



*Intelligent analytics to deliver software better*

# Improving communication between the CTO and the C-suite

Software delivery performance metrics  
and reporting for senior stakeholders

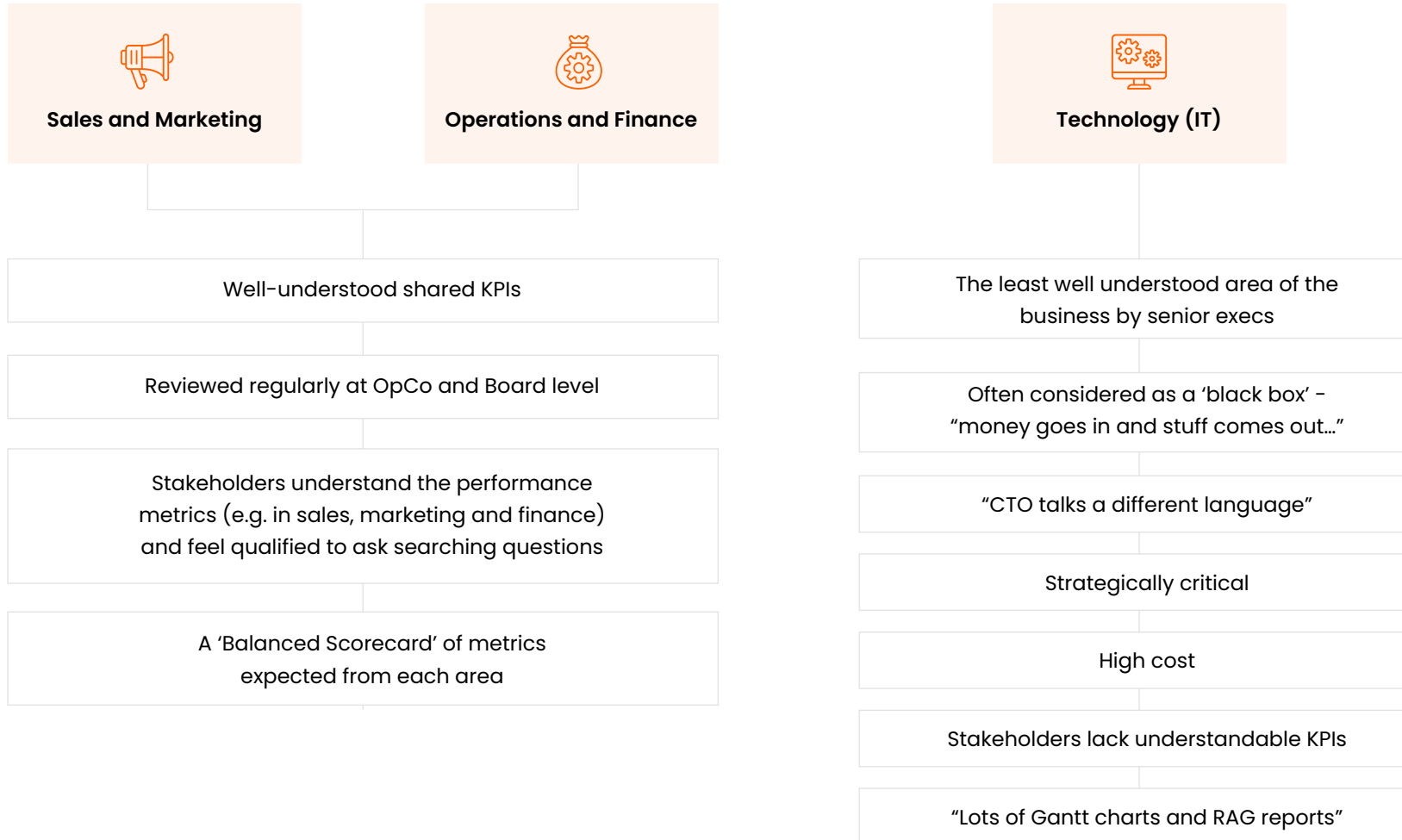
December 2023

# Contents

How to enable CTOs to build trust with their senior stakeholders through improved software delivery communication and reporting...

