

Continuous Improvement: Hell on Earth?

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20 January 2014

GOTO, Berlin

Intro

- Katherine Kirk
 - Over 10 years contracting and freelancing in a variety of roles within the IT and Media industries
 - Coach, PM, Delivery Improvement Specialist, DBA, Web Admin etc etc
 - Specialise working with really "troubled" projects, where simplistic solutions don't quite cut it
 - Completing MSc in Software Engineering at University of Oxford, and holds a first class BSc (Hons) Multimedia Computing

Why Hell on Earth?

The Fundamental Issue

“Continuous Improvement is based on two dangerous inbuilt assumptions which **automatically predisposition it to failure**”

Agenda

- NEW Industry demands: Continuous Improvement is not enough
- People dislike Continuous Improvement Programs
 - 2 common failures
 - Why they occur, using Eastern Philosophy
- A different perspective
- Suggest a technique for tomorrow

Section 1

CONTEXT

... Sigh ...

- Late 90's/early 2000's management style is no longer the answer
 - 1 big release
 - 1 big star per company to run the show
 - 1 single innovation department
 - A couple main territories worldwide

Its MUCH tougher out there!

Ever changing industry:
Innovation is the norm

Our response?

Just ALWAYS keep improving:

Continuous Improvement

Improvement

2006

Nokia N72



Improvement... Continuously?

2006

Nokia N72



2007

Nokia 6555



Improvement vs Innovation

2006

Nokia N72



2007

Nokia 6555



2007

Apple's First iPhone



Blackberry



2006



2007



2008



2009

Continually Improving...



2010

2011



2012



2013

Blackberry now



Blackberry-maker RIM going back to its roots

30 March 2012 Last updated at 06:09 GMT

The company that makes Blackberry smartphones says it will refocus on the corporate market than consumers.

Research In Motion has seen its sales fall behind the competition from Apple's iPhone and devices running Google's Android software.

The Canadian company made a net loss for the three months to 3 March 2012 of \$125m (£78m) compared with a profit of \$934m a year earlier.

Speaking to Wake Up To Money on **BBC Radio 5 live** Larry Magid from CNET said that the company may look at selling the consumer arm of the business.

To listen to other 5 live interviews, please visit the [Best Bits](#) page

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The image shows a screenshot of the Reuters website. At the top, there is a navigation bar with the Reuters logo and a search bar. Below the navigation bar, there is a large banner for 'AVAILABLE UNTIL 15 NOVEMBER 2013' with the text 'THE EXCEPTIONAL OFFER IN DETAIL >' and 'BANG & OLUFSEN'. Below the banner, there is a section titled 'ARTICLE' with a sub-header 'Big leaps keep your universe expanding New Stars'. The main article is titled 'BlackBerry Takeover Bid Falls Apart, CEO to Depart' by Benjamin Kabin at Entrepreneur.com, dated Mon Nov 4, 2013 11:12am EST. The article text reads: 'The \$4.7 billion deal that would have taken BlackBerry Ltd. private has come undone. The Waterloo, Canada-based tech company announced today that Fairfax Financial Holdings, the investment firm that proposed the takeover bid but was unable to raise the necessary funds, will instead invest \$1 billion in BlackBerry.' To the right of the article, there are social media sharing buttons for Twitter, LinkedIn, Facebook, and Email, and a 'Reprints' button. Below the article, there is a section titled 'Follow Reuters' with buttons for Facebook, Twitter, RSS, and YouTube.

...

Its just not enough anymore!!!!

But: even big players are faltering

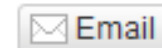
Come on Apple, think different

The Apple known for thinking big and deep is in danger of becoming the new Microsoft. It needs to innovate to stay cool



Heidi Moore

theguardian.com, Thursday 24 January 2013 18.30 GMT



Article history

Technology

Apple · Computing ·
Tablet computers · Steve
Jobs · iPad · iPhone

World news



The era we live in now

... its about **consistent innovative thinking**:

“Globalisation + technology = complexity”

- Need for speed
- *We require innovative solutions:*
 - *to release, to adapt for a variety of territories, adjust to legislation, interfacing / extending legacy systems, service multiple devices and multiple versions (e.g. mobile, IPTV etc)....*

Our response?

- Just ALWAYS keep improving
 - We think Continuous Improvement is the answer
- Improvement =
 - Work out what is wrong
 - Change it to what's right
 - Build on what's right with other right things
- Continuous =
 - Do this over and over, indefinitely

Continuous Improvement

Looks nice and OBJECTIVE doesn't it?



What's not to love?

SECTION 2

PEOPLE DISLIKE CONTINUOUS IMPROVEMENT PROGRAMS

An interesting pattern

- Ask a software engineer



- Ask an environmental scientist
- Ask an archaeologist

Whaaa??

- Engineers are discovery junkies
 - Teen years in dark rooms ‘improving’!

Summary

- So Continuous Improvement
 - isn't cutting it in the industry ?
 - somehow it's messing up morale?
- But
 - We love to improve
 - We GENUINELY want to get better and better
 - Industry DEMANDS it

So what's going wrong?

Section 3

TWO COMMON CONTINUOUS IMPROVEMENT FAILURES

Two common failures

- Distilled, exaggerated ‘parables’
 - Story 1: The Continuous Improvement Manager
 - Story 2: The Continuously Improving Application

We need Continuous Improvement!

- People are gaming management
- Quality is dropping
- Can't deliver what we promised
- No predictability / consistency
- Apathy (increase in sick days/everyone wants to work from home)
- Product is degrading (legacy code hell)

Story 1:

Continuous Improvement Management

- Philosophy:
 - Continuous Improvement framework
 - Give you 50% less (e.g. Time)
 - Expect 100% more (e.g. Output)
- Driver
 - Faster, better
 - Get predictable improvement
 - Get promotion!

