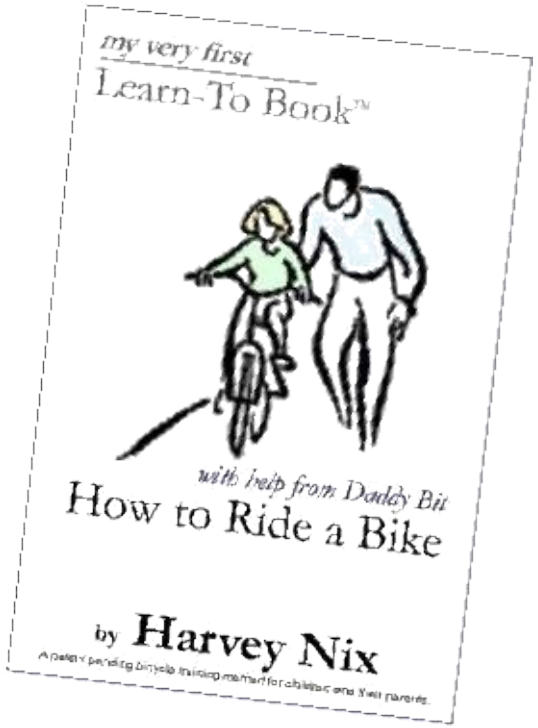
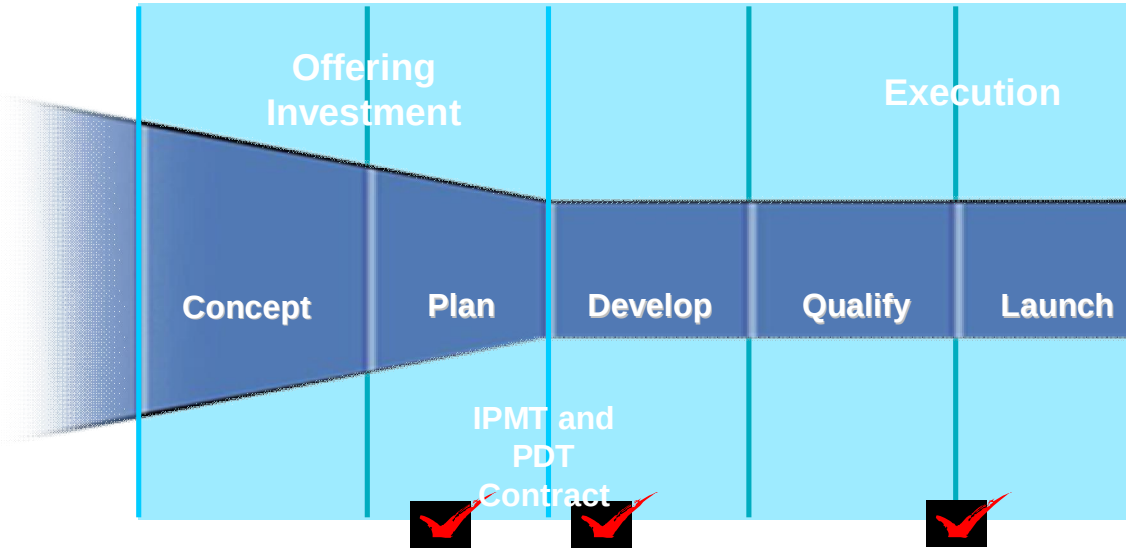
The Art of the Possible to the Art of the Practical

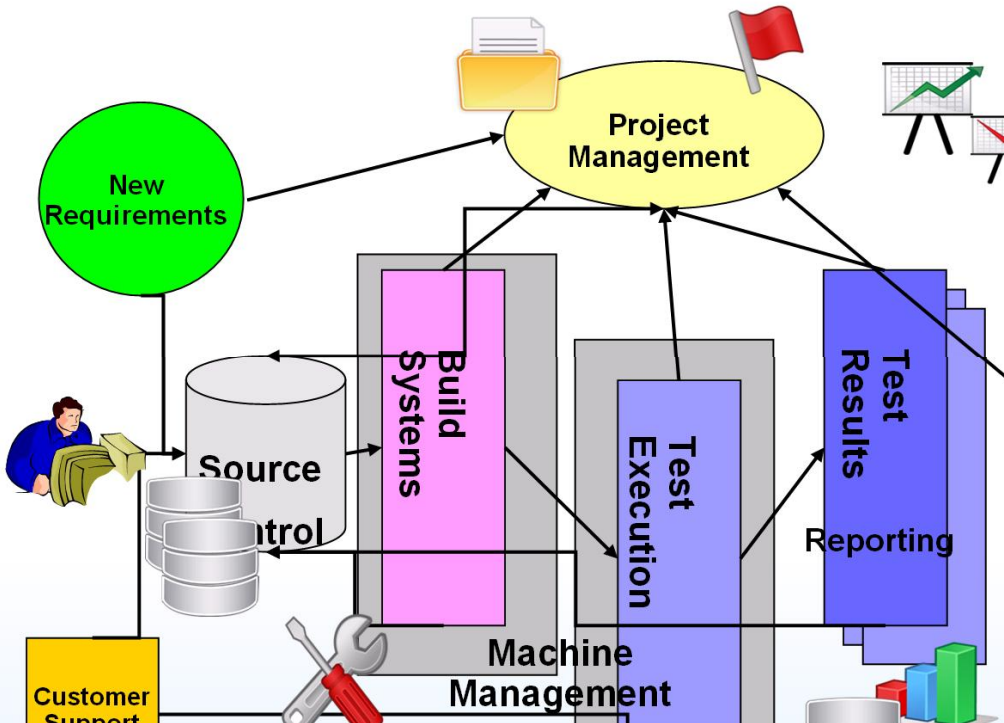
Tony Grout
tony.grout@uk.ibm.com

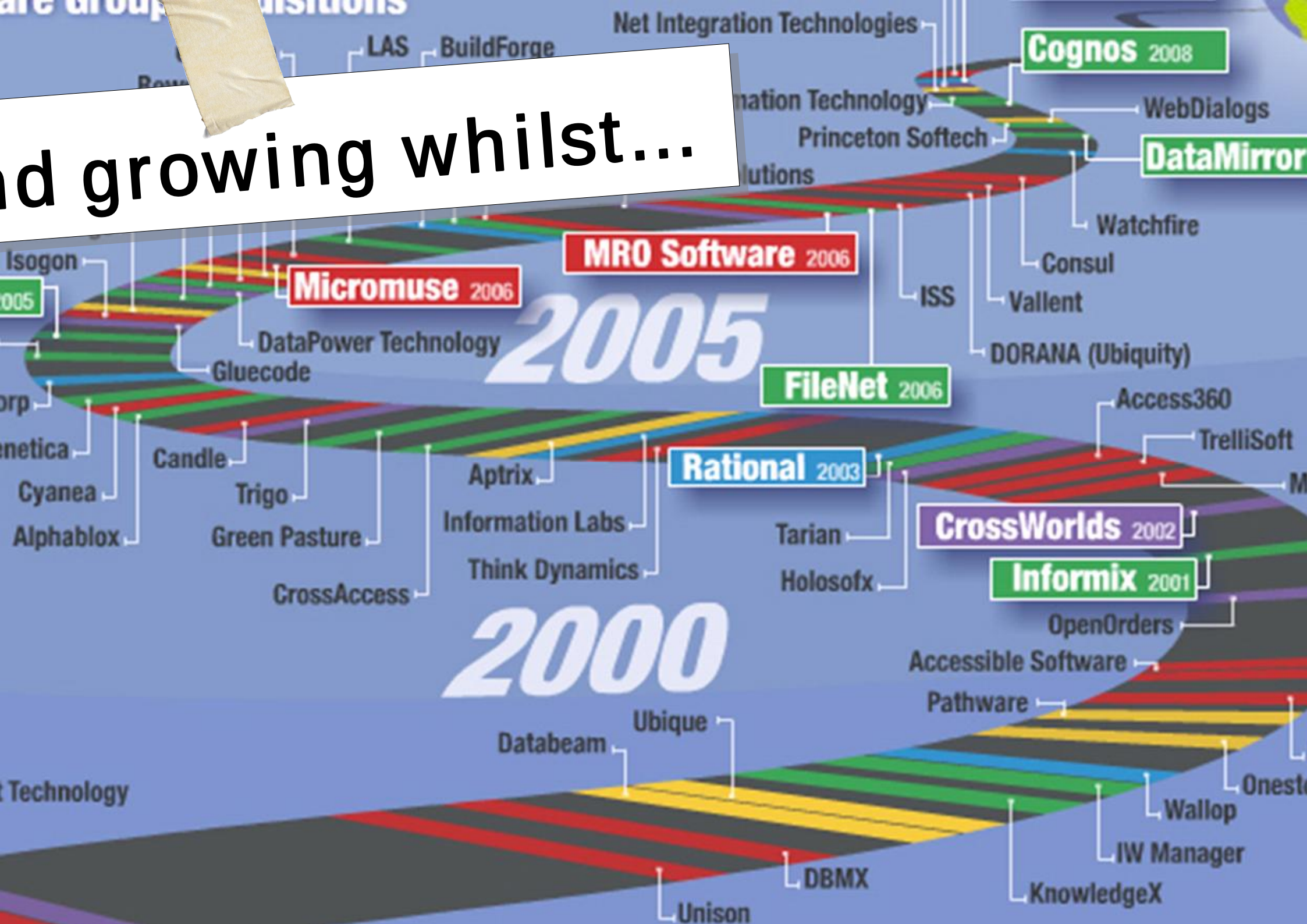


want the one in the picture...