- > The 'black box' of technology delivery and the limitations of reporting provided by CTOs to stakeholders
- > The new analytics solutions offered by 'Engineering Intelligence' platforms
- > Understanding 'what good looks like' - the metrics now available to track and drive software delivery effectiveness and ROI
- > Improved stakeholder reporting - example CTO reports for senior stakeholders to evidence delivery effectiveness and ROI
- > The impact achievable - using Plandek to track, drive and communicate software delivery efficiency

# Technology (and software delivery) is almost always the least understood function at Board level...




# Gantt charts and RAG reports tell stakeholders very little about the effectiveness of a technology delivery team...

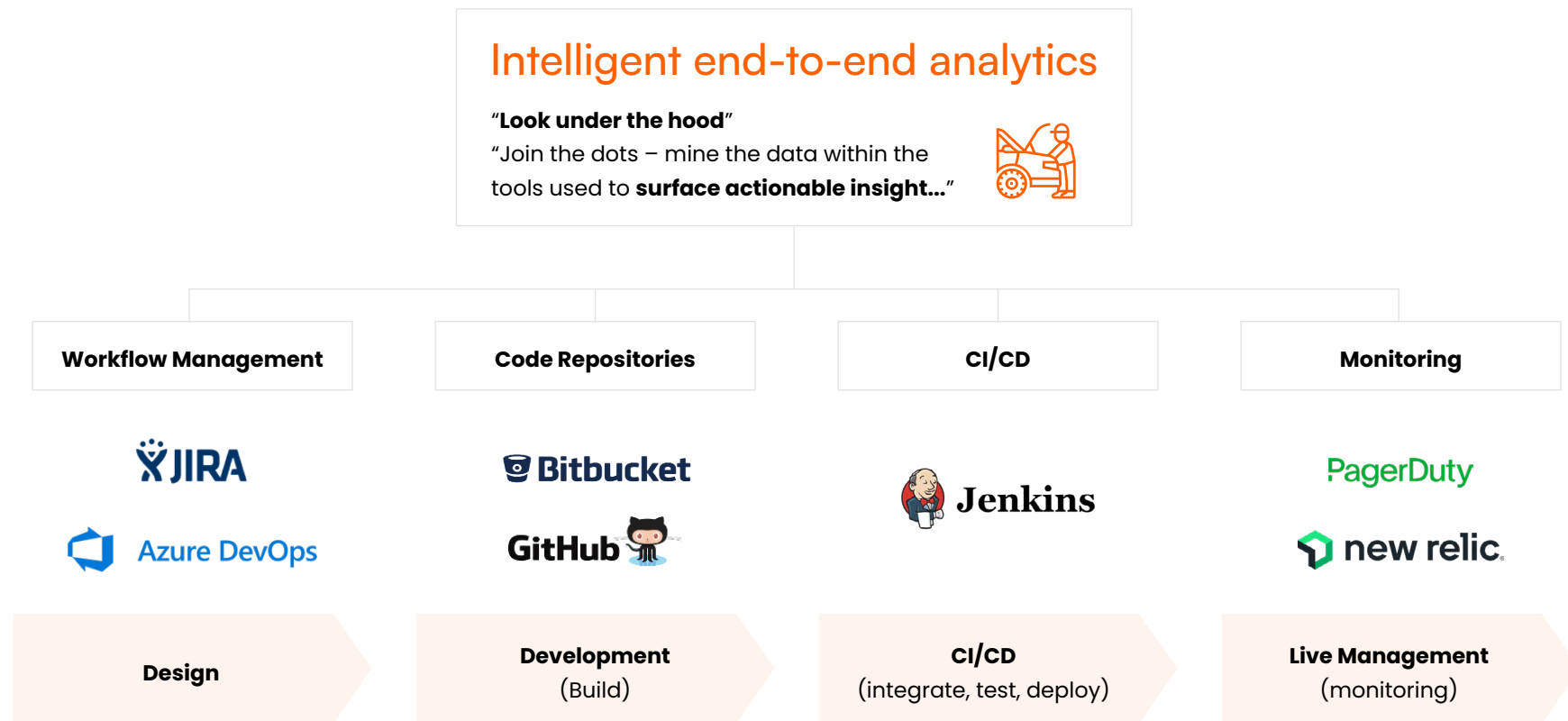
Many CTOs provide the Board with RAG reports with lots of commentaries...