Example

Phase	Will take	Output	Team	Manager
Phase 1	4 weeks	10 items	...	Anger
<i>Request</i>	<i>2 weeks?</i>	<i>20 items?</i>	<i>Permissive</i>	<i>Frustration</i>
Phase 2 - achieved	2 weeks	20 items	Excitement	Pleased
<i>Request</i>	<i>1 week?</i>	<i>40 items?</i>	<i>Trepidation</i>	<i>Determined</i>
Phase 3 – achieved	1 week	40 items	Surprise & Exhausted	Confidence & drive
Request	2.5 days?	80 items?	Anger/Frustration	Convinced



This is CRAP



PROVEN

Yes it works!!!!

(sack those who don't believe it)

The GREAT divide

- Management confirms
 - I've seen a pattern
 - The team can ALWAYS do more than they say
 - There WAS something wrong with their attitude
 - Ignore the protestations of impossibility
- Team confirms
 - I've seen a pattern
 - Manager is disengaged from our situation
 - To make this work we now need to game the system
 - Trying to make it better never works
 - Best to get left alone just to do our job

Ouch?

- **They will revert to original behaviour**
 - *People are gaming management*
 - *Quality is dropping*
 - *Can't deliver what we promised*
 - *No predictability / consistency*
 - *Apathy (increase in sick days/everyone wants to work from home)*
 - *Product is degrading (legacy code hell)*

What's happening here?

*Forcing people to improve
won't make them innovate*

Story 2:

Continuously Improving Application

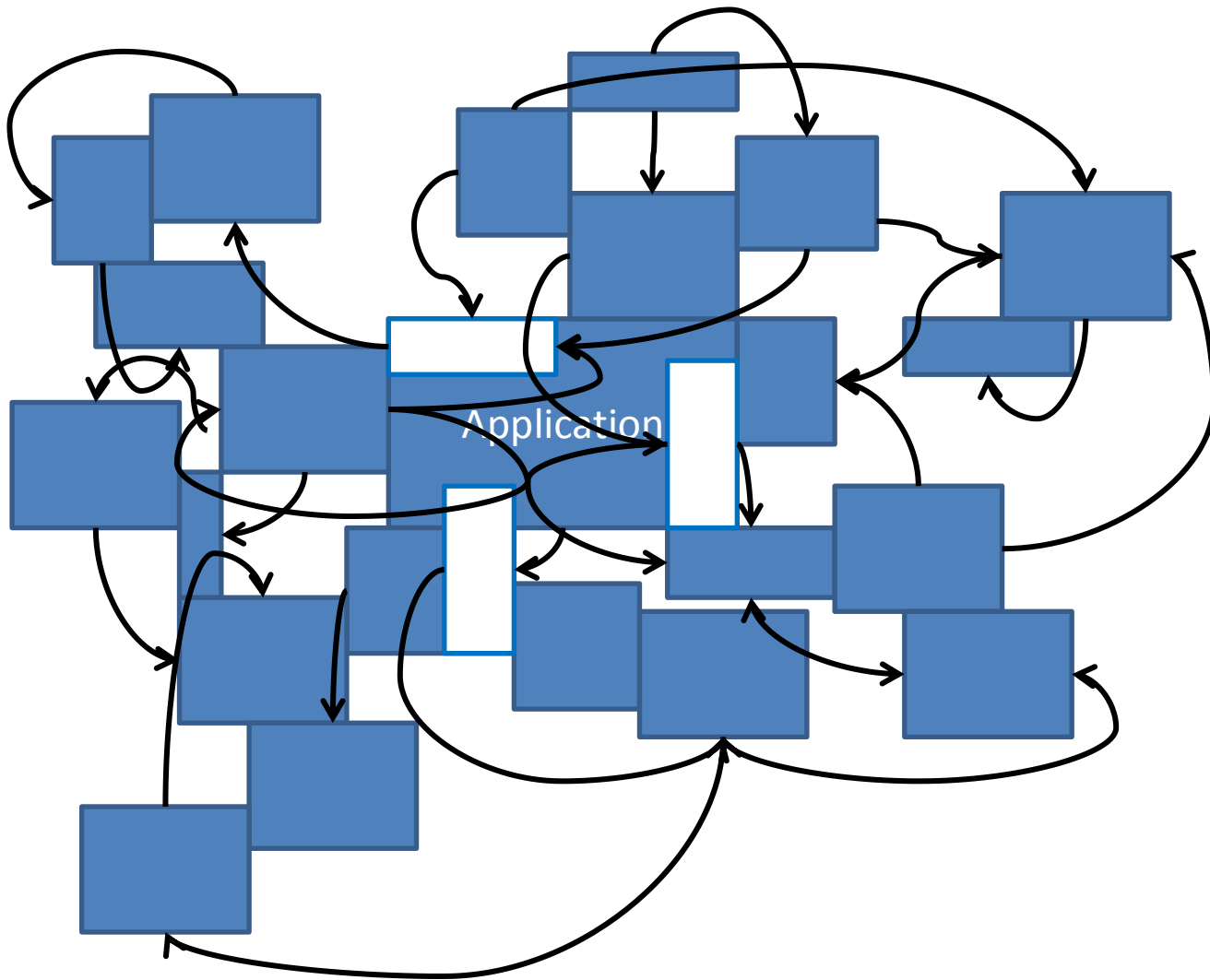
- Philosophy:
 - Make something MUCH better
 - Respond really really quickly
 - Adapt to what is asked
- Driver
 - Make people happy
 - Get it out now
 - Get promotion!

How it begins....



The completed
Application

Continuously improved: Legacy code



What's happening here?

“The influence of idiocy”

Press release driven development (PRDD)?

Who judges something to be an improvement?

Who is judging the judge?

SUMMARY

- Continuous Improvement kryptonite
 - Unrealistic demands (**expectation**)
 - driven by conflicting agendas
 - Subjective opinions (**judgement**)
 - swaying the focus / strategy

Time for....