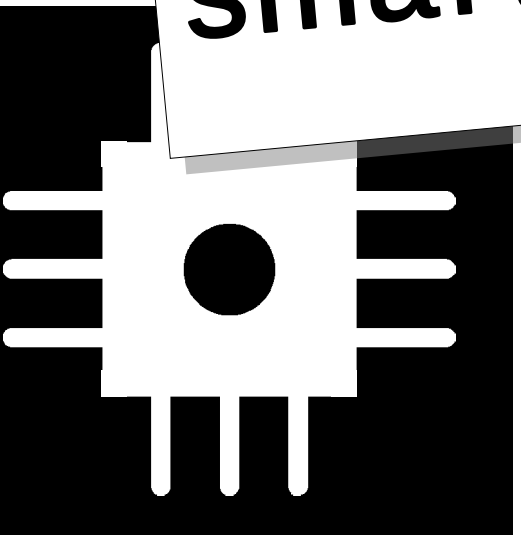
But 25,000 of us looked more like this...





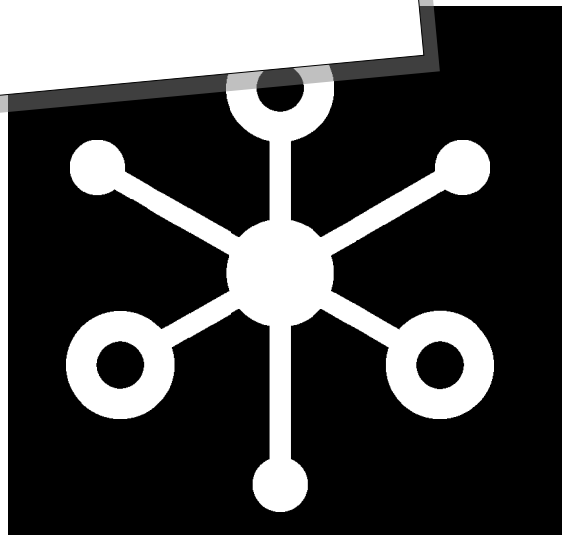

nd growing whilst...
Net Integration Technologies
LAS
BuildForge
Cognos 2008
WebDialogs
Princeton Softech
DataMirror
Watchfire
Consul
Vallent
ISS
DORANA (Ubiquity)
MRO Software 2006
Micromuse 2006
Isogon
2005
DataPower Technology
Gluecode
FileNet 2006
Access360
TrelliSoft
Rational 2003
Candle
Trigo
Aptrix
Cyanea
Alphablox
Green Pasture
Information Labs
Think Dynamics
CrossAccess
Tarian
Holosofx
CrossWorlds 2002
Informix 2001
OpenOrders
Accessible Software
Pathware
2000
Ubique
Databeam
Wallop
IW Manager
DBMX
KnowledgeX
Unison

Building a smarter planet



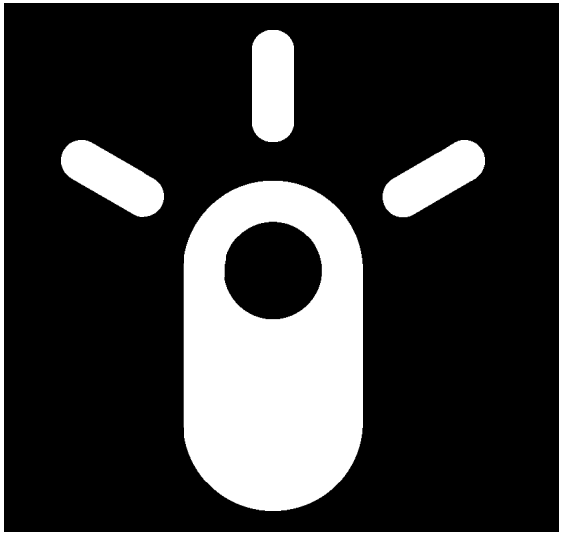
STRUMENTED

e now have the lity to measure, nse and see the xact condition of everything.



INTERCONNECTED

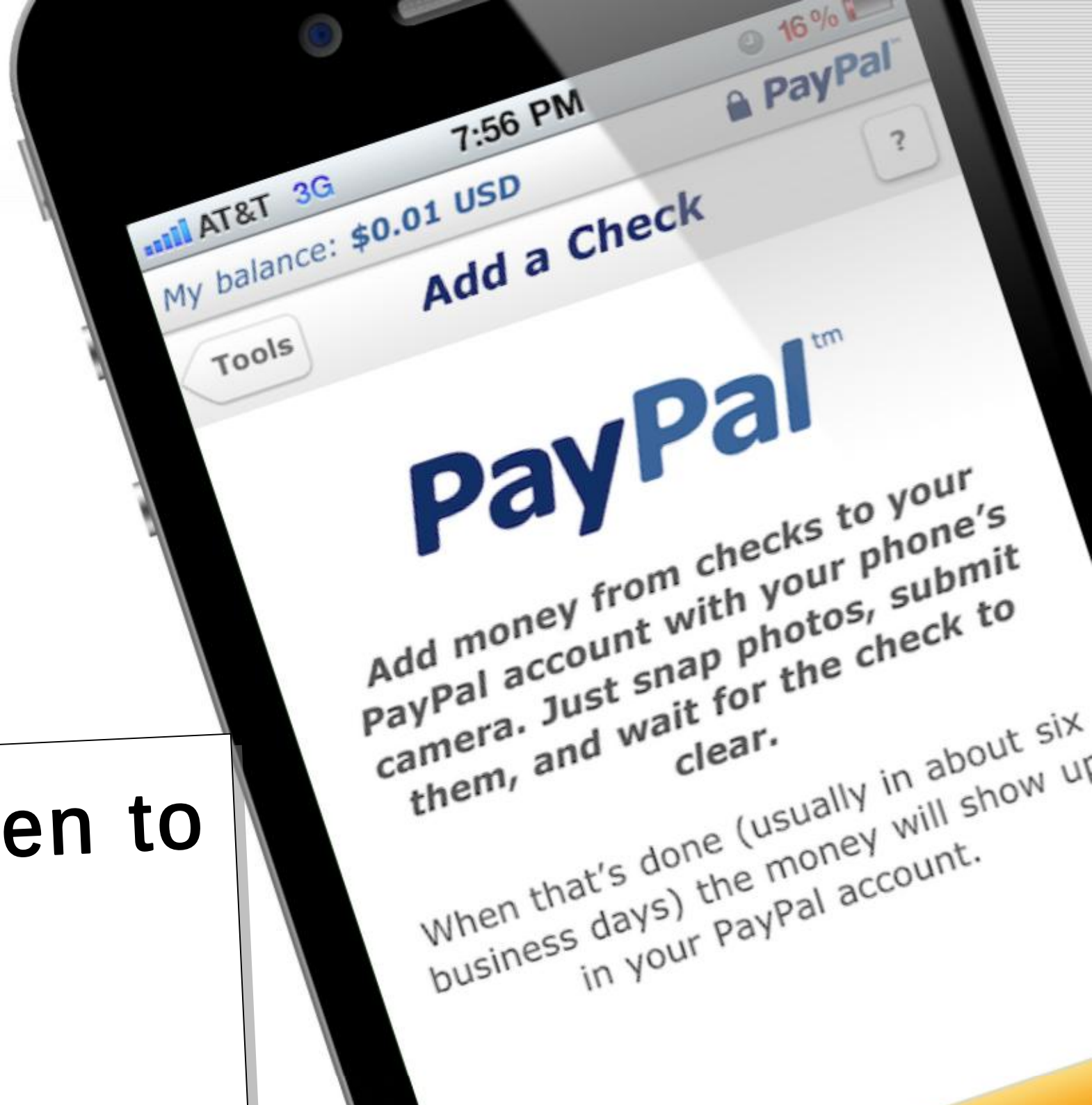
People, systems and objects can communicate and interact with each other in entirely new ways.

