Implementation of a Pega-based SKU lifecycle process in an Agile way

Julien Mailliere

Head of Pack &Text Design,

Supply Network Operations

Ferring Pharmaceuticals

Helping people live better lives

Pega Customer Engagement Summit
Basel, October 22nd 2019

PLEX Product Lifecycle Execution

FERRING PHARMACEUTICALS

Company overview

- Privately owned, research-driven specialty biopharmaceutical group headquartered in Switzerland
- Committed to building families worldwide and helping people live better lives
- Global company with over 6,500 employees in 56 countries and distribution in 110 countries
- 2018 revenue: EUR 1.9 billion*
- 2018 R&D investment: 18%
- Founded in Malmö, Sweden, in 1950

*USD 2.3 billion – CHF 2.2 billion

2018 sales overview by therapeutic area

46% Reproductive medicine and women's health

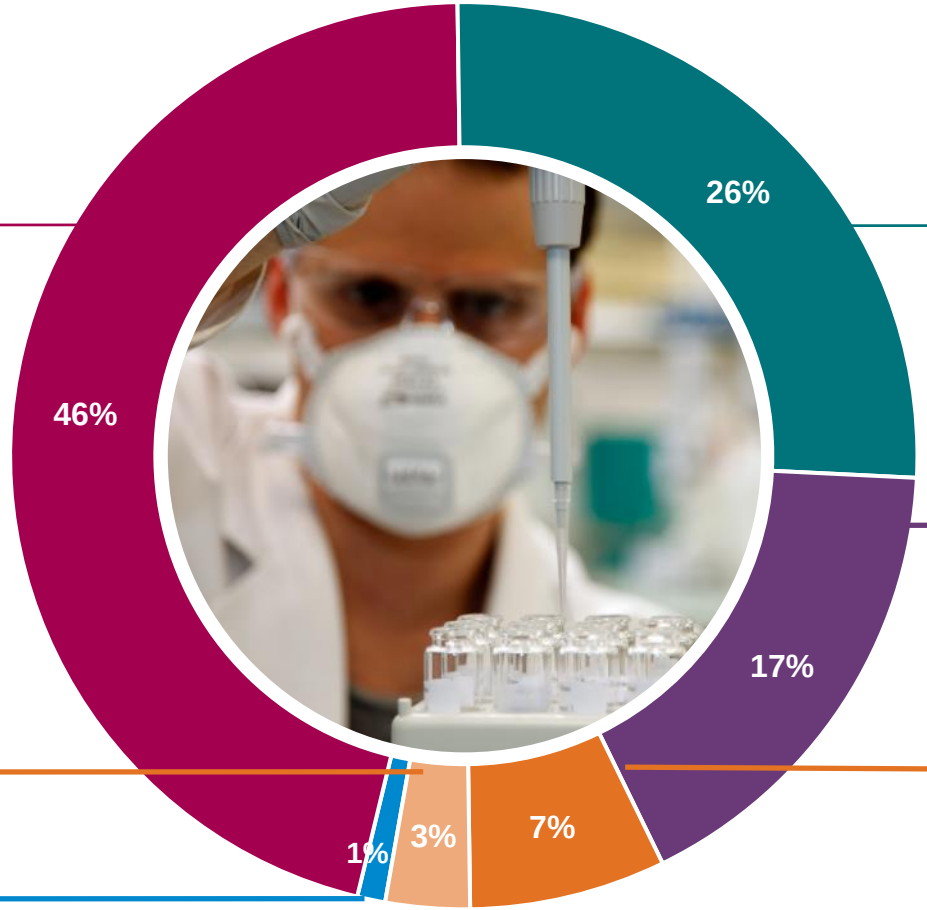
26% Gastroenterology

17% Urology

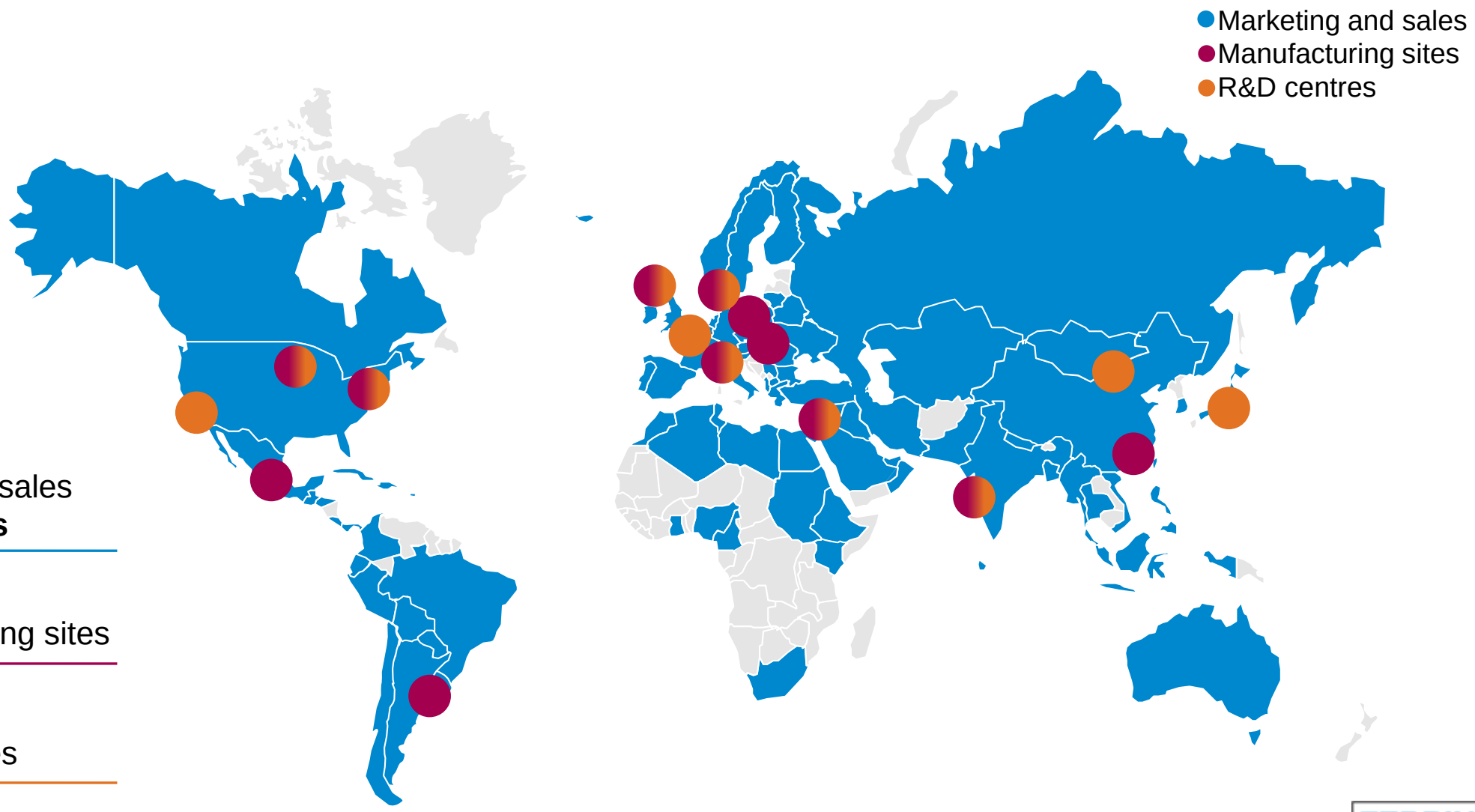
7% Orthopaedics

3% Endocrinology

1% Other



Global presence in over 110 countries



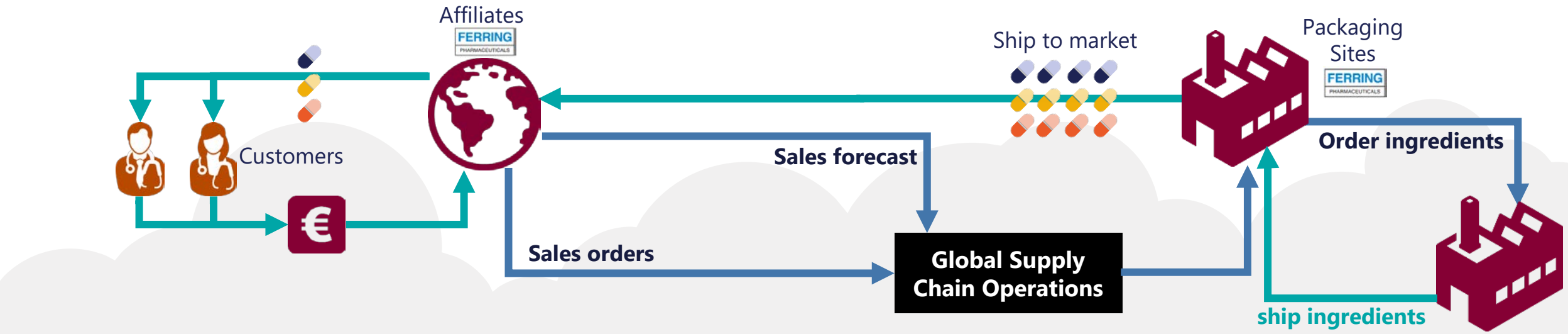
Marketing and sales in **56 countries**

12 manufacturing sites

11 R&D centres

FERRING PHARMACEUTICALS

“Classic” Supply chain flow

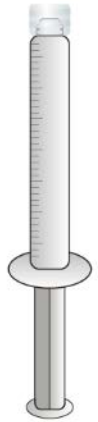


FERRING
PHARMACEUTICALS

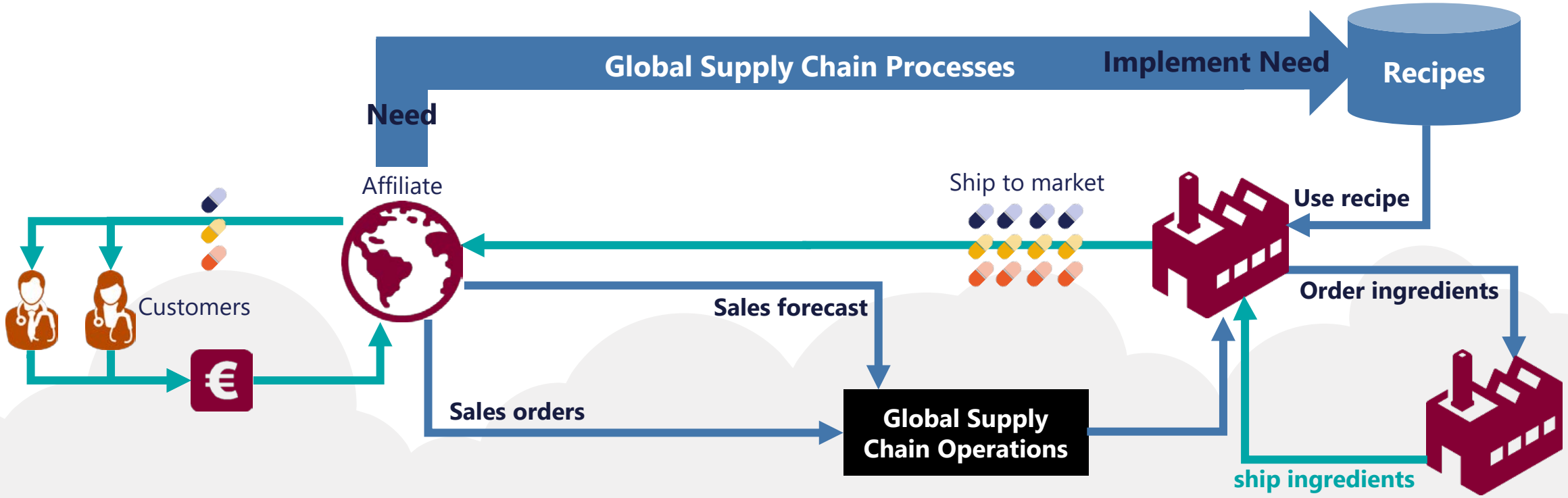
What is a Product recipe ?

