
accenture technology
Accenture Architecture Services
How to Apply Scrum for a System or DevOps Team When Implementing a New Developer Platform
High performance. Delivered.
Strategy | Consulting | Digital | Technology | Operations

Presenter

Mirco Hering
APAC DevOps & Agile Lead

@mircohering on Twitter

Blog about Agile & DevOps
http://notafactoryanymore.com

Copyright © 2014 Accenture All rights reserved.

Who here is using DevOps practices?

Copyright © 2014 Accenture All rights reserved.

DevOps & Agile

DevOps is a direction, not a goal!

Copyright © 2014 Accenture All rights reserved.

Dunning Kruger Effect - Illusory superiority

Named after Ig Nobel Price winners Dunning and Kruger for their paper "Unskilled and Unaware of It,"

They were inspired by McArthur Wheeler, who robbed a bank using “invisible ink” as a mask

The idea that people who don't know enough also don't know enough to realise that they don't know enough

“The trouble with the world is that the stupid are cocksure and the intelligent are *full of doubt*.“
or
"The whole problem with the world is that fools and fanatics are always so certain of themselves, but wiser people so full of doubts.“

Bertrand Russell

“ignorance more frequently begets confidence than does knowledge”

Charles Darwin

Copyright © 2014 Accenture All rights reserved.

Let‘s look at some examples for Dunning-Kruger

- In a survey of faculty at the University of Nebraska, 68% rated themselves in the top 25% for teaching ability. - Wikipedia
- In a similar survey, 87% of MBA students at Stanford University rated their academic performance as above the median. - Wikipedia
- For driving skill, 93% of the US sample and 69% of the Swedish sample put themselves in the top 50% - Wikipedia
- How do you think people would rate you as a leader?” It turns out that 74% of the respondents think they’re either above average or the best leader their people have ever had. – SmartBrief on Leadership

Copyright © 2014 Accenture All rights reserved.

Situation Statement

Previous Development Architecture was build for Transformation with non-overlapping releases and was not completely suitable for high frequency, high quality Agile delivery

*The current processes and tools are not able to effectively support a more **aggressive Release Calendar***

Cost to Serve increases with more releases** – more effort required to maintain processes and **retrofit code

•***Current Dev Arch toolset** is reaching its **end of life***

•***Not completely automated deployment process** increases chances of quality leaks as throughput increases*

•***Inability to support Agile at Scale** – current Dev Arch was not designed with Agile in mind*

•***Developer frustration** with the current processes, performance of the toolset and support available*

•***Inability of real-time reporting** as information is stored in different systems*

•***Lack of Development Architecture reporting** (e.g. Deployment timing, retrofit tracking, code reconciliation, development churn)*

Key areas of focus

- ***Software Configuration Management*** - (baseline, branching, merge support, admin) for code and documents
- ***Integration between tools*** – IDE, Test Automation, etc.
- ***Workflow Management***
- ***Build & Deployment Automation***
- ***Agile adoption*** – Agile SCRUM, Kanban, SAFe frameworks
- ***Reporting***

Business Drivers

- ***User satisfaction***
- ***Traceability***
- ***Improved productivity***
- ***Standardisation*** – reduce supported exceptions
- ***Quality*** – reduce defects related to builds & deployment
- ***Reduced cost*** – cost of poor quality, percentage of automated steps, build time, SCM cost

Copyright © 2014 Accenture All rights reserved.

