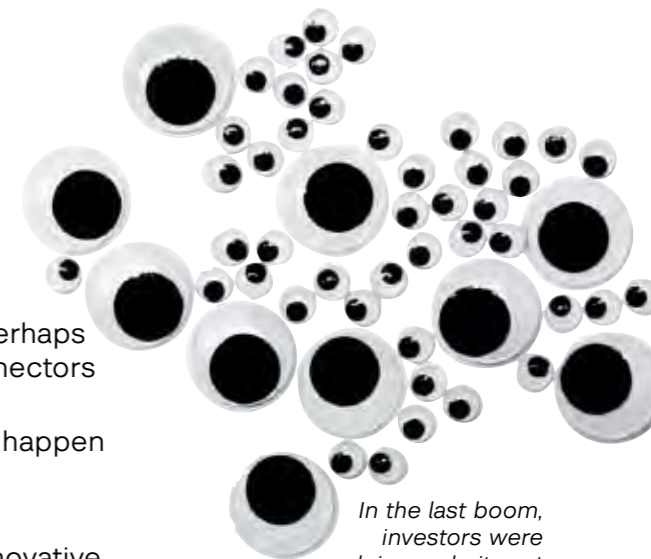
Programming interfaces for phones are complex and diverse.

	Top of the range desk-top, 1999	iPhone 3GS
RAM	128MB	256MB
Storage	20GB	32GB
Processor	500Mhz	600Mhz

The cellphone of 2010 is more powerful even than top-of-the-range computers at the height of the internet boom in 1999.

'Some analysts estimate that by 2015, almost all shipped handsets will be smart.'

THE ECONOMIST



In the last boom, investors were valuing websites at \$1000 per pair of visitor eyeballs. Beware of similar delusions this time round.

It's difficult to write apps for them. And the risk of piracy is high.

But it was the same in the early days of the internet.

Nothing quite worked. Data speeds were perhaps 1000th of what they are today, and the connectors and pipes kept breaking.

But it happened anyway. And the same will happen now.

This book

This book is for any telecoms executive, innovative marketer or bedroom coder dreaming of riches beyond the possibilities of avarice.

It is intended to be a sober reflection on what is going on.

When the irrational exuberance of the next boom starts, reach for it.

2. AN UNAMERICAN REVOLUTION

This one won't be centered in the United States.

The first internet revolution happened above all in the United States.

That was where the tech companies, the fast connections and the venture capital were.

This time it's different.

- The projects that set out to cover entire U.S. cities like Philadelphia with wireless access have gone quiet.
- Call quality isn't as good in much of the USA as it is in Europe or Asia. Call quality can be better in *India* than it is in New York.
- Most Asians and Europeans discovered texting in 1997. Texting only went mainstream in the U.S. in 2008.



The world's largest mobile network operator



Mobile signals are strong in Hanoi, Vietnam.



Madurai, India: four bars, and full 2.5G data



Transvaal, South Africa: 100% 3G



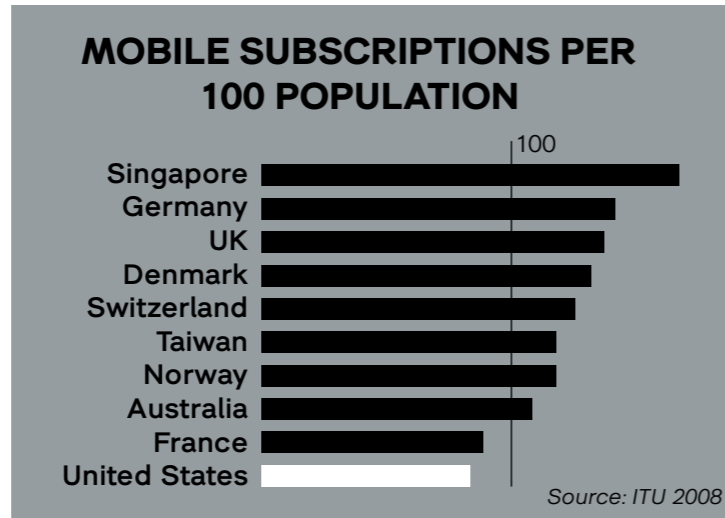
But low bars in New York

- Similarly, 2.5G data networks can work as well in the rural Third World as they do in major U.S. cities. You can be in a village on a remote Indonesian island. No cars. No infrastructure. But your BlackBerry will still work.

So

As a result, the mobile revolution is not localized – it's happening everywhere:

- The most discriminating phone users are in Hong Kong, where handsets are sold unlocked, contract-free and ready to go.
- Sending money by cellphone is happening first in Kenya. Mobile minutes have become a widely traded currency, and a phone-based system known as M-PESA has become the payment system of choice.
- Building payment card functionality into cellphones is happening in Singapore and the UK, and has been commonplace in Japan for years.
- High definition voice calls are already alive and well – in *Moldova*.
- The Obama campaign iPhone app arrived too late to impact the US election much. Cellphones were used better in South Africa's 2009 election, where the ANC databased and sent picture messages to 33 million cellphones.



By most measures, the U.S. is a relatively undeveloped mobile nation.



In 2005, the Motorola RAZR was a sexy \$400 phone for New Yorkers. By 2007, every taxi driver in Shanghai had one. Technology can get cheaper fast.



Phones work on underground sections of Vancouver's new Canada Line metro.



And they've worked for years on Singapore's MRT metro.



On Hong Kong's MTR metro, they even work under the South China Sea.



But they still don't work on most North American and European mass transit systems.

- In Germany, Lufthansa have replaced paper tickets with barcodes sent to their passengers' phones.
- Low income isn't a barrier because of the international reach of telecoms companies. For example, the biggest player in the Ukrainian mobile network operator market is a joint venture with Norway's Telenor. This ensures that Ukraine, per capita GDP \$3000, gets similar infrastructure to Norway, one of the most advanced cellphone countries in the world.

Third World first

Indeed, the cellphone-based internet may move faster in poorer countries than in the West.

Put a copper telephone wire into an advanced industrial country, and fifty years later that wire will still be there.

In a poorer country, that wire will have been dug up for scrap within a month.

This put poorer countries at a massive disadvantage during the fixed-line internet boom.

But this also means that the mobile internet is now their only internet in poorer countries.

So mobile innovation there may be faster.

This boom should be democratic

The cellphone-based internet boom could be the most democratic technological boom in history.

The last internet boom was, at its peak in 1999, about two hundred million rich people.

Only they could afford the kit.

With mobile, it's different.

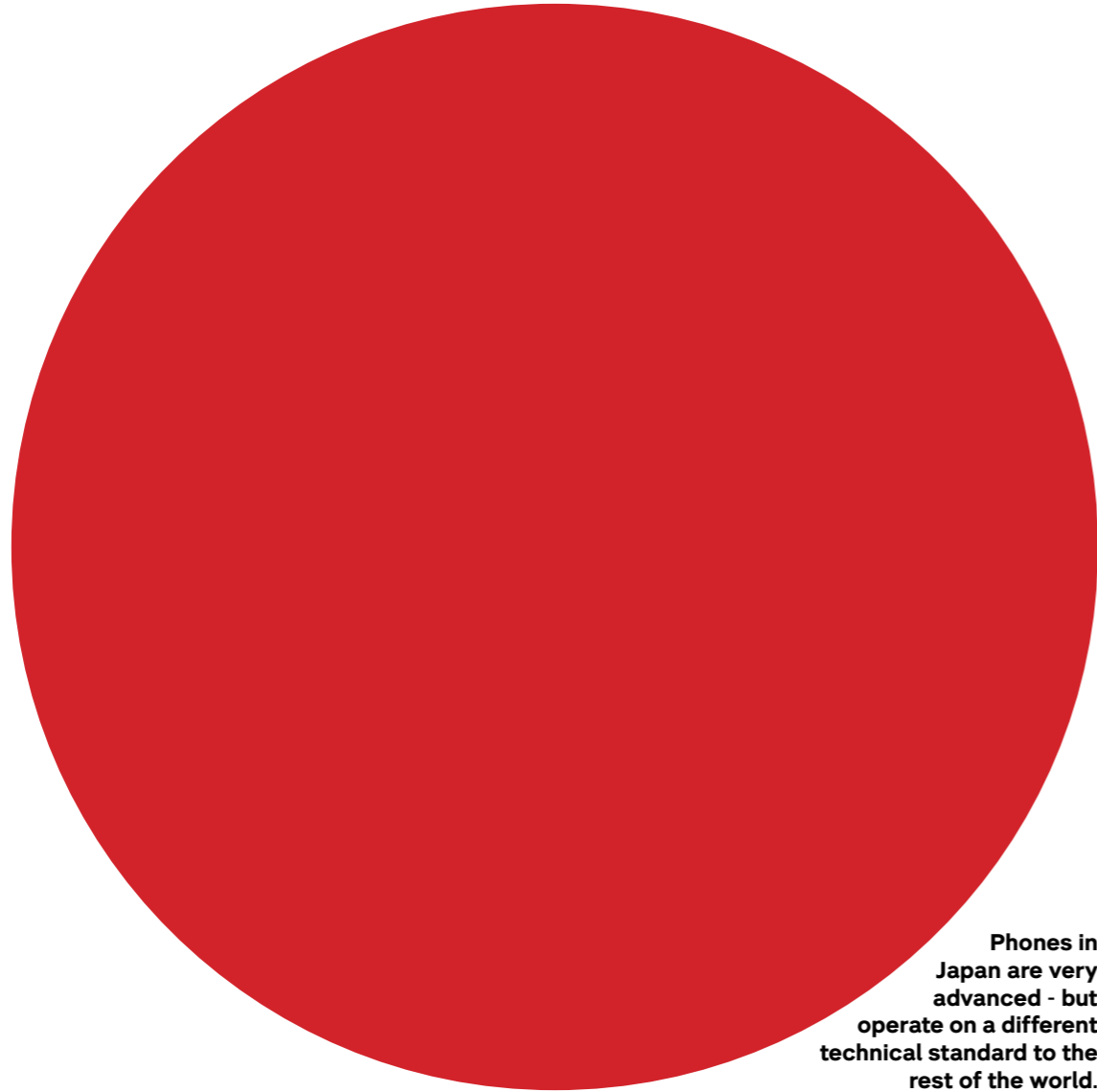


*Cellphones allow Indian peasant farmers to negotiate a price for their livestock **before** they spend a day taking it to market.*



A typical Indonesian sends over 800 texts a month.

The average woman in Sub Saharan Africa touches her hair 37 times a day. But she checks her cellphone 82 times a day. Source: Millward Brown 2008



Phones in Japan are very advanced - but operate on a different technical standard to the rest of the world.



Even in a middle-income country like Thailand, middle class youth update their handset every six months.

Half of the planet - three and a half billion people - has a cellphone.

Soon smart features will be on the \$30 handsets all of them can afford.

And computing power will suddenly be in the hands of most of humanity.

So

This should be a wake-up call to entrepreneurs everywhere. This is the boom that will pull the world out of the recession:

- Projects to put laptop computers into poor communities have struggled because you need to be literate to use a computer, and 25% of humans aren't. But people who can't read use cellphones without problem.
- Past research by the London School of Economics has shown emerging countries grow 0.7% faster because of the economic empowerment voice calls from cellphones provide. Peasant farmers use them to get a better price for their corn; poor fishermen use them to trade with ports. Phone-based mobile computing power should make emerging countries grow *even faster*.

Cellphones can be a powerful tool in elections.





Waterproof phones are big in Japan because they have a TV function. And Japanese like to watch TV in the bath.

3. SHAPE OF A PARADIGM-SHIFTING INSIGHT

In a boom like this, the winners will be those with the paradigm-shifting insights.

But where do you find such an insight?

It's the most difficult question in the world.

Pioneers can't express what's new

When the internet first appeared in 1993/4, no one could quite explain to outsiders what was so good about it:

- Email let you send messages to anyone with an email address. But the only people with an email address in 1994 were scientists. So to non-scientists, email sounded *completely pointless*.
- The first webcam went live in November 1993. It allowed computer scientists in Cambridge, England to monitor beverage levels in their department coffee pot. But why, wondered outsiders, didn't the scientists just go around the corner to check the pot? And why would anyone on another continent want to look at it?

'The future is already here. It is just unevenly distributed.'

WILLIAM GIBSON

- In 1994, the funniest thing on the net was a scientific paper about exploding toaster strudels. Yes, it was funny. *If you were a nerd.* It's always the same with great conceptual leaps. Before they happen, no one can see their value. Even early adopters can get things wrong:



Today, many senior managers ask their staff to update their Facebook for them.

- Some companies got into email enthusiastically in the early 1990s - they put a computer in the mail room next to the fax machine.
- When YouTube appeared in 2005, cutting-edge teens started uploading videos they'd made. But when viewers re-pasted their videos onto other sites, the authors complained it was *stealing*. The concept of sharing, critical to the success of social media, only came later.

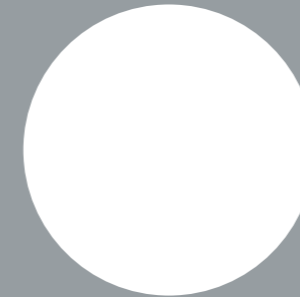
Commercial agendas then blur the picture

Ever since computers were invented, marketers have been over-optimistic about what they could be used for:

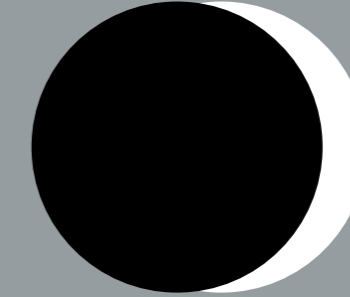
- In 1969, marketers suggested that you put a computer in your kitchen to store your recipes on. A computer at the time cost \$4000. A paper notebook cost \$1 - and was less likely to lose your recipes.
- In 1993, marketers encouraged people to buy a new computer so they could watch postage stamp-sized multimedia clips on them. Hadn't they heard of TV?
- In 1997, hardware companies toured the world trying to sell companies their own web servers. Why not just rent space from an ISP?

Commercial agendas can be seductive.

WHICH OF THESE IS AN INSIGHT?



1. You look at the moon, and you wonder whether it is falling in space, just like an apple falls to the earth.

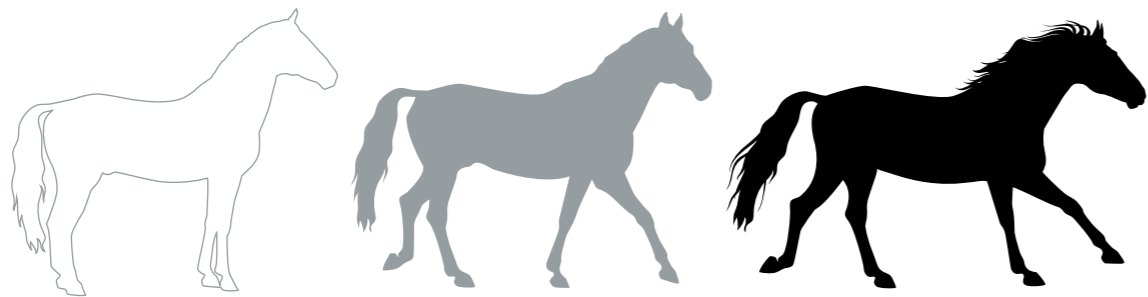


2. You look at an eclipse and you wonder why it is that the sun and the moon are exactly the same size.



3. You are in an elevator at the top of a tall building and the cable snaps. As you fall, you feel weightless, and you wonder – at that instant is there any real difference between being in a falling elevator and floating in space?

