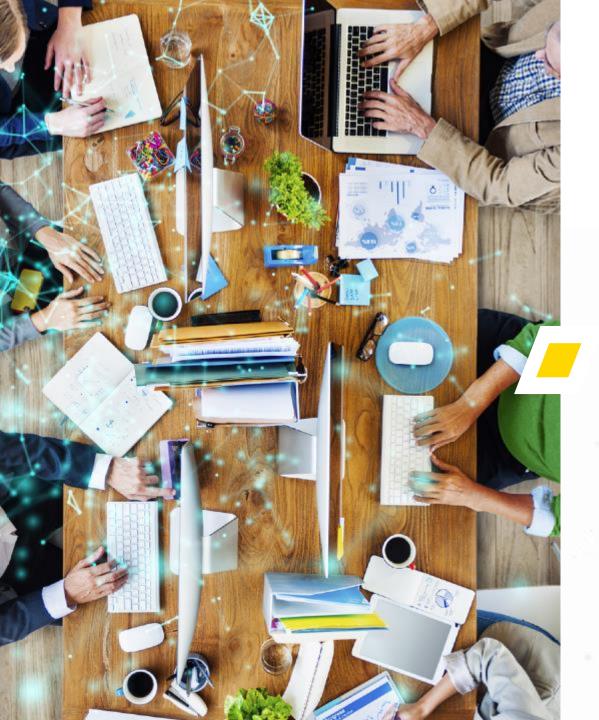




IT meeting 2018





Content

- 1. 2017 recap
- 2. IT strategy
- 3. IT plan 2018
- 4. New/updated processes
- 5. Q&A

2017 - RECAPITULATION







THANK YOU!

For your time, energy, passion and really great contribution and sucessful year 2017©



2017 was ...



1. YEAR OF STABILIZATION

- Teams
- Processes
- 2. CONSISTENCY & DISCIPLINE
- 3. KISS approach: KEEP IT STUPID SIMPLE

2017 review - key achievements/outstandings





Achievements

- Recruitment and team stability
- ➤ BT new platform:
 - Implemented: AEQ1, DWH1, DWH2, DWH3, DWH5, DWH6, ERP1, ERP3
 - ELINKX archived and switched off
- > ITD
 - analysis business split, system analysis setup, test, release process setup, documentation setup
 - NAV4 optimization, release automation
- > ITO
 - > BT environment delivery and build for delivered releases
 - Information security start
- PMO
 - 3 year plan & Win together plan
 - Roadmap 2018 participation
 - Investment Board preparation steps

Splitting of PMO from IT

Roadmap 2018 - participation



Remaining tasks from 2017 plan

- > BT: DWH4 (waiting for user participation), DWH7 (additional release), FRED1 (new vendor)
- > ITD
 - demand process setup
 - process (analysis, test, release, demand) support in JIRA
 - > test tool implementation
- > ITO
 - > BT environment remaining parts optimization/build automation
 - Information security implement based on roadmap (including disaster recovery)



IT – original plan and fulfillment



Business Transformation participation

- Workout revised Business Release plan to achieve key functionalities faster.
- Transformation Program (2017-2018) to develop and implement (first segments) of new architecture and applications (limited functionality faster delivery)
- Implementation of nav2xx roadmap for the year 2017 based on the approved plan. Releases launched to live environment as in the approved plan and without critical issues and agreed data sets fully migrated.
- Support potential JV
- IT Service availability (cumulated multiple for nav4, authorization and client web) >=98% (99,8%, 99%, 99% 24x7x365)
- IT Keep the performace of existing platform
- PMO support
 - Project portfolio delivered projects Ratio between planned project number and delivered project number. (Example: Planned 30 / Delivered 25 = 83 %) >= 80%
- Team Stabilization: Resource based on approved 2017 plan and assure effective usage of resources. Automate resource management.
- Support M&A related integration
 - Acquisition Integration FMS ONE: Assure handover of key functionalities under WAG Group management. Direct reporting is not expected in all cases.
- ITO
 - Improve IT- and Data Security
 - Oevelop and Design first drafts and concept for IT Business Continuity and IT Disaster Recovery Plan

Cross requirements 2017



- ✓ Induction training from HR
- Support for internal communication for projects
- Customer care (night shift) resources for 24x7 proactive monitoring
- Change/projects resources allocation from business departments
- Contribution on business cases preparation from business departments
- Quality check and approval management of business cases from Controlling
- Definition of required business milestones by CxO
- Security officer in company
- Business continuity plan in company to follow with IT plans