Further Context

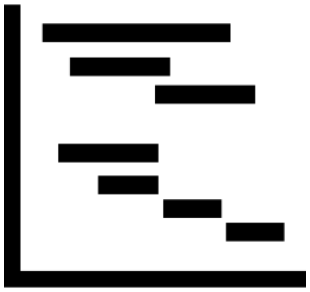
```
Command ===>                                                Scroll ===> CSR
****** ***************************** Top of Data ******************************
000001 //                  jobcard
000002 //*********************************************************************
000003 //*  JCL that is used to copy a IMOD from a standard PDS to a IMOD   *
000004 //*  VSAM file. The second step will compile the IMOD                *
000005 //*********************************************************************
000006 //$$$$$$0  EXEC PGM=SRUMAINT
000007 //STEPLIB   DD  DISP=SHR,DSN=gss.LINKLIB
000008 //SYSPRINT DD   SYSOUT=*
000009 //IMOD001   DD   DISP=SHR,
000010 //            DSN=your.GSS.SYSIMOD
000011 //INIMOD    DD   DISP=SHR,
000012 //            DSN=GSS.input(userimod)
000013 //SYSIN     DD   *
000014 COPY IMOD userimod TO IMOD01 FROM inimod REPLACE
000015 /*
000016 //$$$$$$0  EXEC PGM=SRUMAINT
000017 //*********************************************************************
000018 //*                Compile step                                       *
000019 //*********************************************************************
000020 //STEPLIB   DD   DISP=SHR,
000021 //            DSN=your.GSS.LINKLIB
000022 //SYSPRINT DD   SYSOUT=*
000023 //INIMOD    DD   DISP=SHR,
000024 //            DSN=your.GSS.SYSIMOD
000025 //SYSIN     DD   *
000026 COMPILE IMOD userimod IN IMOD01 STATUS PROD
****** ***************************** Bottom of Data ***************************
```

SIEBEL®

~1000 Developers

Copyright © 2014 Accenture All rights reserved.

What's different? Or not so different?