Product Specific

Country (SKU) Specific

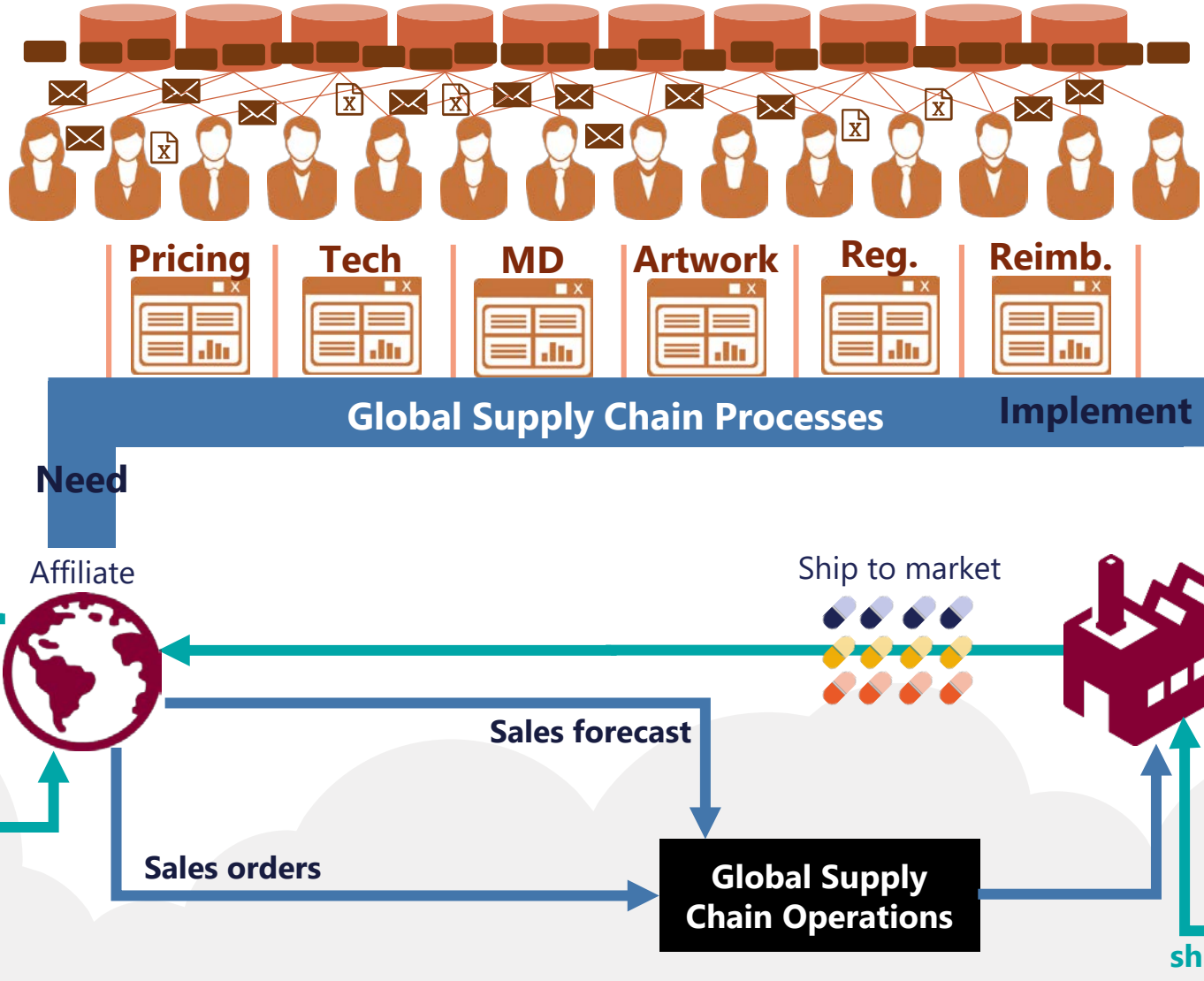


Global Supply Chain Processes



Challenges before PLEX

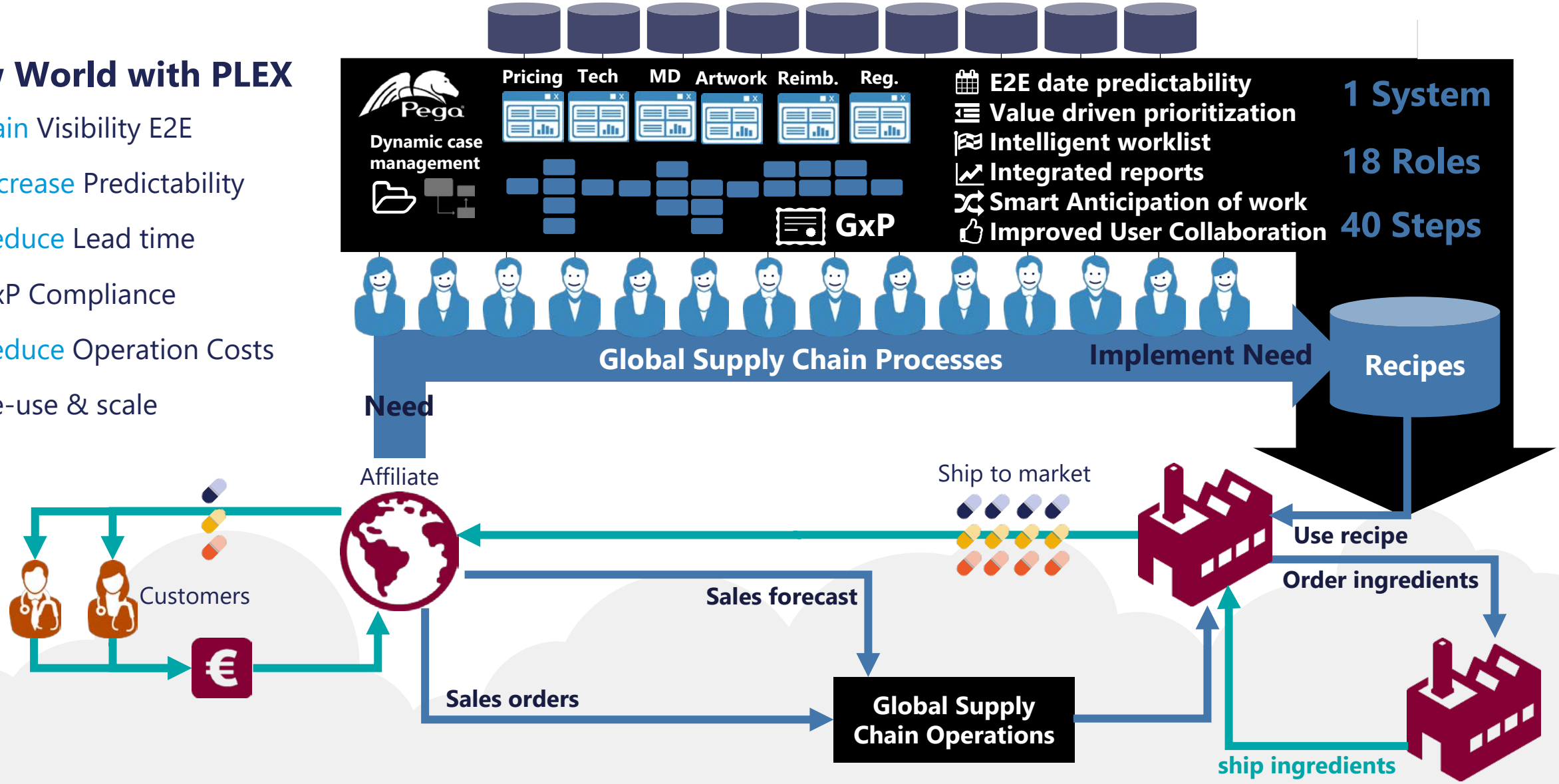
- Visibility
- Predictability
- Lead time/costs
- Compliance
- Automation
- Re-use & scale



FERRING PHARMACEUTICALS

New World with PLEX

- Gain Visibility E2E
- Increase Predictability
- Reduce Lead time
- GxP Compliance
- Reduce Operation Costs
- Re-use & scale