Dimension	RAG Status	Guidelines
Schedule	Green	Schedule is on target.
	Amber	There are likely to be minor delays in the schedule up to 30 days.
	Red	There will be delays of greater than 30 days.
Scope	Green	Scope is in line with agreed business case.
	Amber	There are likely to be minor changes in scope to original business case.
	Red	There will be a significant change in the scope delivered by the project.
Cost	Green	Cost in on target.
	Amber	It is likely there will be a cost overrun to the originally agreed budget by >10% or <£50,000 and underrun of >10% or <£100,000.
	Red	It is highly likely there will be a cost overrun to the originally agreed budget by >10% or <£50,000 and underrun of >10% or <£100,000.
Benefits	Green	Benefits on target.
	Amber	There is likely to be a reduction in benefits of up to 10% or £50,000.
	Red	It is highly likely that there will be a reduction in benefits of >10% or £100,000.

RAG reports updates on progress but reveals nothing about delivery effectiveness and how it changes over time...

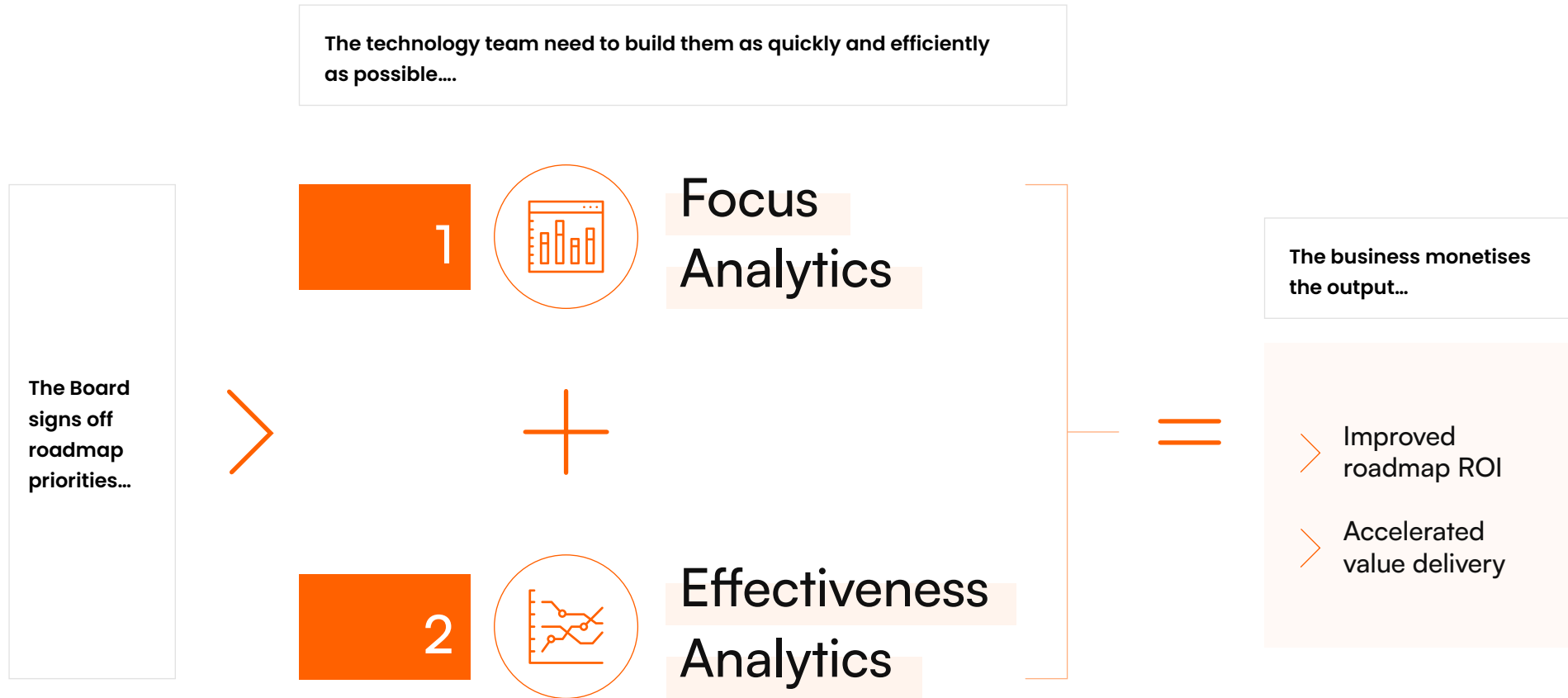
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- Shows progress to a self-set **timeline**
  - Provides anecdotal **commentary**
  - No underlying performance **KPIs**
  - No concept of effectiveness of **spend and ROI**
  - **Stakeholders** ask: "Could milestones have been hit quicker with the same resource?"
  - "How does our effectiveness **compare** to other organisations?"