Timelines

Infrastructure

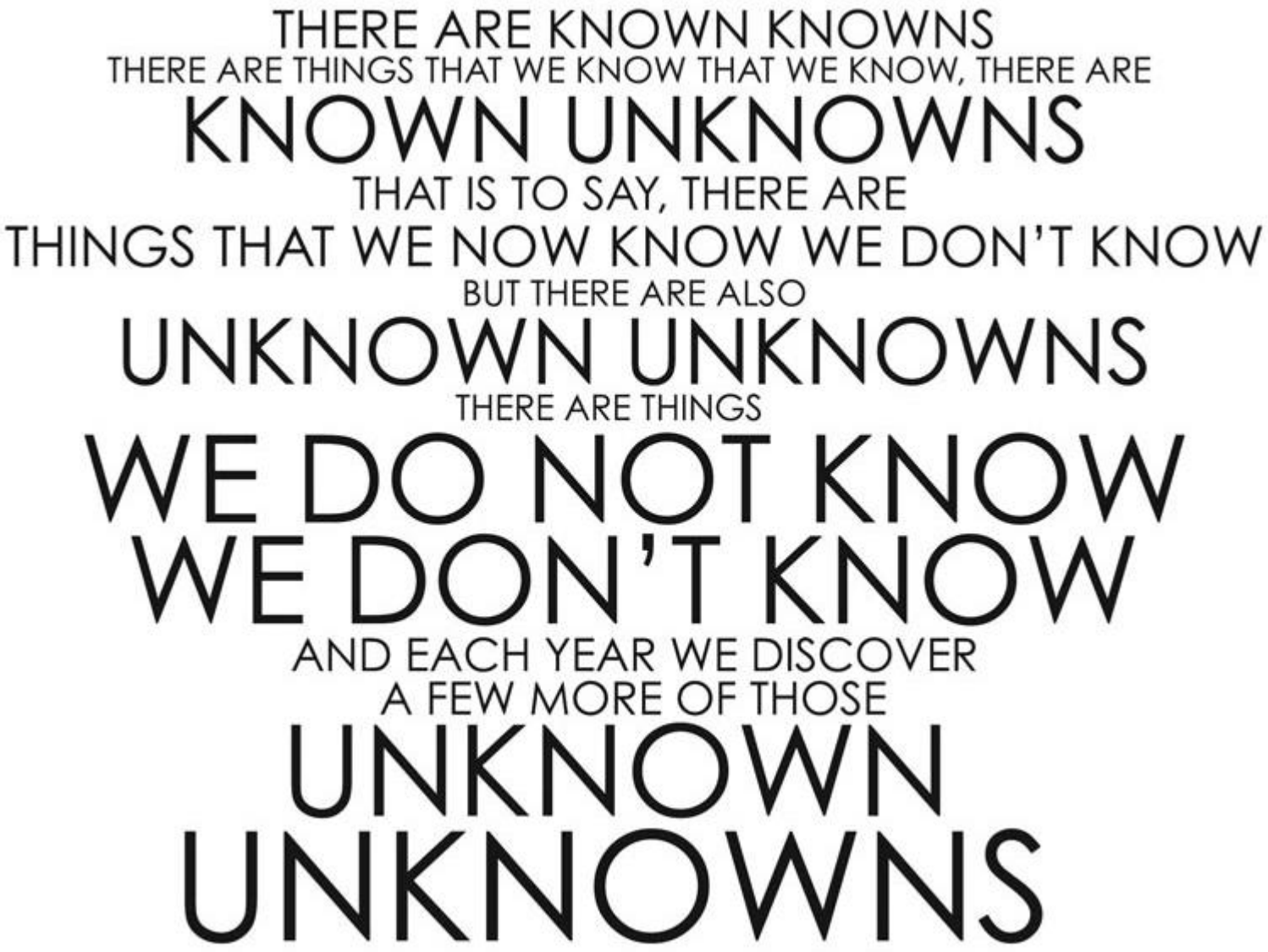
Culture & Mindset

Copyright © 2014 Accenture All rights reserved.

And of course…

Copyright © 2014 Accenture All rights reserved.

It is a journey – not an implementation!

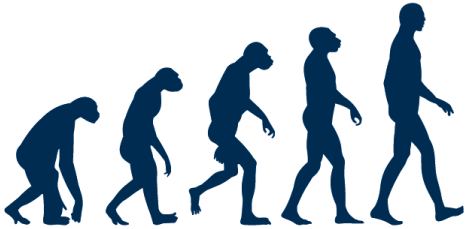


Copyright © 2014 Accenture All rights reserved.

Change Management & Training

Structured Training

Careful Cutover

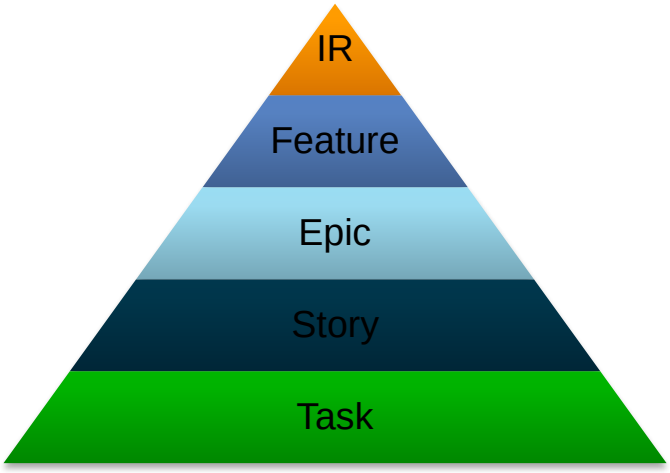


Evolution

Copyright © 2014 Accenture All rights reserved.

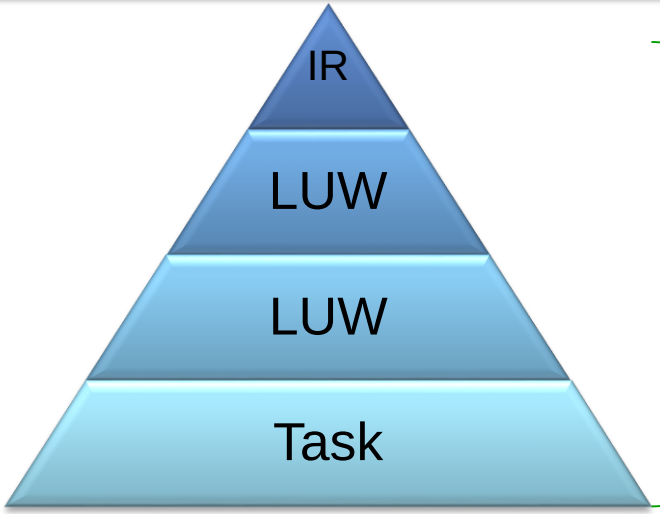
Let's look at how we survived in a hybrid world

Agile Delivery Lifecycle



- Plan backlog, iterations, releases
- Capture retrospectives, Kanban wall
- Collaborate via chat, discussion walls
- Tracking & reporting on work item status