FERRING PHARMACEUTICALS

FERRING PHARMACEUTICALS

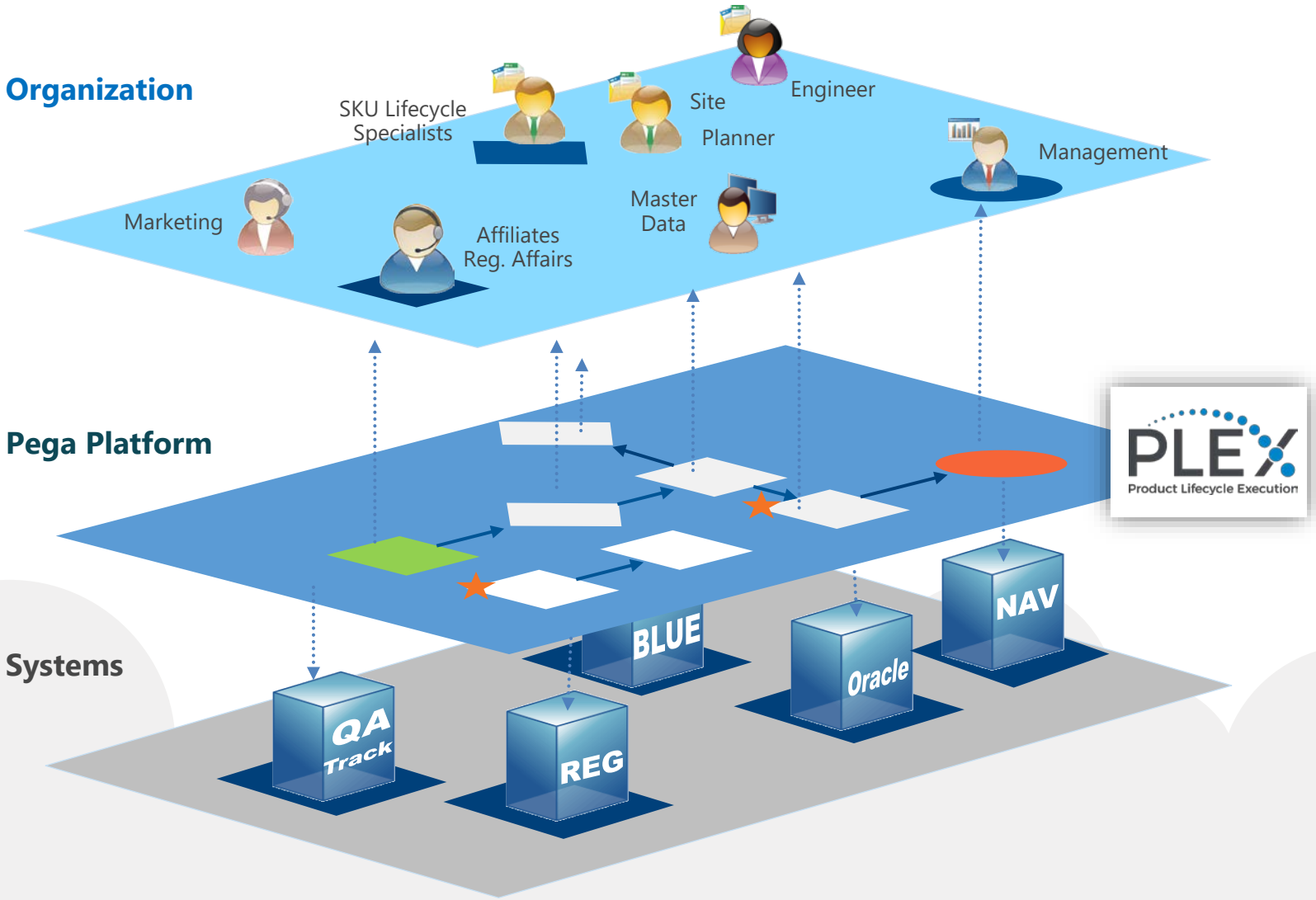
TRANSFORMING PRODUCT LAUNCH & CHANGE

Transform our organization with agile and compliant modification of product portfolio to rapidly supply patients in a dynamic world

LAUNCH & CHANGE EXCELLENCE

INCREASE VISIBILITY	Multi level case hierarchy across all systems allow full visibility on overall process status and timelines.	cost of delay is calculated and visible enabling to focus effort on most valuable work first.	Visual representation of product launch/change per country.	**100%** End to end visibility	
INCREASE PREDICTABILITY	End to end calculation of critical path with reliable values across the sub activities.	Milestones and timeline forecasting will be made on dynamic case information.	Intelligent SLA and proactive alerts are generated to help steer actions ahead of the game.	**20%-40%** Actual vs. Promised Date Variability Reduction	
MAXIMIZE FINANCIAL BENEFITS	Activities are intelligently run in parallel and cost of delay is used to prioritize work and get most valuable work done first.	Complexity is managed and common packs creation is a rational decision based on business value on creation and economies of scale.	Overdue cases number are reduced by proactive planning and decision making on the overall process.	**20%, 10%** Overall Lead Time from change & launch decision to last shipment reduction	
GxP COMPLIANCE	System allow to anticipate the start of some tasks at risk with full digital audit of approvals.	Stock management is manage to avoid product recall because of wrong SKU being shipped.	System ensure that all approved LU are carried over for implementation diligently and otherwise notify the MU creator.	**100%** GxP Compliance	
REDUCE OPERATIONAL COSTS	Automate manual steps and removing system switching needed by auto populating data and propagating data automatically to backend systems.	personal worklist with assignments created by the system based on finer statuses definition and SLAs eliminate the need for local excel spreadsheet.	Improved user experience and productivity with intent driven screens and intelligent wizards.	**50%-70%** Manual steps in and outside systems removed on the overall process	

Case & Process Management for Digital Process Automation



QA track = Change control System
Blue = Artwork Management System

Oracle = ERP plants
NAV = ERP distribution

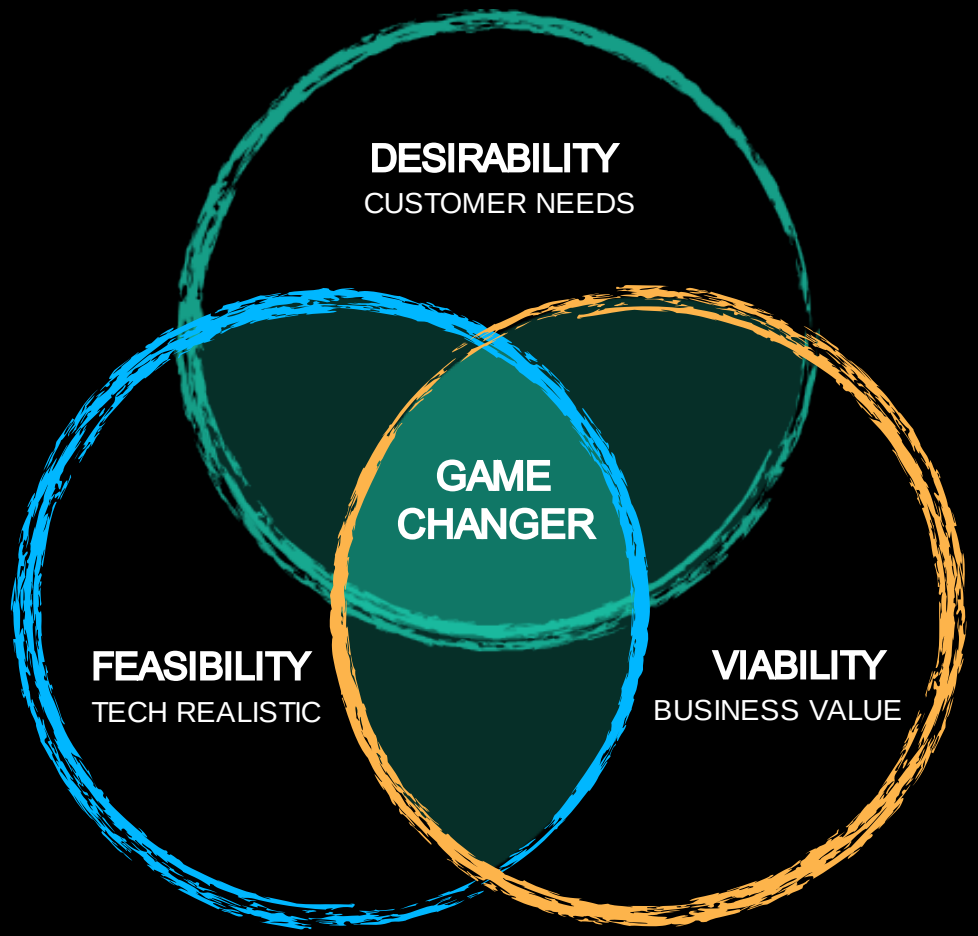
FERRING PHARMACEUTICALS

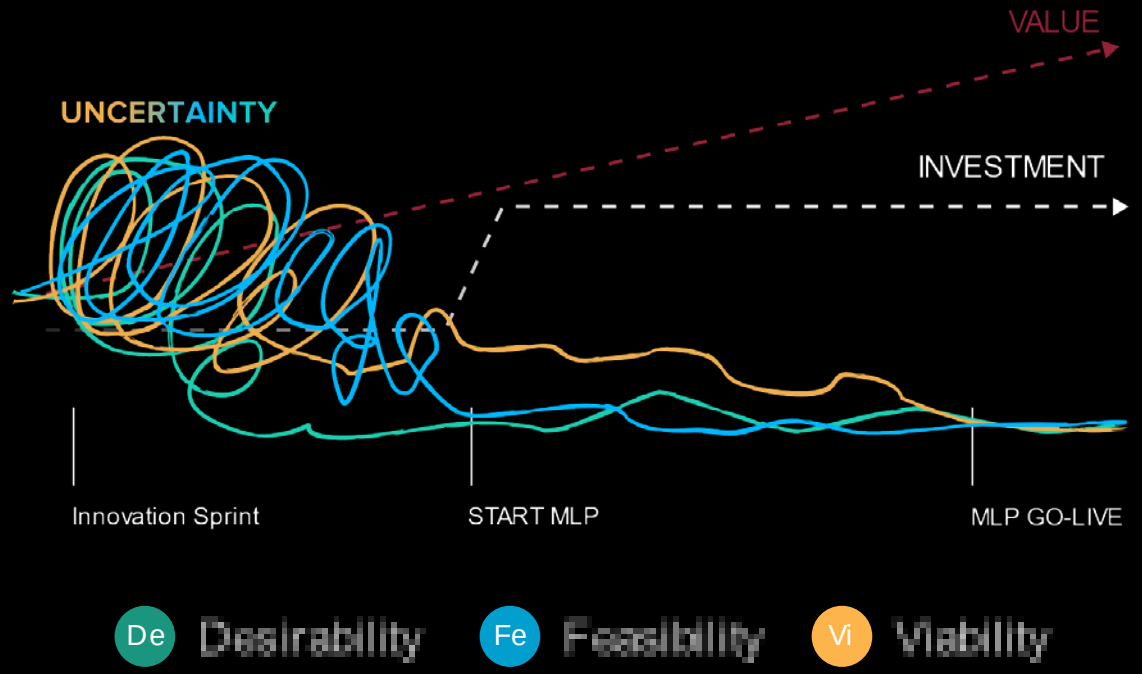
Traditional approach does not work anymore

image: evrenkalinbacak © 123RF.com

We need a new way of working that provides faster feedback cycle, engage the user more into the process yet retain uncompromised quality.