1. Does the moon also fall? was the question that Isaac Newton asked himself. It led him to his theory of gravity.
 2. The sun and the moon just happen to appear the same size to us. If the moon was further from us, it wouldn't quite cover the sun. If it was nearer, it would appear bigger. No insight at all.
 3. Albert Einstein described 3. as the luckiest thought of my life. It led him to his General Theory of Relativity.



'If I'd asked the consumer what they wanted,' said Henry Ford, 'They'd have asked for a faster horse.'

But they can confuse the hell out of you.

And ordinary people can't help you either

Consumers in focus groups aren't much help either.

Before the arrival of the BlackBerry in 2003, few could see the value of having a cellular connection on their PDA. A cellular connection would make it a phone. And they already had a phone.

'Intrusive' said others. 'Why would anyone want to receive emails outside their office?'

It was the same before Nintendo launched the Wii and the DS. Few women could accept that they would ever get hooked on video games.

When faced with paradigm-shifting inventions, most consumers can't see further than the end of their nose.

Or as Henry Ford put it in 1909, 'If I'd asked the consumer what they wanted, they would have asked for a faster horse.'

So

Other people aren't much help when it comes to searching for that crucial insight.



She uses it to flirt.

She uses it to update her Facebook.

She uses it to whisper into his ear at night.

She uses it to share pictures of her life.

It is the first thing she looks at in the morning.

And the last thing at night.

The cellphone is not personal technology.

It is the most intimate electronic device ever.

You're on your own:

1. Don't expect a 'eureka' moment. Great new ideas feel uncomfortable rather than brilliant.
2. Work out a better way of validating your idea than just exposing it to other people.
3. Spend time cleaning up your idea: quite often you'll discover that your great idea was a mashup of several quite good ideas and one really brilliant one.
4. Question all past assumptions. The flashback was considered the worst cliché in film until Anthony Zuiker revived it as the basis of storytelling within CSI.
5. Work out what's fixed and what isn't. Online clothes retail has been dominated by price-oriented former catalog retailers. But it doesn't have to be that way. In the UK, online fashion company asos.com attracted fashionistas by featuring top models such as Daisy Lowe and endorsements in Elle.
6. Don't worry about lack of logic in your process. 'First you make the intellectual leap,' said Einstein. 'Then you work out how you got there.'



GPS directions, SMS alerts and booking by web are transforming the hire car business.

4. SO HOW DO YOU COME UP WITH AN IDEA FOR A MOBILE APP?

It's the million dollar question at the moment.

These thoughts may help you:

1. Make stuff easier

People don't like complex processes.

They type domain names into Google rather than into browser address bars.

Not because they need to search, but because Google doesn't make you type *www.* and *.com* to get you to the right place.

Think lazy.

2. Think simple

In the age of desktop computing, software was often complex.

But the user of mobile apps may well be drunk, or half asleep, or distracted.

To succeed in this new era, software needs the simplicity of consumer electronics devices.



Steve Krug's 2005 classic book 'Don't Make Me Think' urged web designers to make their navigation clearer. 'Don't even think about making me think' might be a good mobile sequel.



DID YOU MISS THIS IDEA?

Back in the 1990s, the most popular search engine was called AltaVista.

One of its cool features was its ability to list links coming into your website.

All you had to do was type *'link: xyz.com'* into the search box and up came a list of other sites that had linked to *xyz.com*.

It was a pretty cool feature. You could see how your web page was becoming more influential, and which journalists, websites and others had noticed it.

Lots of web-savvy people knew this, and used it to reveal valuable insights.

But the most valuable insight was staring everyone in the face.

And no one saw it.

If the number of links coming into your site was a good measure of your site's popularity, would it not also be a good measure of other sites' popularity?

And so if you ranked sites using this popularity measure, would you not create a better search engine?

If you'd had this insight, you might today be worth over a hundred billion dollars.

Because you would have invented Google.

3. Cut out steps

As every e-commerce analyst knows, every stage a customer has to go through to buy loses sales.

Amazon's big leap forward was one-click purchasing. *Simplify your process too.*

4. Don't let 'mobile' confuse you

People use their cellphones for voice calls at home.

Don't let the 'mobile' moniker make you think 'out of home'.

5. Don't worry about gravitas

At \$50 a DVD, an Xbox/PS3 game has to be pretty compelling to work.

The criteria are much lower for \$1 apps.

In *'Pocket God'* you manage an island of primitive people who fall into the sea and get eaten by sharks if you tilt your iPhone.

It's pretty pointless.

But at \$1, it's a hit.

Similarly, *'Paper Toss'* simulates throwing a ball of paper into an office waste paper basket. It's not quite as immersive as *Doom*. But at \$1, it doesn't have to be.

6. Focus on the eternal

Language, say evolutionary psychologists, evolved so that humans in the hunter-gatherer environment of 50,000 years ago could better evaluate each other's suitability for mating.

As computing becomes a more mainstream human activity this decade, it's likely that its prime use will become not spreadsheets, or databases, but *flirting*.

'Fate rarely calls upon us at a moment of our choosing.'

OPTIMUS PRIME



DID YOU MISS THIS ONE TOO?

In the 1980s, there was an app called Hypercard.

It was a virtual Rolodex, but one where you could create clickable text links from card to card, allowing the reader to follow their own information trail through the stack.

Hypercard came free on every Mac.

But virtually no one used it.

And no one asked the million dollar question: whether Hypercards around the world were connected together.

If they had asked that question, they would have invented the World Wide Web.

7. It's about boy meets girl

Indeed, forget all the garbage about new forms of society.

People still spend most of their lives finding the right partner, relating with them and having children with them.

Men haven't changed much since Botticelli drooled over Simonetta Vespucci five hundred years ago.

Technology may facilitate human nature.

But it will never change it.

8. Concentrate on the universal

When Steve Jobs was thinking about launching a mobile device in 2000, his staff pushed him to launch a Personal Digital Assistant. After all, more and more people were bringing them to meetings.

Jobs didn't think most people needed a PDA.

But people had been listening to music since the dawn of mankind.

So he launched an MP3 player instead.

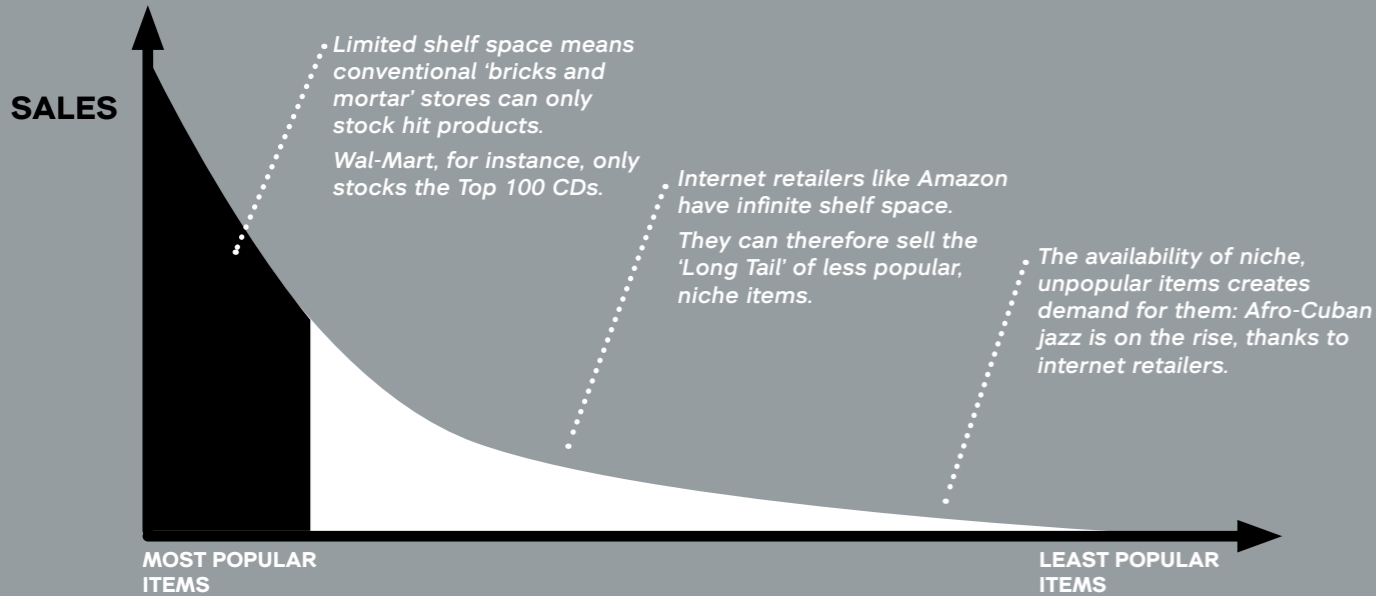
9. Focus on the human condition

Most people are dissatisfied with search engines not because they don't know how to search, but simply because they don't know what they want.

If you can work it out for them, you will become rich.



Evolutionary psychologists tell us that language developed in humans to aid selection for mating.



DOES THE LONG TAIL WORK FOR APP STORES?

The Long Tail has been the biggest economic theory of the internet.

But does it work with app stores?

App stores have infinite shelf space, and should be able to sell an infinite number of apps.

But the number of apps in Apple's store has now passed 100,000, and many developers are struggling to sell theirs.

The problem is not shelf space but marketing: getting the app into the consumer's mind, and keeping it there long enough for them to buy it.

Shelf space on the app store may be infinite.

Shelf space in the human mind is not.

In fact, most humans struggle to deal with more than one brand for each need they have.

As a result, eBay is the only player that matters in auctions; Google has most of search.

And that's why, in the new era of frictionless commerce, the biggest economic effect has not been the Long Tail.

But 'The Winner Takes All'.

10. Don't worry about downturns

Google's big growth spurt was in 2001-5.

There was a tech bust at the time, so Google never acquired any competitors.

Bad economic times give good ideas a clear path.

11. Look for weaknesses

It came as a real surprise to the photographic industry that no one wanted to print pictures from their digital camera, and preferred to keep them on Flickr or Facebook instead.

It shouldn't have.

Most thirtysomethings have crates of photos in their attic that they never look at, and can't easily share.

The problems mobile apps can solve are right in front of your nose.

12. Look for problems

When postal services went on strike in the 1980s, businesses bought a fax.

And once they experienced fax, never went back to postal mail.

Spot the problem – *and fix it.*

13. Feel the power

Trucks get jammed on narrow roads because their drivers follow satnav instructions blindly, regardless of road conditions.



Inspiration can come from anywhere.

'Isn't it funny' said the governor of the Reserve Bank of Zimbabwe 'that by implementing quantitative easing, the whole world is now copying my economic policy?'

Expect people to follow life instructions on cellphones just as blindly.

Be careful what you ask people to do – *because they may well do it.*

14. Don't overburden your user

Wii Sports Resort doesn't unlock 100 pin bowling until you are good at 10 pin bowling.

Grand Theft Auto 4 doesn't unlock Manhattan until you're familiar with Brooklyn.

Apple didn't let anyone customize buttons on the iPhone for its first six months.

Introduce complexity slowly.

15. Don't overburden your partners

At its launch, the iPhone was just a phone with a cool new touch interface.

Conceptually, it was easy for mobile network operators to buy.

If Apple had offered the phone to them with the iTunes and app stores from day one, the lawyers would still be negotiating the launch revenue splits today.

Again, introduce complexity slowly.

16. Solve big problems

Google solves big problems – like the need for a global visual street map - using solutions with scale.

Solutions with scale can make you *impossible to copy.*



In India, apps like Nokia's Life Tools provide peasant farmers with agricultural information and prices.



'If I have seen further, it is because I have stood on the shoulders of giants', said Isaac Newton. There's nothing wrong with a little plagiarism.



10% of your mobile app users are also watching TV.



10% are in the dark.



10% are half asleep.



And 10% are drunk.

Then BurdaStyle.com started offering downloadable dress patterns. Alongside this, they created a home dressmaking community, allowing women to share pictures of dresses they'd made online. Home dressmaking is now on the up again.



If an idea once fulfilled a need, it could do so again.

18. Recognise the new state of news

In the past, the big news stories were things like the fall of the Berlin Wall.

Today, celebrity news is big - when Keisha Buchanan left the Sugababes in 2009, the tweets went on for months.

So if you're designing an information app, think hard what information *really matters* to people.

19. Don't assume previous generations knew more

The Guns'n'Roses rock classic 'Sweet Child o' Mine' ends with the repeated lyric 'Where do we go now?'

Not because the group wanted to express existential angst.

But because they didn't know how to finish the song.

And so

And so it always is with the web.

The insights are sitting in front of you.

People pass them every day.

But only one person in a million can see them.

The ability of cellphones to create flashmobs needs further exploitation.

**'Do or do not.
There is no 'try'.'**

YODA

5. THE DIGITAL DOWNWAVE

In 1997 the bookshop owners of the world quaked at the arrival of a new competitor.

The new competitor offered a hundred times more books than they did, much lower prices and free delivery to their customers' homes.

Furthermore, it could find any book within a second.

Did it cause a crisis in bookshops?

Did the new competitor trigger a crisis in bookshops?

Oddly it triggered very little reaction at all:

- Some bookshops installed sofas.
- A few others put in coffee shops.
- The rest did nothing.

The result?

The result was that a few bookshops suffered.

But most were unaffected.

The bookshops grew.



CUT COSTS THE LOW COST AIRLINE WAY

Digital entrepreneurs should study the masters of digital cost cutting, the low cost airlines:

- Low cost airlines cut travel agents out of the booking process, and sent their customers to the web, saving 12% of the cost of a flight.
- They then made their customers print tickets out themselves, thus cutting out check-in staff.
- By refusing to transfer bags from flight to flight, low cost airlines then cut costs further. But this also allowed them to claim *fewer lost bags* than full-fare airlines.
- Then, by flying to secondary, less congested airports they cut costs further, but also became *the most punctual airlines in the world*.
- Secondary airports meant they could also promise to get leisure travelers to *beautiful countryside faster*.
- Then the low cost airlines sold click-thru ads on their websites to hotels and car hire companies. Empty space on their websites became a big profit center.
- Then they flexed their muscles: they established that they could move their flights from airport to airport on a whim.
- As a result, the tables turned. Low cost airlines stopped paying airports to land. And regional governments started paying them to fly tourists in.
- By the early 2000s, low cost airlines had captured the entire marketing budget of some tourist boards. Why spend money on marketing when government will do it for you?

The new competitor – Amazon.com – grew. It was the weirdest industrial revolution in history.

Why?

In hindsight, we can see why.

The internet boom happened at the same time as the credit bubble.

Consumer incomes were growing by four percent a year.

And house prices were rising too.

Internet-based businesses could grow.

Traditional businesses could survive.

And no one had to lose their job.

An odd revolution

This isn't how it normally is in technological revolutions.

Previous ones have been about the destruction of the old as much as they have been about the creation of the new:

- As the Industrial Revolution swept Britain in the 1820s, automatic weaving looms put handweavers out of work on a massive scale. The unemployed handweavers broke into mills, smashed up the new machines, and *rioted*.
- Later the same decade, the railroads arrived. And the canal industry *went out of business*.
- The railroads then made it much easier to move goods across the US and Europe. So the price of goods fell. And falling prices brought decades of *deflation*.



This decade, the image of the internet as a fun, shiny, positive force with no downside may disappear.



Past industrial changes have shaken up lives.

Expect this one to do so too.



Deflation means people may be shopping in Tokyo. But they're not buying.

Now in 2010

The credit bubble is now over, and digital businesses are now growing at the expense of old ones.