IT STRATEGY

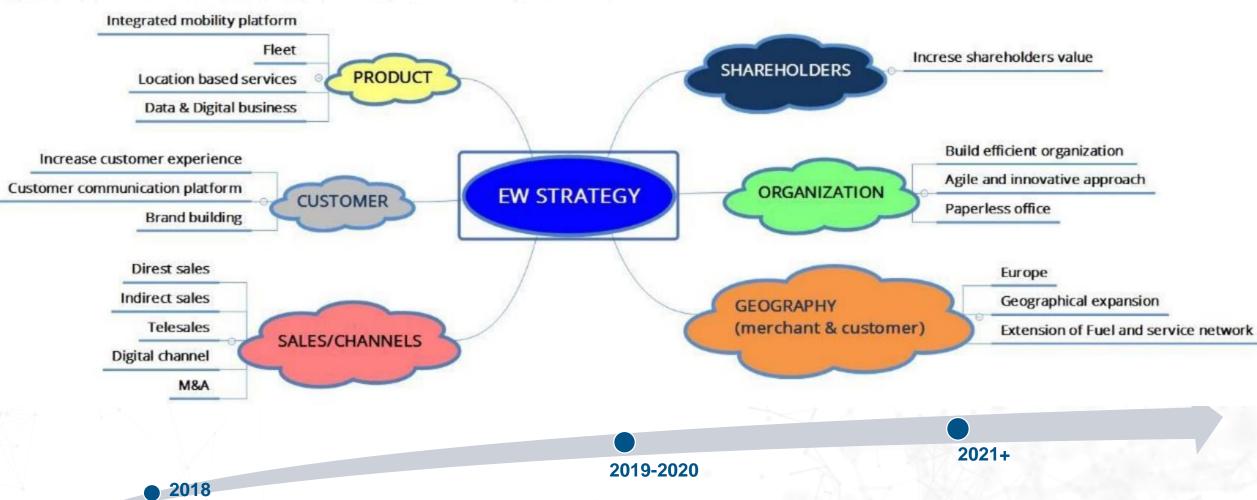






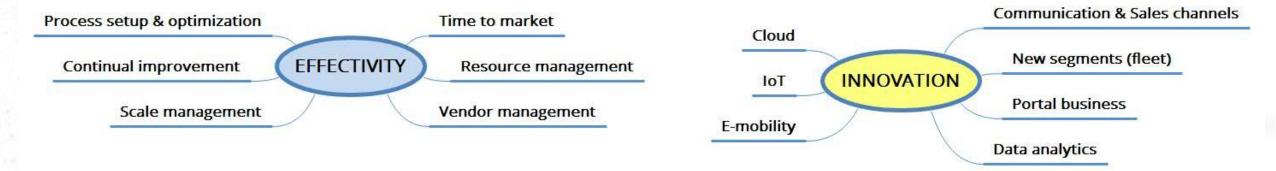
EW - WINNING TOGETHER



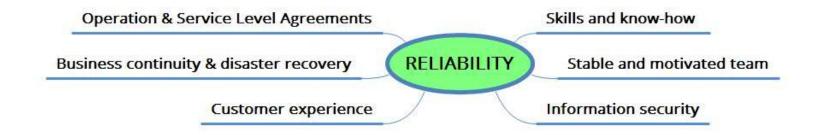


IT STRATEGY





SUSTAINABLE GROWTH



IT PLAN 2018





IT Longterm Strategy plan

Version 2017



MOVE FASTER, SCALE FASTER

- Bi-modal
- Manage volumes (in project/changes, in operation)
- Completion of SoA architecture
- Multivendor approach, outsourcing

ITD

- Team decentralization (project structure, acquisitions)
- Further roles definition or setup specialists

ITC

- SLA/OLA further development (driven by volumes, time zones, services)
- Go 2 cloud with standard services, prepare for applications

- Resourcing fully adopted cross all units
- Distributed organization support
- Cloud or laaS/PaaS to manage volumes in infrastructure







TEAM BUILD AND STABILIZATION

PMO

- Discipline and consistency to improve governance and prioritization of business requirements
- Governance extended with programme management and system integration

ITD

- Vendors and contractors management
- Resourcing internal team, contractors, vendors improvements to gain higher flexibility/effectivity
- Documentation, testing, analysis methodology
- Release management review

ITC

- Stability and availability of services
- Information security real implementation start
- New platforms and services



IT STRATEGY PLAN 2018



EFFECTIVITY

- Delivery of new SoA (new platform) components based on plan 2018
- Deliver agreed business priorities based on Project roadmap and 2018 plan
 - Main focus on New platform, EETS, GRACE, Digital integrated products
- Demand, change, release management aligned with new SoA
- Renew and improve resource management
- Implement automation of regress tests
- Learn how to manage cloud effectively
- Establish Vendor management

RELIABILITY

- Focus on Problem management to keep operation service level
- Improve support of own PS
- Additional KPI set with focus on time to market and quality
- Continue in BC and DR implementation

INNOVATION

- Go to cloud with the first services (WEB, DATA, ...), use SaaS and PaaS, possibly laaS
- Adopt agile (as complementary for waterfall) and DevOps approach
- By Information Security roadmap implementation increase security level for group

MOVE FASTER...
...SCALE FASTER

IT CHANGE 2018





IT Development



- 1. Web optimization & refactoring (ODS/ESB implementation), go to Cloud?)
- 2. Monitoring and improvement of Whitelist generation process
- 3. NAV4 optimization
- 4. NAV2016 stabilization after SCP
- 5. ESB performance tuning (simplification of operations, reduced logging & tracing, HW extension...)
- 6. Completion of UAT environment migration from PROD to TEST domain (IT Ops)
- 7. Finalization of test environment refresh procedure
- 8. Active directory cleanup (roles and groups stabilization)
- 9. DMS (S602) optimization & stabilization
- 10. Knowledge base using Confluence



IT Architecture



- 1. Support implementation of:
 - Minimum Viable Product of MS CRM and decommission of SugarCRM (FRED project)
 - System related impacts of General Data Protection Regulation (GDRP project)
 - Toll Platform for EETS & migration of non-EETS tolls (EETS project)
 - Migration of toll services invoicing from NAV4 to NAV16 (ERP2 project)
 - Operational Data Store as a key component in the transition architecture (ODS & other projects)
 - New Digital Platform based on new cloud based Front-end (former EIMS project)
 - Integrated product(s) (Shop Goods, Telematics, Parking, Insurance, Breakdown Services...)
 - Card Management System(s) & new Pricing decision where, when & who
- 2. Create data architecture layer, data quality management and support Data Lake development
- 3. Create roadmap for hybrid architecture and migration to Cloud
- 4. Support for internal processes (e.g. new demand management process)