image: evrenkalinbacak © 123RF.com





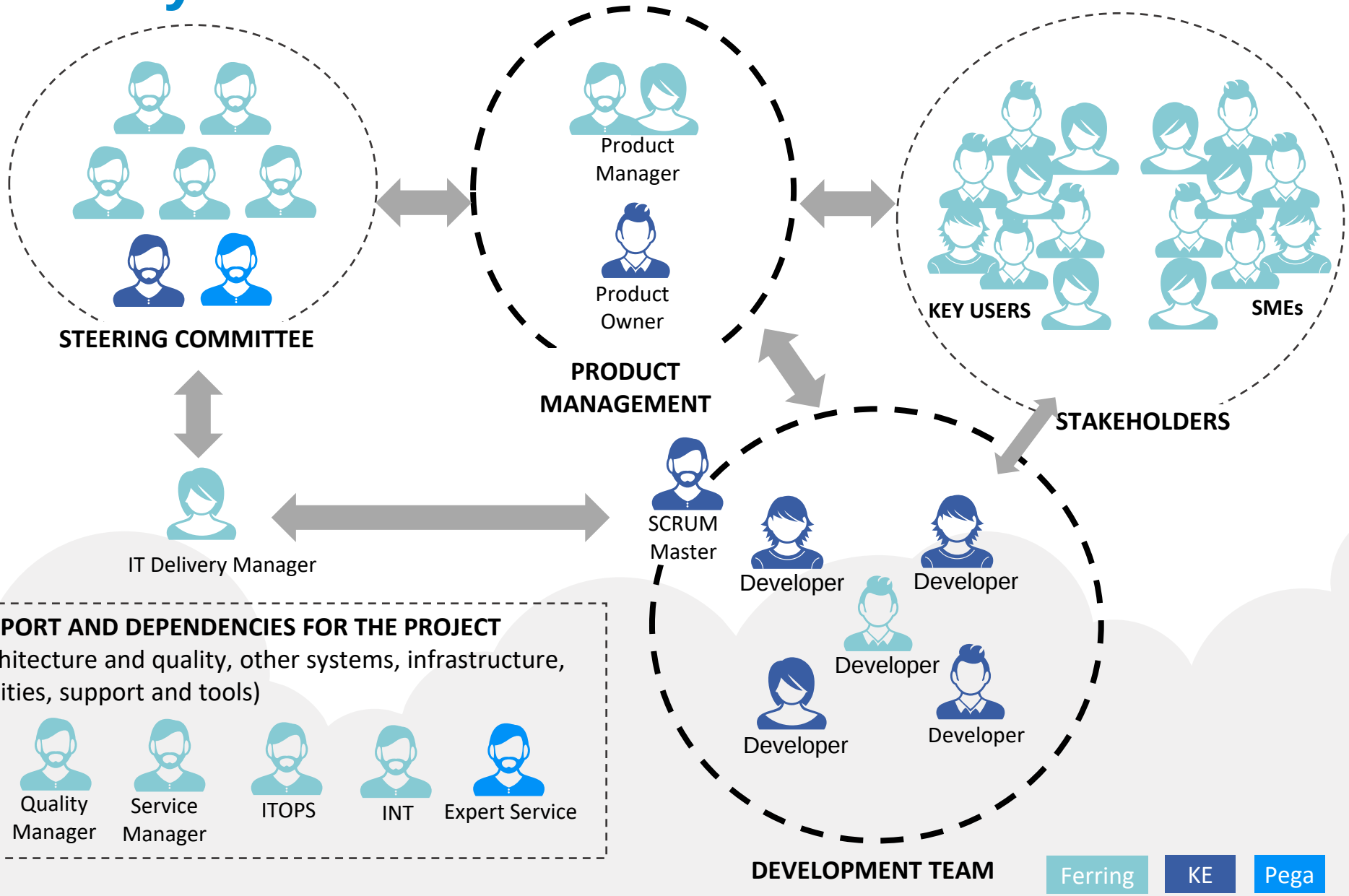
Knowledge Expert
A Pega Ventures Funded Partner

Leap of faith

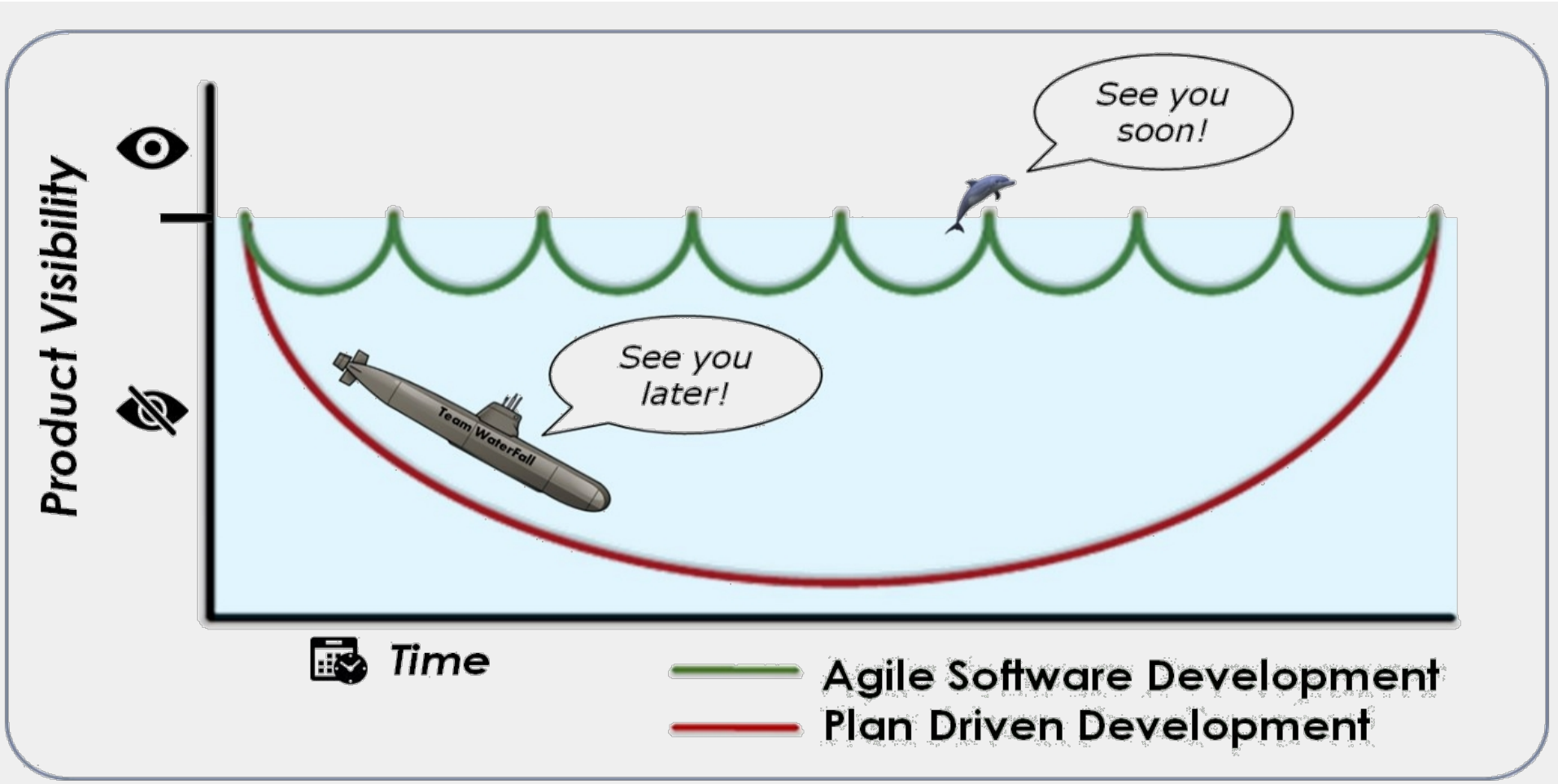
Invest in the solution, but also in the methodology