So watch out:

- In the nineties, no one carried computing power with them as they went shopping. So the new low prices on the internet never quite met the higher prices on Main Street. Today, phones are becoming able to read barcodes and compare prices as you shop. *Expect the full power of internet pricing to be unleashed in the 2010s.*
- Book publishers thought that they had been spared the downside of the internet, as pirates focused on music and film rather than books. But publishers depended on the book sections of newspapers to promote their titles. And in 2009, cash-strapped U.S. newspapers all dropped their book sections.
- Some computer game designers are shocked by how the bottom is falling out of their world as \$1 apps on cellphones become the standard way to play games. *No one is safe.*



Unemployment in the United States is now 10%. The wolf is at the consumer's door.

So

Perhaps the best advice this time round is, no matter how innovative your idea, cost cutting is going to be a key element of it.

- Don't dismiss cost cutting as being unsexy. If you can cut costs enough, you create new markets.
- Imagine the power of bringing services that were once the exclusive right of rich people within the reach of the average human being. *You could change the world.*

6. WILL MOBILE DATA SAVE THE TELECOMS INDUSTRY?

Cellphones were a deadzone in the West in the mid 2000s.

People weren't making any more calls.

They weren't sending any more texts.

And regulators were squeezing the price of everything.

Almost overnight, mobile network operators, the darlings of 1990s business, had become a smokestack industry.

Then

In 2006, most people thought mobile data was a no-hoper.

Then in 2007 came the iPhone.

The first iPhone users used forty times as much data as anyone else.

Even before the app store arrived.

Today, mobile network operators stand at the center of the mobile data boom.

But they have lost control of markets in the past, and they could do so again:



Now 99p at Tesco.

- In the nineties, mobile network operators left ringtones to third parties like Jamba's Crazy Frog.
- Others made the money in personalized phone covers too, and in wallpapers and screensavers.

Here are some principles mobile network operators should consider this time round:

1. Don't fight the consumer

In the early nineties, mobile service providers hid the text functionality of their phones from consumers, arguing that every text sent was one fewer phone call made.

They refused to accept that texting filled a separate need for discreet, non-synchronous communication.

When consumers in Europe and Asia discovered texting for themselves in 1996/8, it didn't kill voice calls.

But it did grow into mobile service providers' number two revenue stream.

2. Own the address book

The cellphone's address book app is little changed since 1990.

Which is a shame.

An address book with automatic remote back-up could have kept users loyal after number portability arrived.

What other improvements could be made?

- The ideal address book would allow you to share phone and email details with new friends just by clicking 'accept'.

'The \$116 billion business of selling cell phone calls in the U.S. faces a long, ugly decline.'

FORBES

NOVEMBER 2009

- It would then update your details on their phones automatically.
- It would also allow you to share pictures with them.

Mobile network operators and handset manufacturers are working on this.

It could provide real added value to their phones.

But if they had done this ten years ago, they could have avoided the slide into being a commodity business, and created loyal, premium customers.

They might also have invented Facebook.

3. Work out the billing

Most app stores are struggling because of complex billing procedures.

Mobile network operators already have a gold-plated billing relationship with their subscribers.

Single-click billing needs to happen now.

4. Don't think commodity

Because telecoms is full of metrics like *Average Revenue Per User*, most telecoms execs have ended up believing that they work in a numbers driven, commodity industry.

Not so.

In their growth phase in the 1990s, mobile telecoms were about raw human emotion, personal relationships, and a positive future for mankind.

The mobile telecoms industry has always done better when it has been *inspired by the future*.

5. Don't make things complicated

Some fixed line telecoms operators have employed confusion marketing for decades, to prevent their



Does your telecoms company risk being a clone? Read this: pubs.yr.com/clones.pdf



SIM-enabled photoframes from Softbank allow young urban Japanese to update their parents in the countryside with photos from their phones automatically. The future is less and less about voice-centric devices.

customers working out what a bad deal they are getting now that they make most of their calls from their cellphone.

This confusion marketing mentality has seeped over into mobile telecoms, as regulators squeeze.

Confuse your customers, and you'll eventually lose them.

6. Don't copy

Most telecoms companies have excellent competitor information.

But they use this information to copy each other.

If one telecoms company launches a netbook with a built-in simcard, they all launch a netbook with a built-in simcard.

Companies that do exactly the same thing end up competing on price.

Profits start through differentiation.

7. In fact, think different

Mobile network operators rarely think beyond voice and text.

But cellphones had other uses, even before data.

In Japan, over sixty percent of men use their phone as an alarm clock. Axe Japan served their phone up a new alarm-clock babe every morning.

In other countries, Axe used cellphones' ability to emit a high pitched whistle to turn them into fake scanners for body piercings.

There's a lot more value even to basic cellphones than just voice and text.

APPS ARE GREAT. BUT THE BASICS OF THE HANDSET STILL NEED FIXING:

The weird navigation system, designed by engineers for other engineers.

The button that sends your call to voicemail as you pull the phone out of your pocket.

'Confusion' mode.

The lack of one-click remote backup.

The lost charger you can't replace.



The difficult-to-change four rings to voicemail. If the phone's at the bottom of your handbag, you need at least eight.

The software upgrade that takes 36 steps to install.

The button with the funny symbol that stops the phone working.

The multiple SIM problem: many travelers around China carry a separate SIM for each city they visit.

The complex calling plan. 99% of phone users don't understand their calling plan.

8. Get a vision

In 1980, Microsoft set out its mission to 'place a computer on every desk, and a computer in every home.'

It was a sharp commercial vision.

And one that has driven the company for three decades.

Computers are now moving into cellphones.

So mobile telecoms now needs such a mission.

Will anyone find it?

Most mobile telecoms companies are publicly traded.

And the next quarter's results play a huge role within their decision-making.

Defining a mission will need a longer horizon than three months.

7. THE SOCIETY OF TOMORROW IS THE TEEN SOCIETY OF TODAY

If you're a cool fourteen year old girl, the book you're reading at the moment is likely to be about young women having relationships with vampires.

It's a hot publishing genre known as 'Fang Bang Lit'.

And for you, the biggest thing of 2009 was the second Twilight spin-off film, 'New Moon'.

Much of the publicity for New Moon was online.

And it was very effective:

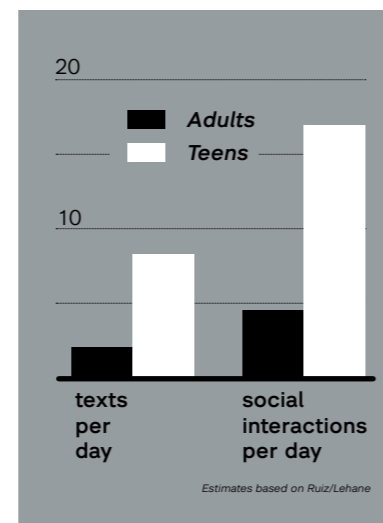
- Tweets about New Moon peaked at about 80,000 per hour.
- Live Ustream webcasts were picking up 3 million live viewers.
- YouTube trailers were picking up 24 million views.

The marketing was viral.

But the effect was mass.

This is important

Watching teens is important because the teens of



To see the behaviors of the future, study teens.



ARE TWEETS TOO BANAL?

Journalists moan that most tweets contain banal information.

And they are right.

But people have always been interested in banal information - if it's about a celebrity, or someone they have a crush on.

And it's always been like that.

During Beatlemania in the 1960s, the media focus was not on the Beatles' mystical beliefs - that came later.

It was what brand of toothpaste they used.

When Allied generals were planning the Normandy invasion in 1944, their aides

remarked that they first opened their newspapers at the *cartoon strips*.

Today, via Twitter, the thrill is that you can find out what Miley Cyrus is thinking as she thinks it.

Or Alyssa Milano.

Or the Jonas Brothers.

And all without the intervention of PRs. (Or so it would seem.)

People are more interested in the personal than in the public.

And always have been.

today are the adults of tomorrow. And the teen habits today are the all-adult habits of tomorrow.

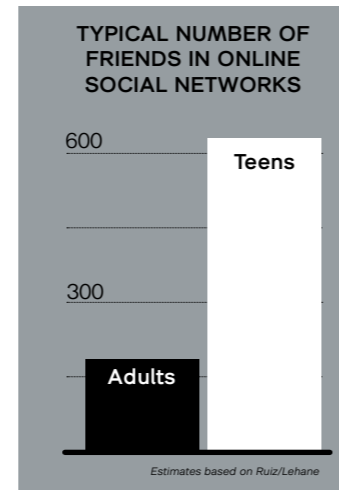
- Boy gamers of the eighties are now middle-aged gamers.
- Those who rebelled in blue jeans in the sixties are now retiring in blue jeans.

So, from our observations of teens, it's clear that in the future:

1. Everyone will be socially networked. Because otherwise they'll never get invited to anything.
2. No one will ever lose touch with anyone.
3. Social networks will be valued for the security they offer. You don't want to date a psycho. Psychos don't have many friends on Facebook.
4. Celebrity culture will grow and grow. The internet allowed people further into celebrities' lives than ever before. The mobile internet allows them to follow those lives 24/7.
5. It will be normal to let other people monitor where you are through GPS. If your signal switches off, your friends will think you have been kidnapped. And your boy/girlfriend will know you are up to no good.
6. Linking the cellphone to the cloud will be important. Lose your cell and you lose your life.
7. You don't pay for air. Why pay for music and film?
8. Analog TV constantly exposed viewers to new thoughts – people only watched nature documentaries because there was nothing else on. Today, there's much more choice, so sports fans only look at sports, and geeks just look at tech



Websites about kittens get more hits than those of major corporations.



Adults, particularly those aged 30+, just aren't sociable.

sites. Expect this to make people *more narrow-minded* in the 2010s.

9. There will be no privacy, and no one will care.
10. Well not quite. As one teen put it to our researchers: *'My rule #1 is no cameraphones in the bedroom. My friend Babsie forgot. By the time she came to school the next day, she was 'BJ' Babsie.'*

Over the next decade, urban society may redevelop characteristics of the tribal environment where mankind lived in the prehistoric era.

Where there was no privacy.

And everyone knew who you were sleeping with.

And what you thought and did.

8. WELCOME TO THE CLOUD

Lars sits in a bar and listens to music.

The music is coming from Spotify.

From the cloud.

Wei lies in bed listening to Nokia's Comes with Music.

It too comes from the cloud.

Anna loses her iPhone.

But she doesn't worry about her addresses and datebook, because they are safe.

Backed up in the cloud.

When she gets home, the cloud tells her where her iPhone is. The cloud shows her on Google Maps that it's still at her boyfriend's house.

Vodafone 360.

Spotify.

Comes with Music.

MobileMe.

The era of cloud computing is upon us.

Here are the issues involved:

Is it mine?

Don't assume that just because customers are storing their data in the cloud that we are entering a new era of cloud communism. People still need to feel



Cloud photo storage on sites like Flickr and Picasa is rapidly replacing the family photo album.



and believe their data is still theirs. The need to own, collect and possess is basic humanity.

Is it safe?

People like the cloud, because even if their pad is burgled, their stuff is still safe in the cloud. If it isn't safe, that's a problem. Some big services have lost their users' data completely. That's a huge problem.

What happens when I'm out of range?

The cloud is going to be a pretty crappy service on 3G connections for the next few years. And people won't be on wifi hotspots all the time. Smart software that predicts what you're going to need next and then downloads it before you realize you do is critical.

Why the hype?

The cloud, say some, is there to store stuff that won't fit on your mobile device. But 80GB of flash memory fits in a sugar cube nowadays. RAM is cheap and getting cheaper. 'Everything is moving to the cloud' say cloudvangelists. *Really?*

Are you saying my phone is dumb?

People have been predicting for years that PCs will become dumb terminals, and it's never happened.

Will it happen with phones?

Phones are status symbols – *and there's not much status in a dumbphone.*

I want it now

The cloud makes a lot more sense if it's about giving you access to stuff you must have *now*. Expect the need for instant satisfaction to grow and grow in coming years.

Growth needs incentives – like Amazon.com's offer to



Most handheld consoles from PSP to Nintendo DS nowadays talk to each other.

They could be portals into a new generation of cloud-based games.



Cameras are starting to upload to the cloud automatically.

let you download Rihanna's 'Rated R' album as MP3s for \$4 in the first 48 hours.

The third cloud

The third cloud is about people sharing stuff on their devices in a peer-to-peer way.

Sharing songs and videos can be a very intimate act if you do it face to face.

The third cloud could be big.

Video beats audio

People want to possess music, because they listen to tracks over and over. They usually want to watch most TV only once.

So cloud video streams make more sense than cloud audio, once bandwidth rises.

So

Expect great things from the cloud.

But not what tech gurus predict.



Lovers have always whispered sweet nothings to each other.

They are starting to wifi and bluetooth stuff to each other too.

9. WARNINGS FOR MOBILE ENTREPRENEURS

In early 2000, the stockmarkets crashed. Venture capital dried up.

The speculators who had hoped to sell on their dotcom shares to greater fools headed for the hills.

And Generation X looked at their worthless corporate shares and options. And realized they had not been paid for two years.

Most entrepreneurs lost everything in the last internet boom.

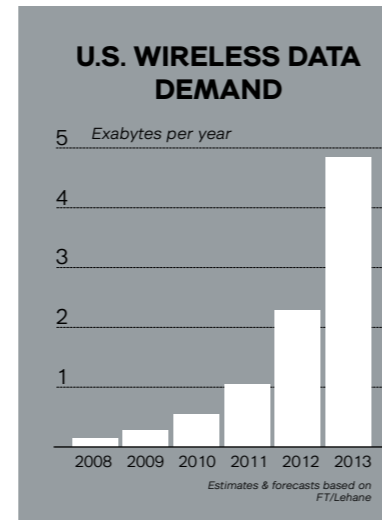
Here are some of the traps this time round:

Don't believe the hype about faster data speeds

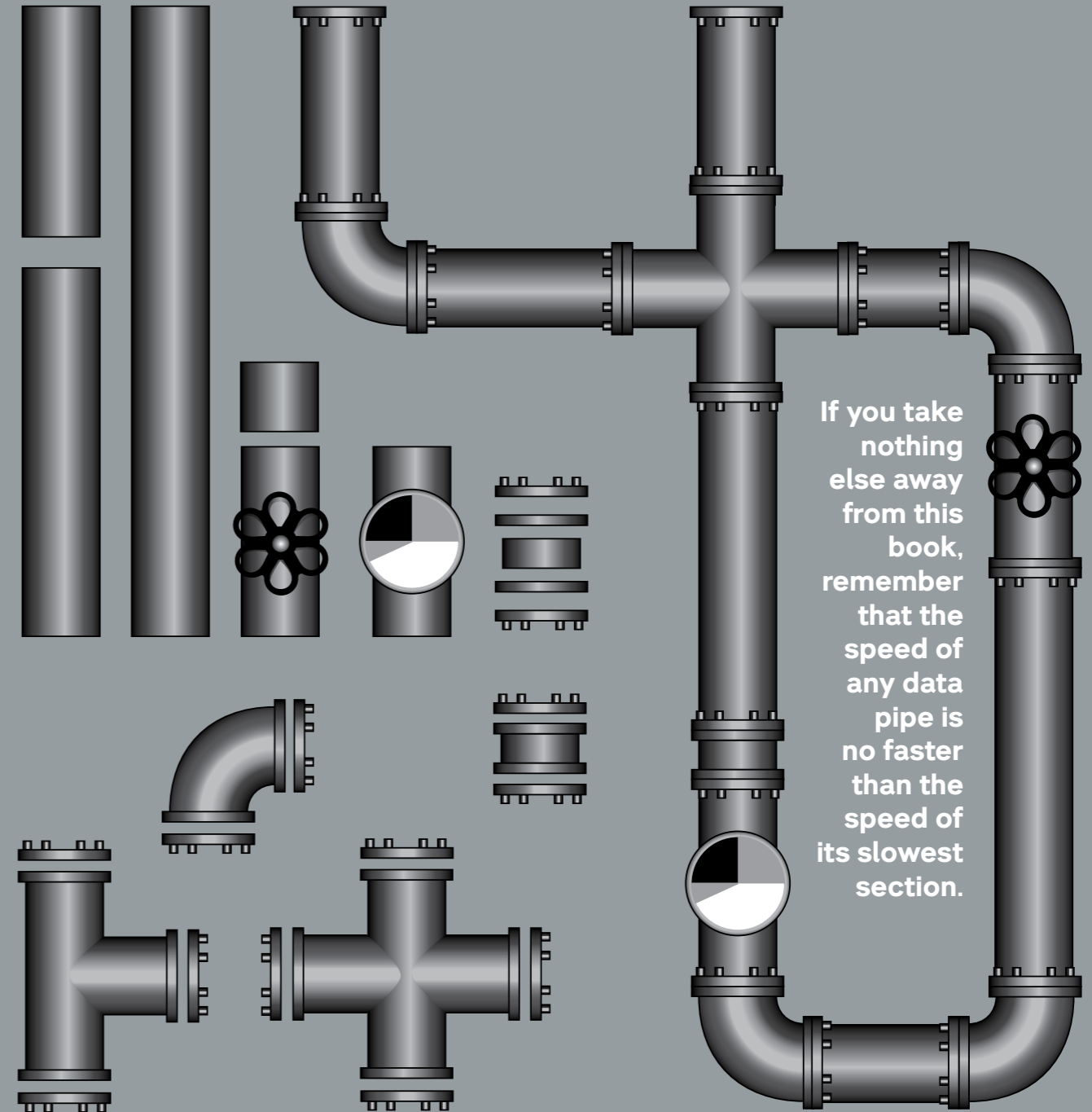
It's more likely that *demand* for mobile data will grow exponentially rather than the *capacity* available to transmit that data.