The Fundamental Issue

“Continuous Improvement is based on two dangerous inbuilt assumptions which **automatically predisposition it to failure**”

Dangerous Inbuilt Assumptions

```
graph TD; A[Dangerous Inbuilt Assumptions] --> B[Continuous]; A --> C[Improvement];
```

Continuous

- Assumption 1:

**“Infinite improvement
is possible”**

- *Allows unrealistic
expectation*

Improvement

- Assumption 2:

**“Something is wrong
and must be fixed”**

- *Begins with negative
judgement*

Section 4

STEP 1: UNDERSTAND THE FAIL

Get a different perspective

Modeling (e.g. architecture) in different ways

=

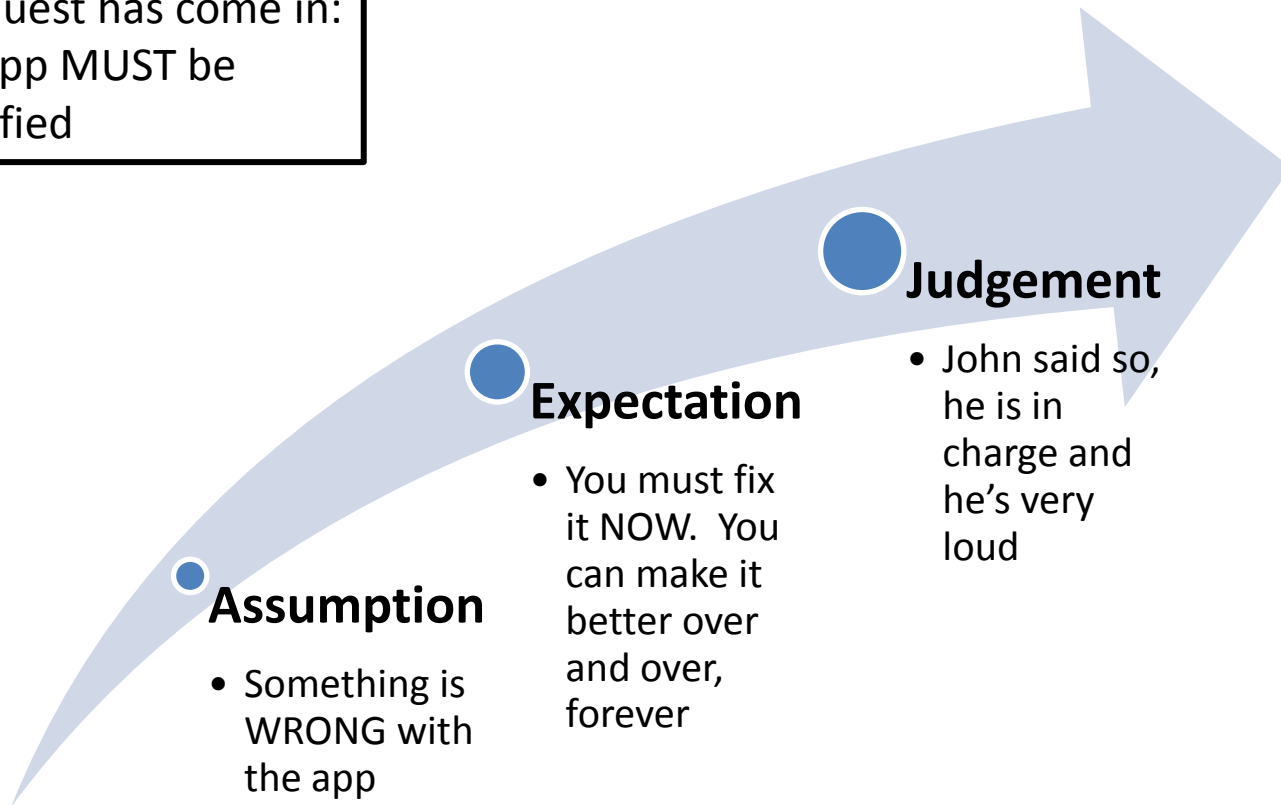
Freedom to choose strategy and reaction

Applying eastern philosophy

- This is not a recent technique
 - Steve Jobs
 - Management & Mindfulness Research
- Mindfulness
 - Mahasi Vipassana – a very ‘practical’ strain of Buddhism
 - AIM 1: Reduce Suffering
 - AIM 2: Continually Improve indefinitely till enlightenment

Recap: Exploiting the weakness

A request has come in:
the app **MUST** be
modified



SUBJECTIVE instead of OBJECTIVE

WARNING: They're poisons

Assumption	Expectation	Judgement
<ul style="list-style-type: none">• You're not necessarily working with the REAL data!!	<ul style="list-style-type: none">• Breeds apathy• Getting what you expect might not be what is best (e.g. not innovative enough)• Too much emotional investment: expectation can create morale crashes when it isn't achieved	<ul style="list-style-type: none">• Subject to ignorant influence• Can be critical, and self-orientated

Section 5

STEP 2: AN ALTERNATIVE?