Infrastructure



- 1. Finalization of MS System Center (SCCM, SCOM, SCOR) implementation
- 2. Finalization of backup platform Exchange (AppAssure and native SQL -> Veaam and MS DPM)
- 3. O365 on Citrix farm (click to run installation)
- 4. Hybrid platform strategy definition (what will stay in OnPrem, what will be in Cloud)
- 5. Cloud environment creation/migration I
- 6. SAN optimization (distribute capacity and performance), old SQL cluster exchange (isql1,isql2)
- 7. VMware upgrade and patch
- 8. Active Directory redesign (according to design document)
- 9. Workstation OS Migration to Windows 10 (Using SCCM)
- 10. Server OS Migration to Windows 2012 R2 or upper (excluding special technological servers)
- 11. Creation server standard on branch offices and realization.
- 12. Disaster Recovery site/witness site (3. site, cloud?)
- 13. Cloud environment creation/migration I
- 14. Dell Compellent SAN exchange preparation (requirements, assessment, design)
- 15. Identity management, Chip cards/User certificates (after realization enabler Certification Authority redesign).

Information Security



Area	Control	Deadlin e	Q1/2018		Q2/2018			Q3/2018			Q4/2018		
Technological Security In	iternal Firewall	8/2018											
Technological Security Fig	idelis	6/2018											
Technological Security Cl	loud Security	3/2018											
Technological Security Ins	sider Pentesting	3/2018											
Technological Security Ne	ew VPN concentrator	5/2018											
Technological Security Pr	roxy	3/2018											
Technological Security Ce	ertification Authority	6/2018											

- ✓ 1. Internal NGWF firewall network segmentation, intrusion prevention system
- 2. Fidelis automated detection and response platform for network and endpoints
- 3.Cloud Security definition of identity and data protection
- 4.Insider Pentesting internal pen-testing
- 5.New VPN Concentrator VPN concentrator compatible with the Azure or AWS
- 6.Proxy up-to-date threat intelligence to defend against crafty and malicious threat
- 7. Certification Authority deployment two-level hierarchy CA

IT SUPPORT & OPERATION 2018





Support & operation



- 1. Adopt fully Operational diary for daily routines automation and information exchange in the team
- 2. Implement Emergencies in both Infrastructure and Application teams = extend emergency teams
- 3. Involve 24x7 Customer care hotline to wake up for critical alerts specialist on emergency initially must be setup for Whitelists process and Pricelist pre-calculation
- 4. Work on improvement of New service hand-over to operation (Service Transition process)
- 5. Focus on Incident reporting and Problem management to keep existing operational levels
- 6. Full usage and configuration of new management systems:
 - MS Configuration manager for configuration of Operational systems (Provisioning, patch management, ..), integration with cloud environment (Intune, etc...)
 - MS Operations manager for Monitoring Infrastructure and application
 - MS Orchestrator for orchestration and automation daily tasks (beginning with provisioning of user accounts)

IT GOVERNANCE 2018





IT Governance

ew

- 1. IT group coordination
- 2. IT suppliers portfolio management
- 3. IT finance controlling
- 4. IT compliance

W.A.G. group IT cooperation









Short term strategy:

- Every company has to have own place for their work
 - We have common targets & future architecture
 - Standardization is not parameter of cooperation expect building security framework
- Use / share corporate benefits
 - Tenders, Purchase
 - Common dealing with technology vendors

Future strategy:

- Milestone: 1st common system in production
- Production framework, security threats, regulation & common architecture will result in tailed cooperation



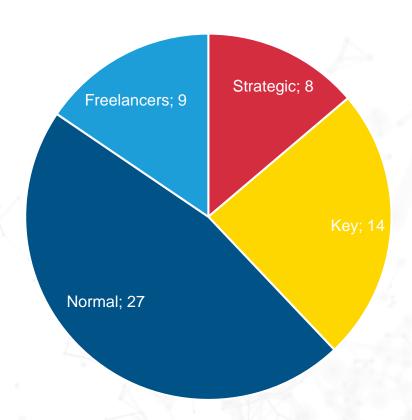
Geneve, rivers Arve and Rhone

IT suppliers portfolio



Based on classification we defined internal basic criteria for:

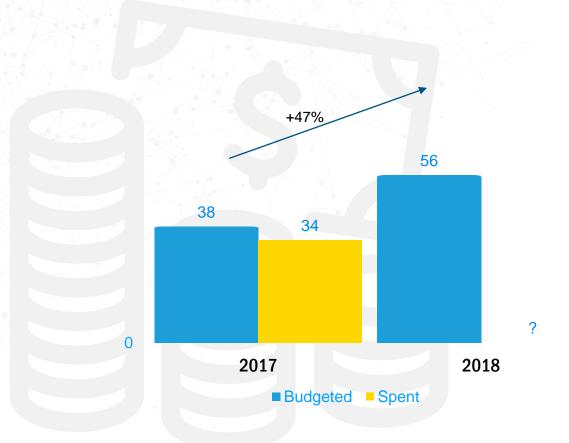
- Relationship management
 - Steerings
 - IT reviews
 - Administration support
- Cooperation governance
- IT finance monitoring
- Contract standardization