So data transmission speeds in the future may be not faster, but slower.

The winners in the first internet revolution planned for slow data speeds, on the principle that you shouldn't have to wait for their services.



It's demand, not capacity that will rocket.



Fast loading ugly sites like Craigslist survived.
Slow loading beautiful sites didn't.

Don't believe in 3G

Don't assume that because you are designing apps for 3G phones that you can rely on 3G data speeds. Telecoms companies in most countries have licences committing them to 3G voice, not 3G data.

And remember the 3G voice spec in most countries is for reception outdoors.

In many countries, 3G voice doesn't work indoors.

Don't ignore the fine print

When an internet service provider promises a fast download speed, download speed is what they mean.

Upload speeds can be less. A lot less.

But keep your ear to the ground

3.9G should appear first in Japan in about 2012. It will give data speeds to cellphones of up to 100 megabits a second – the same as today's state-of-the-art fixed line fibreoptic broadband.

Don't manufacture garbage

Most software companies don't die through a lack of innovation. They die by flooding their userbase with buggy software releases.

Don't replace your winning version 1.0 app with a rushed beta 2.0 app.

'Permanent Beta' only works if you're 99.9% right.

'Permanent Alpha' is corporate suicide.

Don't have teething problems

In the nineties, most e-commerce sites lost most of

**'Never be
satisfied with
ninety nine
point nine nine
percent.'**

FAKE STEVE JOBS



Some of the best mobile developments have little to do with 3G.

Contactless payment systems rely on near field, not cellular communications.



HOW TO SURVIVE THE VIRTUAL OFFICE

Sometime soon, some management guru will write a book arguing that as computing moves over to mobile devices, we no longer need fixed desks in our offices.

The same happened in the late nineties: the arrival of laptop computers let people argue that desks were no longer necessary then too.

If your company does this, here's how to survive:

1. **Don't become a teleworker.** Teleworkers rapidly lose influence. They are then the first to be fired.
2. **Start a dirty desk policy** - spill coffee over the desk you want to keep, so other people will not want it.
3. **Leave a jacket over your chair permanently.** Not only does it create the impression that you

are still in the office after you've gone home, it keeps people from stealing your desk the next morning.

4. **Leave a big, heavy, low value item permanently on your desired desk.** A suitcase full of rocks is perfect.
6. **Bring in your own pocket 3G wifi hub, and release the password only to favoured individuals to network their iPod Touches, Nintendo DSs and PSPs.** Branding the hub identifier 'Pete's wifi' shows coworkers who's boss.
8. **Bring your dog to work.** Dogs are good at guarding territory. (This works well in Germany and Scandinavia, where bringing your dog to work is seen as a basic human right.)

their customers between the catalog server and the e-commerce server. They never came back.

Amazon worked from day one. And the efficiency of the logistics in their Seattle warehouse was stunning from day one too. Even in 1997 they never sent you the wrong stuff, and were the only e-commerce site that didn't.

An airline takes a year to recover from launching a new terminal and losing everyone's bags. An e-commerce operation is dead by then.

Don't offer pointless updates

Don't you get annoyed when an app keeps asking you to download a pointless update? *So don't do it with your app.*

Don't delay

1992 saw the announcement of the satellite phone - a portable phone that connected you to the world via fifty geostationary satellites.

It was an inspiring new idea.

But by the time it appeared seven years later, most of the world was covered by GSM.

Unlike satellite phones, GSM phones worked indoors.

And GSM phones were tiny, whereas satellite phones were still the size of a brick.

Good ideas have a sell-by date.

Don't make it complex

You wouldn't buy a TV that required you to press CTRL-ALT-DEL to switch it on. Or a fridge. Or a car. So why copy the outdated protocols of 1970s computing when you design your software?



A warning from history: all past industrial revolutions have had their mistakes.

Watch video at pubs.yr.com/mmv1



In 1997, a Victoria's Secret webcast fashion show crashed the internet as 50 million geeks drooled over their keyboards.

Expect similar bottlenecks this time round.



QR codes - barcodes which reveal a web or email address when scanned by a cameraphone - are part of everyday life in Japan. But they are taking longer than expected to spread around the world.

Don't lose your objectivity

Be absolutely clear what the central consumer benefit is that you offer, and why only you can deliver it. Keep listening to real consumers, rather than your irrationally exuberant co-workers.

Last time round, a lot of entrepreneurs convinced themselves that they had a business because they were a 'portal' (a very sexy word in the nineties). A portal is not a benefit. And nor will an 'm-portal' or 'm-commerce hub' be a benefit.

Above all, don't get tunnel vision. The light you see at the end of the tunnel may be salvation for your business.

But it may also be an oncoming train.

Don't depend on mass marketing

Diageo seed their drinks brands in cool bars before they decide to put mass advertising money behind them.

Most big successful things today were successful *before* they were advertised.

Don't assume new is always better

Every web designer learned to lay out web pages using tables in 1996.

Then came frame-based design, and it died.

Then came layer-based design, and it died too.

Then came JavaScript - until users switched JavaScript off.

Today it's Cascading Style Sheets.

Don't assume a new technology is good just because it is new.



Mobile data networks are starting to overload in San Francisco and New York.



And now in London too.

WHAT HAPPENS WHEN YOUR MOBILE BUSINESS STOPS GROWING?



It's the moment when most businesses lose their way.

Coffee shops see their revenue stalling and desperately try to sell their existing customers more.

They end up as cake shops.

Similarly, many mobile businesses will hit a growth barrier, and diversify themselves into oblivion.

When someone on your team suggests you become an 'm-portal.'

Or an 'm-commerce hub.'

Then you'll know it's happened.

You've lost the plot.

Don't feel you have to keep moving on

Google Search is no more complicated than it was in 2001. Craigslist is the same as it was in 1996. Genetically, the crocodile hasn't moved on since the age of the dinosaurs. *If it ain't broke, don't fix it.*

Don't value networks until they are a network

If your idea is social, your idea is not worth much until you have a substantial, committed user base. After the success of MySpace in 2005 and Facebook in 2006, thousands of entrepreneurs went round seeking capital to build a social networking site. *They were too late.*

Never forget consumer need

In the internet boom of the late nineties, entrepreneurs stopped talking about consumer needs, and started talking about business models instead.

Accountants, financiers and management consultants all nodded.

They felt much more comfortable with quantitative business plans on Excel than with the complex psychology of human need.

But all the businesses that were built purely on business models went bankrupt in 2000.

So we'll stress: *Business models are nice to have. But*



You can never get enough bars: if you're a cool 22 year Hong Konger, what matters is whether you get good voice and data signals two storeys underground in basement nightclubs.

if your business does not fulfil a consumer need, it will never fly.

But trust Mr Moore

Moore's Law says that the number of transistors on a silicon chip doubles every eighteen months.

It means that mobile devices will get better and more powerful during the 2010s.

And they will do so rapidly.

Expect them to be around a *thousand times more powerful* by 2020.

Moore's Law has been the underlying driver behind the computing revolution of the last fifty years.

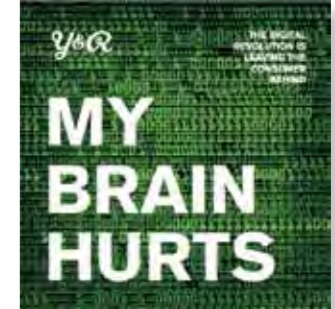
So rely on it.

But understand it too.

Moore's Law doesn't say that mobile data transmission speeds will grow exponentially.

It doesn't even say they will grow at all.

Be careful.



If you like this book, download this one, about how consumers understand technology products and services. pubs.yr.com/brain.pdf

10. THE SHAPE OF MOBILE SEARCH

Back during the first internet revolution, there were many search engines.

How did a search engine get better?

Many decided it was all about more sophisticated searches.

Instead of just searching for 'burger', they offered the option of searching for 'burger' but not 'cheeseburger'.

Some search engines went further.

They offered searches based on complex Boolean logic.

They were very sophisticated.

But all were beaten by Google, which offered a simple search box, and no controls.

The user didn't want to be bothered with all the complex logical stuff.

They just wanted to get what they wanted.

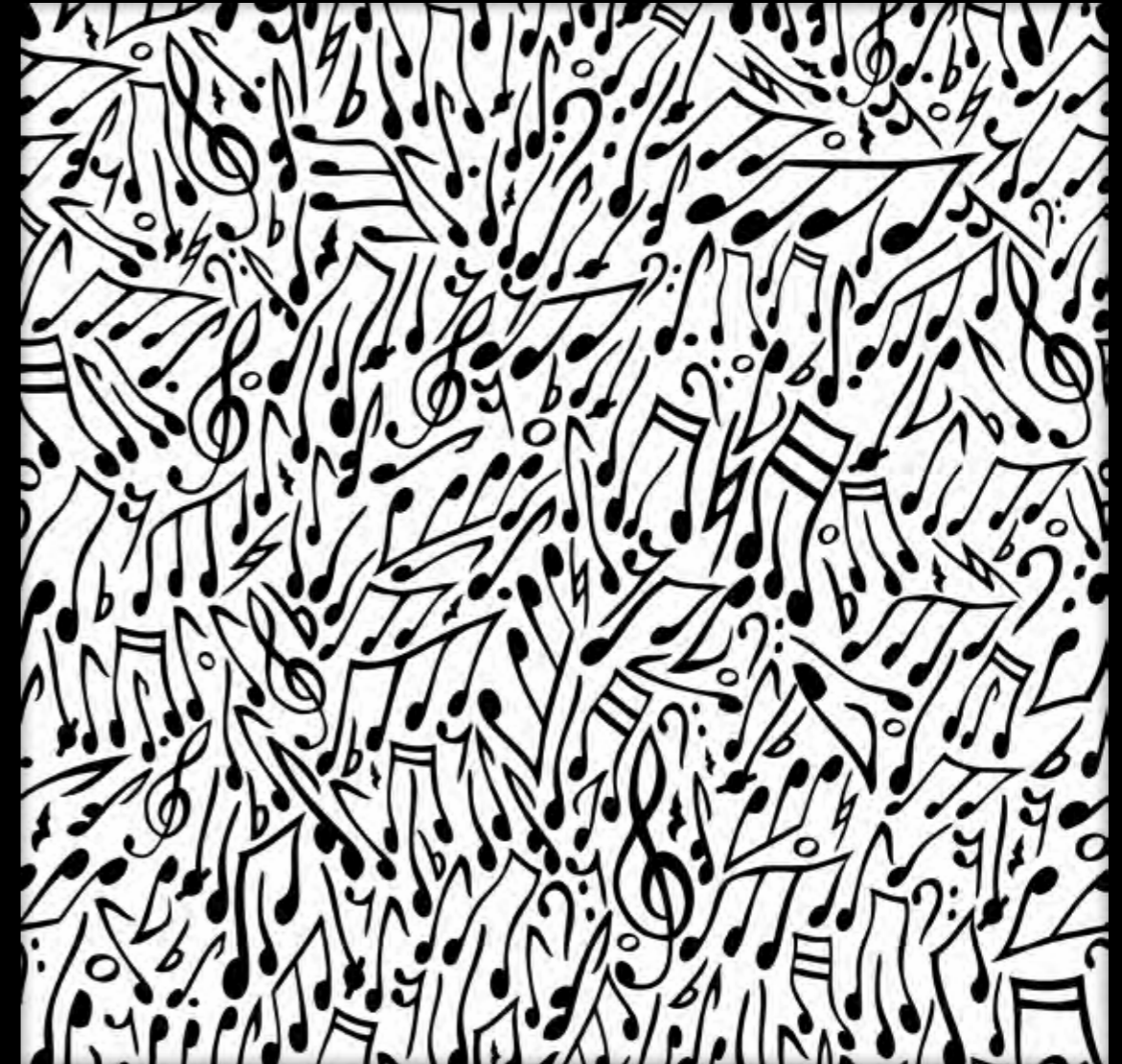
And Google delivered it.

But

But there's still one flaw with Google.

It's fine if you know what you're looking for.

But if there is one thing that has bugged humanity for



Most people are amazed by mobile apps like Shazam, which can listen to a musical track in a nightclub and identify it from millions of other tracks within seconds. Search will progress through similar amazing capabilities.

millennia, it is that most people don't know what they want.

So what's the next step for search engines?

The next step is the search engine that accepts that you don't know what you are looking for.

And then finds the thing you need.

How?

A smart mobile device is with you all the time.

After a while, it will get to know you.

What you do.

Where you go.

Who you hang out with.

And so it should be able to work out what you want.

In the same way that Amazon suggests stuff that you might want based on your browsing history.

Or iTunes Genius predicts what tune you might like to listen to next, based on your musical tastes and those of people like you.

As said already, this new service would not be called search.

Search is about the problem.

This is the solution.

It might therefore better be called 'find'.

'Find'

It combines social networking and GPS data to work out who your friends are, who you like to hang out with, in what sort of place, and at what times.

Find knows where you work and where you live.

Most people don't like having to make decisions all the time.



The point of search functions is that they take away the hassle of dealing with stuff.

Mobile search should move search out of the office and take away the hassle of dealing with your life.

You don't have to tell it.

Pretty rapidly it'll work out what you like to eat and who you're dating.

When you have this level of information, intuition comes easily.

When you're meeting with Josie tonight, it knows that you'll probably be going for a pizza and a film again.