Expectation

- “Assumes, presumes, takes for granted. Its a manifestation of arrogance. **Expectation is bound to fail us one way or another for it projects an ideal, a concrete goal on the future whose parameters we don't know.** We simply don't know what is going to happen. So when our expectation fails to materialise we are disappointed, depressed by it. A life that rests on expectation is forever falling into ditches. Consider how many times we've been disappointed in our lives. Such is the measure of expectation.
- Expectation is a dangerous poison. **When we fail to get what we expect, we are disappointed, humiliated, depressed”**

Bhante Bodhidhamma

Aspiration

- “Does not expect, assume, presume. It does not have a success time or finishing date. Aspiration does not presume fulfilment, does not presume on others. It is simply a movement in the mind, a desire for the wise, the beautiful and the virtuous. **An inclination towards a goal.** And so aspiration **gathers all the necessary qualities and support to move in that direction.**
- Aspiration is humble. Not the false humility of a prideful self. [Not] a cover to prevent the humiliation of failure in others eyes. Genuine humility is that **groundedness that comes with seeing life not as success and failure, but as trial and error. If things dont work out, well, at least I know** what is not for me. **It clarifies future action”**

Bhante Bodhidhamma



- **Judging** – to take a position that is critical, and self-righteous.
- **Judicious** – there is a judging that is not judgmental; judicious means to be wise and sensible. To be judicious means **to see the whole situation** even from the other person's or institution's point of view. To do that we must **drop our own little opinion and see it in a wider perspective**. These are the virtues we expect in a judge – **not to be hijacked by a crowd baying for blood or duped by the clever arguments of lawyers**.

Bhante Bodhidhamma

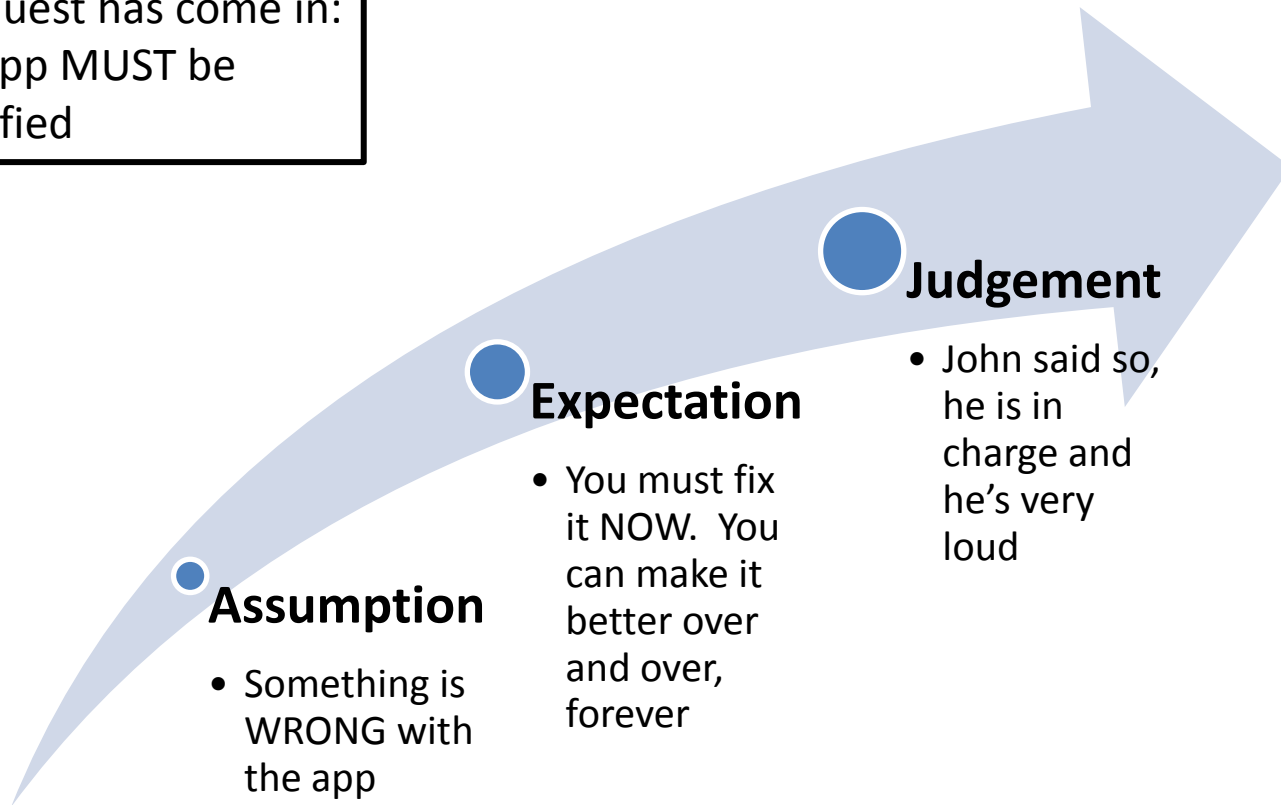


Example

- Assumption
 - We can (when we can't)
 - We can't (when we might)
- Investigation
 - How interesting: What can we do?
 - How interesting: What can't we do?

Recap: Exploiting the weakness

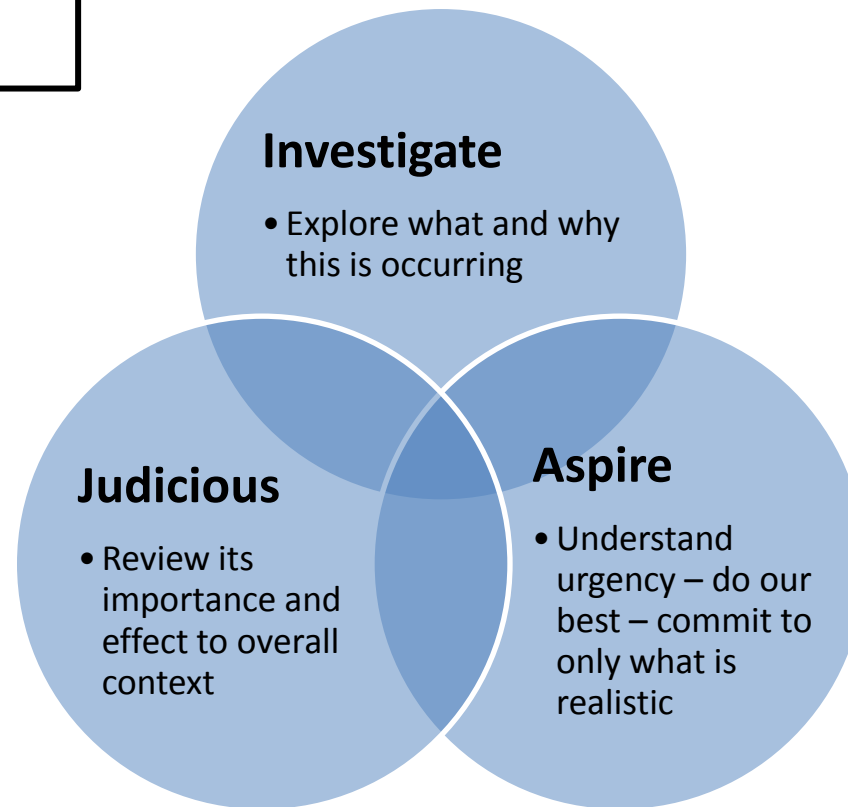
A request has come in:
the app **MUST** be
modified