image: Pavol Stredansky © 123RF.com

Agile Delivery Model

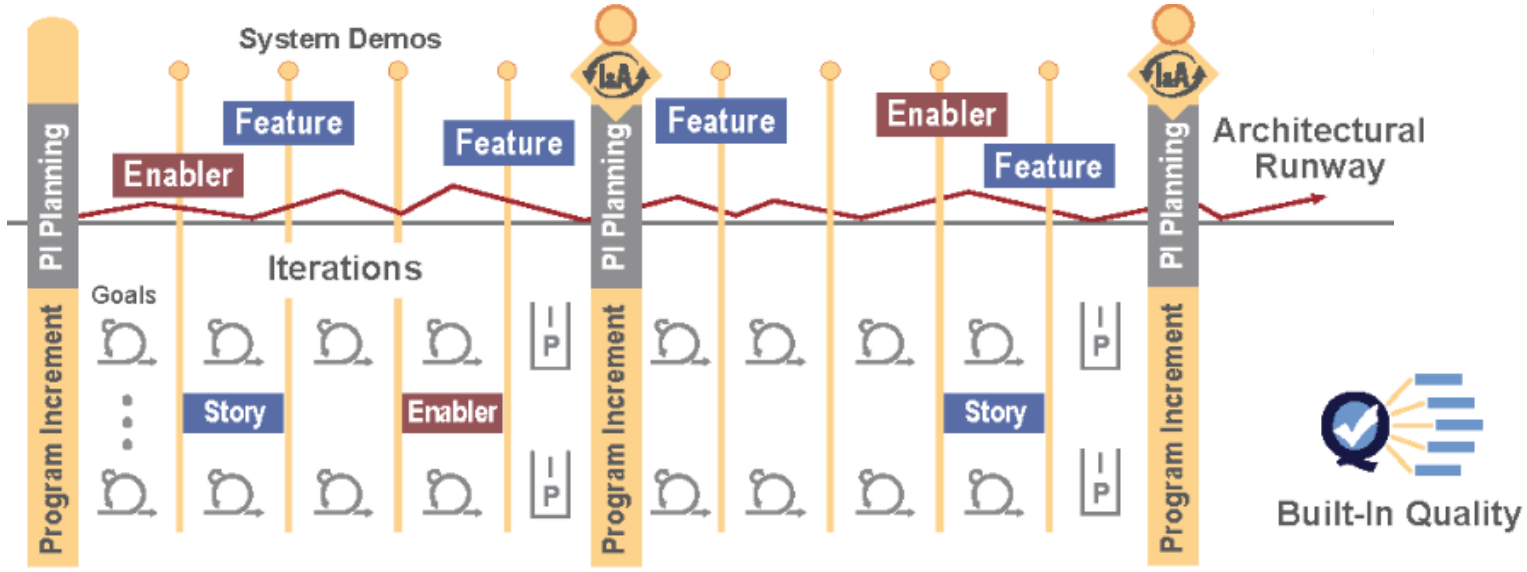


Change of Paradigm requires Training and Preparation



FERRING
PHARMACEUTICALS

Agile Delivery Cadence



JANUARY

KICKOFF

PI 1 INNOVATION & PLANNING

FEBRUARY

APAC DEMO

APRIL

PI 2 INNOVATION & PLANNING

MAY

SOFT GO-LIVE CHANGES

JUNE

DEMO LAUNCH COMMITTEE

PI 3 INNOVATION & PLANNING

JULY

CHANGES RAMP-UP

AUGUST

SOFT GO-LIVE LAUNCH

PI 4 INNOVATION & PLANNING

NOVEMBER

FULL GO-LIVE CHANGES

DECEMBER

FULL GO-LIVE LAUNCHES

FERRING PHARMACEUTICALS

Alona Nadieieva
André Afonso
Ghania Bouzemame
Mickaël Presumey
Pierre-Marie Hetault
Piotr Madejski
Wassim Jrad