When she calls you at 7pm, it tells her you're on the way but stuck in traffic. Because it knows that too.

It then knows when you're in the movie theater, and so to switch itself to vibrate.

And it knows that the date went well because you're heading back to Josie's after the theater.

It even picks a 'making out on the sofa' playlist for you.

But you have to be careful. Malicious apps on your friends' phones have also spotted that your GPS and hers have overlapped all night.

So you both get looks as you turn up for work the next day.

Suggestibility

'Find' may also be about suggestibility.

Plenty of people enjoy having their friends suggest things to do.

And plenty of people change their lives to fit in with a new boyfriend or girlfriend.

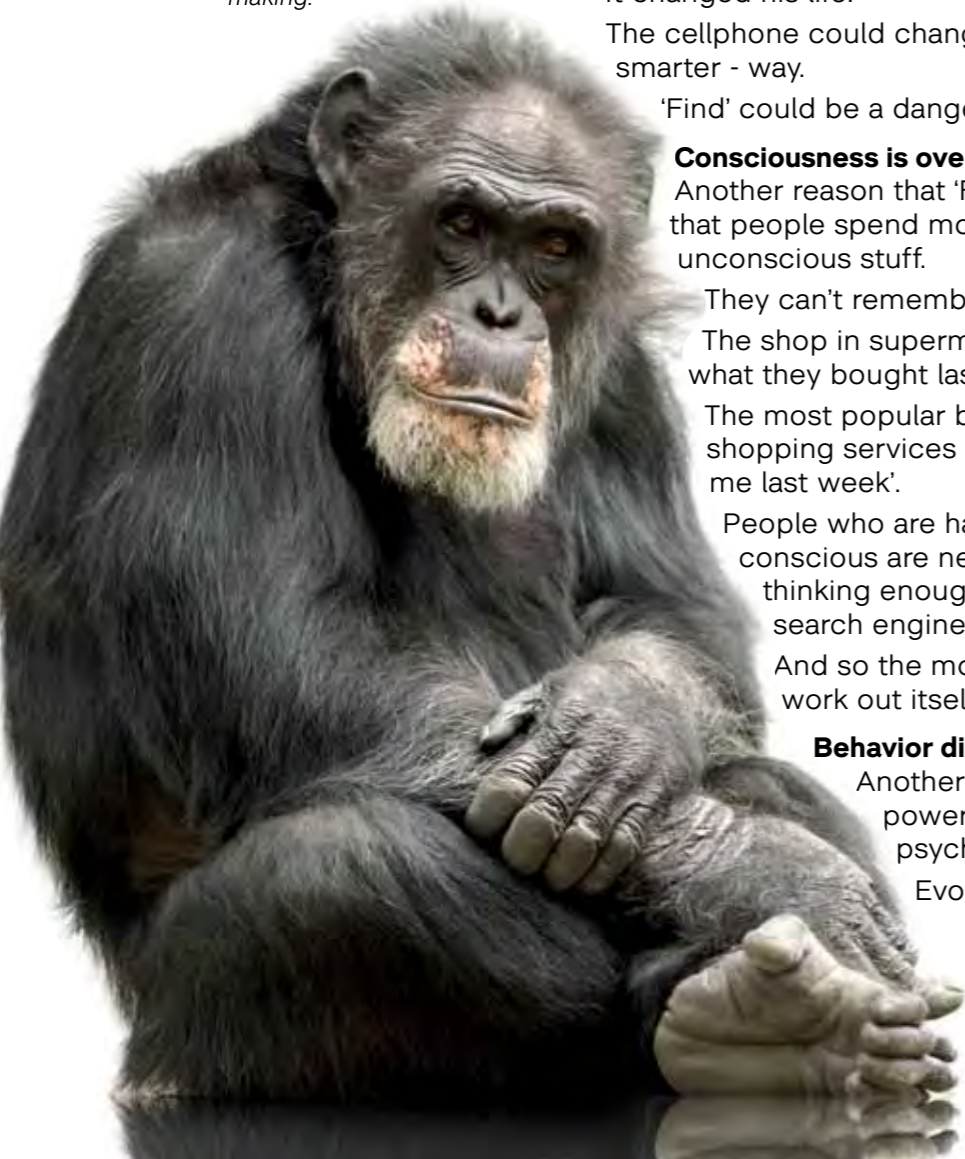
Not because they have to.

But because they quite like someone else making all the decisions.

The cellphone has a good sense of your habits. And



Mankind is just an advanced ape. Our behavior is driven as much by instinct as it is by conscious decision-making.



therefore it is in a good position to suggest what you should do next.

In his dark 1971 novel *The Dice Man*, Luke Rhinehart described what happened to him when he decided to use dice to make decisions.

It changed his life.

The cellphone could change lives in a similar - but smarter - way.

'Find' could be a dangerously good mobile app.

Consciousness is overrated

Another reason that 'Find' could work is that people spend most of their day doing unconscious stuff.

They can't remember their drive to work.

The shop in supermarkets on autopilot, buying what they bought last week.

The most popular button on online food shopping services is 'give me what you gave me last week'.

People who are habit driven and semi-conscious are never going to raise their thinking enough to type requests into a search engine.

And so the mobile search engine needs to work out itself what they want.

Behavior dictates attitudes

Another reason why 'Find' is powerful comes from evolutionary psychology.

Evolutionary psychology finds

more and more that our behavior is not the result of free conscious decisions.

- What we want to eat is controlled by our body, not our mind.
- Who we are attracted to and date is driven by evolutionary mechanisms.

Soon we may come to the realization that our attitudes are not driving our behavior.

It's usually the other way round.

So a complete and intimate GPS knowledge of our movements and habits may not give anyone insight into our minds.

But it may not need this to predict what we will want to do next.



You don't get to decide who you're attracted to. So are your behaviors on Facebook really under your conscious control?

11. MOBILE AUGMENTED REALITY

Hans is a backpacker.

It's 1982.

He steps off a train in a foreign city.

Hotel touts come up to him, offering cheap accommodation.

Girls come up to him, inviting him to their bar.

Ten restaurants promise him fine local dishes.

But

If Hans accepts any of these offers, he is in for a shock.

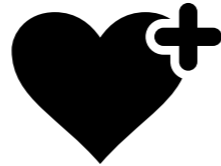
The hotels are all dirty and offer no hot water.

The bars will charge him two hundred dollars for a cola, and beat him up if he doesn't pay.

And most of the restaurants serve e-coli with their semi-rotten food.

Hans today

In the 2010s, Hans steps off the same train and pulls out his mobile device.



Simple mobile feedback systems could transform the shopper experience of bars, restaurants and other retail outlets.

He is immediately confronted by a heads-up display explaining that:

- He should not follow any of the hotel touts.
- He should avoid the girls.
- One of the ten food joints has a good rating.
- And should Hans then be ripped off, there are six other young people who speak the same language as him within 100 metres.

Of course, in the past, Hans might have had a guidebook with him.

But that guidebook would have been two years old, and would have covered fewer than half the outlets.

And it would have contained the prejudices of a single writer, rather than the crowdsourced wisdom of the last two hundred backpackers who drifted through that station.

The future of interfaces

Augmented reality - the ability of a web-based app to read visual information via barcodes and add to it started in the area of gimmicks.

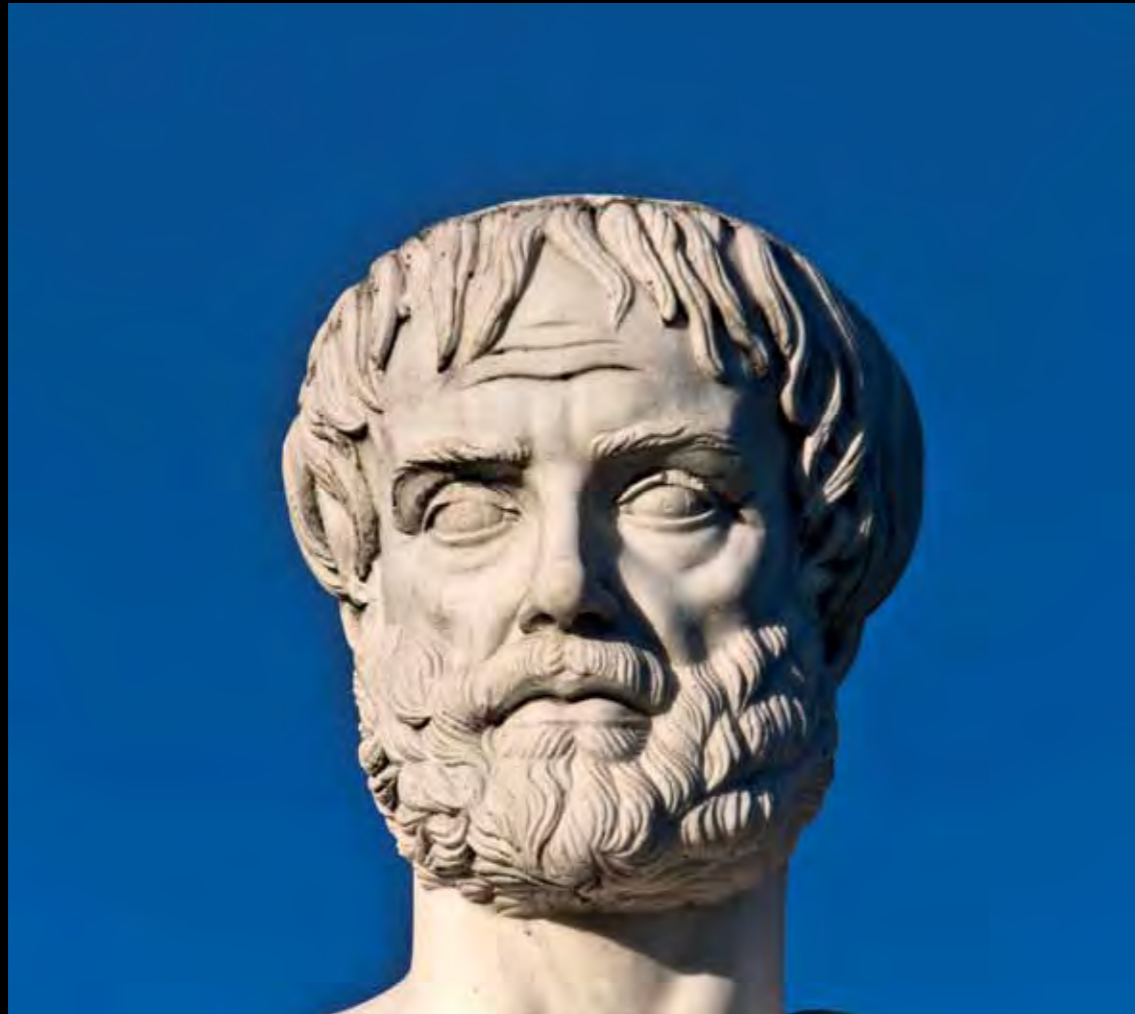
- You hold up a barcode to a webcam.
- A 3D picture appears hovering over the paper.

But it is moving on fast:

- Marketing is starting to localize as taxi firms, retailers and other services all zero in on augmented reality's



Augmented reality should add additional value to social networking data.



When American digerati jetted off for the zen-like Stream digital unconference in Greece in 2007, many took their new iPhones with them, eager to show them off to other delegates. They all returned to \$1000-plus data roaming bills. If mobile augmented reality tourist data is going to take off, roaming data charges need to fall.



Video: pubs.yr.com/mmv2

ability to turn a passer-by's GPS into a lead and custom.

- Augmented reality has already moved on from static objects to moving games on the back of breakfast cereal packs. Expect this to become an increasingly important part of kids' toys and marketing premiums.
- Augmented reality is helping Google Streetmaps tell you what's available, what's happening, and which of your friends are around to do it with you.
- Augmented reality heads-up displays mean you need never feel exposed in the wrong part of town at night. They familiarize you wherever you go.
- Other apps under development give you a spooky sense of nostalgia and déjà vu, placing the pictures you took last time you visited Paris over the city as you walk through it today.

The big picture

But augmented reality is bigger than this.

It's about the future of the human/computer interface.

We've lived with the desk as a metaphor for computing ever since the graphical user interface arrived in the eighties.

Augmented reality and the heads-up display take away the need for a metaphor and connect computing power directly to the mobile user's real-world environment.

It thus provides the first leap forward in interfaces in thirty years.



Augmented reality erases the dividing line between gaming and real life.

12. THE ONLY MEDIUM

In the 1990s, most brand managers put ten percent of their marketing spend into 'new media'.

This allowed them to look cool to their peers, without scaring their forty year old boss who didn't quite get the 'cyberweb infohighway thing.'

The rest of their budget went into traditional media.

This meant that traditional media continued to flourish during the last internet boom.

Traditional media also did well out of the dotcoms themselves:

A typical dotcom was chasing 'eyeballs', or regular visitors to their site. In the crazy logic of the time, each regular visitor was worth a thousand dollars to their market capitalization. The easiest way to get these eyeballs, everyone discovered, was to advertise the website on TV.

Many dotcoms spent *over half their venture capital* on television.



You may not have to worry about junk mail in the future.

Because you may not get any.

And so dotcoms grew the revenues of TV companies in the US and UK by *over fifteen percent* in 1999.

Not today

This time round though, things are different.

Consumers are making more and more purchasing decisions uninfluenced by traditional media.

And so traditional media are dying fast:

Newspapers RIP

'The last newspaper in America will be bought sometime in 2035' complained journalists in 2007, horrified by ten percent annual circulation declines, and the refusal of the under-25s to adopt the newspaper-reading habit.

Then came the credit crunch, and US newspaper circulations started falling by *thirty percent* a year.

Today, 2035 seems like wild optimism.

TV in a tailspin

As newspapers disappear, TV stations in rich countries are in a tailspin.

Falling advertising revenues are leading to job cuts and reduced budgets, which are leading to lower quality programmes.

In New York, Tokyo and in London, TV content producers are depressed as never before.

It's a far cry from the heyday of TV in the 1980s.

Direct Mail is dying

Similarly, direct mail is going through a crisis.

Sixty percent of the mail in most countries comes from direct mail companies; most of the rest is statements from banks and utility companies.



People learned of Michael Jackson's death not in newspapers but on Twitter.



Is the Huffington Post any less credible because it is online rather than printed?

But direct mail companies are moving over to digital campaigns.

And banks and utility companies are moving over to online billing.

The world's postal services thus face an uncertain future.

Expect desktop digital media to suffer too

It's not just traditional analog media that will suffer.

Expect desktop-based digital to suffer too, as people do more and more on their cellphones.

Already, people are no longer replacing their main desktop machine or laptop every two years the way they used to.

And because they are no longer changing machines, they are no longer getting the latest internet browsers.

A quarter of the world sticks with the nine-year-old Internet Explorer 6.

And Google's new Chrome browser is stuck at a few percent market share.

To the frustration of the industry, most consumers don't even understand what a browser is or does.

Up-to-date browsers are vital for the development of new web services.

There's no point in creating a



Soon you may not need to choose between reading your newspaper via your cellphone, or the paper version.

Because the paper version may go bankrupt.



The Apple Daily tabloid in Taiwan uses QR codes to link its stories to CGI video 'reconstructions' of news events.

cutting-edge web experience if half its audience can't experience it.

Or they have to update a plug-in.

Or their corporate IT manager has to be begged to update things first.

Rapid technological change in the fixed internet may thus be over.

So

In the new media environment of the 2010s, the cellphone will not be the sexy new medium.

In some marketing situations, and in some countries, it may be your *main* medium.