SUBJECTIVE instead of OBJECTIVE

A different view

A request has come in:
the app **MUST** be
modified



OBJECTIVE iteration instead of **SUBJECTIVE** steps

Armed with the new info...

... lets revisit our two stories....

Story 1:

Aspiration/Investigation/Judiciousness

Phase	Will take	Output	Team	Manager
Phase 1	4 weeks	10 items	...	Anger
<i>Request</i>	<i>2 weeks?</i>	<i>20 items?</i>	<i>Permissive</i>	<i>Frustration</i>
Phase 2 - achieved	2 weeks	20 items	Excitement	Pleased
<i>Request</i>	<i>1 week?</i>	<i>40 items?</i>	<i>Sensible</i>	<i>Hopeful</i>
Phase 3 – achieved	3 weeks	25 items	Pleased	Confident
Request	3 weeks	25 items?	Confident	Trusting

*Sustainable pace?
= resilient innovation?*

*Aspire: 2 weeks,
20 items, no
legacy?*



Try new things?
Learning a lot!




We can predict!
We get better

- Less delusion = more solution = based on reality
- Predictability? Reliability?
- Morale: Easier to stay in discovery state for longer periods = foundation for innovation
 - ‘not being good enough’ vs ‘learning a lot’

Story 2

Aspiration/Investigation/Judiciousness



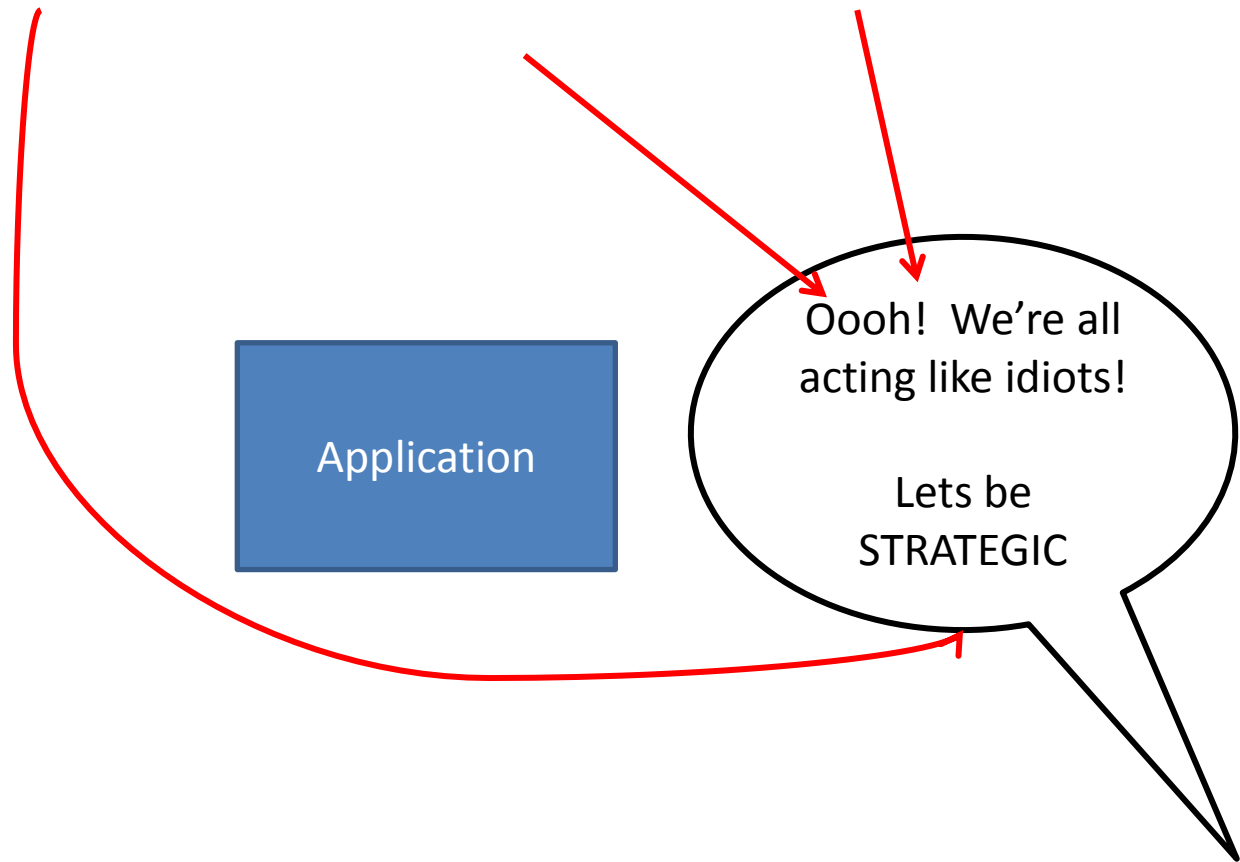
We want! We
want! Then we
want! And then...
And then...