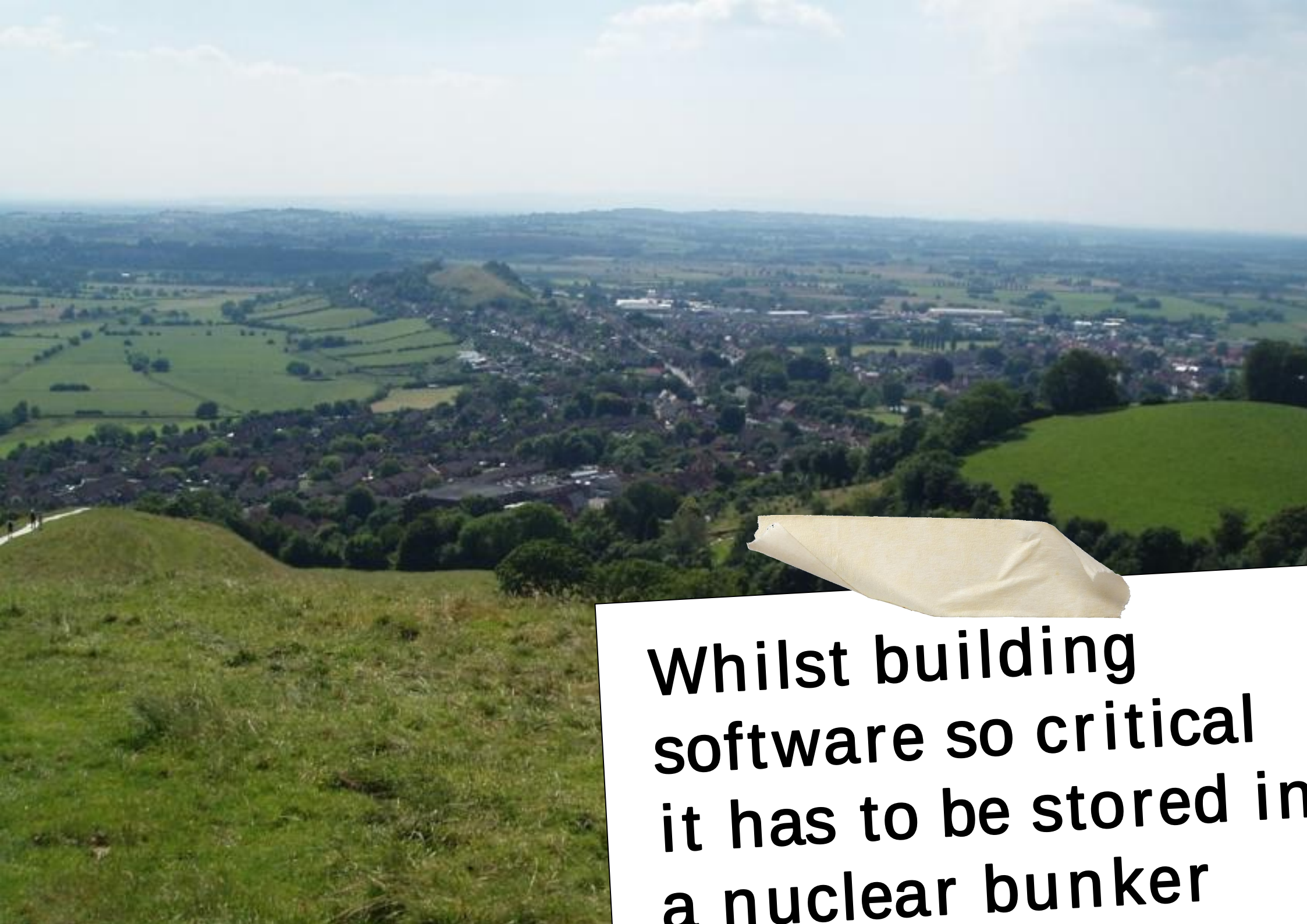


INTELLIGENT

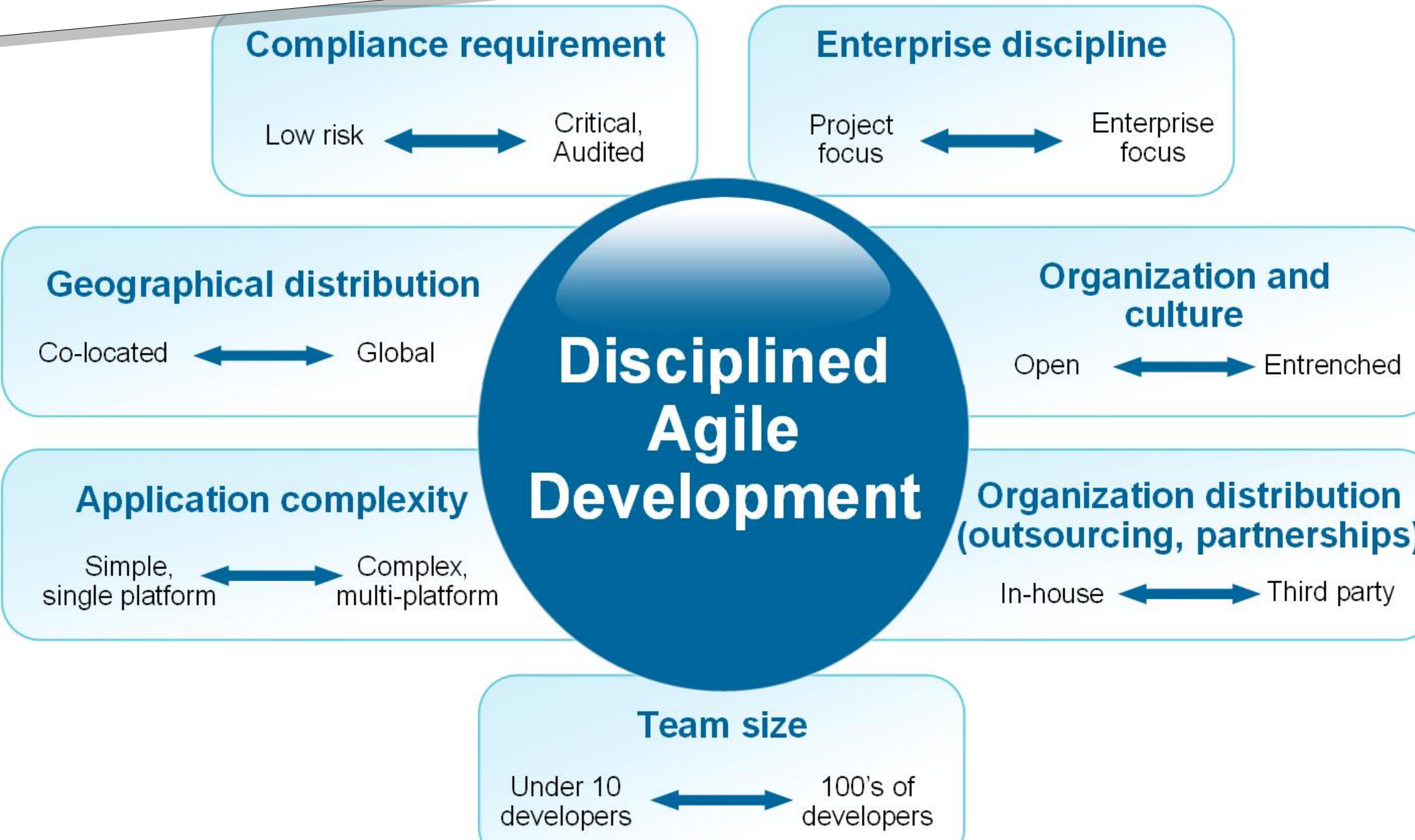
We can respond changes quickly a accurately, and g better results b predicting and optimizing for fut

d being driven to
liver it all
e an app...