In 2009, print media explored embedding tiny video screens in their pages to boost advertising revenue. But broadcast TV advertising is having just as many problems as newspapers.



13. PACKAGED GOODS BRANDS JUST WEREN'T MADE FOR DIGITAL

It's fundamental.

In 2006, Vietnamese Texan rapper and pin-up Tila Tequila became the most popular person on MySpace.

It wasn't by accident.

Tila had databased thousands of fans she had collected via her music and her appearances in magazines, and had built up a relationship marketing program to them.

And she drove them all to her MySpace page.

Then as Twitter became more important, Tila started to tweet, rewarding her followers with downloadable JPEGs.

She grew to dominate Twitter too, heading up the tag clouds by asking her followers to flood Twitter with hashtags like *#ilovetila* and *#tilaarmy*.

Tila was given her own MTV reality show 'A Shot at Love with Tila Tequila', where guys and women fought it out to be her partner.

Her online merchandise store took off.



Tony the Tiger was invented in the 1950s – along with many of the familiar consumer goods brands and their icons of today.

As did her musical career.

It was a masterful use of social media.

And done by Ms. Tequila totally intuitively.

So?

Which begs the question.

If Ms. Tequila can do it with no marketing experience, why do so many packaged goods brands, with their expert marketers and huge marketing budgets, get digital media so wrong?

The answer is fundamental.

And it goes back all the way to the 1950s.

Why?

Television first arrived in the 1950s.

Something like 40% of packaged goods brands were launched then.

But it wasn't that packaged goods companies launched some brands and then discovered a new medium called television.

It was that the big packaged goods companies discovered television, and created brands to use it.

The power of TV

Television was good at making boring consumer propositions top of mind.

It could make brands that delivered them famous.

And so in the fifties packaged goods companies identified TV-friendly propositions, and designed their new brands around them.

TV was as fundamental an ingredient to these brands as vegetable fat or detergent was.

'Customers are tuning out. They no longer listen to in-your-face messages.'

Instead they demand meaning in the brands they buy.'

**BOB GILBREATH
MARKETING WITH
MEANING**

The problem with adapting packaged goods brands to mobile digital is therefore fundamental.

- Digital is good at building relationships with people.
- But it isn't good at making TV propositions top of mind.

Brands designed around television therefore don't work in the digital era.

To make the transition, big packaged goods companies will need not just to re-engineer their communications strategies.

They will need to re-engineer the very core of their brands.

As it was when TV arrived

This shouldn't come as a surprise.

Plenty of packaged goods brands struggled in the 1950s to adapt from press to TV.

One packaged goods company had a brand that promised to clean colored clothes without fading them.

1950s magazines, with their beautiful full-color lithography were perfect for this brand – it could show a vibrantly colored dress and a faded dress in a dramatic side-by-side demonstration.

This advertising property didn't quite work on TV.

Because TV was in black and white until 1967.

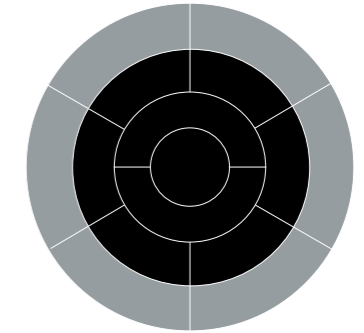
So?

Think harder as your brand moves to 100% digital media:

Broadcast television was as fundamental an ingredient to 1950s packaged goods as vegetable fat was.



- Stick your neck out. Brands from the TV era were carefully managed to avoid risk. Brands that do well in digital integrate *controversy* into their marketing programs.
- Consider: 'Does my brand really need its TV-age 'voice of God' authority?' In the digital age, authority can sound more like autism.
- Ask yourself: 'How would I ideally launch a *new* brand in this sector using digital media?' It'll give you a better plan than the legacy brand plan you have at the moment.
- Ask also: 'How would a celebrity create a new business in this sector?' Celebrity brands seem to work better than classical brands in the digital age.
- And then ask yourself: 'Do I need a brand idea, or would I be better off with a social idea?' They can be quite different.
- Give up slavishly translating all your brand's equities into digital, and ask yourself: 'What really matters, and what would be better discarded?' Words may be set in stone as your brand values. But that doesn't mean they are worth anything.



Companies with complicated brand models struggle to change medium. Those with simpler brand equities have an easier time of it.

14. TARGET AUDIENCE

Ask a brand manager to define the target audience of their brand, and most will talk perhaps about mothers aged 25-45, or upscale men aged 30-50.

Nearly all brand managers define their target by demographics.

And broad ones at that.

But why?

All the evidence is that broad groups of people don't buy most brands.

Especially in today's world of segmented markets.

A few brands – typically leading washing powders - are bought regularly by 30% of households.

But most brands are bought by smaller, more tightly defined groups of people:

- Most new users of cooking ingredients buy what their mother bought. Most new car buyers have a friend or friends who already own that car. *New users of a brand always turn out to have links to existing users.*



Many brands are still addicted to a target audience definition created in the TV age.

- Frequent flyers can be defined demographically as senior managers aged 30-50. But they can also be defined more sharply using GPS as people who go to airports frequently, and who are abroad frequently.
- Most users of a supermarket are people who live within 15 minutes drivetime from that supermarket.

So why the broad audience?

Curiously, most brand managers find it difficult to explain where their target audience came from.

They just inherited it from the previous brand manager.

Who inherited it from the previous brand manager.

And where did the first brand managers get their target audience from?

Dig back into most companies' histories, and you'll find that their first target audience was defined not by someone within the company, but by someone selling TV airtime.

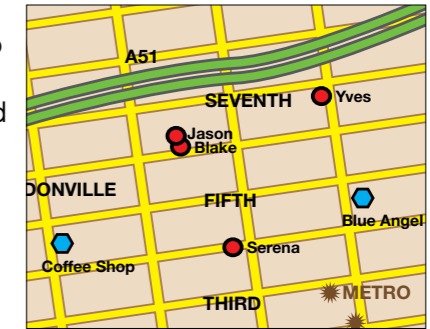
- For broad audiences, TV is cheap.
- For narrower audiences, TV is much more expensive.
- It therefore makes sense for a TV company to make the target audience as wide as possible.

In the era of mass media, perhaps this didn't matter much.

TV was a blunt instrument.

It hit everyone, no matter what the target audience was.

But why should a target audience should be so wide



As geotagged communities like San Francisco's Loopt take off, 'Where' becomes as important as 'Who?'

today, in the era of smart digital techniques and narrowcast digital media?

Most brands' target audiences could be narrowed dramatically.

But

But when a digital planner looks at a target audience in these new ways, they run into problems.

Most marketers regard their target audience as set in stone.

After all, it's usually remained unchanged for decades.

So the performance of digital media is then evaluated not against what it does well, but against the old demographic target.

And digital media look like they are only covering a small part of the target.

No matter that the people they miss never bought the product anyway.

We are facing circular logic here. Target audiences have a built-in bias.

If a brand defines its target audience in broad demographic terms, the answer to its communications problems will always be television, because television is great at hitting broad demographic audiences.

It's clear that if digital media are to be evaluated properly by companies, the whole concept of a brand's target audience needs re-thinking.

15. THE POWER OF LOYALTY

Loyalty has been the big discovery of the two past decades: why spend your marketing budget hunting difficult-to-find new customers, when you can persuade your existing customers to use more?

Loyalty schemes have spread far and wide:

- They work even on hard-headed business decisions. As Scott Adams, creator of Dilbert, once put it, *'Corporations with no discernible management policies of their own end up being run by the frequent flyer policies of airlines.'*
- They can work even with low-ticket impulse purchases. Every coffee bar runs a loyalty card – *because they work.*
- And they are increasingly important in packaged goods. Most of the big consumer goods companies have discovered that they are extraordinarily dependent on a small group of high spending, loyal 'golden' customers who avoid retailer brands and who buy most of the products in their portfolio.

Loyalty is a powerful marketing strategy.

A larger and larger part of marketing budgets go to it.

But

But there are several problems.

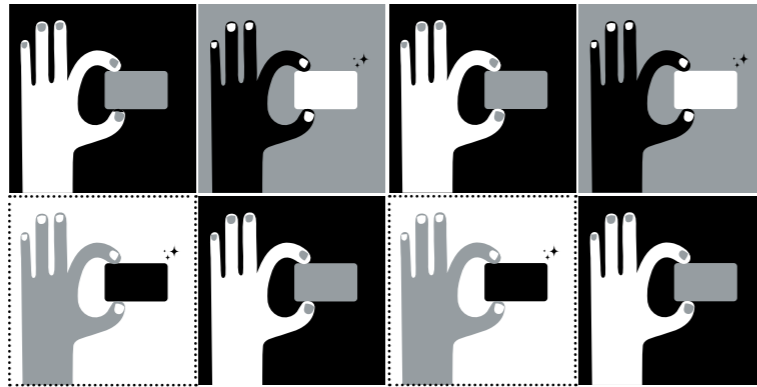
And they are big ones:



In the early 2000s, one airline gave out cool Bang and Olufsen headphones for every six shorthaul trips flown.

It led to a huge number of pointless business trips.

- A typical Western shopper now possesses over *twenty-seven* loyalty cards.
- Keeping loyalty schemes, passwords and redemptions organized can be a real chore.
- Most schemes reward consumers for stuff they would do anyway.
- Most marketers would like to reward people who leave the brand but who come back – but this is not easy.
- They would also like to reward people for trying new variants, or upgrading to new ideas within the portfolio.
- Many retail stores would like to reward people for browsing, rather than just on the occasions when they buy.



Card-based loyalty schemes were great until everyone started doing them.

The fundamental problem is that modern loyalty schemes are dependent on what behaviors you can easily measure.

And in the past, it's been very difficult to measure anything.

How mobile can fix it

Cellphone-based loyalty can change all of this:

- GPS-enabled phones allow you to measure exactly where people are standing. And therefore if you want people to visit a store or browse an automobile



WILL YOU BE TRUE, MY LOVE?

When marketers think about loyalty, they tend to think entirely within their product category.

Coke focus on share of mouth versus Pepsi.

Cola drinkers' loyalties in shampoo and cars are seen as completely separate.

But are they?

Y&R's John Keaveney has been researching in this area, and his discoveries challenge much conventional thinking.

John compared loyalty in multiple categories, using big marketing industry databases like TGI, the standard audience and brand usership measurement tool of newspapers and magazines.

He looked at people who were loyal in washing powder, and compared them with those who were loyal in coffee, and in packet soups.

And he found significant overlaps between all the groups.

Put simply, there are loyal people.

And there are disloyal people.

He compared the attitudes of loyal and disloyal people to see why they differed.

He found that disloyal people wanted to pursue 'a life of novelty and challenge' and enjoyed 'taking risks'.

Whereas loyal people were the opposite.

It seems that loyalty is not about products. It's a basic character trait.

John then looked at the personal relationships of people who were loyal to packaged goods brands and people who were not.

People who were loyal were more likely to value long term personal relationships, or to have been with one partner for a long time.

People who were disloyal were much more likely to be single.

He then went deeper still.

He looked at MTV research into the sexual habits of young people.

He found indications that brand-loyal young people tended to stick with one partner.

Whereas brand-disloyal young people tended to have multiple partners.

It seems that loyalty isn't about Coke or Pantene or BMW.

It is an intimate facet of who we are.

And so if you want to know whether a new partner is likely to be faithful to you, you need not spy on them.

You just need to count the number of brands of shampoo they keep in their shower.

showroom, you can check they've done so and reward them.

- The GPS phone could also reward consumers for *not* visiting a competitive store. All defections start with the consumer trying out the competition. This could stop it happening.
- Visa's contactless payment systems use the near field communication capabilities of cellphones. These could be used to transmit loyalty scheme information too. *The hassle of carrying and using loyalty cards could disappear.*
- As contactless payment systems mean people pay by phone for even small items, the phone may be able to reward users for regularly buying even confectionery and newspapers.
- Cellphones can allow customers to opt in to promotions as they enter a retail site. As customer relationship marketers know, opt-in promotions are good because they only reward people motivated enough to opt in, and exclude people who aren't sensitive to promotions.
- Loyalty schemes for transportation systems may no longer need to involve cards – if the user's trips can be tracked by GPS, everything can happen automatically.
- They can also reward members of corporate health schemes for buying a healthy diet.
- The privacy issue needs resolving. For instance, through her purchases of pregnancy tests and folic acid, the smarter supermarkets usually know when a woman falls pregnant. *And they do so before her partner does.*



Card-based coffee shop loyalty schemes have to be simple to work.

Cellphone-based ones can be more sophisticated.

- Smart, phone based loyalty could come just in time. The cost of service personnel, and therefore the cost of swiping a loyalty card at point of sale, keeps rising.
- Soon the barrier will not be the logistics of loyalty schemes, but the inability of marketers to mine the growing mountains of data they generate for insights. Tesco and Kroger have DunnHumby. Other companies need to work out who will mine theirs.

There are many problems to be solved.

But once they have been, *cellphone based loyalty schemes could change marketing.*



Data mining isn't easy.

Most companies struggle to find any insights at all.

16. 360 DEGREES TO 24/7

360 degree campaigns - those which promise to surround the consumer with communication, using all media, each employed in an appropriate way - have become a big thing in marketing over the past ten years.

But does any campaign really work like this?

- No advertising campaign ever occupies more than a small part of anyone's daily media exposure.
- And most people aren't exposed to conventional media for a large part of their day.

'360 degrees' therefore means one degree at best.

And one degree for only part of the day.

Mobile gives a new option

Mobile though gives a new option. We know that compelling Facebook content, like *Farmville*, or *Happy Aquarium*, makes people go back for updates hour after hour.

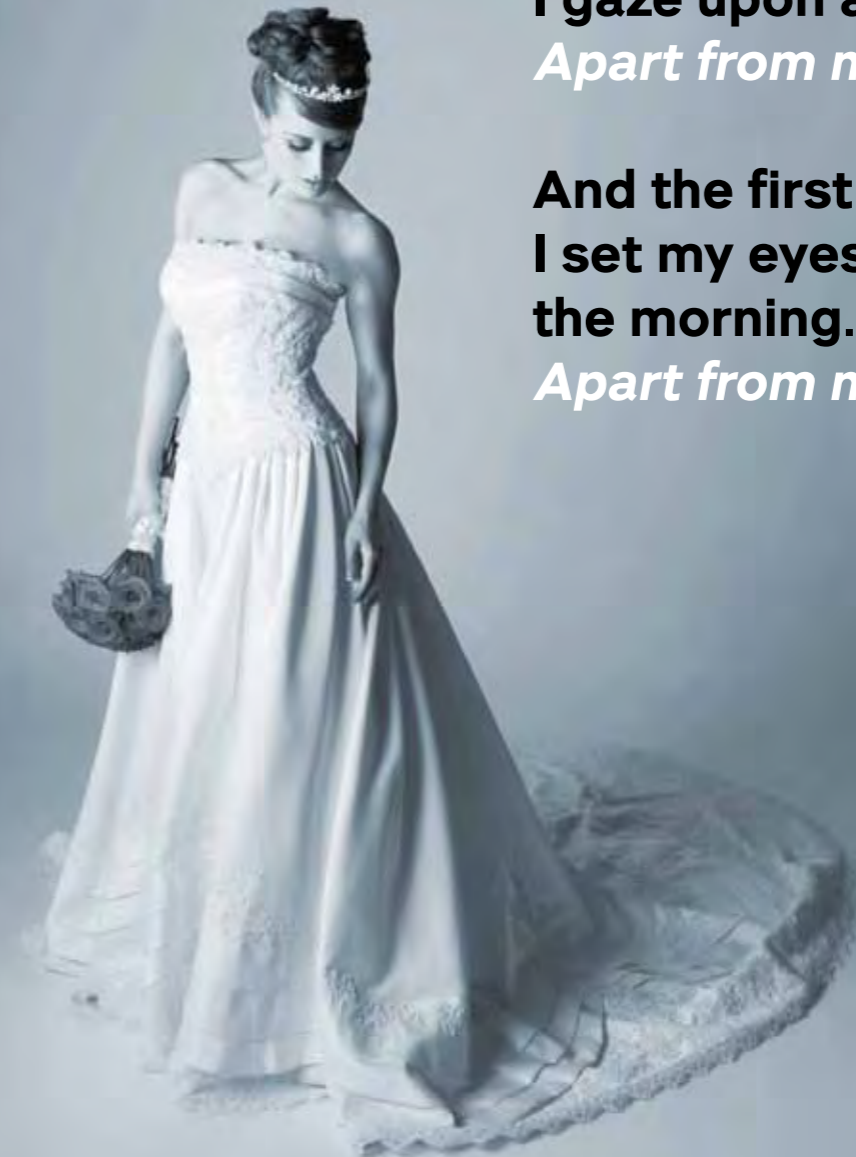
And not just in their leisure time.