Application

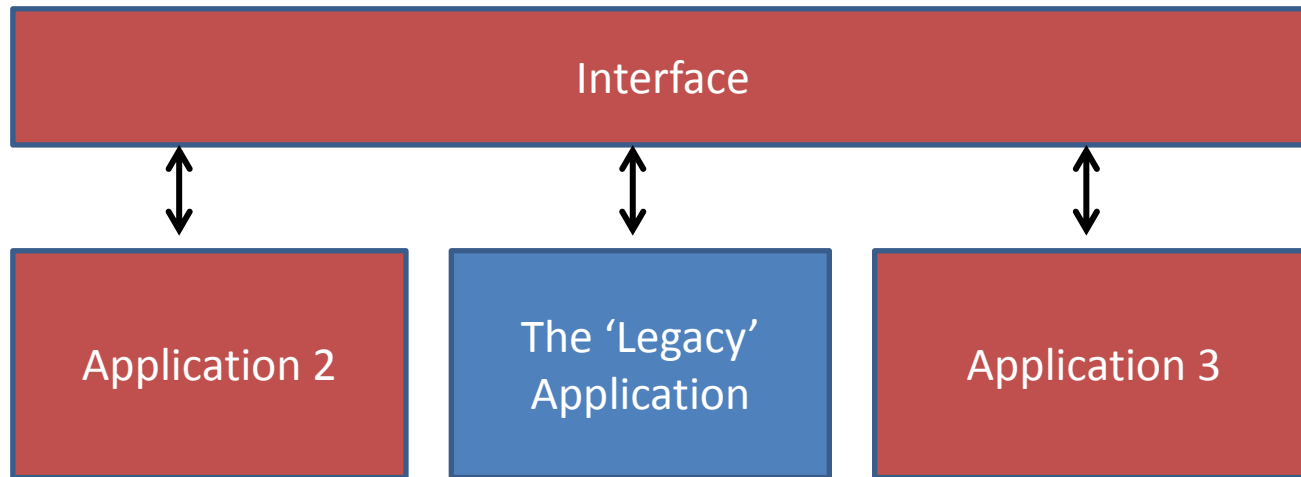
Story 2

Aspiration/Investigation/Judiciousness



Sustainable, innovative solutions

Aspiration/Investigation/Judiciousness



Less influence of idiocy

So, all is not lost!

- A change in perspective can help
 - Increase long term sustainable pace
 - increase resilience to adapt to different rapidly changing scenarios
 - could lead to better predictability and more reliability

SECTION 1 + 2 + 3 + 4 + 5 = ACTION?

Review

- Point 1 -** New Industry demands: aggressive competition, relentless innovation
- Point 2 -** Pattern 1: People dislike Continuous Improvement Programs
- Point 3 -** Pattern 2: Common Continuous Improvement Program failures - Unrealistic management & Legacy code
- Point 4 -** Continuous Improvement Programs fail because of unrealistic expectation, inbuilt subjectivity and false assumptions
- Point 5 -** Different techniques can help

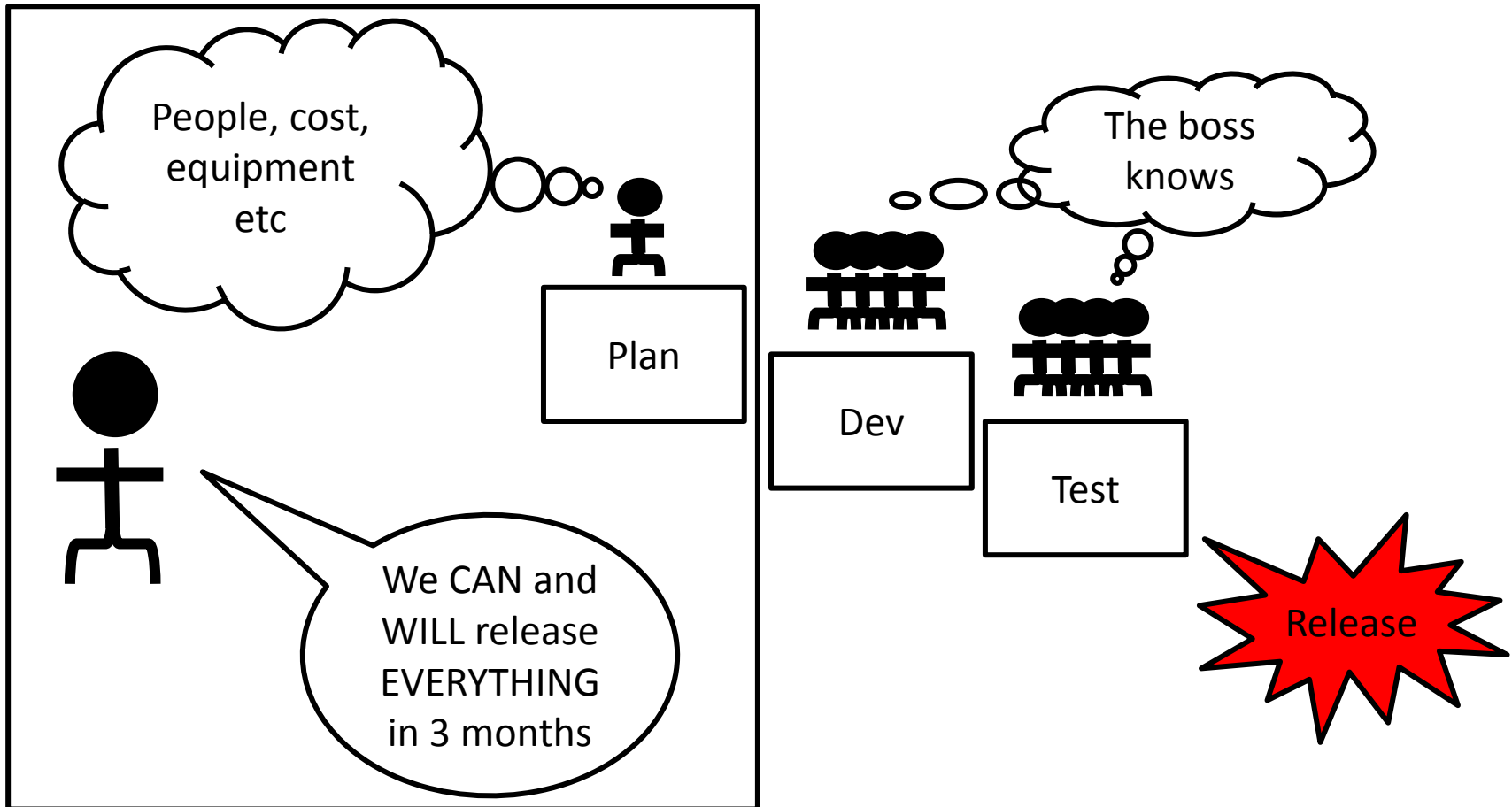
... woteva ...

