

28/09/2020

Wales Transport Week VolkerRail

About me



ED ARNOLD

**Head of Planning & Project Controls,
VolkerRail**

VolkerRail at glance...



leading multi-disciplinary railway infrastructure contractor

**7
business
divisions**



- Major Projects



Specialist Businesses

- Design
- Metro and Rail projects
- Piling
- Plant
- Power
- Signalling

900+

employees



VolkerRail is one of the UK's leading multi-disciplinary railway infrastructure contractors, with a successful track record of delivering small contracts to joint ventures and alliance projects in excess of £1bn across the UK's national rail network.

Our detailed understanding of the industry come from years of experience on main, branch and light rail networks; freight lines, depots, sidings and private industrial locations. Our skills range covers every aspect of permanent way renewals, maintenance and track construction, overhead line electrification, HV and LV power distribution and signalling. This includes design, plan, supply and installation works, which can be delivered either individually or as part of a fully integrated project; all of which are enhanced by our fleet of plant equipment. This includes OTM and S&C tampers, Kirow rail mounted cranes, ballast regulators, beaver lightweight tampers, RRVs and Colmar lifting machines, as well as an array of rail mounted support and inspection vehicles, specialist welding equipment and an extensive range of small plant and equipment.

Why O365?



2018
PAPER OVERLOAD

THROW NOW 



2018
LOADS OF
DESKPHONES

THROW NOW 



2018
PAPER FORMS & REPORTS

THROW NOW 



2018
EMAIL FOR
EVERYTHING

THROW NOW 



2018
PAPER RECORDS

THROW NOW 



March
2019

WE LAUNCH OFFICE 365 FOR
VOLKERWESSELS UK


THROW NOW 

“If we stand still, we will actually be going backwards”

OUR APPROACH TO DIGITAL CONSTRUCTION AND INNOVATION



Empowering our people to work smarter, create more time for thinking and have a better work life balance.