Waterfall Delivery Lifecycle



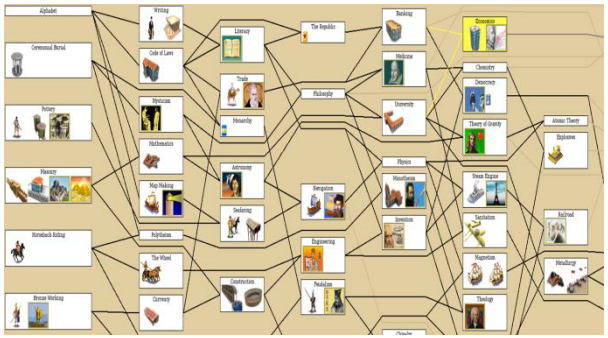
- Capture Logical Unit of Work (LUW) from IR
- Plan & estimate effort to deliver LUW
- Collaborate via chat, discussion walls
- Tracking & reporting on status of LUW's and IR

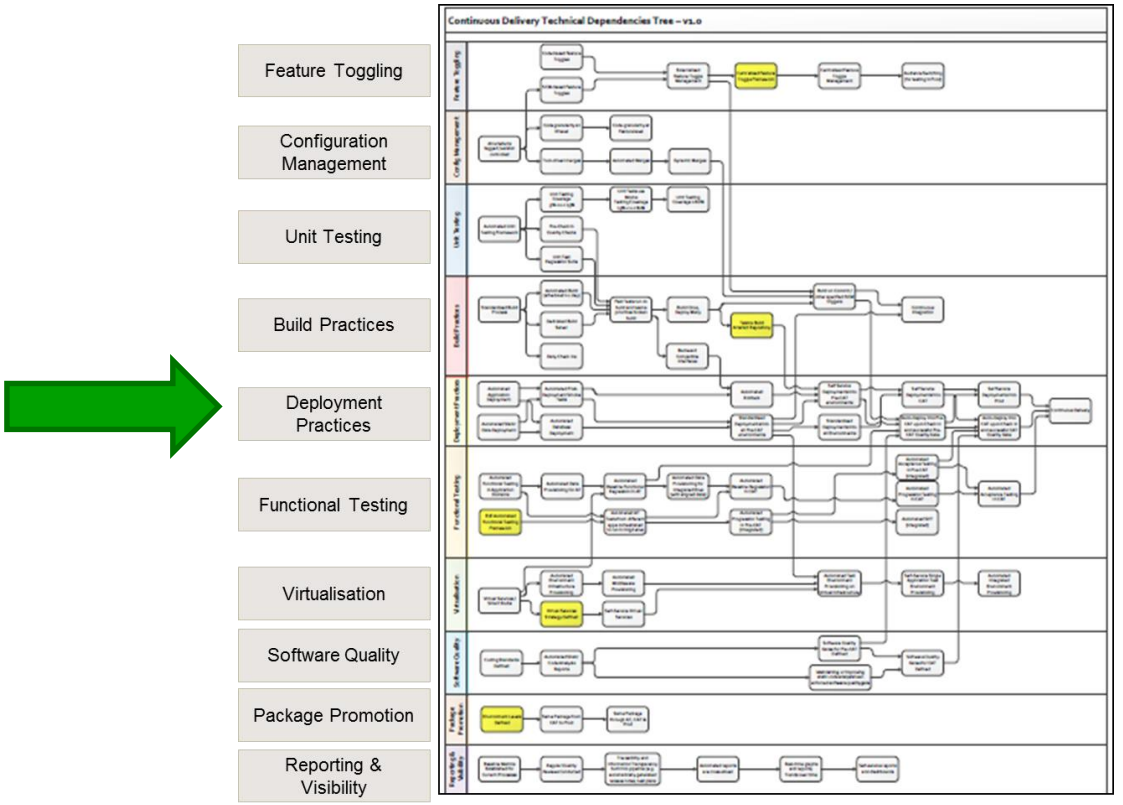
Copyright © 2014 Accenture All rights reserved.

Our Tools…promoting collaboration and delivery transparency

Copyright © 2014 Accenture All rights reserved.