ONE TEAM

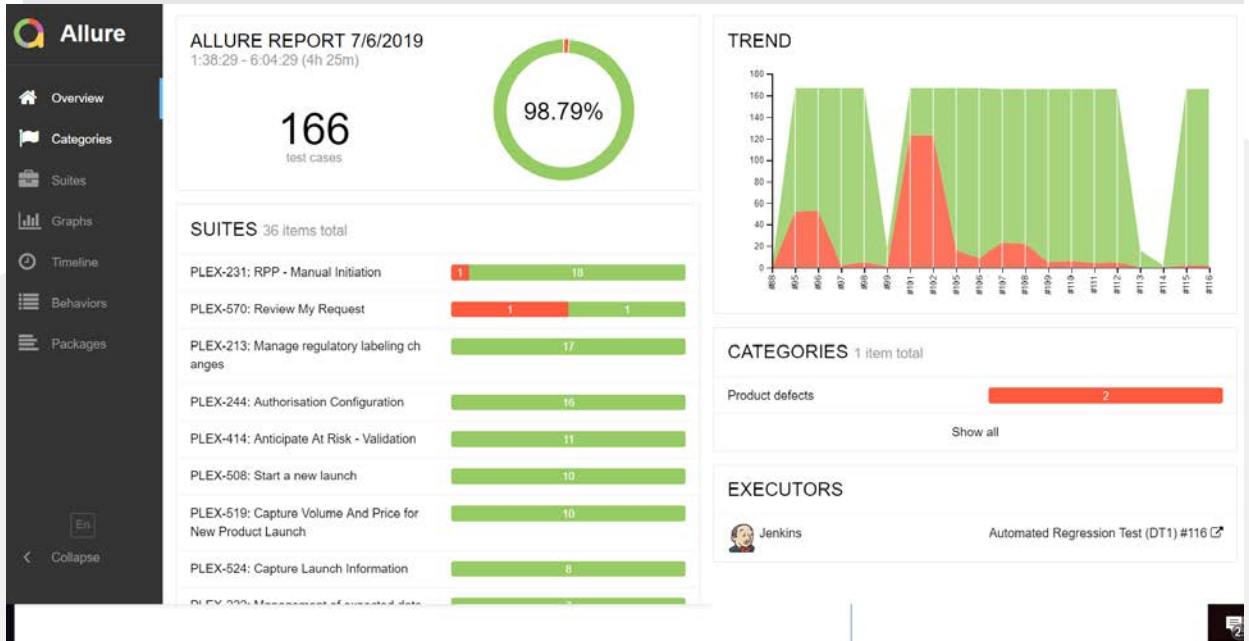
Milestones

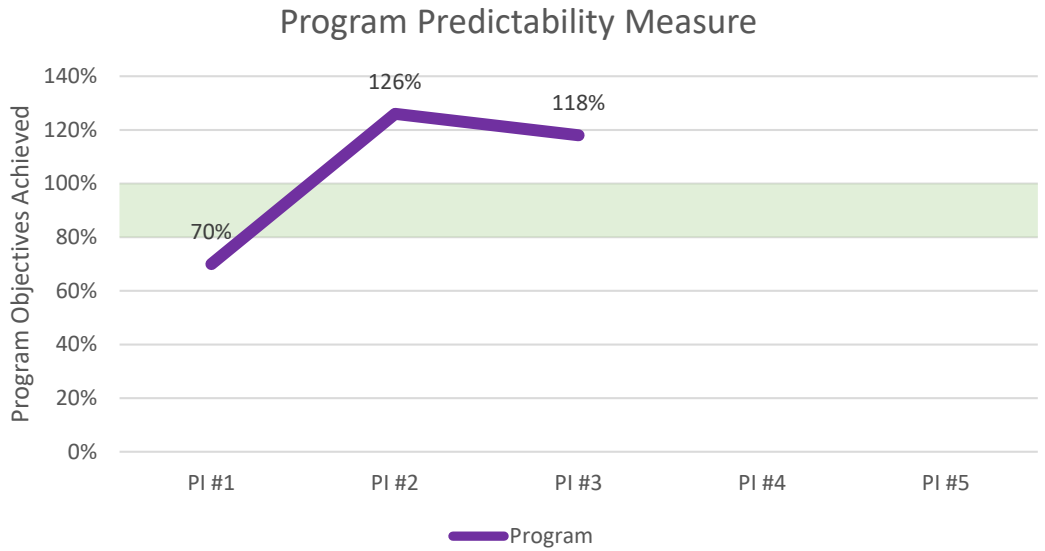
Agile Program Metrics

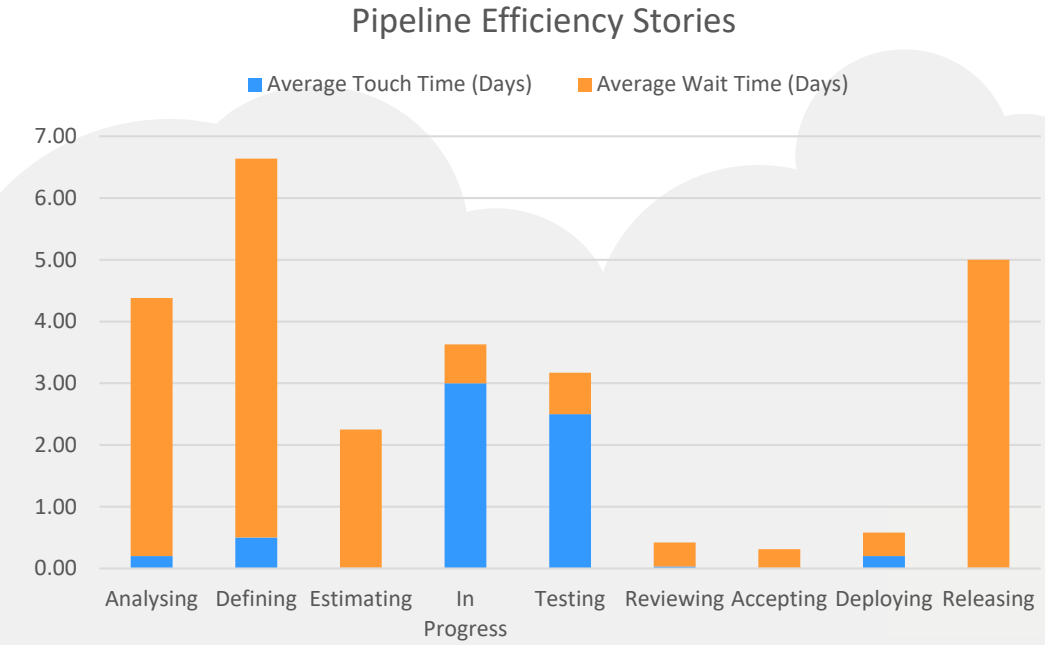
PLEX
Product Lifecycle Execution

PEGA COMPLIANCE SCORE

82%	1485	274	36
COMPLIANT RULES	TOTAL RULES	RULES WITH WARNINGS	UNJUSTIFIED WARNINGS

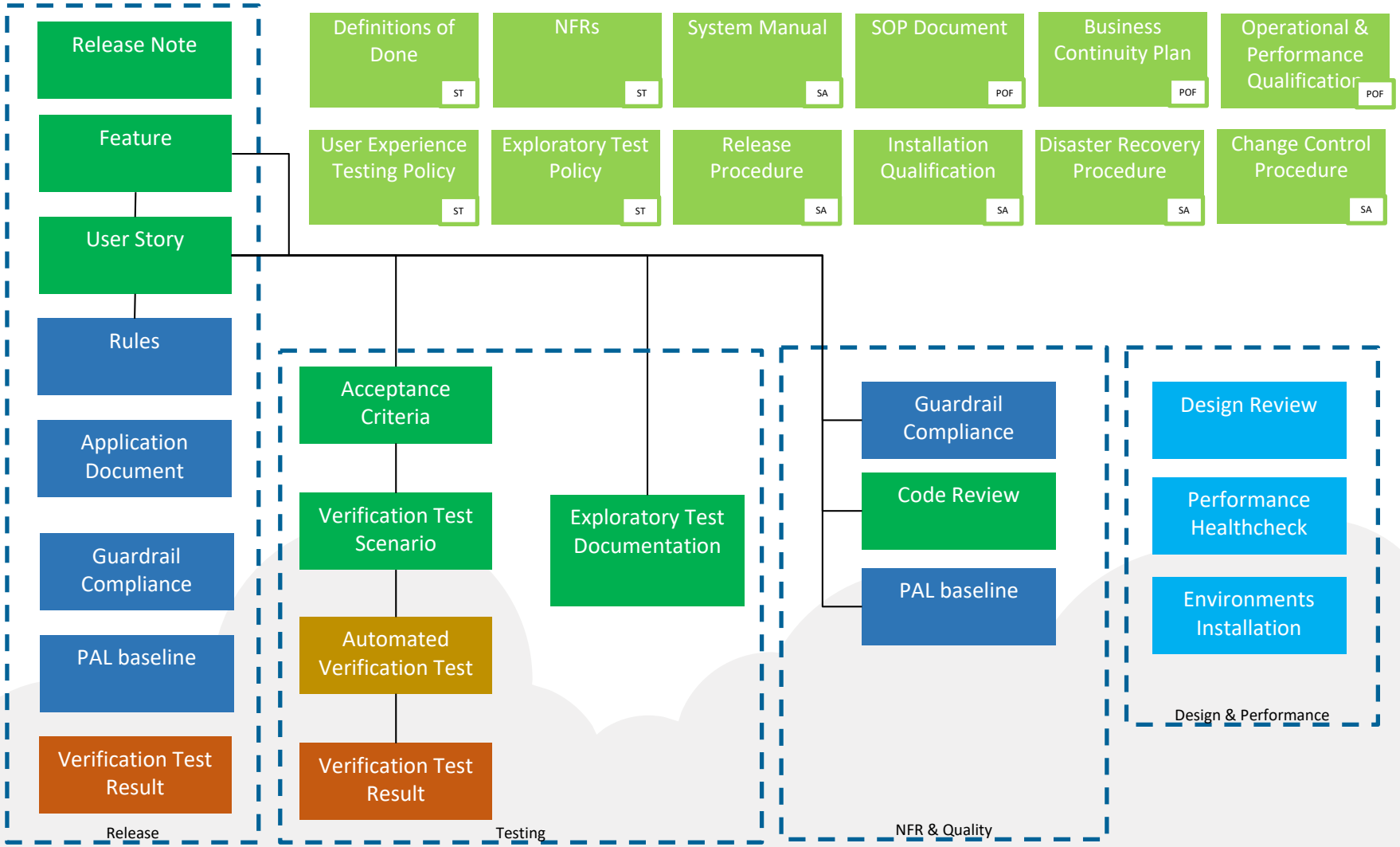






Agile in Pharma? Documentation and GxP Aspects

Project lifecycle artefacts



Pre-project artefacts

- Vendor Audit — QM
- System Assessment — PM/QM
- Risk Assessment Log — PM/QM
- Computer Validation Plan — PM/QM
- System Service Level Agreement — PM/SM