What about the REAL WORLD???

Waterfall

Control/Judge

Do/submit

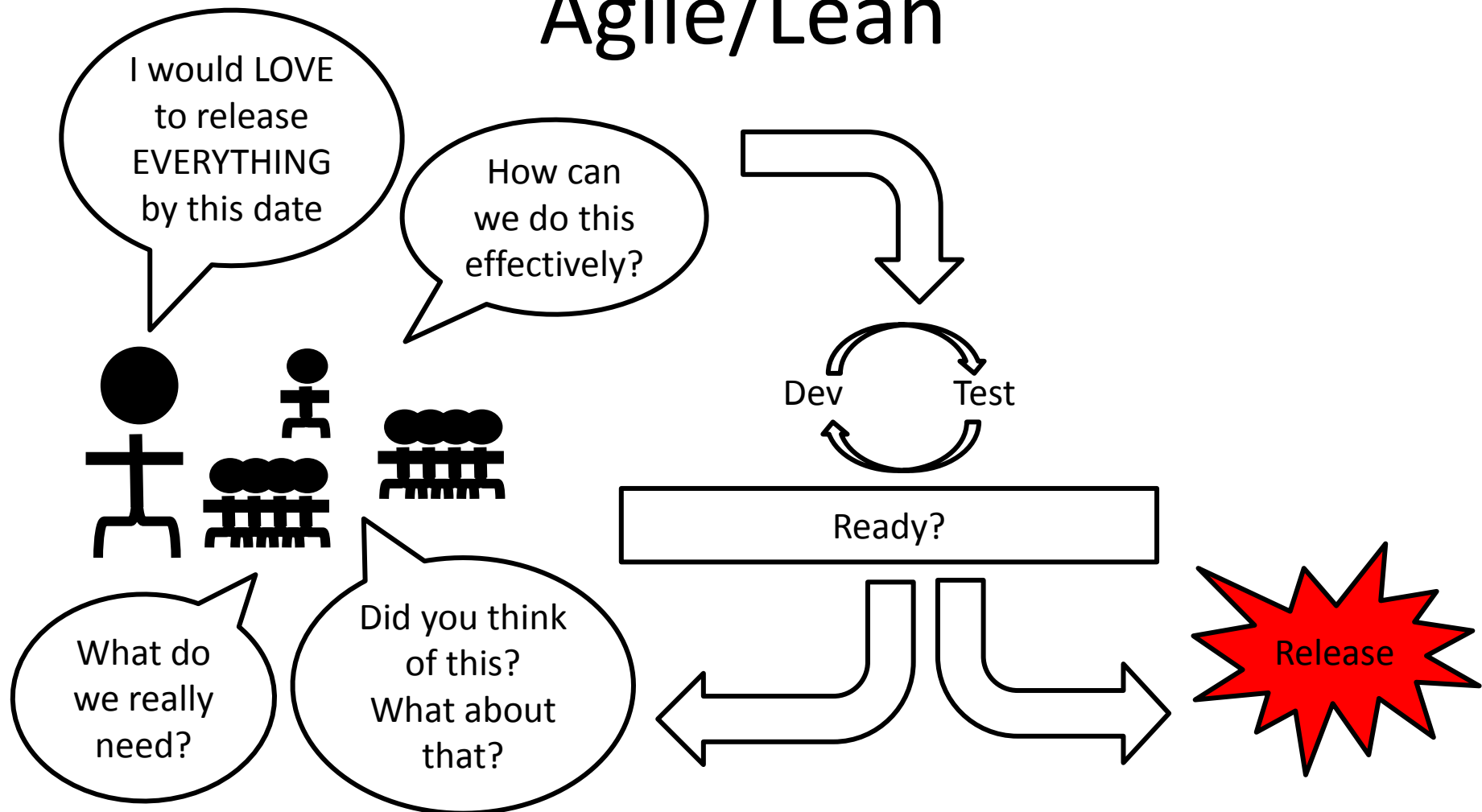


Expectation – We shall release EVERYTHING

Assumption – Nothing will change / We can / we've thought about it ALL

Judgement – Boss and supervisor

Agile/Lean



Aspiration – We would LOVE to release EVERYTHING

Investigation – Adjust to context: what can we do / what do we really need / how

Judicious – Voting, collaboration, constant feedback

Just look at: Retrospectives!!

- In just ONE meeting... Its got it all:
 - Aspiring to be better
 - Investigating what is wrong / solutions
 - Judiciousness: voting/collaborating on new ideas and actions

But even Agile/Lean is not immune

- Its easy to 'kill' a Retrospective
 - Avoid voting
 - Leave investigation for later
 - Demand things to be done
 - Judge others and their output
 - Get one person to run it

... So, even in Agile/Lean, we need a reminder to focus on what's important...

The three main meetings

- Planning sessions
- Retrospectives
- Daily Standups

Notice what's happening...