Many companies report that over half the web traffic in their offices nowadays is accesses of Facebook pages.

And it happens with games too.

People monitor their phones every waking hour.

Phones thus offer the opportunity for 24/7 campaigns.



I want you to be the last thing I gaze upon at night.
Apart from my phone.

And the first thing I set my eyes upon in the morning.
Apart from my phone.

A hardcore gamer will typically spend twelve hours at a time trying to crack a new game.

When *Call of Duty: Modern Warfare 2* came out in fall 2009, large numbers of men vanished until they had killed the terrorists and finished the game. The same happened with *Final Fantasy XIII*.

Modern digital media are immersive and obsessive.

Even \$1 cellphone games can provide sessions of several hours a day for those who get hooked on them.

If people use digital content in this way, could marketers create compelling marketing that worked in this way too?

To create not a 360 degree campaign.

But a campaign that kept users involved all day, every day.

A 24/7 campaign.

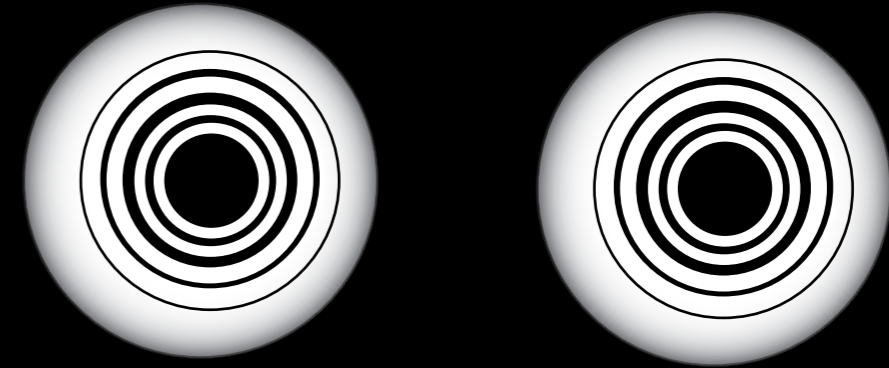
Shape of a 24/7 campaign

To do so, a 24/7 campaign would need to:

- Provide compelling content which updates hour by hour.
- Be widgetized on to mobile platforms. The content needs to be with you all the time.
- Get consumers to create and share content themselves.
- Utilize heart-wrenching emotional content – like the lost ugly duckling that recruits people into *Farmville*, or the orphaned baby squid from *Happy Aquarium*.



Marketers should get inspired by the next generation: they naturally theme their lives with characters like Spongebob or Dora.



THE CRACKBERRY

Lee Kuan Yew, the founding father of Singapore, once remarked that air conditioning was a key factor behind Singapore's transformation into the commercial and industrial powerhouse it is today.

But economists were too conservative to admit it.

Similarly, no economist has yet quantified how the BlackBerry has changed business over the past seven years.

But its effect has been profound:

Executives used to work for perhaps fifty hours a week, and were offline for the rest.

Nowadays, they check their BlackBerry first thing in the morning, and the last thing at night.

The BlackBerry check has become a compulsive reaction every five minutes.

They are thus online for around sixteen hours a day.

This has resulted in much greater efficiencies in global companies, as the constraints of time zone are taken away. You don't have to email from the US to Europe before Europeans go home any

more, because Europeans will be checking their BlackBerry all evening.

Weekends are open for business too. An exec who needs a consensus on Saturday morning can get it by Saturday night.

The BlackBerry has made employees much more effective as they travel. Ask a travelling executive ten years ago how effective they were when out of the office, and most would tell you perhaps 30%. Today, armed with mobile devices, anyone can be 90% functional anywhere.

BlackBerrys make managers work even on holiday: vacations are divided into soft (where the BlackBerry is checked every few hours) and hard (where the BlackBerry is off).

Put it all together, and the BlackBerry may have squeezed an extra 30% more productivity out of executives since 2003. To any company where staff costs are a significant part of turnover, the benefits have been dramatic.

- Be a *social idea* rather than a brand idea. Only social interaction between users will sustain such a campaign.
- Get *personal*: a social idea that involves you and reveals stuff about you is much more compelling than other ideas.
- Have a *narrative* to tell. Many brands, particularly packaged goods brands, don't have much to say about themselves. They will soon be faced with the realization that they *just aren't interesting enough* for the social digital age.



People tend their virtual farms all day every day on Facebook. Hardcore gamers play all day, every day too. Could marketing campaigns work this way too?

17. TELL THE TRUTH

Classical marketing doesn't.

Dave is a classical marketer. He lost his job in the credit crunch. He's now working on a market stall. 'Buy my cakes!' yells Dave at passing shoppers. 'They're really tasty.' 'And they have a really lemony zing.' 'I don't like the look of them.' says Mrs Smith, passing with her shopping trolley. 'Each one is different.' 'And they're not very lemony' says Mrs Jones, walking with her dog. 'And I bet they're full of preservatives.' 'Oh dear' says Dave's partner Julie. 'Let me take over.' 'Of course each one is different Mrs Smith,' says Julie. 'They're home made by me. Not made by machine in a factory.' 'And they don't taste really lemony, Mrs Jones, because they're made with real lemon juice, not citric acid, which gives factory-made cakes their artificial lemony zing.' 'And yes, they do contain preservatives. Otherwise they'd go mouldy by the weekend. Would you want that?'



If you only tell consumers the good things about your product, you are only telling them half the story.

Poor Dave

Dave is a classical marketer, communicating product benefits in a clear, authoritative way.

And he's failing dismally in the modern marketing environment, where his customers can answer back.

Julie is performing much better, acknowledging her customers' concerns, and interacting with them.

Julie's approach is much more effective for the digital era.

But what is the fundamental difference between her approach and Dave's?

Dave's perspective

From Dave's perspective, the difference is that he is using classical marketing principles, putting his best foot forward and articulating benefits.

Whereas Julie is being more tactical, responding to issues.

The consumer perspective

But from the point of view of the market stall's customers, the situation is much simpler.

As they see it, Julie is telling the truth.

Whereas Dave is a liar.

Marketing without lies

Dave's perspective is 20th century analog; the consumer perspective is 21st century digital.

So the principle classical marketers need to adopt if they are to do well in the mobile digital era is simply to *tell the truth*.

'You persuade people when you tell them the truth.'

DON DRAPER

- Do you have any repeat users? If you do, then they read your marketing lies, bought the product, discovered what it really was like, and are still buying it. Do you still believe that the truth can hurt you?
- This is not a new strategy. British copywriter David Abbott made his name in the 1960s writing copy that admitted faults with the products he was selling.
- One of the most powerful US ads of the 1930s asked you to consider buying a GM car rather than a Ford or a Packard. But first, it asked you to 'Try All Three'.
- Some of the most powerful advertising of the analog era admitted the truth. That the VW Beetle was ugly. That Avis sometimes goofed.

So

Rather than mask all the negatives, and let other people expose you, why not state them yourself?

After all, we are now in an environment where everyone is reading and writing reviews.

And where, in many categories, the credibility of marketing has dropped to close to zero.

1. Take the existing user reviews for your product – good and bad – and hand these as part of the copy brief to your copywriter.
2. Include one bad point for every three good points.
3. If you want credibility for your brand site, you need to aggregate the thinking of everyone else in the marketplace. Encourage people to check everything

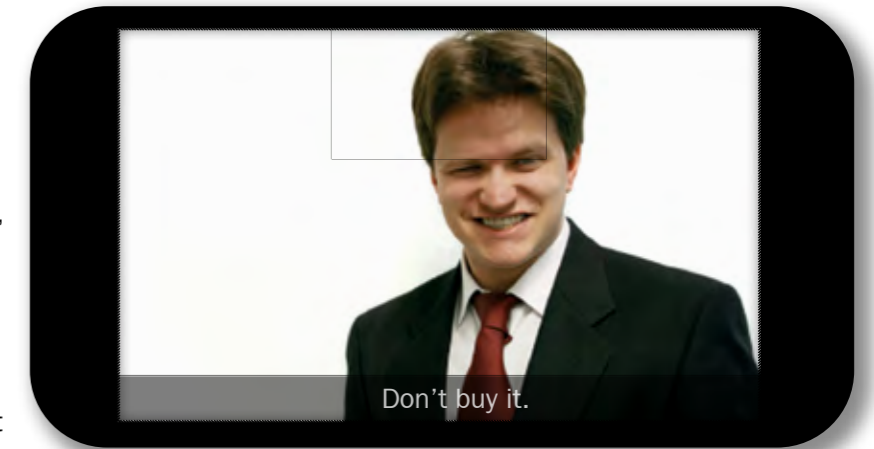


In the 1960s, Volkswagen admitted its Beetle was ugly. It became the most loved car in America.



Mobile devices mean consumers can now check the truth of marketing claims as they buy. If you're exaggerating, they can tell.

- out for themselves, and provide links to the most respected comparison sites.
4. Admit that your user guide isn't very good, and create a forum to let your users help each other.
 5. Then listen carefully to what your consumers say about you, and respond appropriately. Comcast uses Twitter to do this, with the Comcast Cares program.
 6. Don't let your CEO disappear into an ivory tower. For a tuned-in tweeting CEO, check out Tony Hsieh at Zappos.
 7. In the transparent world of 21st century marketing, a shiny, happy, positive tone of voice can come across as mindless cheerleading. Tell your copywriter to tell things the way they are.
 8. Be especially clear about what your product is *not* good for. 'The essence of strategy,' said Von Clausewitz, 'is sacrifice.'



Mobile devices are allowing consumers to get the facts for themselves at the point of sale.

Admit an error or two. People may come to like you for it.



18. MEASUREMENT

'Today', said Galileo, 'I shall drop two cannonballs from a tower.

'One is large and heavy.

'The other is small and light.'

'That's interesting,' said the Catholic Church.

'God will send the large, heavy ball towards the ground faster.

'And it will hit the ground first.'

And then a pause.

'Of course,' said the Catholic Church, 'If this were not to happen, then you would be questioning the existence of God.

'So we would be forced to persecute you.

'For the rest of your life.'

Galileo did the experiment anyway.

And the big cannonball didn't land first.

It hit the ground at exactly the same time as the small cannonball.

And so the Catholic Church persecuted Galileo.

For the rest of his life.

Big, heavy things fall in exactly the same way as small, light things. Weird, isn't it?

If Galileo had been a classical marketer

If Galileo had been a classical marketer, none of this would have happened:

- Most classical marketers, faced with a risk of persecution, would have canceled the experiment.
- The rest would have fiddled the result, or buried it.

Classical marketers are political animals.

That's how they survive in corporate jungles.

In the analog era

And that was fine in the analog era.

Measurement was so imprecise, and campaigns so big, that any marketer who didn't live by this code didn't last long.

It was in no one's interest – client, agency or medium – for failure to be proven.

But it's a pretty unhelpful instinct in the mobile digital age.

In the mobile digital age, nothing has yet been established.

Everything is measurable.

And marketers must work like scientists, working out what works for their business and what doesn't.

This means testing, testing, testing.

And inevitably failing, failing, failing.

On a good day, digital marketers will admit this.

Most of their 'social' campaigns on Facebook don't end up social.

Their viral campaigns don't spread.



MEASUREMENT DOESN'T HAVE TO BE BORING

Most of the time, measurement leads you to what you'd expect.

But just occasionally measurement leads you to something so strange it changes mankind's entire perception of itself.

Such was the case in 1930, when young astronomer Edwin Hubble decided to study the fixed stars.

Man had been calling the stars 'fixed stars' for thousands of years, because they never seemed to move in relation to each other.

They represented eternity itself.

Edwin accepted that they never moved left or right, or up or down.

But he wondered whether any of them were moving towards, or away from the earth.

To do this he looked at the light from stars in other galaxies, using the same change in frequency, or

pitch, that you use to tell whether a police siren is moving towards or away from you.

And he discovered the weirdest thing.

He discovered that almost every single one was moving.

At incredibly high speeds.

Away from the earth.

Four centuries after Galileo had questioned the existence of creation, Edwin had discovered the Big Bang.

Edwin made idiots out of other scientists who hadn't bothered checking.

Some of them had fiddled their theories of the universe to make it 'fixed'.

One of those scientists was Albert Einstein.

Fiddling his relativity equation to fix the stars was, he later said, 'the greatest mistake of my life.'

And no one clicks on their links on Google.

It's a humbling experience.

You think you know how to do marketing.

And under the cold clinical light of digital analytics you fail.

That's just the way things are.

A new manifesto

So here's a new measurement manifesto for classical marketers as they head towards mobile, digital media.

- Everything now can be measured.
- Everything now needs to be measured.
- Measurement needs objectivity. Don't mix it with the passion you need to create things.
- All marketing is judged to have failed unless proven otherwise.
- This is not to say that anyone has struck out in digital marketing. It is just the nature of new media that most experiments in them fail.
- If we do not fail, we do not learn.

This takes guts.

Admitting a campaign has failed is the ultimate big company marketing taboo.

MOBILE MANIA

At a time of great marketing change, if you don't measure, you don't learn.



19. MOBILE MEDICINE

Jo goes for a run every morning.

She uses Nike+ to measure her running speed, heart rate, steps per minute, distance covered and speed.

She uses an iPod to 'tune her run' – to place musical tracks at precise points in her run to spur her on.

When she gets home, Nike+ shares her stats online, to allow her friends to compare and compete to achieve goals.

Nike+ has built a vibrant competitive community out of running.

And it has sold large amounts of sports apparel as it has done so.

Meanwhile

Meanwhile PruHealth partners with Virgin Active health clubs in the UK to offer a corporate health program where employees get benefits in return for hitting quantitative exercise and diet targets and for swiping their cards regularly at the gym.

Meanwhile

Meanwhile, in 2008, Johnson & Johnson developed the first iPhone diabetes app, which evaluates blood sugar



*Medicine is changing
as people rely more
and more on Dr.
Google.*



Nike+'s events include combined running and private shopping evenings – the ultimate sporty woman fantasy.



The most popular track by far on Nike+ is Survivor's 1982 hit 'Eye of the Tiger'. Runners are such clichés.

levels for type 1 diabetics and helps them manage their diet and insulin.