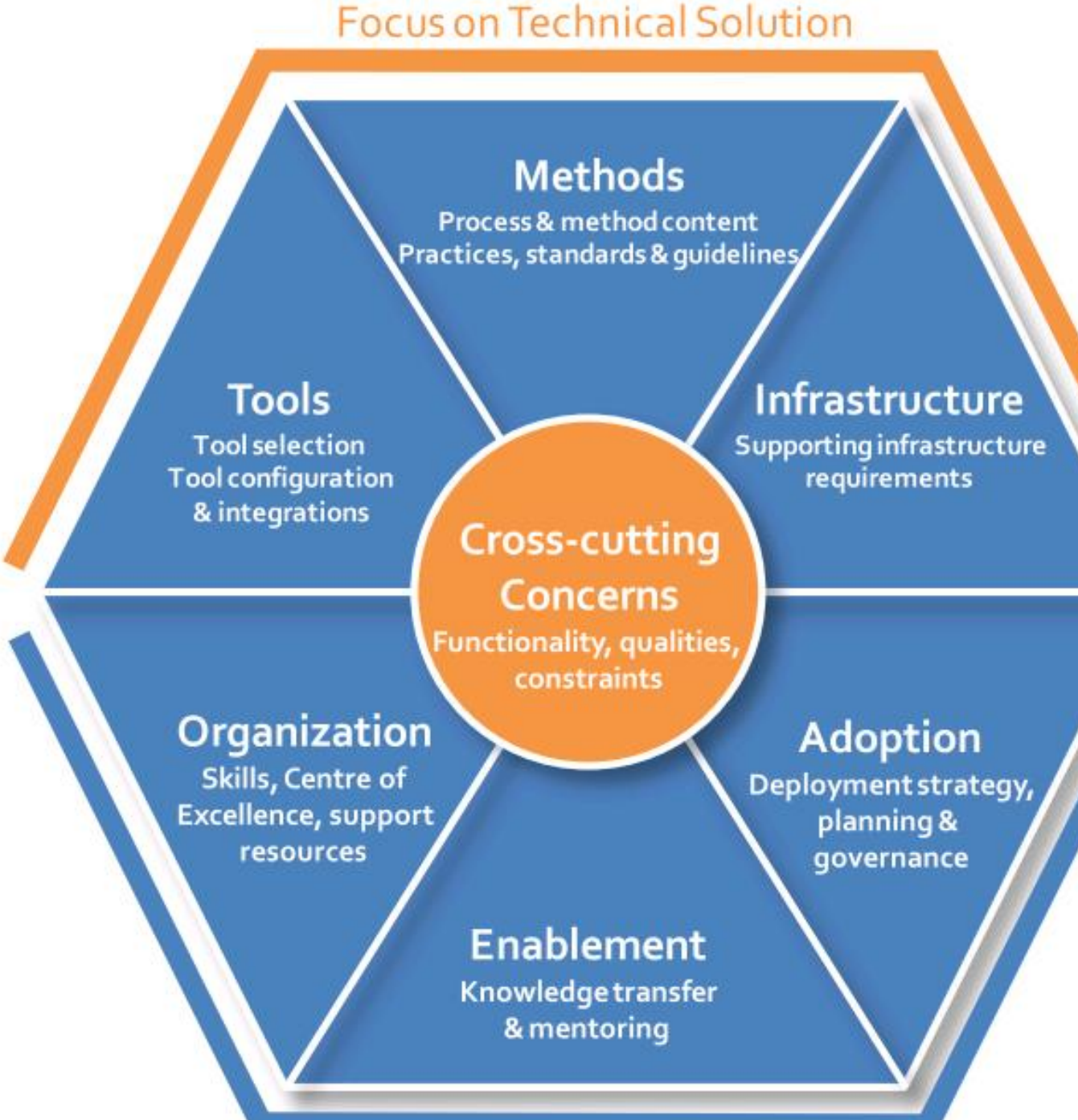

Whilst building
software so critical
it has to be stored in
a nuclear bunker

hen you think about agility @scale



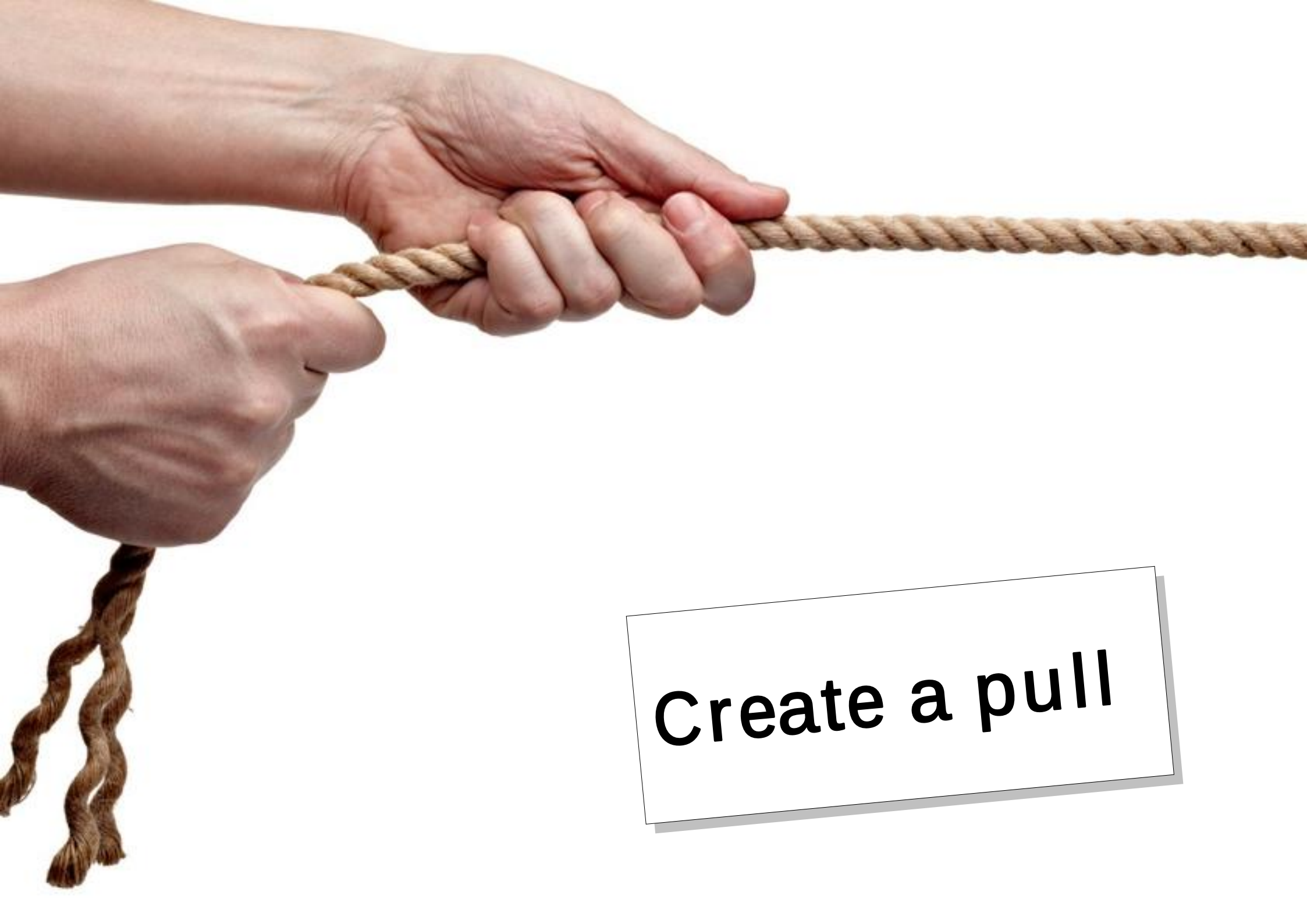
So how do you get 25,000
people to work differently?

here's a lot t
hink about



Push doesn't
work especially at
this scale...