Engineering Intelligence tools work by mining data from the toolsets across the end-to-end software delivery process to provide a new level of intelligent insight for CTOs...



# Understanding ‘what good looks like’ in software delivery — metrics for the C-Suite...

# Two key elements drive software delivery ROI...



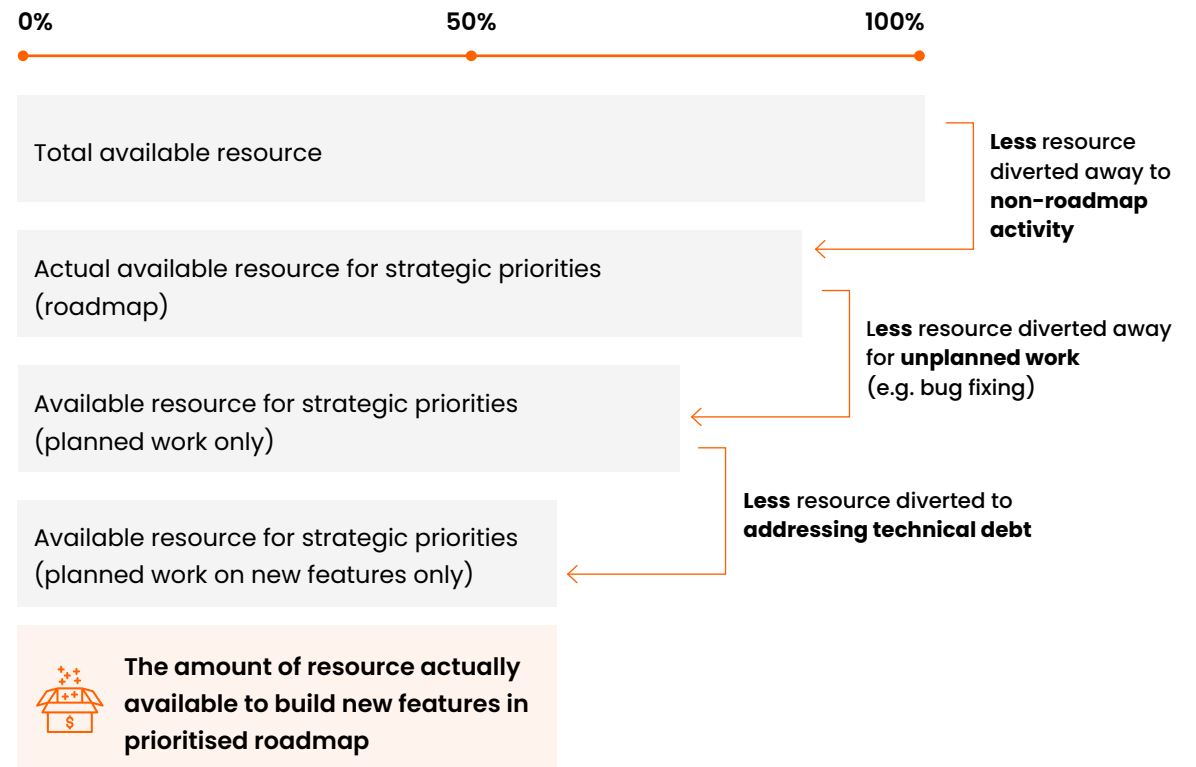


# Focus Analytics

**Q1:**

Is our finite delivery resource focused effectively on our strategic priorities?

These analytics reveal what proportion of available resources is actually focused on our strategic priorities – the first key challenge in optimising software delivery ROI...