Maturity models and what we can learn from Computer Games

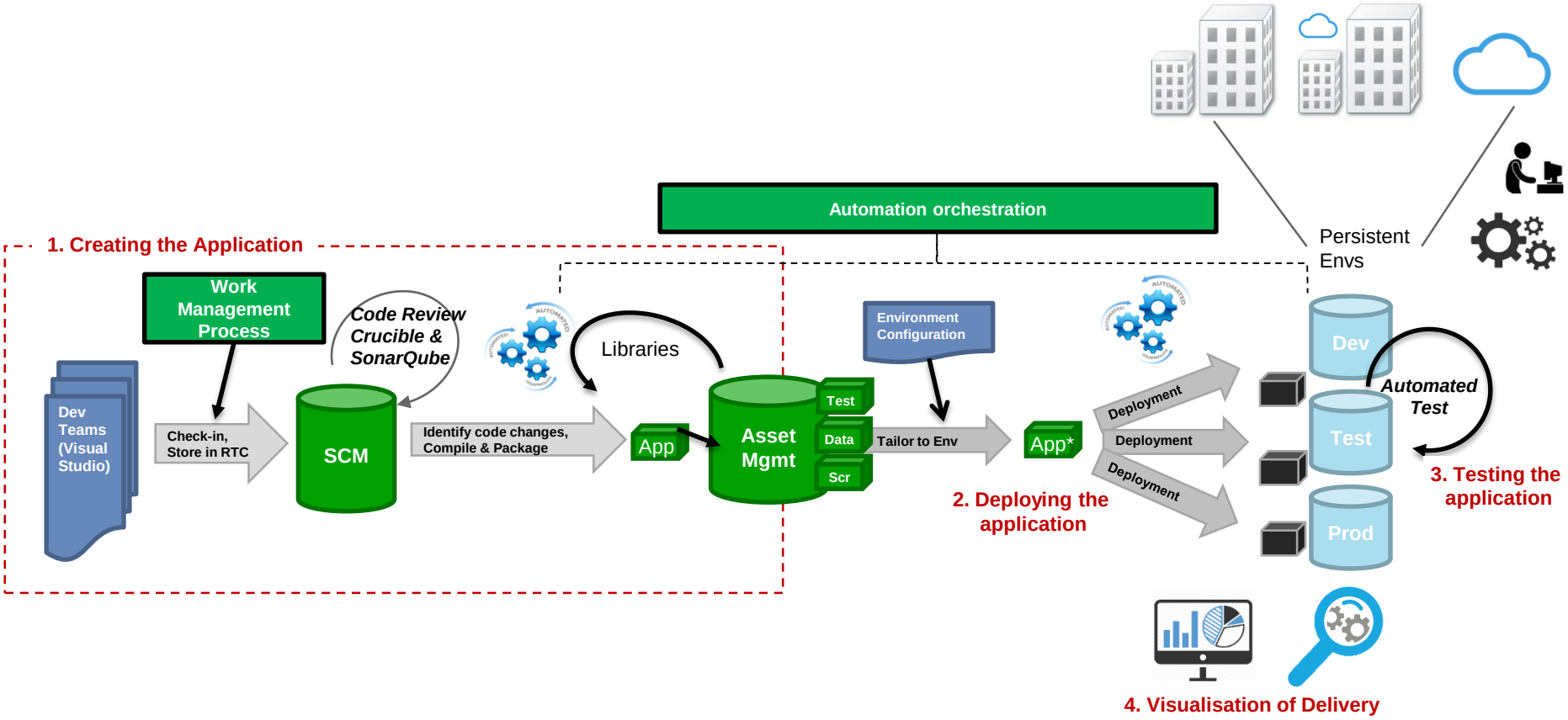




[Read more on my blog: http://notafactoryanymore.com/2015/03/26/what-computer-games-can-teach-us-about-maturity-models-choose-your-own-devops-adventure/](http://notafactoryanymore.com/2015/03/26/what-computer-games-can-teach-us-about-maturity-models-choose-your-own-devops-adventure/)