They need to want it


Create a pull

Make them feel part of
something worthwhile

BE
AMAZING
CREATE
SOMETHING
WONDERFUL

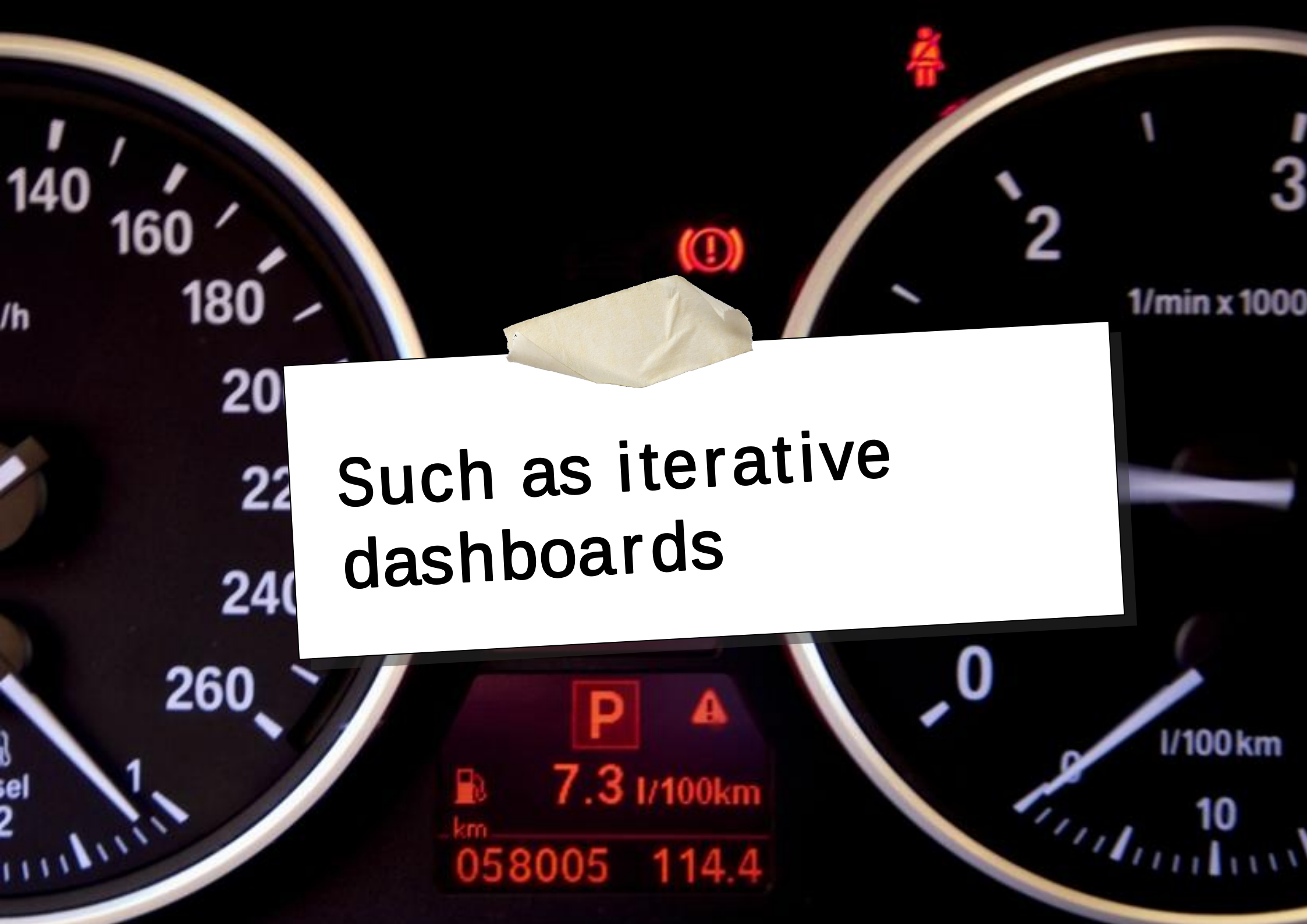
We flew a core team around the world to train and

We've also learnt a lot from our contribution to open source

Jazz.net brings our developers close to their customers

Don’t be prescriptive too early

Sometimes we lit some
fires...


Such as iterative dashboards

But we provided tech and support if they chose to use it

critical defect
ts the build in
he final iteration

You're on your own

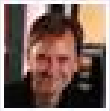
1. You've found the user story work item in Rational Team Concert where the defect

2. Rational Team Concert shows the code linl to the user story

3. You review the code but it's not immediatel obvious

```
public class AnimCanvas extends Canvas implements Runnabl
{
    protected Thread myThread;
    public AnimCanvas() {
        myThread = new Thread(this);
    }
    // the run() method never gets called because the
    // thread never gets started.
    public void run() {
       for(int n = 0; n < 10000; n++) {
           try { Thread.sleep(100); }
           catch (InterruptedException e) { }
           animateStep(n);
       }
```

File Edit View Tools Help

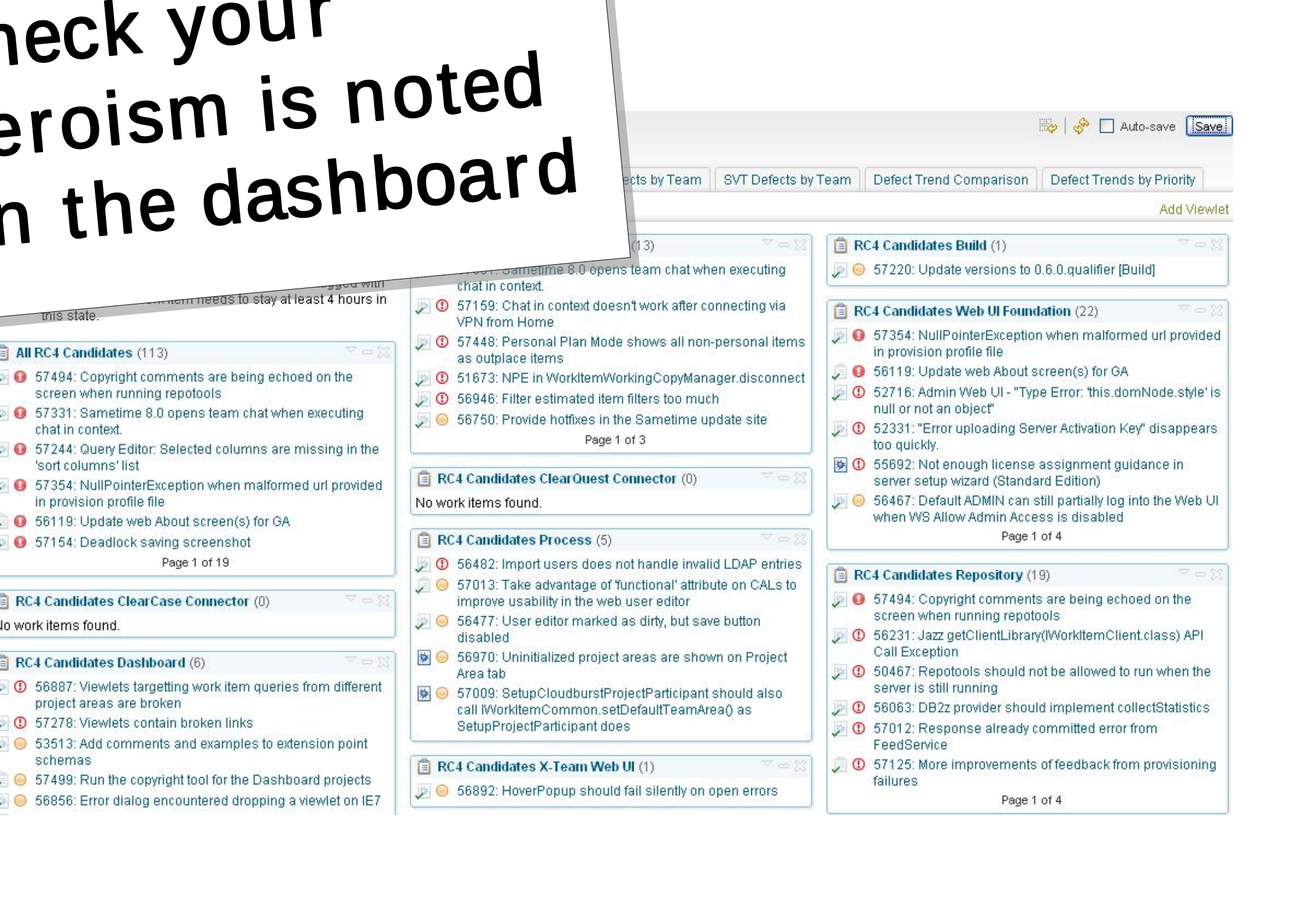


Scott Rich
Distinguished Engineer,
Technical Lead for Rational CLM
I am at work

Tony Grout: Hi Scott could really do with some help
Scott Rich: Sure send me the link
Tony Grout: http://snurl.com/jsirt
Scott Rich: Must be late you forgot to start the thread after you initialized it. I've fixed it and closed the work item. Take a look, then go home :-)

You're not alone

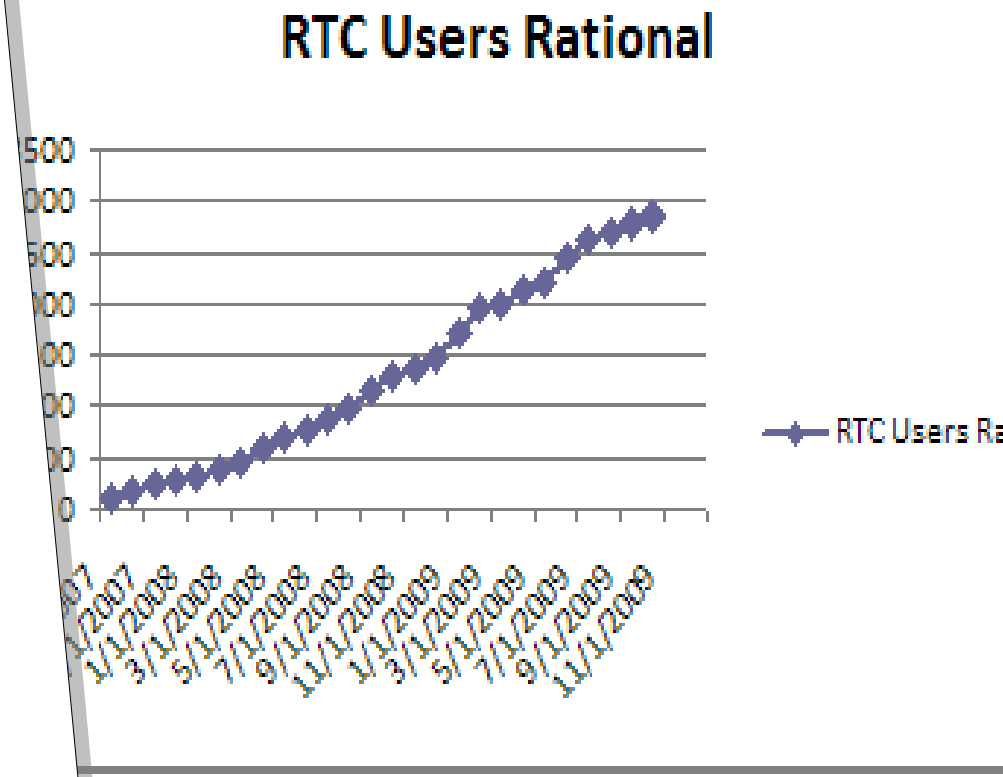
```
public class AnimCanvas extends Canvas implements Runnabl
{
    static final int LIMIT = 10000;
    protected Thread myThread;
    public AnimCanvas() {
        myThread = new Thread(this);
        myThread.start();
    }
    public void run() {
       for(int n = 0; n < LIMIT; n++) {
           try { Thread.sleep(100); }
           catch (InterruptedException e) { }
           animateStep(n);
       }
    }
    ...
}
```