These are models for a whole new range of services in the 2010s, as health digitizes and mobilizes:

- Doctors are encouraging patients to take responsibility for their own care, and this involves much measurement.
- The world is being flooded by gadgets to check your blood pressure, blood sugar and cholesterol.
- The ageing of rich world populations means that there are many more older people around, many of whom are keen to monitor their health.

Health numbers

In the past, the only numbers most people knew about themselves were their height and their weight.

Today, things have changed.

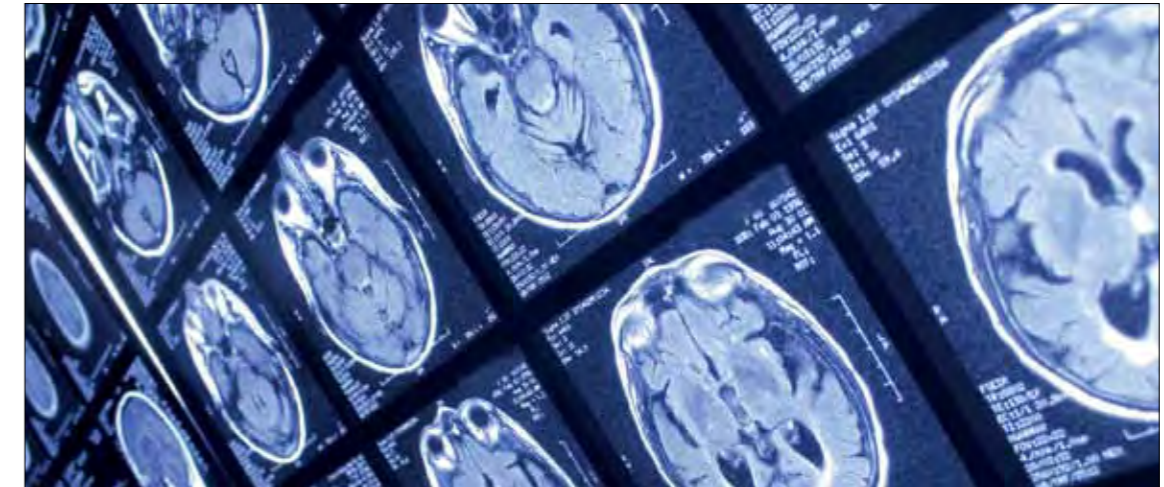
Typical rich world fifty year olds may know their blood pressure, pulse, blood sugar level, levels of good and bad cholesterol, and much else.

This trend is likely to accelerate as portable devices drop in price and as insurance companies demand more numbers from their prospects before they agree to insure them.

The trend may also be driving people towards new 'quantified' self perception, as identified by Kevin Lane Keller in his blog, *The Quantified Self*.

But whilst consumer electronics and pharmaceutical companies gear up to flood the world with new, more and better gadgets, problems are arising:

- For many people, numbers are an area of great confusion and fear.



- People struggle to self-report.
- They are also unable to identify an average from a range of readings they have taken.
- Others delude themselves about their numbers, following a long history of denial about their weight.

The solution to all of this is clear: the cellphone needs to become the central, automated collection and transmission device for all of this information.

So:

- Expect mobile digital medicine to become an integral part of the middle class lifestyle in the 2010s.
- Your phone has an accelerometer. So it already knows whether you went for your run this morning or not. And indeed some Docomo phones in Japan already give you a read out of how many steps you took today. It's not a big leap to a piece of software

People make irrational trade offs with their health: when the credit crunch hit, large numbers of Americans postponed critical medical procedures.

that wakes you up tomorrow morning and makes you put on your sneakers.

- Similarly, certain Japanese Au phones already talk to bathroom scales via Bluetooth. All phones need to know how much their owners weigh.
- Blood pressure of 160/100 was considered fine in a sociable 35 year old in 1960. Today it would put them in the emergency room. Expect the medical profession to upgrade numerical health targets further as the 2010s progress. And therefore expect the need for gadgets to grow.
- In most countries, there is a huge difference in life expectancy between richer people, who eat better and exercise, and poorer people who don't. Can the user-friendliness of cellphones break digital health out of its current middle-class ghetto?
- Self-help in medicine has been growing ever since medical authorities allowed people to buy previously prescription meds over the counter in the nineties. Expect a gossip culture infrastructure to grow around this in the 2010s.
- But as always, simplicity rules. You need training to operate most 'consumer' healthcare gadgets today.
- How much could all of this be worth? A typical affluent sixty year old is worth \$2 to \$3 million. How much of that would they pay for a shot at another ten years of active life? The Boomers are getting old. *And they don't want to die.*



Googling your meds has become a national pastime amongst elderly Americans.

20. MOBILE MONEY

'Our customers', say banks 'are less likely to leave us than they are to get divorced'.

And they are correct.

Banks have very low rates of customer loss.

And it's always been like that.

Except

Except in the late 1990s when the internet hit the world.

Established banks were slow to offer online access.

So young, tech-savvy customers migrated to the new generation of internet-only banks.

The established banks then realized their mistake, and opened transactional websites.

And the window of opportunity closed.

But now

Today though, the window is about to open again.

Smart mobile phones are likely to provide another chance to challenger banks.

They will succeed by identifying the many ways in which financial services still fail the consumer.

And by then creating a mobile banking service to fix those needs:



The Japanese Suica payment card, which pays for travel, taxis, newspapers and other small items merged into the cellphone several years ago.



M-PESA

In March 2007, Kenyan mobile network operator Safaricom launched M-PESA, a mobile money system. (Pesa is Swahili for money.)

The original intention was to help low-income people receive and repay microfinance loans.

But the system became wildly popular. People started to use it to send money back from the cities to their family in the country.

And as an everyday store of money.

And as a way of making payments easily, without having to carry cash.

By 2009, there were six million M-PESA subscribers making on average two transactions a week.

Is this valuable?

Around the world, there is a huge need for simple, phone-based finance.

And where such a system is not set up officially, people will create a system themselves.

In Iraq, twenty million people transact by SMS text, using airtime credits on scratchcards.

This matters.

Lack of cheap, easy access to money transfer and secure storage is one of the reasons the poor stay poor.

In 2010, half the people on Earth will earn less than two dollars a day.

Conventional banking isn't interested in them – nor they in it.

New services like M-Pesa and Nokia Money could therefore not just be a big commercial success.

They could also provide security for half of humanity.

1. Cash in your wallet or purse runs out regularly. It's inconvenient to keep visiting an ATM. The cellphone needs to combine with the credit and debit card to be accepted for all transactions, large and small.
2. People struggle to keep track of how much money they have spent and how much they have left. The cellphone should give indications on this – and those indications should be as simple as the signal or battery symbol.
3. Hard-working families lack real-time analysis of what they are spending their money on. The phone should let them see their spending patterns as they happen, and highlight deviations from their budget.

The shape of a service to beat all existing banks is clear.



In banking, nothing is as it seems. Private banks emphasize family values not because rich families stick with them for generations, but because as soon as their children get their hands on their money, their first act is always to dump their parents' bank, and get their loot as far away from them as possible.

21. IN PRAISE OF TV

'TV-led thinking' is always criticized by digital people. They should think again.

Imagine if Philo Farnsworth and Logie Baird and all the other people who invented television had had a conference in the 1920s.

And a meteorite had hit the conference hotel.

And as a consequence, TV had never been invented.

Today, the main media would be newspapers, magazines and billboards.

And there would be an exciting new medium called digital.

In the early days of digital, data transfer speeds would have been slow.

So digital would have started as just text.

With ads on Google.

And on Craigslist.

As things sped up, the world would have moved on to graphical banner ads.

Later on, everyone would have discovered that animated movement got more attention than static images.



TV remains the most powerful awareness-building medium known to mankind.

And Flash-based animations would have taken over.

Then, as bandwidth got better, the animations would have turned into postage-stamp sized video.

Slow at first.

And halting to buffer every couple of minutes.

But compelling to the viewer.

And then quarter-screen video.

And then full screen video.

There would have been disappointments along the way, of course.

Like the Victoria's Secret fashion show that crashed the internet in 1997.

But as the video got better, everyone would have realized how powerful it could be.

They would have learned that moving pictures and sound were the perfect combination.

And the most exciting new medium of the 21st century would be not augmented reality. Or social networking. Or Twitter.

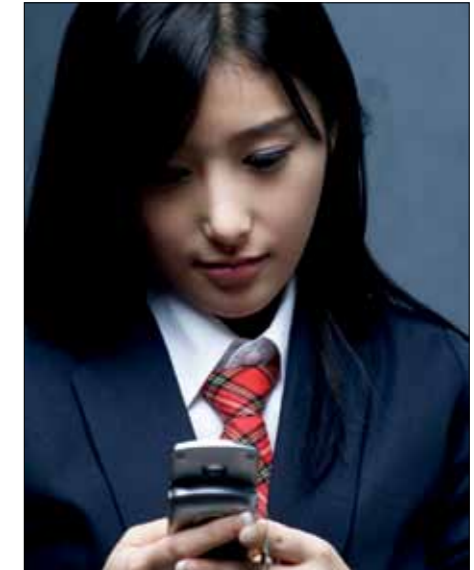
But something that looked remarkably like analog television.

So

Digital people shouldn't dismiss TV thinking as part of the past.

As broadband speeds up, everything from websites to interfaces will become video-driven.

And understanding how people respond to video streams will be what matters:



'Wired' started 'Japanese Schoolgirl Watch' to spot upcoming tech trends.

With more and more innovation coming from companies like LG, Korean schoolgirls are now the ones to watch.

The best watched videos on YouTube are music videos. Get inspired by Beyonce not by Nike.



1. Why lean forward when you can lean back?

Video has always been a 'lean-back' medium.

And because people prefer to lean back, video streams have always pushed lean-forward media out of their path.

Expect this to be the most fundamental change in the web this decade.

2. TV viewers don't want to think

Don't expect people to respond to your video-driven web presence as rationally as the word-based one from the past.

Jingles, songs and personalities work better on video than dry information.

This came as a shock to marketers when TV took over from press in the 1950s.

It will again come as a shock again to digital marketers in the 2010s.

3. TV viewers don't want interaction

Interactive TV has been the big thing that never happened for a decade now.

Perhaps people just don't want to interact when they are relaxing.

Links that you can click now, and then follow up in the morning may be the solution.

4. Video is about visual stories

The world's cinematographers get frustrated by their friends' inability to understand what they do.

Their job is to tell stories through pictures. It's a demanding art.



THE NIGHTMARE

The dream was terrifying and came to her often.

It had haunted her all her life.

She was running away across a deserted beach.

And a huge white balloon was following her.

No matter what she did, the balloon kept on coming.

And when it caught her, it pushed her to the ground.

It pressed on her.

And smothered her.

She gasped for air.

She couldn't breathe.

And then she woke up choking.

Time after time.

A psychologist in Buenos Aires said it was about her relationship with her mother. Another told her it was about her deepest fears. And another talked about breast feeding.

Later in her life she told a friend about the dream that had always haunted her.

And then came the revelation.

When she was a little girl, her father had watched a sixties British spy series called *The Prisoner*.

And in the title sequence, a large white balloon had hunted down a spy escaping across a deserted beach.

Never underestimate the power of television.

Selling through moving pictures is a demanding art too.

5. Say it fast

'No one watches anything longer than about three minutes' say people producing video for newspaper websites.

It's the same on YouTube. The stuff people watch is no longer than three minutes.

You have to say what you want to say fast.

6. Don't interrupt

No one wants you to interrupt their viewing, if they've spent time and money downloading the video stream first.

Your message has to be so compelling that they want to watch it.

7. Think social

'In the past the TV stations chose what you watched. Today you choose what you watch. But tomorrow, you will watch what your friends watch.' says a man from the BBC.

He knows what he's talking about – the BBC's iPlayer is building in rating and feedback features.

TV is going social.



Mobile TV picture quality is so important in Japan that manufacturers have extended their big flat screen TV brands like Aquos and Bravia into mobile handsets.

22. THE THREAT TO LIBERTY

It's coming.

Back in the late 1940s, George Orwell wrote his iconic book '1984' about a totalitarian state in the future.

He based his future totalitarian state on the sexy new technology of the late 1940s, the television.

Big Brother beamed out messages from the television. The television was the basis of 'Thought Control'.

But

But what if Orwell had proposed a better technology of totalitarian control?

Something that might have actually worked?

What if every citizen were given a device that constantly measured where they were?

Big Brother, by overlaying that position on a map, could then see exactly what they were doing.

And by comparing the positions of other citizens, could then tell who the citizen was meeting with.

It would be the ultimate surveillance technology.

Would anyone have believed it?

Orwell might have just about persuaded his readers that such a device was possible.



Many people, particularly those under 25, are perfectly happy to broadcast their GPS location to the world.



The first person to master the new medium of radio in the 1920s was not Orson Welles. It was an articulate young politician in Germany.

He might have also persuaded them that a totalitarian state might force its citizens to carry one. But what he would never have believed is the situation in 2010. Where more and more people are choosing to carry such a device – a cellphone broadcasting their GPS location - *voluntarily*.

Many other changes

Many other changes are threatening liberty at the moment.

The roots of modern democracy can be traced back to the invention of the printing press.

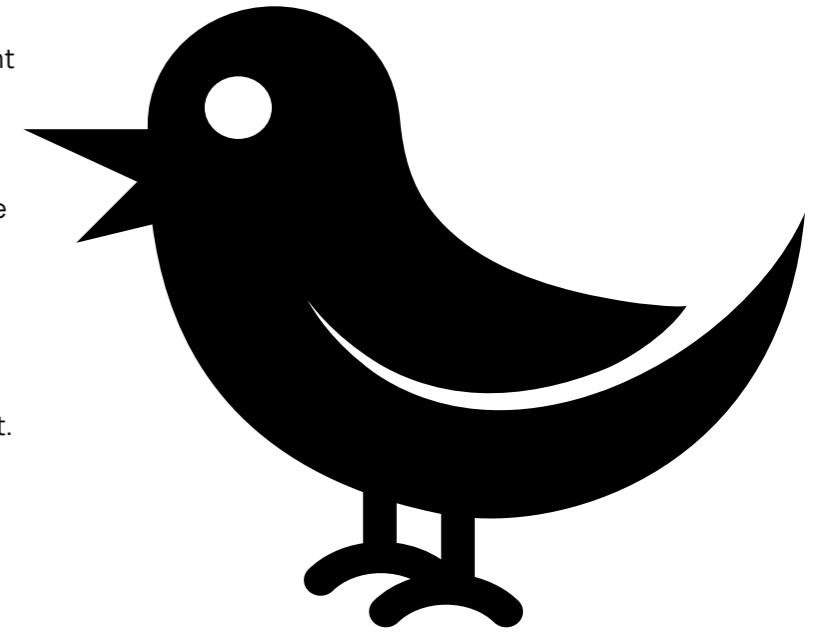
Today, newspapers are dying throughout the world, and are being replaced by blogs and other digital media of questionable editorial accuracy.

The checks and balances of democratic societies are eroding.

So far

So far though, the digital revolution has proved a net freedom, as government officials leave secret files on laptops on trains, satellite TV opens up the world to objective reporting, and activists break through censorship using Twitter.

But they are successful because the generation running governments around the world are digital incompetents.



Twitter and YouTube have turned people all over the world into broadcasters.

We should fear the next generation of politicians, who know what they are doing.

We are playing with exciting new technologies.

But we are also playing with fire.

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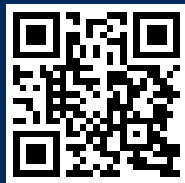


**Technology gurus talk about paradigm shifts so much that
few notice when one actually happens.**

This one is huge.

And it's going down at the moment.

As the cellphone becomes a computer.



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