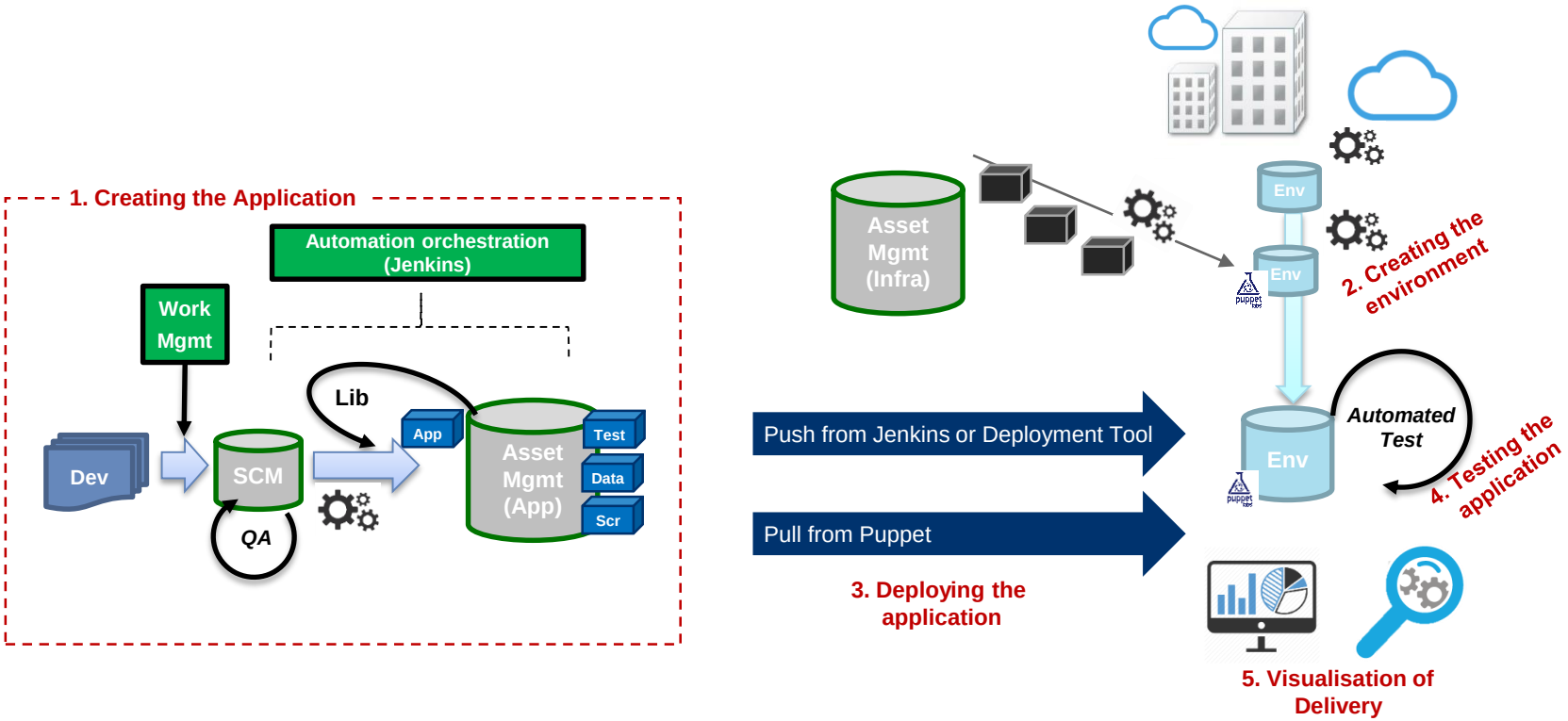
Copyright © 2014 Accenture All rights reserved.