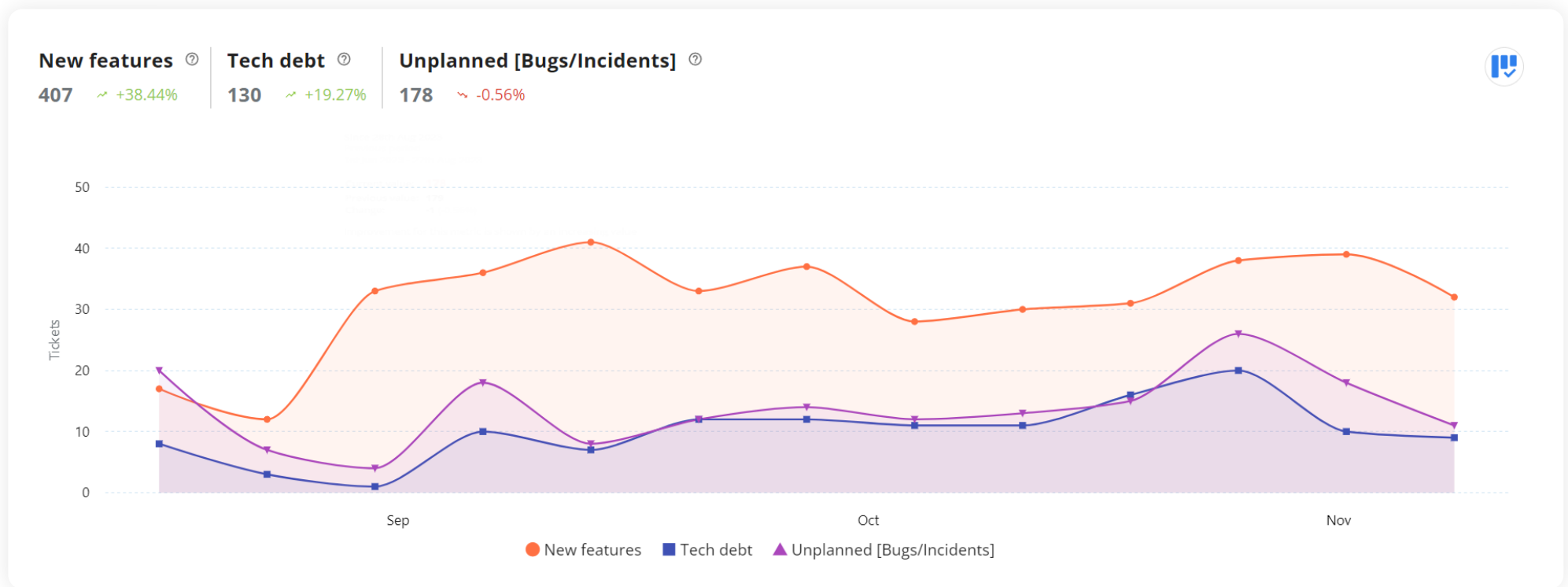






# Focus Analytics

## Focus analytics – example stakeholder reporting 1

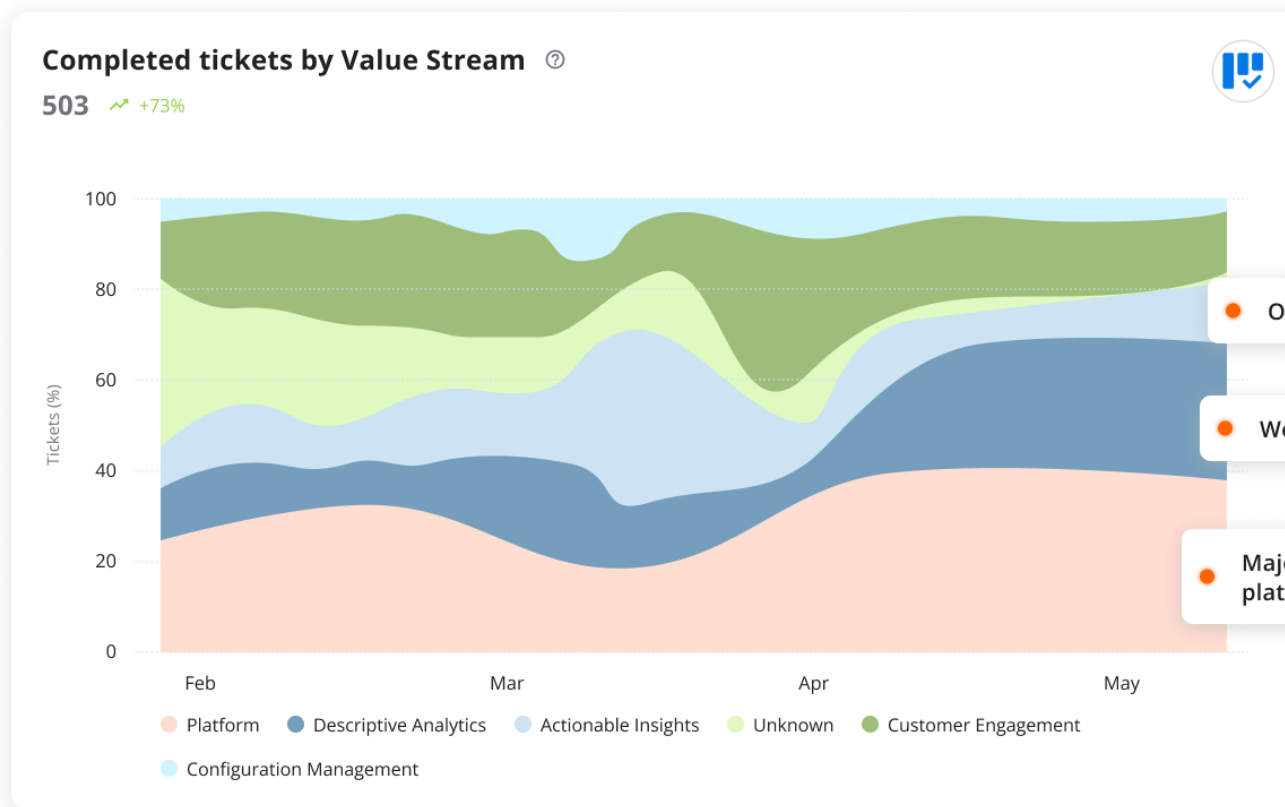


Here, we demonstrate to our stakeholders the proportion of effort available to build new roadmap features relative to the proportion absorbed by technical debt and unplanned bug-fixing



# Focus Analytics

## Focus analytics – example stakeholder reporting 2



In this example we are closely aligned to our key roadmap priorities:

- Our Prescriptive analytics functionality
- We continue to focus on descriptive analytics
- Majority of our work (c40%) is focused on the backend platform

Here, we demonstrate that the resource available to deliver new roadmap features is focused on the key roadmap priorities agreed with stakeholders.



# Effectiveness Analytics

**Q2:**

Is our delivery resource working as efficiently and predictably as possible to deliver value?