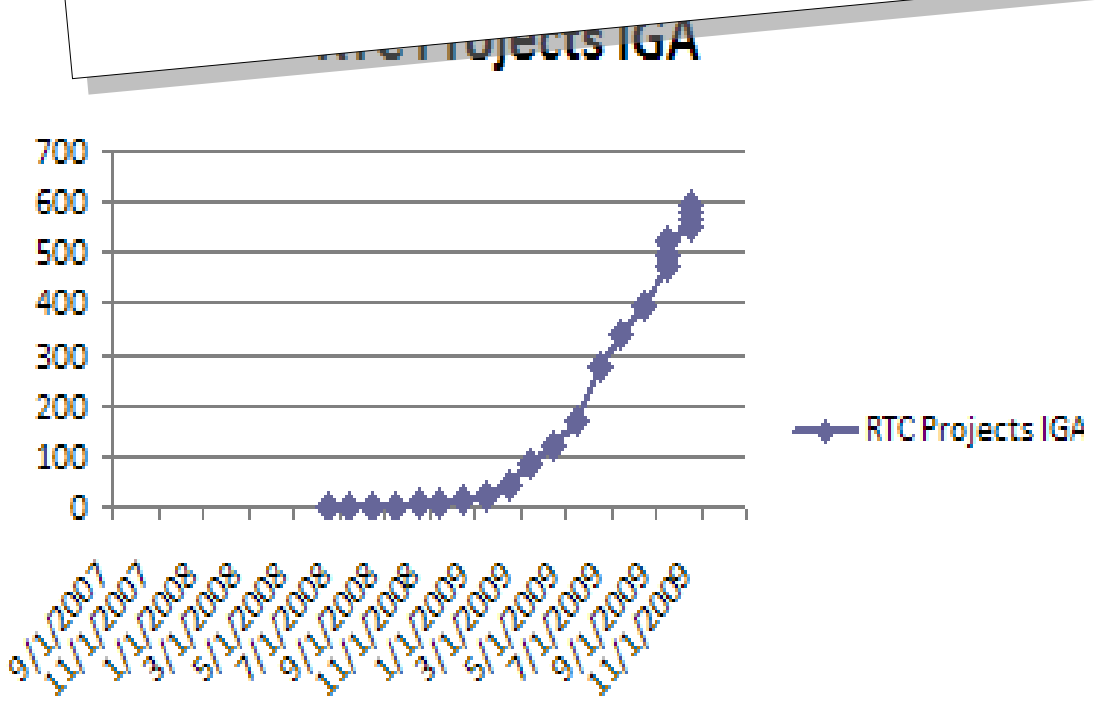

neck your
eroism is noted
n the dashboard
Auto-save
Save
cts by Team
SVT Defects by Team
Defect Trend Comparison
Defect Trends by Priority
Add Viewlet
this state.
All RC4 Candidates (113)
57494: Copyright comments are being echoed on the screen when running repotools
57331: Sametime 8.0 opens team chat when executing chat in context.
57244: Query Editor: Selected columns are missing in the 'sort columns' list
57354: NullPointerException when malformed url provided in provision profile file
56119: Update web About screen(s) for GA
57154: Deadlock saving screenshot
Page 1 of 19
RC4 Candidates ClearCase Connector (0)
No work items found.
RC4 Candidates Dashboard (6)
56887: Viewlets targetting work item queries from different project areas are broken
57278: Viewlets contain broken links
53513: Add comments and examples to extension point schemas
57499: Run the copyright tool for the Dashboard projects
56856: Error dialog encountered dropping a viewlet on IE7
(13)
chat in context.
57159: Chat in context doesn't work after connecting via VPN from Home
57448: Personal Plan Mode shows all non-personal items as outplace items
51673: NPE in WorkItemWorkingCopyManager.disconnect
56946: Filter estimated item filters too much
56750: Provide hotfixes in the Sametime update site
Page 1 of 3
RC4 Candidates ClearQuest Connector (0)
No work items found.
RC4 Candidates Process (5)
56482: Import users does not handle invalid LDAP entries
57013: Take advantage of 'functional' attribute on CALs to improve usability in the web user editor
56477: User editor marked as dirty, but save button disabled
56970: Uninitialized project areas are shown on Project Area tab
57009: SetupCloudburstProjectParticipant should also call IWorkItemCommon.setDefaultTeamArea() as SetupProjectParticipant does
RC4 Candidates X-Team Web UI (1)
56892: HoverPopup should fail silently on open errors
RC4 Candidates Build (1)
57220: Update versions to 0.6.0.qualifier [Build]
RC4 Candidates Web UI Foundation (22)
57354: NullPointerException when malformed url provided in provision profile file
56119: Update web About screen(s) for GA
52716: Admin Web UI - "Type Error: 'this.domNode.style' is null or not an object"
52331: "Error uploading Server Activation Key" disappears too quickly.
55692: Not enough license assignment guidance in server setup wizard (Standard Edition)
56467: Default ADMIN can still partially log into the Web UI when WS Allow Admin Access is disabled
Page 1 of 4
RC4 Candidates Repository (19)
57494: Copyright comments are being echoed on the screen when running repotools
56231: Jazz getClientLibrary(IWorkItemClient.class) API Call Exception
50467: Repotools should not be allowed to run when the server is still running
56063: DB2z provider should implement collectStatistics
57012: Response already committed error from FeedService
57125: More improvements of feedback from provisioning failures
Page 1 of 4

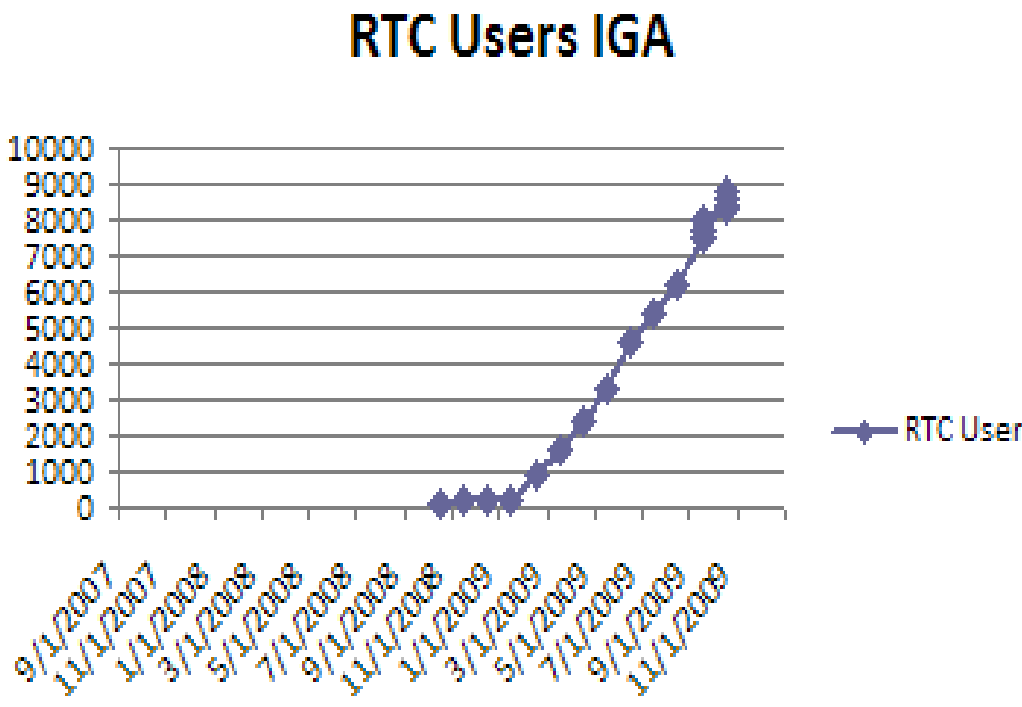
Your going home

We created virtual communities

In under two years we went from zero to over 10,000 agile developers







It hasn't all gone so well

I’m not a machine to be swapped in and out

How do I
size it?