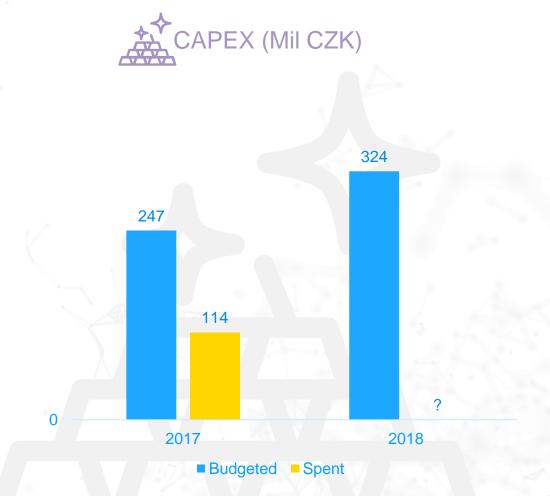




IT Finance controlling IT budget 2017 vs. 2018



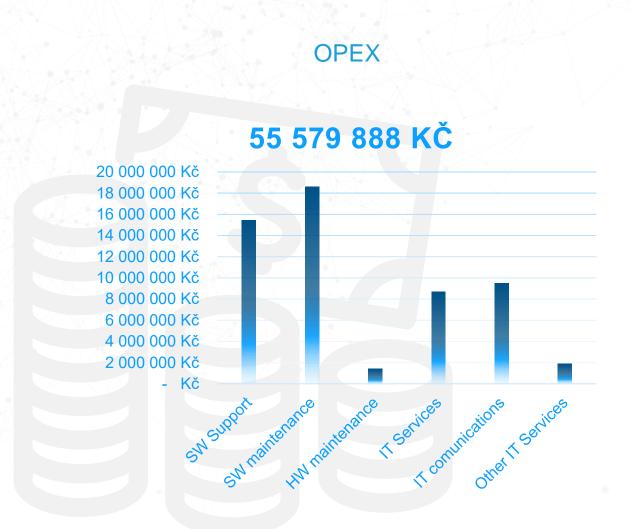


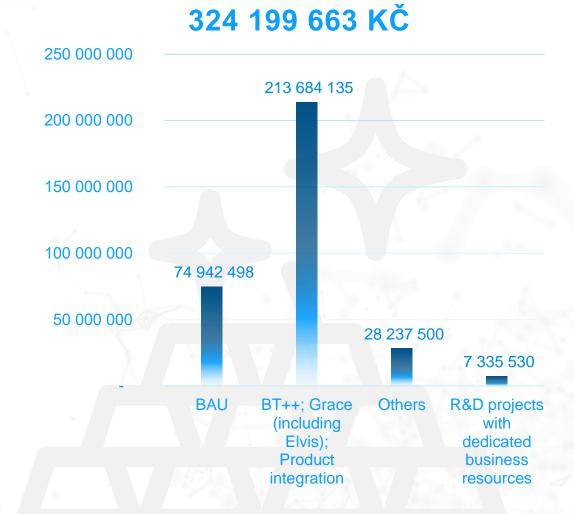


IT Finance controlling IT budget 2018 structure





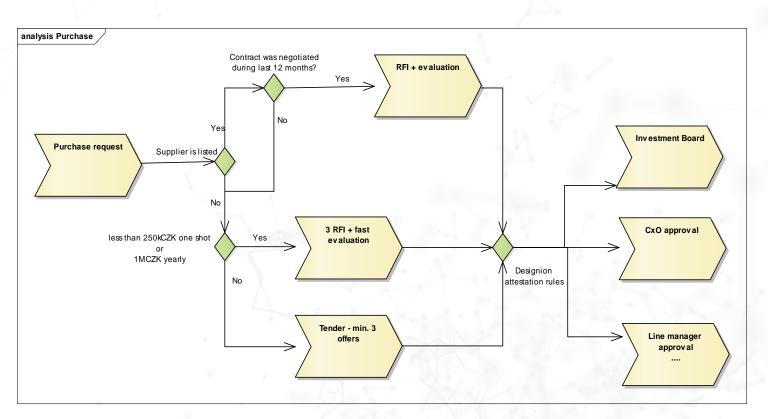




IT Finance controlling



- Tenders, Procurement & purchase process
- Standards of Contractual documentation
 - NDA
 - Framework contracts + partial contracts
 - Freelancers/agencies
- Agile aproach



IT Compliance



- IT compliance
 - Regulatory regulation
 - Payment Institution PSD1 & PSD2
 - GDPR
 - 2nd level controls
 - Production key processes, IT cache flow