Model A Continuous Delivery - Application Deployment Flow to persistent environments



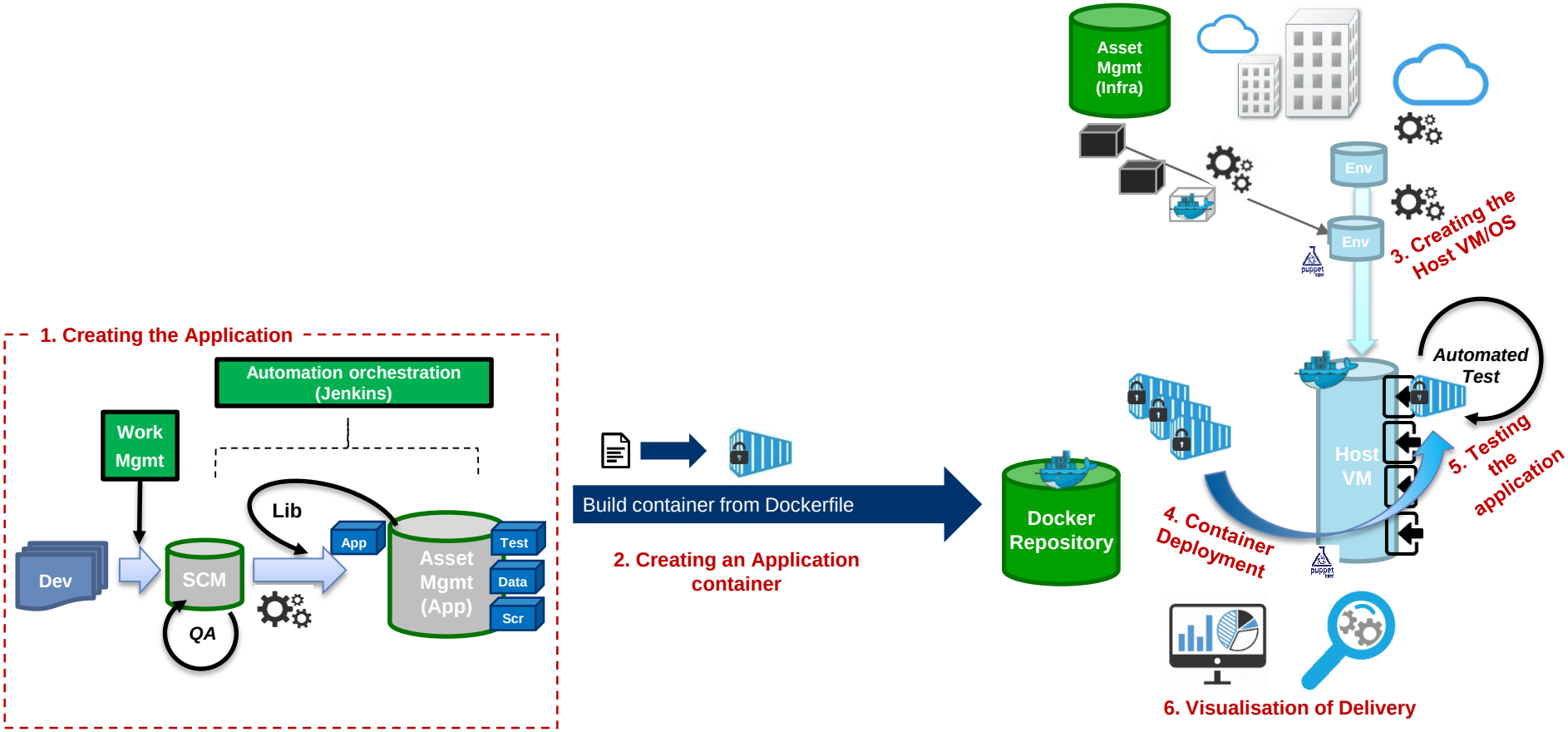
Copyright © 2016 Accenture All rights reserved.

Model B - Application Deployment Flow into newly provisioned environments (a.k.a. Netflix Pattern)



Copyright © 2016 Accenture All rights reserved.