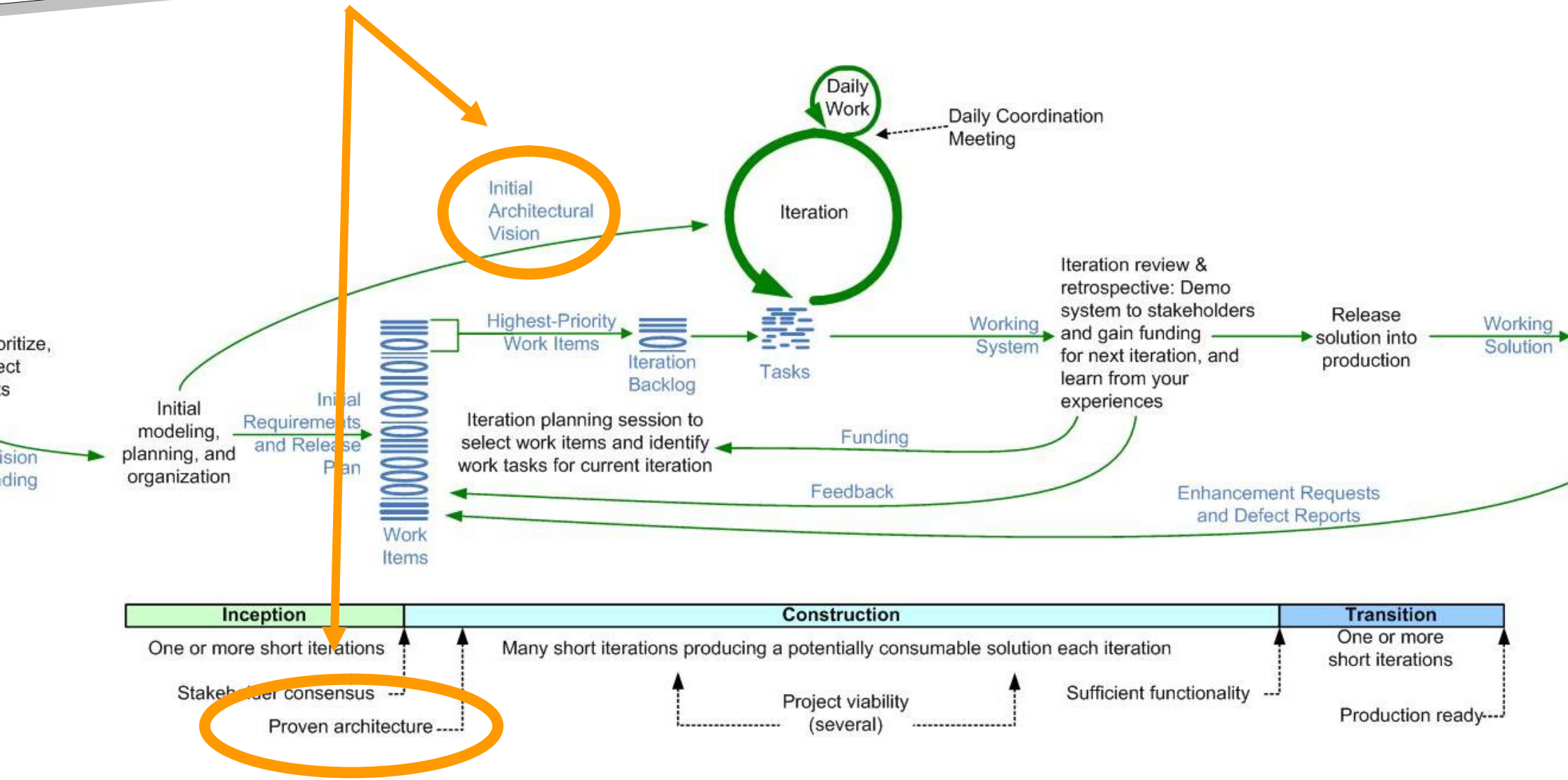
Which balls can we drop?

Some people just don’t like agile

Using pair
programming in
coaching can help

We're now
emphasising
addressing risk
early in our

e're using
isciplined Agile
elivery



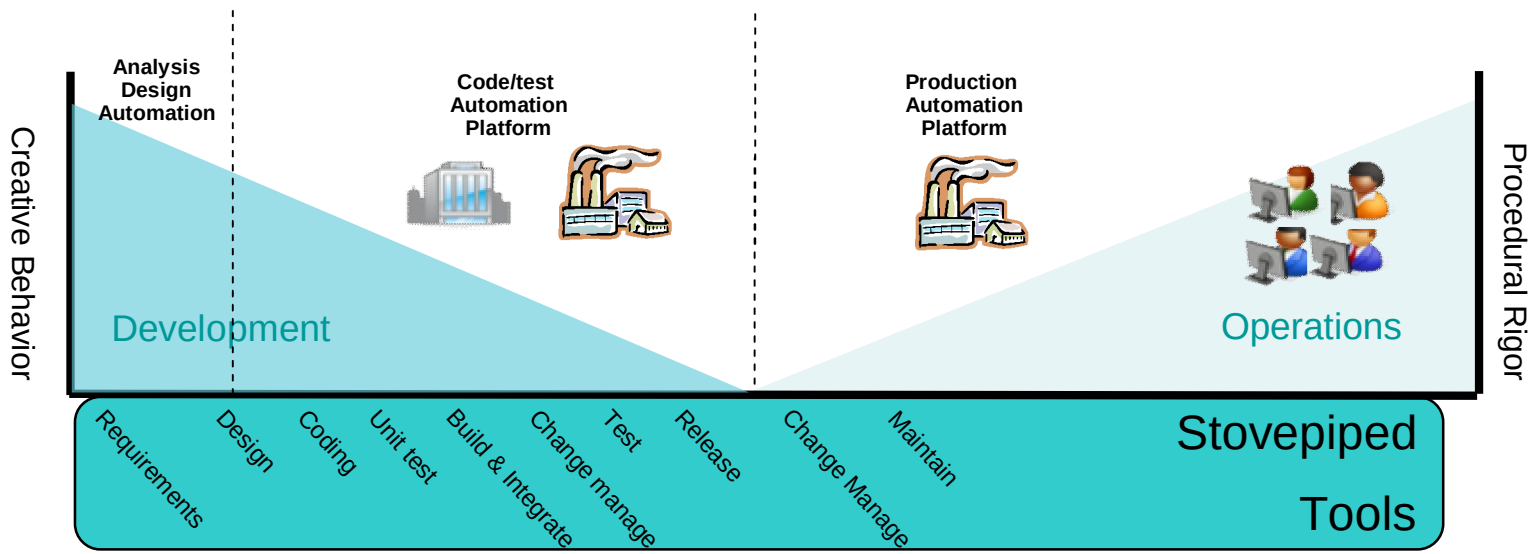
Addressing technical complexity in early iterations