We take a 'balanced scorecard' approach to consider a range of delivery and engineering metrics that characterise delivery efficiency (and that can be understood by non-technical senior stakeholders)...



A measure of '**work done**'



Throughput  
relative to resource

Throughput  
relative to quality



A measure of ability to **deliver** increments in **shorter cycles** (Agility)



Lead Time

Cycle Time



A measure of ability to shorten the **customer feedback loop** and deliver new features to customers more frequently



Deployment  
Frequency



A measure of ability to reliably **plan and execute** work in short week increments at team level



Sprint  
Completion

Sprint Velocity  
and Carry Over



A measure of ability to manage and **improve quality**



Escaped  
Defects



A measure of **team engagement**



ENPS



Each metric area is **logical** and easily understood by a non-technical audience



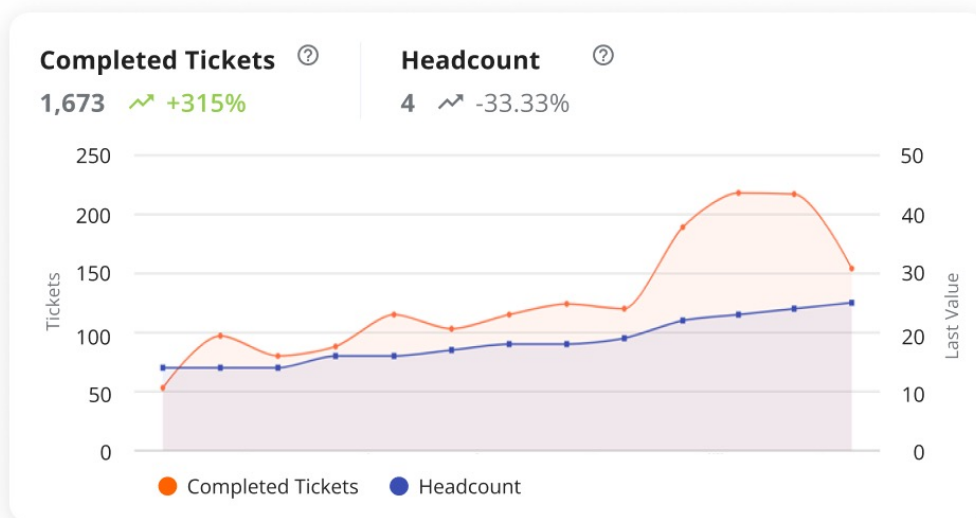
Each metric is **understandable** with limited explanation