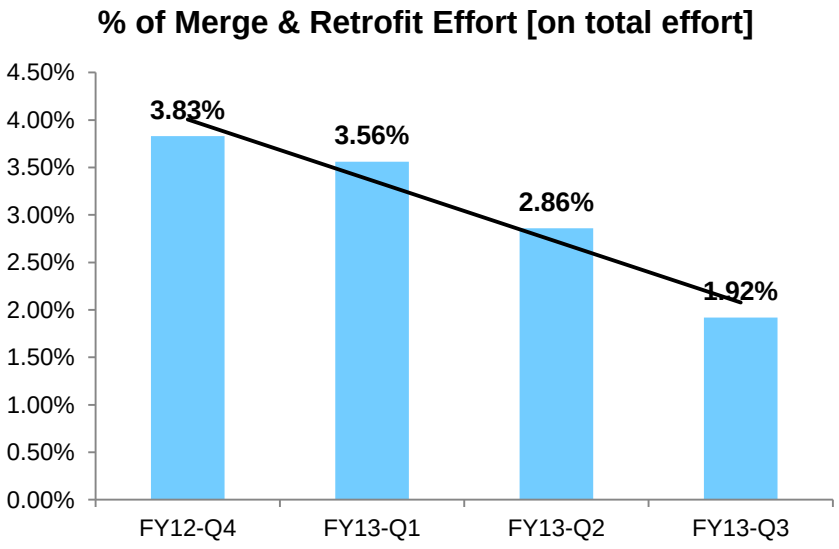
Model C – Container based Application Deployment Flow

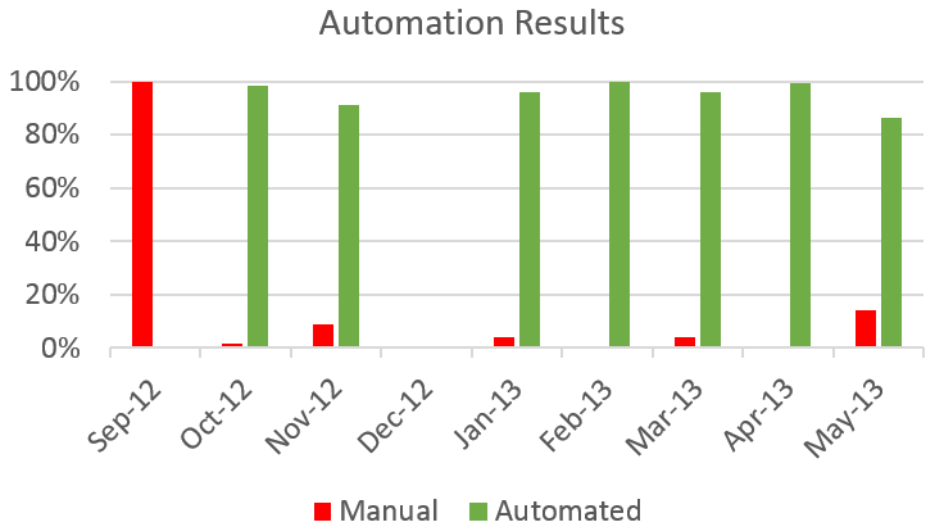


Copyright © 2016 Accenture All rights reserved.

We did get the results we were hoping for

Our merges took way too long (~2 weeks) and took too much effort





The result: 2 weeks -> 3 days

We removed over 3300 days of manual effort per year across SCM, Build, Package and Deploy

Copyright © 2014 Accenture All rights reserved.

Early Benefits

Quantitative Benefits

Activity	Measured as	% Improvement	Comments
Merge & Retrofit	% of the Build Effort across Releases	50%	Based on the actual effort tracked
Software Configuration Management	Effort to support SCM activities	63%	• Elimination of manual trackers [workflow lists, baselines, objects] • Maintenance of 2 tools [CVS, CC], scorecards & run books not required • Unnecessary environment sync-up eliminated
Cost of poor quality	% of defects attributed to SCM, Deployment	59%	Elimination of defects introduced because of previous • Inefficient SCM processes • Incorrect deployments
Build & Deployment	Process & effort to raise deployment requests	90%	• No. of Deployment requests (DR) reduced - Enterprise build [not incremental or individual builds] • Effort per DR reduced because DR not in spreadsheets [now raised on tool] & elimination of extra step in the flow of deployments

Qualitative Benefits

- Granular Configuration Management and traceability
- Integration with agile lifecycle tooling to allow story based Configuration Management driven from meta data
- Real-Time traceability of status for build and deployment
- Automated Build and Deployments – “One Button Deployment”
- Developer efficiencies as a consequence of improved tool interaction times, processes

Copyright © 2014 Accenture All rights reserved.

This is not optional…how can I help?

Copyright © 2014 Accenture All rights reserved.