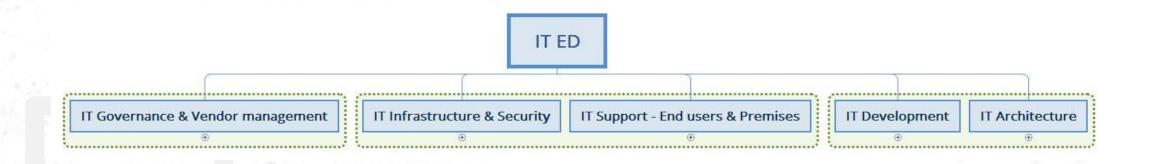
ORGANIZATION CHANGES





New Organization diagram

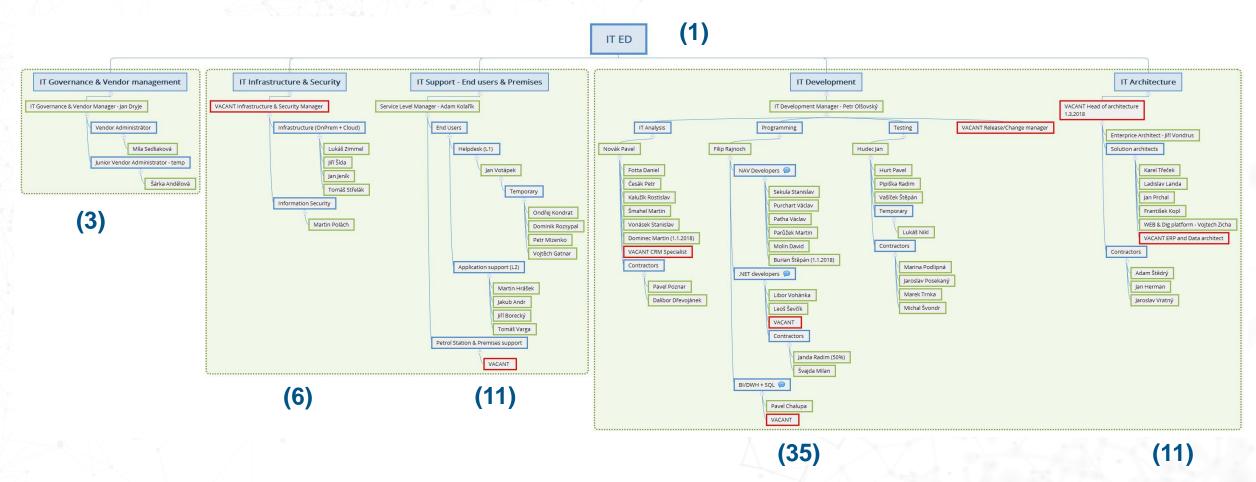




- Establish newly department "IT Governance & Vendor Management"
- Split "IT Operation Department" into 2 separate parts:
 - "IT Infrastructure & Security"
 - "IT Support End users & Premises"
- Separate from "IT Development" all architects into "IT Architecture" department

New Organization diagram





TOTAL: 67 incl. 2018 newcomers (≈ 64 FTE)

AGILE TEAMS and MOVING on 4th FLOOR



IT analysis Development **Testing** IT architecture Business **ERP WEB** DATA CRM Team HUBs creation - ERP, WEB, DATA, CRM, INTEGRATION, TOLL, CARD, NET&AC, ... Specialization to defined area (system) Focus on production support, technical debt, small development, projects and R&D in single area

PROCESS CHANGES





AGILE APPROACH









71 % of Top
Performers
Report That
Bimodal IT
Improves Innovation

Terr. The 2017 Control of Top
Performers

Report That
Bimodal IT
Gartner

Gartner

- Manage change in bigger scale
- Implement our ambitions
- Be more innovative

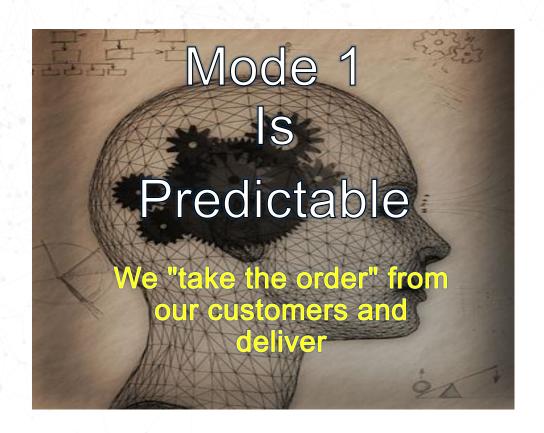
WHAT IS IT? ... WAY OF WORKING



- Different approach to different tasks
- Common business-IT teams
- Strict rules for shared resources
 - (finance, people, portfolio management and prioritization, releasing to operation, master data management, information security, ...)
- Full integration is not necessary in innovative mode