# Effectiveness Analytics

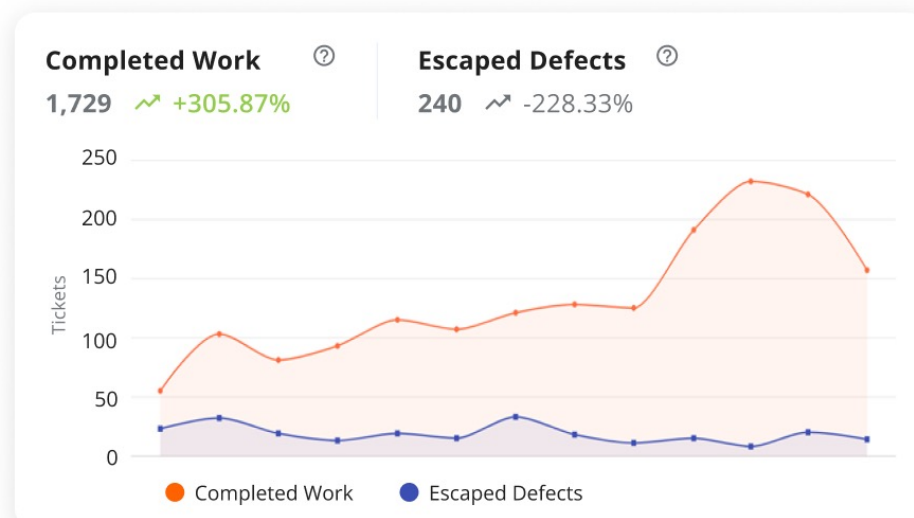
## Effectiveness analytics – example stakeholder reporting 1

We can compare how throughput has increased relative to headcount increase



- Here we see that throughput is increasing at a faster rate than headcount has increased over the last 12 months.

Importantly we also compare work on completed roadmap tickets (new features) versus headcount increases



- Here we see that throughput is increasing at a faster rate than headcount has increased over the last 12 months.

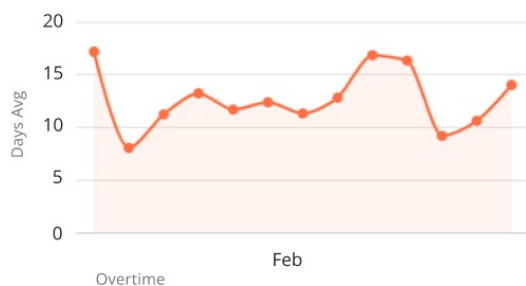


# Effectiveness Analytics

## Effectiveness analytics – example stakeholder reporting 2

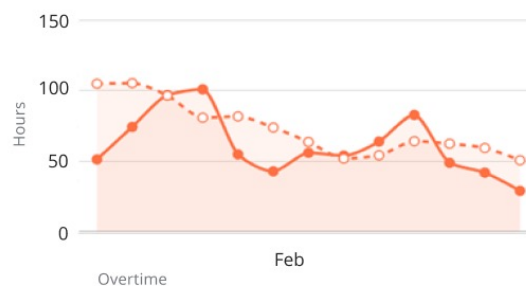
### Delivery Time <sup>?</sup>

12.61 days ↘ -3.33%



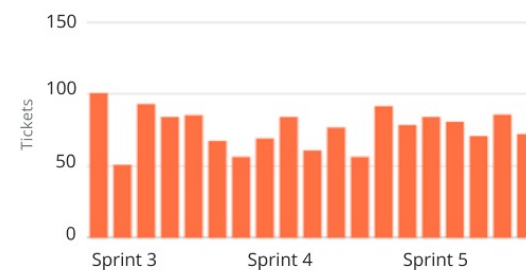
### Code Cycle Time <sup>?</sup>

62.13 hours ↘ -51.04%



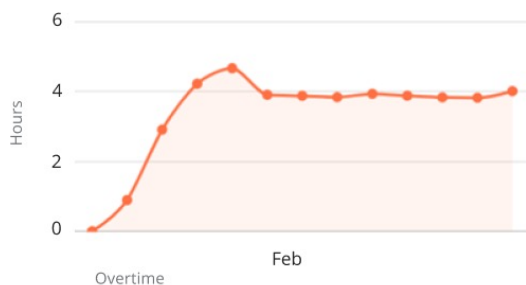
### Sprint Target Completion <sup>?</sup>