he next step is getting
her parts of IBM to
ecome more agile

Finance

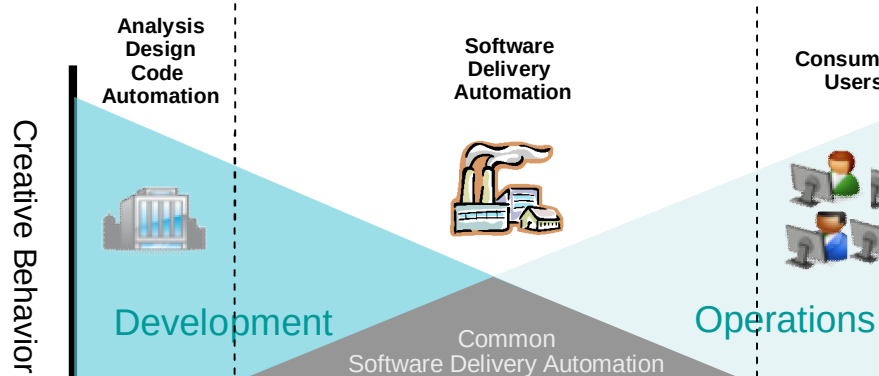
Human Resources

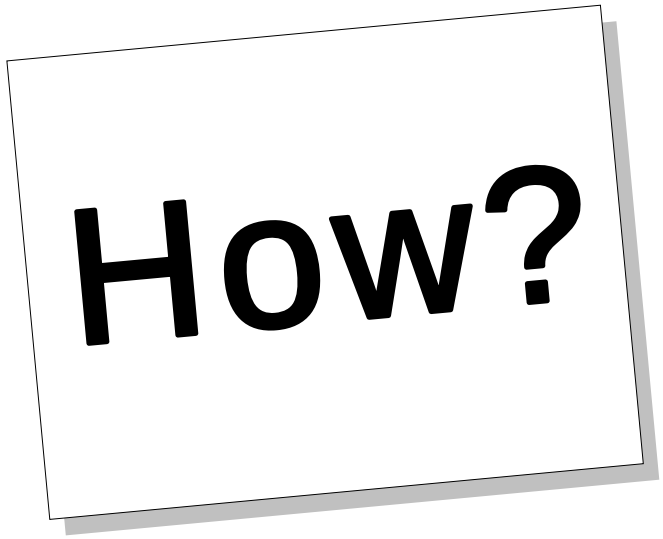
Operations

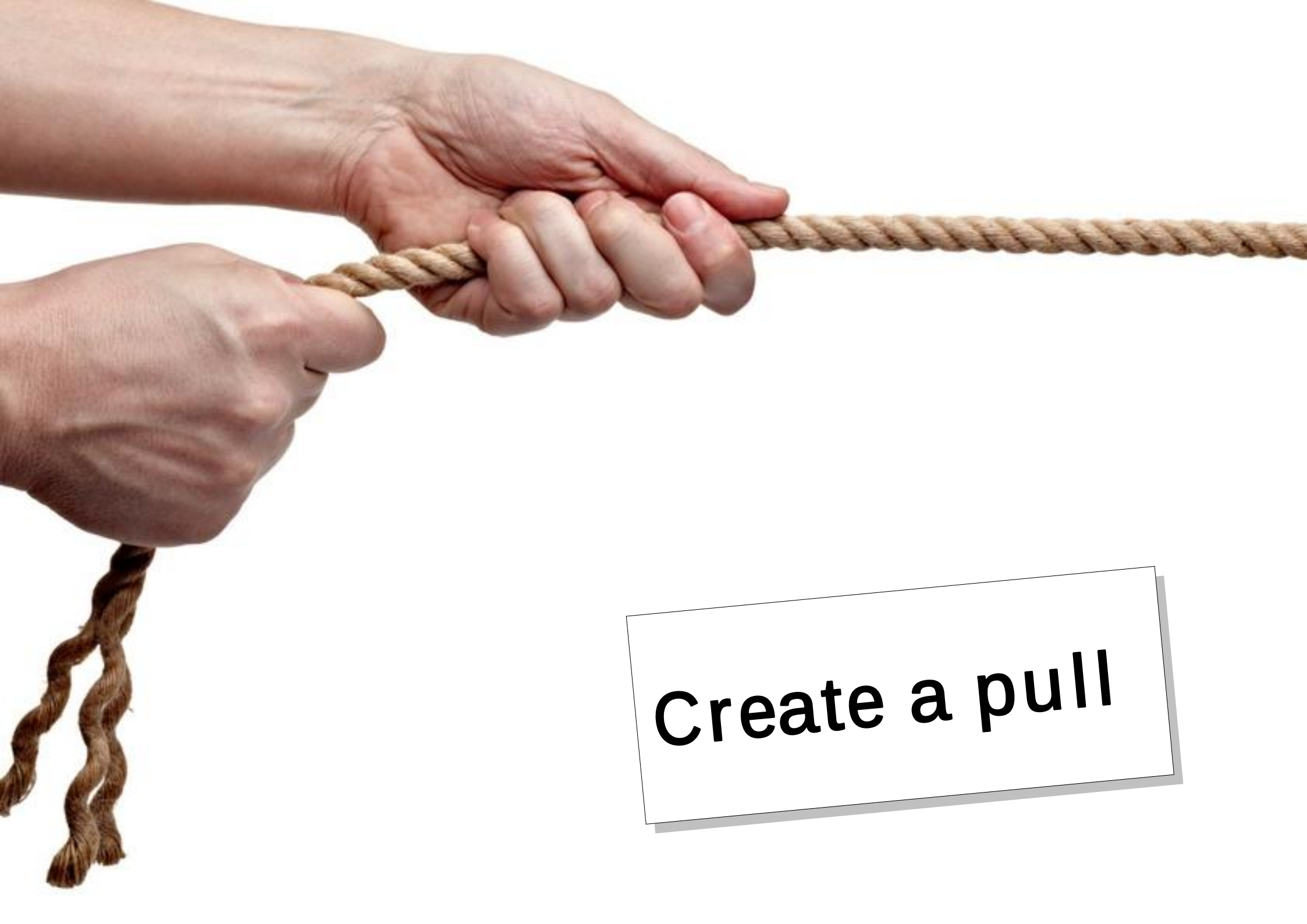


Practical agility is about getting softwa in peoples hands

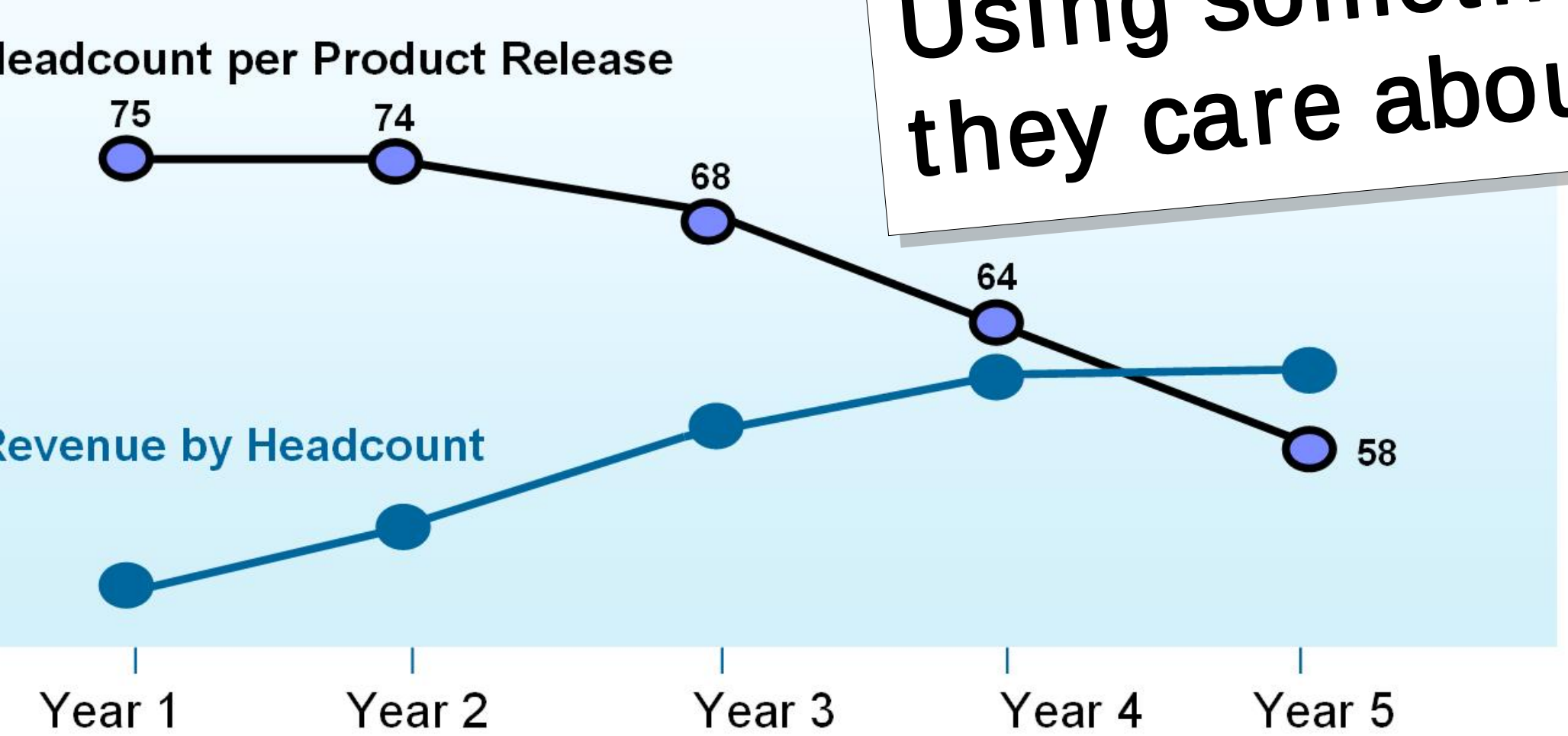
Agile
Delivery
Process
Platform




How?


Create a pull

they care about



Metric	Goal	Year 4	Y
On Time Delivery	65%	47%	10
Defect Backlog	3 Months	9+ Months	3.5
Enhancements Triaged	85%	3%	10
Enhancements into Release	15%	1%	21
Customer Sat Index	91%	88%	96
Beta Defects Fixed Before GA	50%	3%	94

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