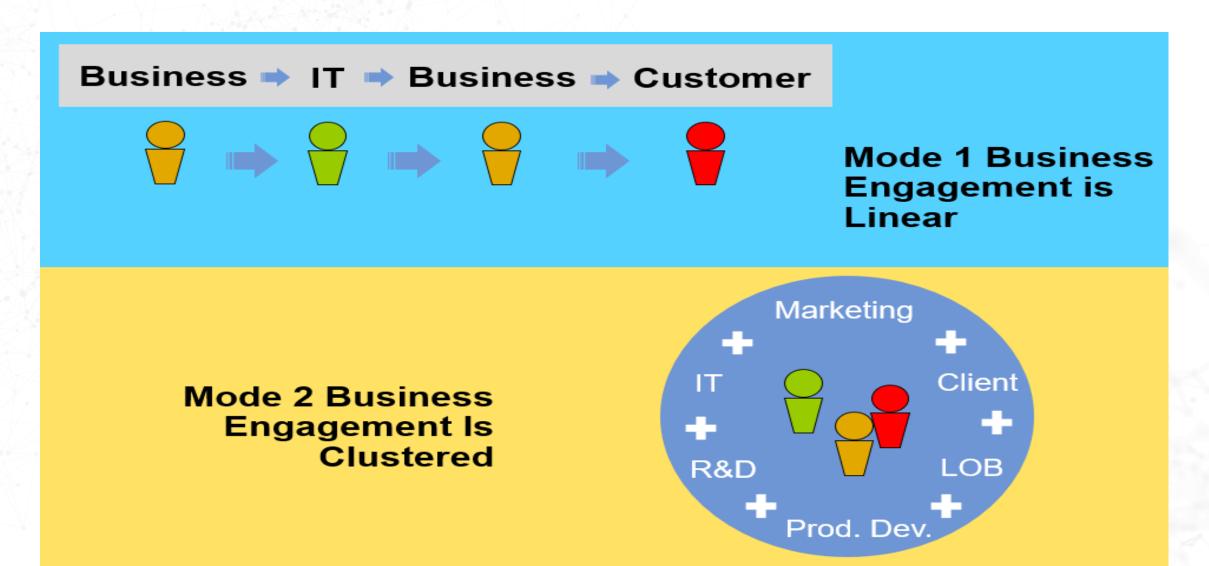
Bimodal Refers to Two Modes of Working





Business & IT Engagement in Mode 1 and Mode 2 Difference





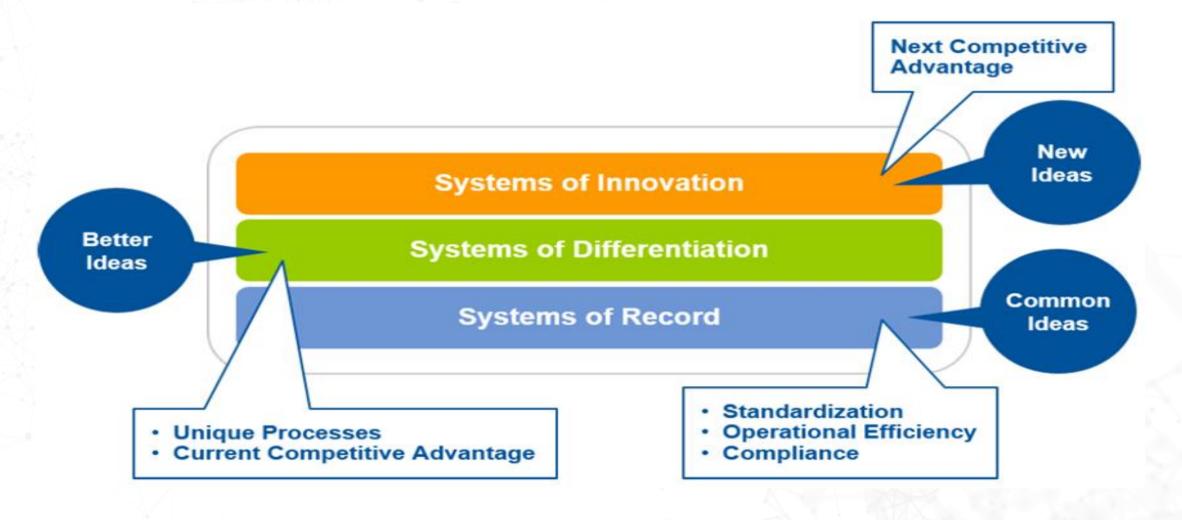
HOW?



- BY IMPLEMENTING "PACE LAYERED APPROACH" or say differently …
- ...create TWO possible ways of execution with specialized
 - processes
 - trained people
 - rhythm

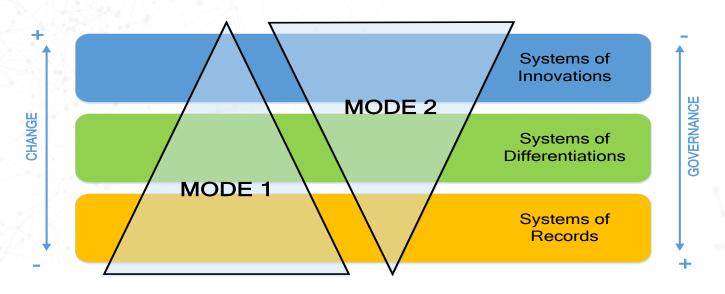
What is Pace Layered Approach





Pace Layering and Bimodal IT are complementary





Mode 1 - Business as Usual

- When you're certain you know where you're going
- The tried and true way
- One-off, one-and-done, 18 to 36 months
- Predictable: Plan ahead for everything, then march to orders
- Don't change much: Schedule, scope, people, target
- Big bets: Hard to reverse or recover if wrong ...



Mode 2 - Business as Unusual

- · Not sure of direction or path
- Need to do things ... and fast
- Experiment and explore new things
- Travel light
- Try multiple things
- Clarify outcomes to target (not "no plan")
- Test to verify outcomes and assumptions
- Change direction fast (pivot) or reverse
- Harvest those that work





UNCERTAIN

Bimodal IT = Marathon Runners + Sprinters Deeply Different, Both Essential



Mode 2

Think Marathon Runner



Reliability	Goal Agility		
Price for Performance	Value	Revenue, Brand, Customer Experience	
Waterfall, V-Model, High-Ceremony IID	Approach Agile, Kanban Low Ceremony		
Plan Driven, Approval Based	Governance Empirical, Continu Process Base		
Enterprise Suppliers, Long-Term Deals	Sourcing	Small, New Vendors, Short-Term Deals	
Good at Conventional Process, Projects	Talent	Good at New and Uncertain Projects	
IT-Centric, Removed from Customer	Culture Business-Centri Close to Custom		
Long (Months)	Cycle Times	Short (Days, Weeks)	