'Consistent Discovery' Technique

Expectation – **Aspiration**

Judgement – **Judiciousness**

Assumption – **Investigation**

During the meeting...

- Watch the mood of the room
 - Morale: up or down?
 - Too many 'single opinions'? Time to collaborate...
 - Too many demands? Time to break down 'what we can do' versus 'what we aspire to do'....
 - Too many assumptions? Time to investigate reality...
- Use the model as a collaborative scale
 - E.g. Where are we: expectation / aspiration
- Look at how you deal with others

Example: Conversations

Expectation	Aspiration
"By this date or else"	"Let's aim for this ... but commit to that"
Judgment	Judiciousness
"You're not productive enough" "This is useless/wrong"	"What's the bigger picture: what's the workload? What may be blocking progress?"
Assumption	Investigation
"We can't / we can do this"	"Why do we think we can't/can?"

IN CONCLUSION

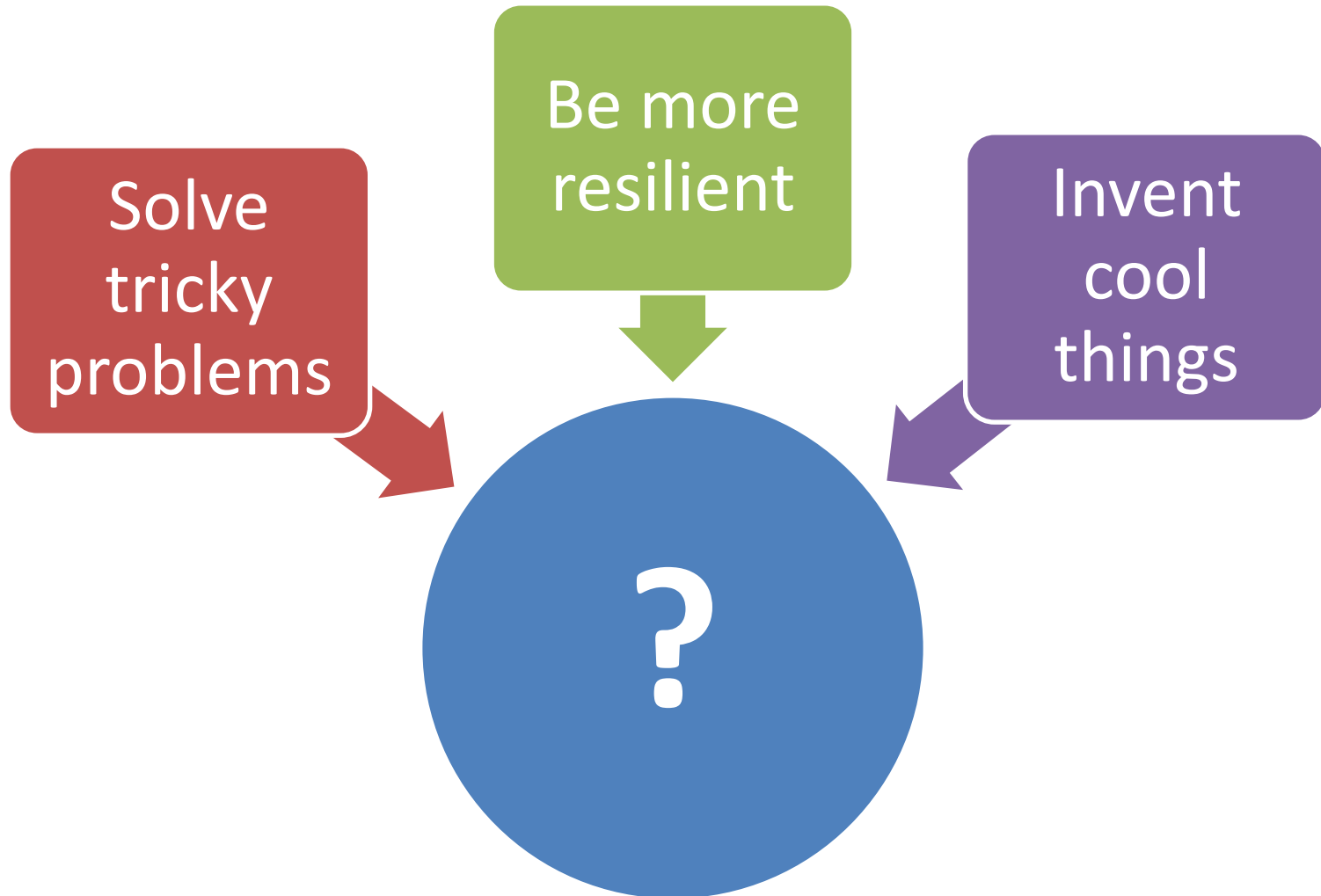
The era we live in now

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- The need for speed
- *We require innovative solutions:*
 - *to release, to adapt for a variety of territories, adjust to legislation, interfacing / extending legacy systems, service multiple devices and multiple versions (e.g. mobile, IPTV etc)....*

We gotta do it all, y'all!



The pressure...

2006

Nokia N72



2007

Nokia 6555



Improvement

2007

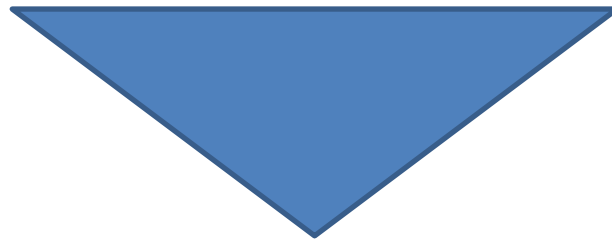
Apple's First iPhone



Innovation

No need for dramatics!

Continuous Improvement



Consistent Discovery

AIM: Resilient innovation

Go use it!

Try a 'Consistent Discovery Technique'

Expectation – **Aspiration**

Judgement – **Judiciousness**

Assumption – **Investigation**