75.49 %



### Time Between Deployments <sup>?</sup>

8.34 hours ↘ -46.05%



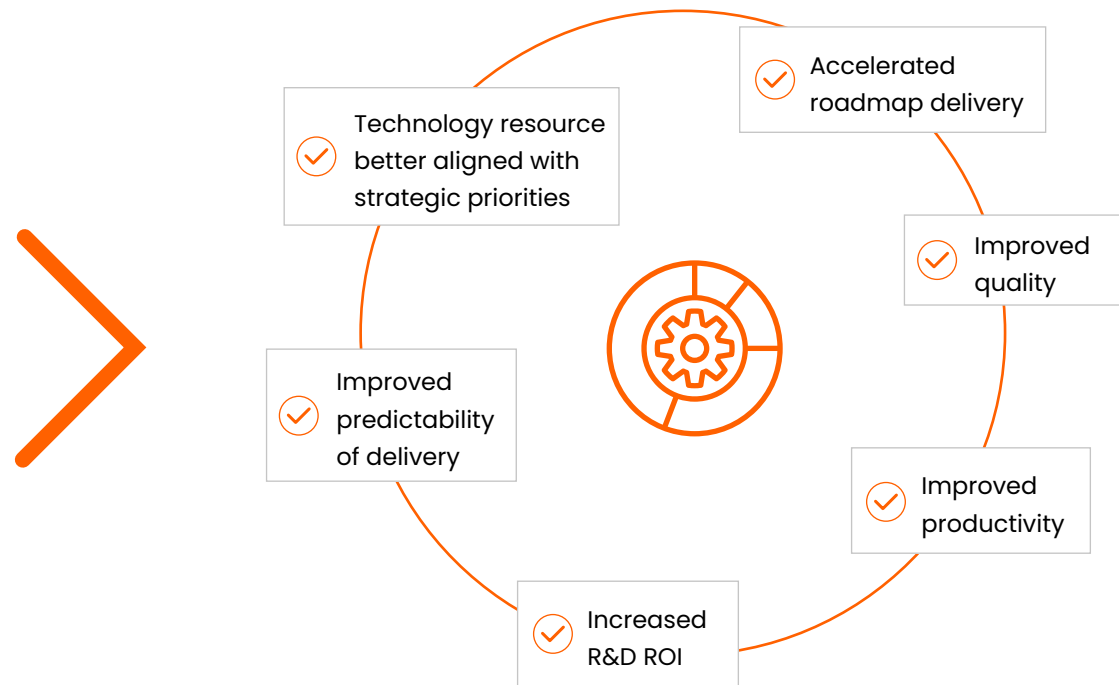
- Our delivery Lead Time is a key measure of overall agile delivery efficiency as it measures the time taken to deliver an increment of work, from design through to delivery-to-live
- Deployment Frequency is another key effectiveness measure as it correlates with product NPS scores. The more frequently you deploy, the higher the NPS score
- Ability to hit sprint goals (Sprint Accuracy) is a key measure of team dependability and a determinant of on-time delivery

The impact achievable — using Plandek  
to track, drive and communicate  
software delivery efficiency...

# Plandek has a demonstrable near-term impact on the operational KPIs that accelerate value delivery...

Plandek delivers demonstrable improvement in the metrics that drive R&D ROI, such as:

- ① **400% improvement in Deployment Frequency** of new features
- ② **55% reduction in Time to Value** (the time taken to deliver an increment of software)
- ③ **An 80% improvement in sprint accuracy** - the key determinant of delivering new features in a predictable way
- ④ **54% reduction in Escaped Defects** to ensure that software quality actually improves whilst velocity is increased.
- ⑤ **50% improvement in Flow Efficiency** to reduce 'inactive' time and increase productivity



# Plandek is used by high performing technology teams globally to accelerate and communicate their value delivery...



North American tech & services cos such as Bottomline, recently acquired by Thoma Bravo



Global software and data customers



Middle Eastern ed-tech (Dubai)



Europe's largest car leasing business, global flight comparison and the UK's train ticket booking leader



High growth UK-based technology-led businesses (in FS, travel, telco, data, cyber security and fin tech)



UK public sector

Plandek is recognized as a top global vendor in DevOps Value Stream Management Market Guides, 2020-2023'



And we partner closely with global leading PE firms, re-sellers and consultants to deliver value to our clients...







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