Think Sprinter

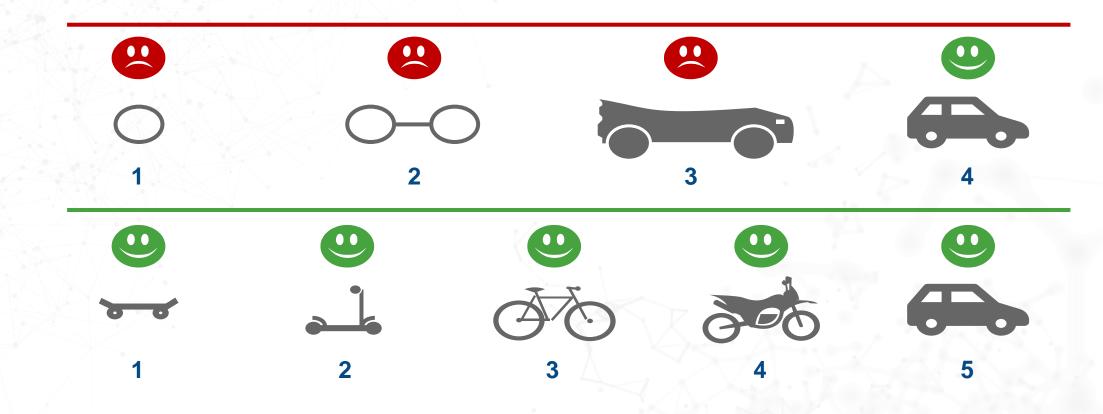


How to Build a Minimum Viable Product



Not Like This

Like This



NEXT STEPS



- Continue in BT program and build SOA architecture
- Continue in settling technical debt
- Continue on improvement of "Strategy to action" process
- Improve portfolio management (including prioritization)

- Evaluate how ready we are
- Build Governance supporting BI-MODAL
- and try ... select the first suitable project for MODE 2
- and start to build Mode 2 teams

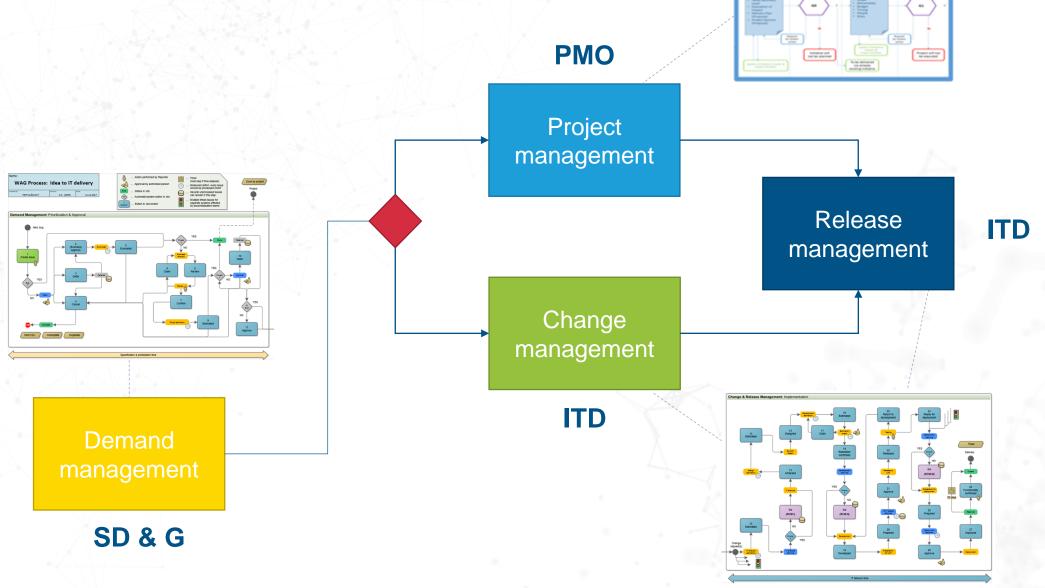


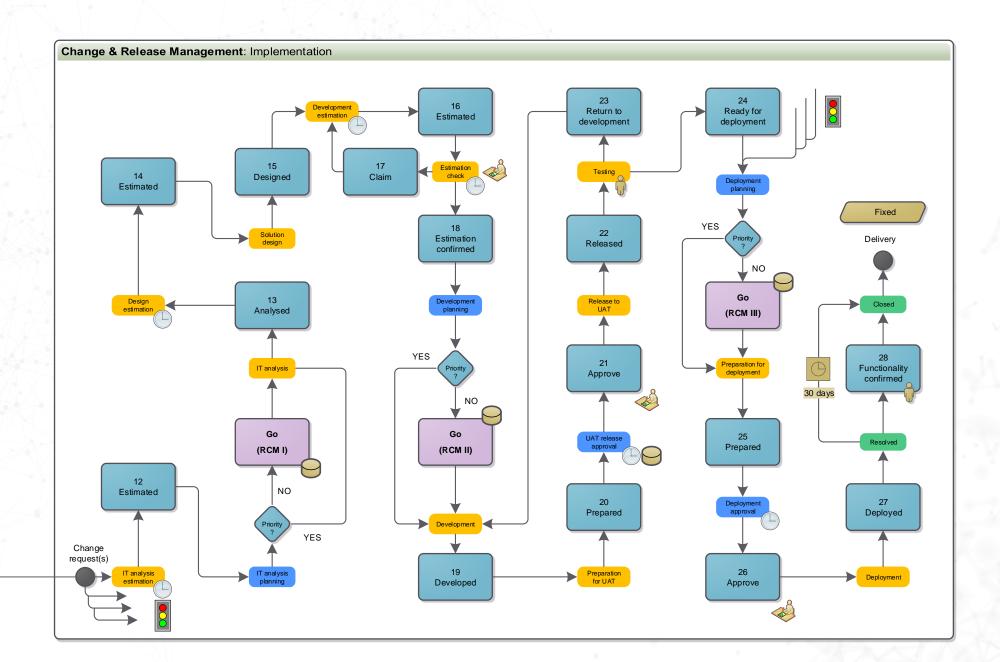
Project methodology, demand management, change and release management, ...