TOMORROW
NOW

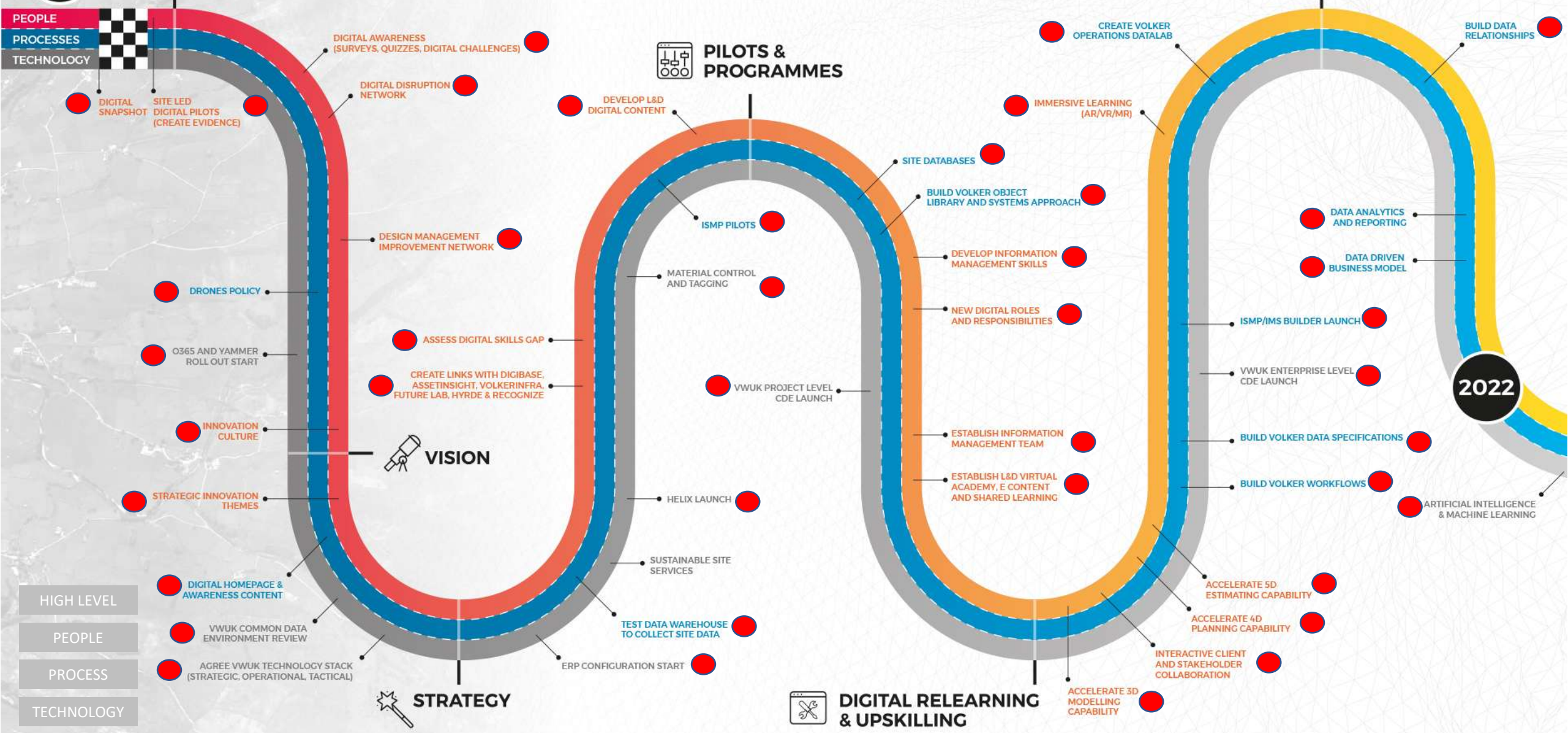
2019

DIGITAL AWARENESS

DIGITAL ROADMAP

POWERED BY DATA
DRIVEN BY PEOPLE

PEOPLE
PROCESSES
TECHNOLOGY



HIGH LEVEL

PEOPLE

PROCESS

TECHNOLOGY

DETAIL

VISION

STRATEGY

PILOTS & PROGRAMMES

DIGITAL RELEARNING & UPSKILLING

2022



- DIGITAL SNAPSHOT
- SITE LED DIGITAL PILOTS (CREATE EVIDENCE)
- DIGITAL AWARENESS (SURVEYS, QUIZZES, DIGITAL CHALLENGES)
- DIGITAL DISRUPTION NETWORK
- DESIGN MANAGEMENT IMPROVEMENT NETWORK
- DRONES POLICY
- O365 AND YAMMER ROLL OUT START
- INNOVATION CULTURE
- STRATEGIC INNOVATION THEMES
- DIGITAL HOMEPAGE & AWARENESS CONTENT
- VVUK COMMON DATA ENVIRONMENT REVIEW
- AGREE VVUK TECHNOLOGY STACK (STRATEGIC, OPERATIONAL, TACTICAL)
- ERP CONFIGURATION START
- DEVELOP L&D DIGITAL CONTENT
- ISMP PILOTS
- MATERIAL CONTROL AND TAGGING
- HELIUM LAUNCH
- SUSTAINABLE SITE SERVICES
- TEST DATA WAREHOUSE TO COLLECT SITE DATA
- IMMERSIVE LEARNING (AR/VR/MR)
- SITE DATABASES
- BUILD VOLKER OBJECT LIBRARY AND SYSTEMS APPROACH
- DEVELOP INFORMATION MANAGEMENT SKILLS
- NEW DIGITAL ROLES AND RESPONSIBILITIES
- ESTABLISH INFORMATION MANAGEMENT TEAM
- ESTABLISH L&D VIRTUAL ACADEMY, E CONTENT AND SHARED LEARNING
- ACCELERATE 3D MODELLING CAPABILITY
- CREATE VOLKER OPERATIONS DATABAS
- BUILD DATA RELATIONSHIPS
- DATA ANALYTICS AND REPORTING
- DATA DRIVEN BUSINESS MODEL
- ISMP/IMS BUILDER LAUNCH
- VVUK ENTERPRISE LEVEL CDE LAUNCH
- BUILD VOLKER DATA SPECIFICATIONS
- BUILD VOLKER WORKFLOWS
- ARTIFICIAL INTELLIGENCE & MACHINE LEARNING
- ACCELERATE 5D ESTIMATING CAPABILITY
- ACCELERATE 4D PLANNING CAPABILITY
- INTERACTIVE CLIENT AND STAKEHOLDER COLLABORATION