Expert Service

Pega7

Ferring Document

Jira/Confluence - Asset

Jira/Confluence – Policy/Document

Github

Jenkins/Allure

This slide shows the exhaustive set of artefacts used for system GxP validation. All artefacts on this slide are sufficient to satisfy the full set of activities/deliverables required for a GxP compliant system. It is to note that one of the product principles is that “user training is embedded in application user experience” and as such no classroom or formal training should be needed.

Primary owner for documents:

PM = Project Manager (Ferring)	POF = Product Owner (Ferring)
SA = System Architect (Ferring)	SM = Service Manager (Ferring)
ST = Scrum Team	QM = Quality Manager (Ferring)

FERRING PHARMACEUTICALS

DESIGN SPRINT

PLEX
Product Lifecycle Execution

FERRING
PHARMACEUTICALS

Agile development example: Invest on user-adoption 1/2

1. Before change: fully manual system

Finished Product description table

Ingredient type	Requested	Quantity	Current item number	New item number (if known)	Semi-finished item number	Material Specification	Supplier
Carton	☑	1	5007000177			F-MS-2056	
Collection carton	☐						
Collection carton label	☐						
Substance label	☑	1	5008000166			F-MS-1103	
Solvent label	☐						
Reimbursment label	☐						
Leaflet 1	☑	1	5009000697			F-MS-3040	

2. PLEX: addition of 2 complex interfaces: bring transparency about BoM content + current artwork

Parent Case for Change (R-17)

Change (C-49) NEW 8301000022 - MENOPUR MULTIDOSE powd and solv for sol for inj vial 1x 600IU SG - SG

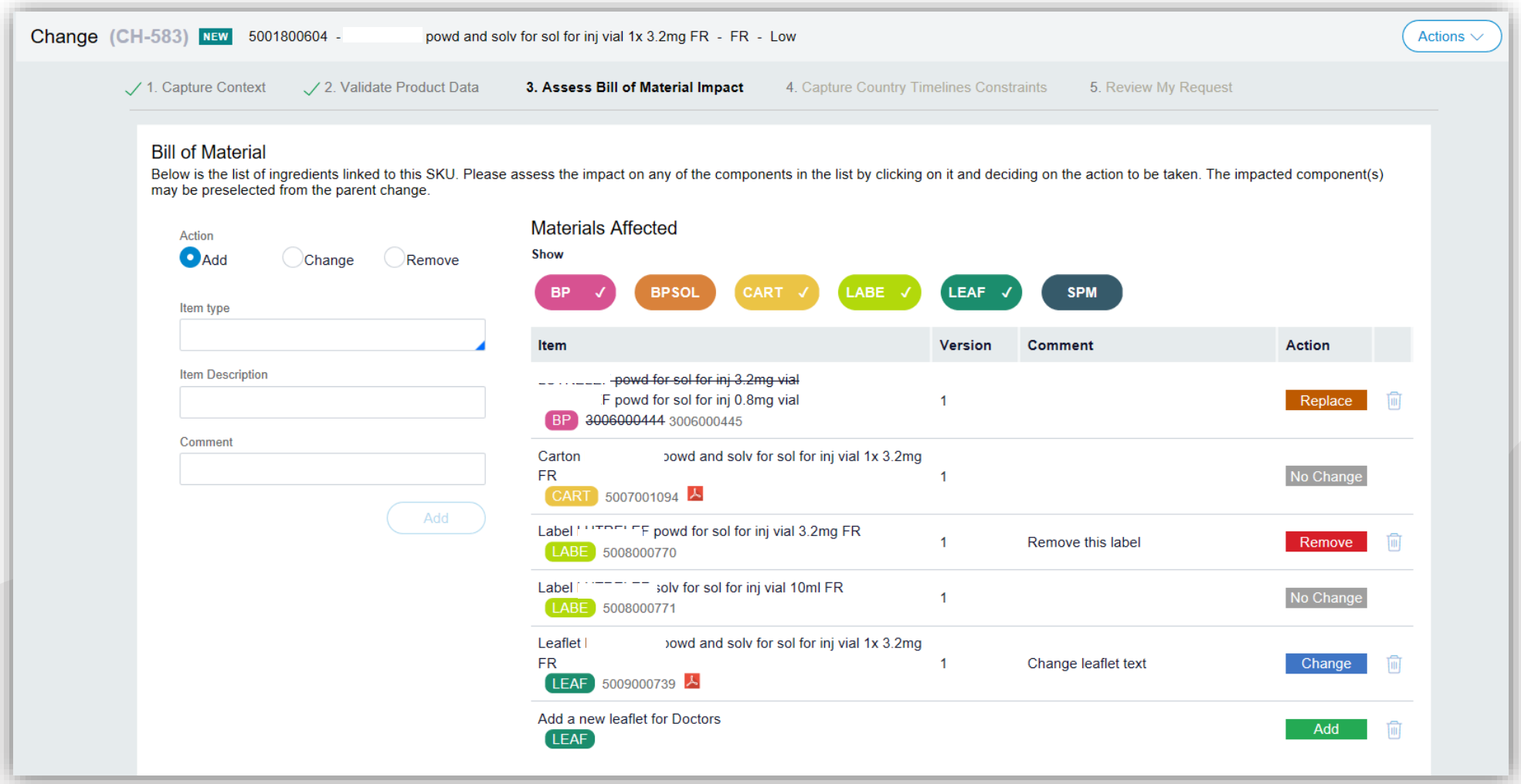
Actions

Item Name	Item Number	Item description	View Artwork	Change	Delete
Bulk Product	I-3006000532	D powd for sol for inj 600IU vial			
Label	I-2008054079	Label wd for sol for inj vial 1x 600IU SG			
Bulk Solvent Labelled	I-3006000073	D solv for sol for inj syr 1ml			
Label	I-2008054080	Label lv for sol for inj syr 1x 1ml (600IU) SG			
Medical Device	I-2011050071	Plunger Rod for Syringe barrels 1ml			
Medical Device	I-2011050252	Needle 25Gx5/8 - 0.5x16mm Orange			
Medical Device ⓘ	I-2001053054	IT of 9 pcs syringes / alcohol pads rope N.V.			
Carton	I-2007055837	Carton wd and solv for sol for inj vial 1x 600IU SG			
Leaflet	I-2009054558	Leaflet MENOPUR powd and solv for sol for inj vial SG			
Medical Device ⓘ	2001053976				

For a new active or solvent, is it added or replaced ?

Agile development example: Invest on user-adoption 2/2

3. PLEX: Second version following end-user feedback and UX experience workshop.



Key Success Factors

1. Customer Centricity
2. Lean-Agile Approach
3. DevOps Culture

Thank you

Contact: Julien.Mailliere@ferring.com

Connect with us!

Ferring Pharmaceuticals

@ferring

Ferring Pharmaceuticals

@ferringpharmaceuticals

Ferring Pharmaceuticals