Processes





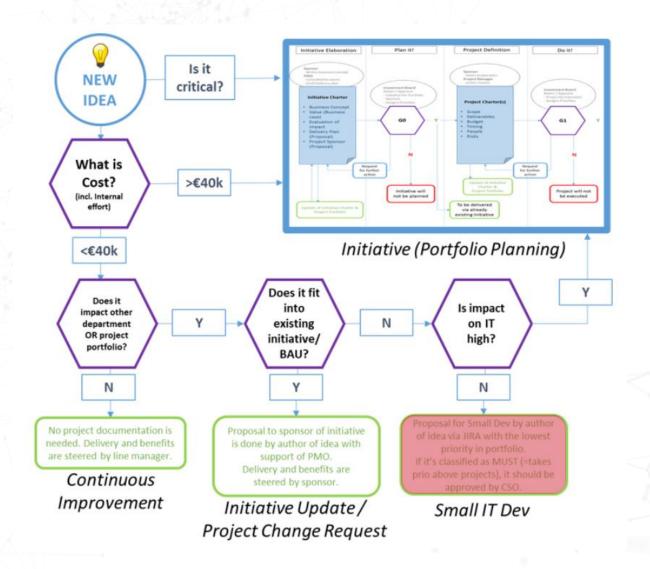




- Simplicity
- Speed
- Responsibility
- Overview

Project Management





- Introduced in Sep 2017
- Refined in Dec 2017

WAG Portfolio & Project Management



Resource model 2018 - IT Development

10% ... 4 hours a week

ative & business cruciali change requests ative & business cruciali change requests - reduced

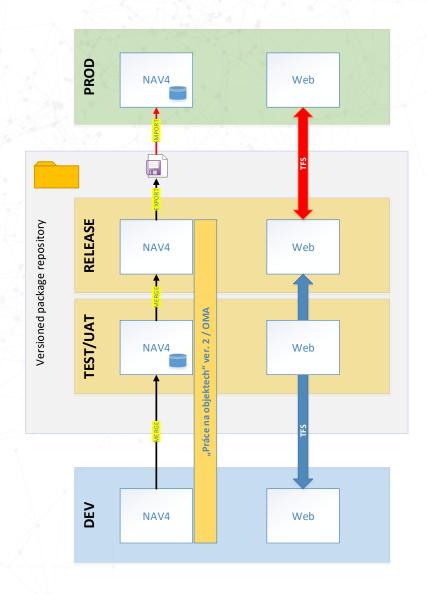
Area	Activity	Priority	Description	Allocation
Overhead	Overhead		Vacations, training, illness, teambuildings, dept. meetings	18%
	Teamleader overhead		Leadership of team	38%
	Manager overhead		Management of all teams and people	58%
Operations	Operations unplanned	1	Incidents, Service requests, Bug fixes	15%
			Incidents, Service requests, Bug fixes - reduced	3%
BAU	B2B (Network)	2		
BAU	Technical debt	3	Optimizations of systems, IT projects, improvements	21%
			Optimizations of	
BAU Portfolio plan. & assesm		t 5	Portfolio plannin BAU Small dev MUST HAVE	3 —
	Portfolio plan. & assesment		Portfolio planning, project resourcing and prioritization	4%
BAU Shopt	non-EETS, national tolls	4	1 01 7	-
	ShopGoods			
	NME			
	Tax refund new countries	7		
ERP AEQ CDBr Roadmap Core FRED EETS progr GRACE	ERP	8		65%
	AEQ			
	CDBr			
	FRED			
	EETS program			
	GRACE	23		
	Insurance	24		-
New Bus Opp	HRIS			
Others	BWF			
	etc.	52		
BAU	Small development	49+	Mainly legislative & business crucial CHR, up to avail.capacity	15%
		49+	Mainly legislative & business crucial CHR - reduced	5%

- Small Development has very low priority (now 49)
- Priority for any particular CHR can be increased by CSO or SD&G only

- There is a limited total capacity per year dedicated to Small development (~400 MD)
- Reevaluation/business analysis of all stopped CHRs is needed
- Demand/Change management process in Jira is under redesign, planned launch 1st Feb 2018

Release Management





Hot-fix

- Resolves a critical issue by introduction of permanent/temporary fix
- Must be fully/partially deployed ASAP
- Release frequency: Weekly
- Minor release (simple change)
 - Affects only one system
 - Functionality can be deployed independently on the other systems
 - Release frequency: Twice a month (or even Monthly only)
- Major release (complex change)
 - Affects two or more systems
 - Must be properly planned, fully and perfectly tested
 - Release frequency: Quarterly

INFORMATION SOURCES





See following links ...



1. Q1 Plan

\\wag-data\it\IT4IT ProjektyIT Projects 2018Q1 plan_v2.mpp or \\wag-data\it\IT4IT Projekty\IT Projects 2018Q1 plan_v2.pdf

2. Sharepoint

IT OLD: http://wag-sps-app/IT/SitePages/Home.aspx

IT Ops: https://eurowag365.sharepoint.com/sites/ITo/SitePages/Eurowag IT Operations documentation.aspx

IT NEW: https://eurowag365.sharepoint.com/sites/IT/SitePages/Home.aspx

3. Intranet metodiky

- <u>https://intranet.eurowag.com/departments/PMO/Team public documents/WAG_Portfolio_Project_Management_Methodology.docx</u>
- https://intranet.eurowag.com/departments/IT development/Team public documents/Forms/AllItems.aspx



Q & A





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