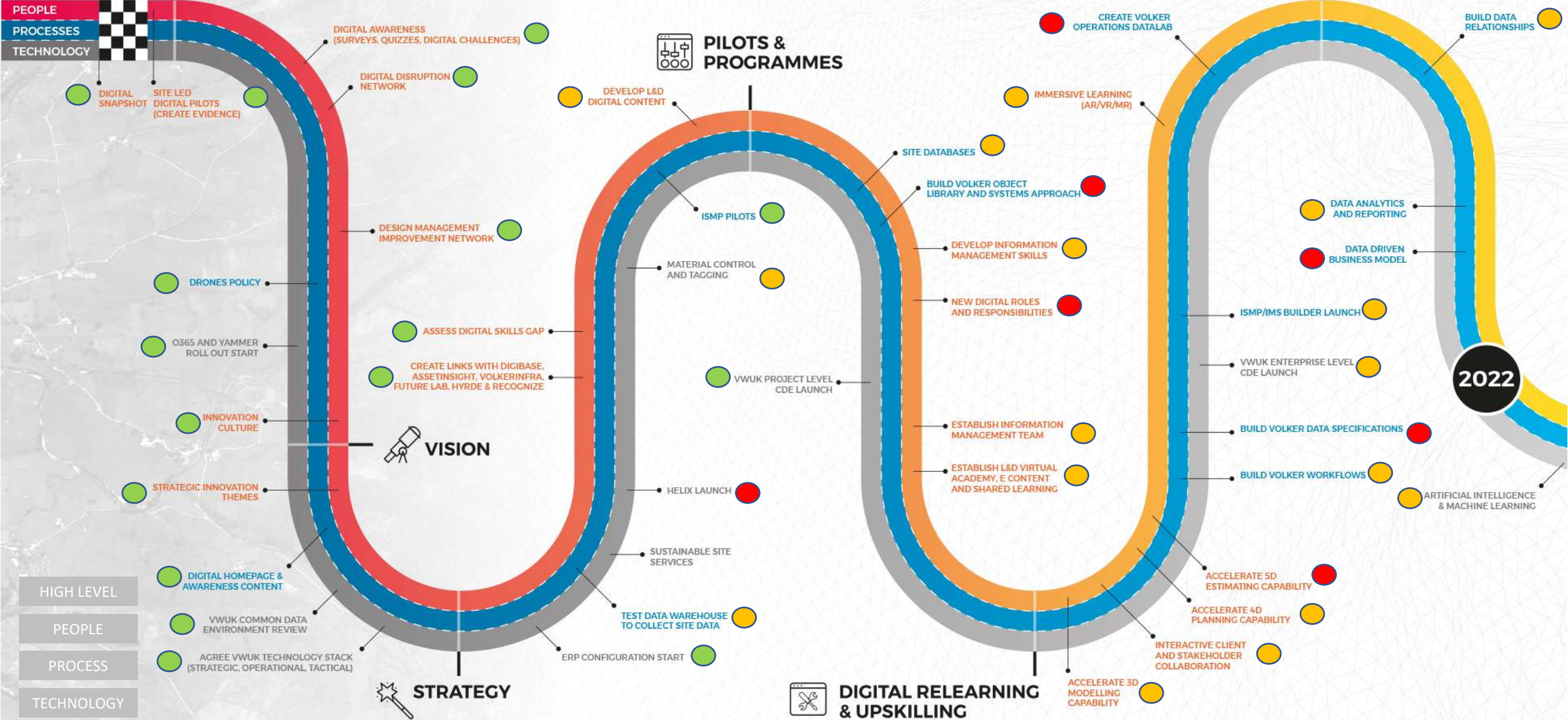
2019

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POWERED BY DATA
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- PEOPLE
- PROCESSES
- TECHNOLOGY



- HIGH LEVEL
- PEOPLE
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- DETAIL

VISION

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2022



If we improve digital awareness, drive adoption and choose the right technology we will still not be successful.

We need a data management strategy if we are to become a company which is



**POWERED BY DATA
DRIVEN BY PEOPLE**



Our digital highlights



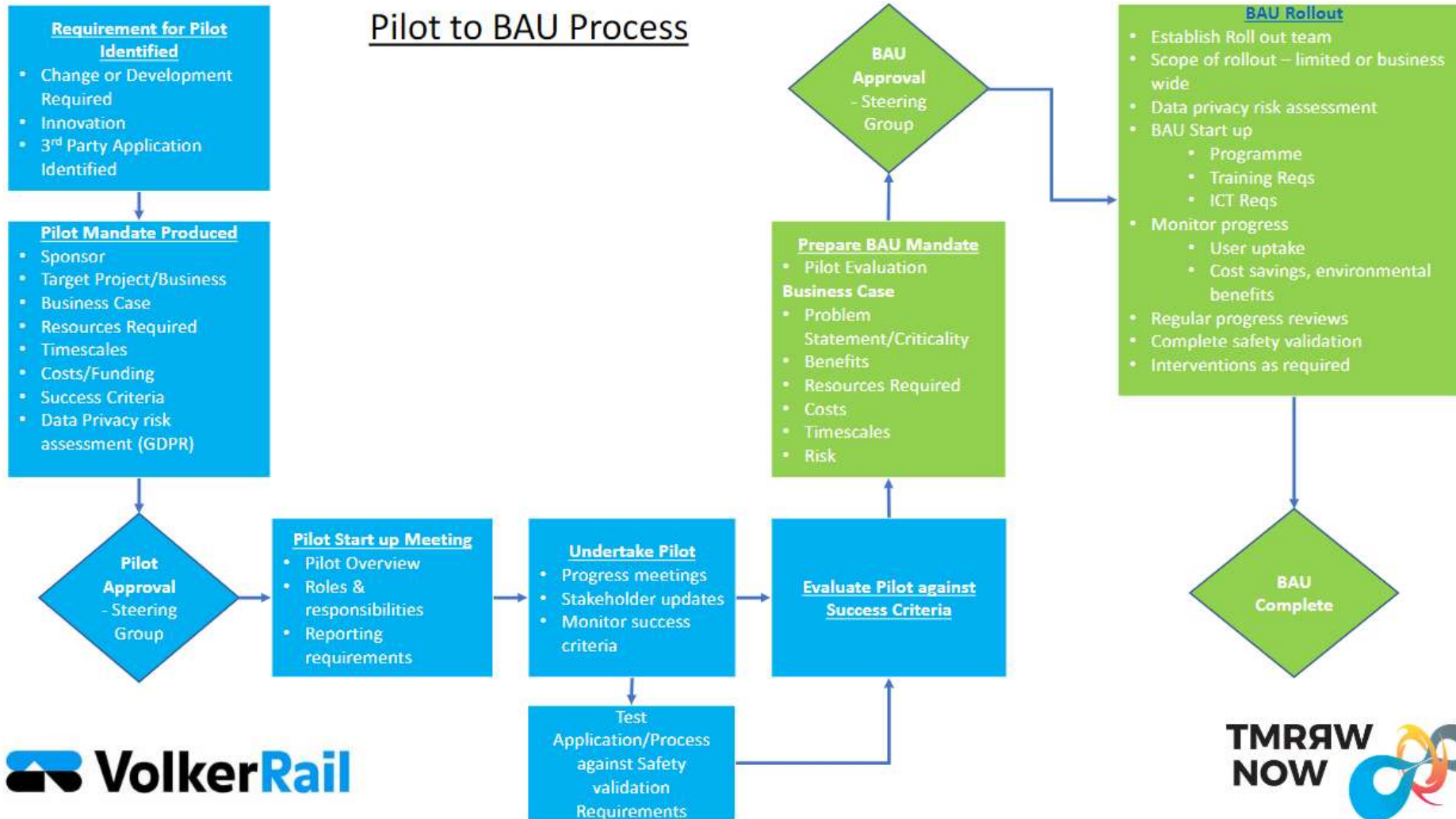
Digital Team of the Year 2019



Development of our National Disruption Network

Our Pilot Process

Pilot to BAU Process

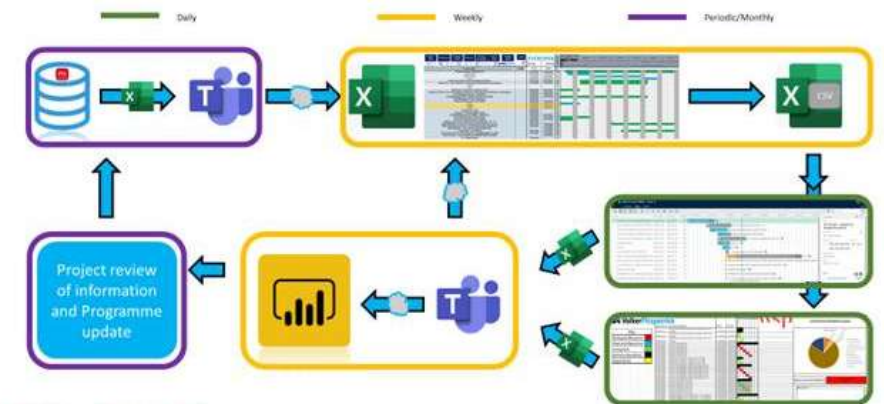


Applications



VolkerRail – Digital Construction

- Deployment of site based applications across the business
 - Robust data collection
 - Site to office data flow & back again
 - Real time progress data
 - Reduction in paper and unnecessary traveling
 - Ground up adoption
- Development of tools for the collection, communication & consumption of project & business data
 - Common Data Environment linked our scheduling platform
 - Use of Office 365 Power Platform – Power Apps, Automate & BI



Lessons Learnt



Senior management buy in + **messaging**

People helping **People**

Support **curiosity** and **experimentation**

Balance **chaos** with **structure**

Traditional and **radical** training

Provide **helpful guidance** on what to use when

Supply technology that **just works**

Demonstrate business **efficiency** and **time savings**