Navigating agile planning and enhancing predictability:

A Keylane perspective

A common misconception is that agile development takes place without any planning. However, this notion is far from true.

Agile development demands a considerable amount of discipline, encompassing various stages from meticulous planning to ensuring efficiency. The process revolves around preparation, detailed specification, continuous refinement, and engaging the right people at the optimal stage – **not too early, not too late, but precisely on time.**

This whitepaper outlines how Keylane's Product Management and Product Development teams approach agile development, roadmap planning, customer commitments, and agile sprint planning. It elaborates on how we have elevated predictability and reliability for our customers through these measures.

The product roadmap

The product roadmap stands as the most important planning concept – it sets forth the strategic direction for product development and it communicates new functionalities to all stakeholders. This encompasses commitments made to customers as integral components of implementation programmes.

At Keylane, our product roadmap consists of epics, each featuring a high-level functional outline and corresponding requirements the epic is supposed to cover. Each epic's estimation involves a T-shirt size assessment conducted collaboratively by Product Management and Product Owners. While rough in nature, this estimate helps chart the course of epics on the roadmap. By prioritising these epics and considering the development organisation's velocity (capacity), we gain the ability to forecast and commit to delivering specific product releases – a process referred to as the planned version.

Assessing velocity can be challenging, especially during changes within the development organisation prompted by attrition, ramp-up, or reorganisation. A notably effective yet simple method, known as "yesterday's weather," involves using past performance as an indicator. If the development team accomplished X epics in one release, it's reasonable to anticipate a similar outcome in the subsequent release. Setting plans beyond this baseline could indicate overly optimistic projections.

With well-defined priorities in place, the development team retains the capacity to exceed expectations and pull extra epics from the roadmap. This prompts adjustments to velocity, along with updates to the roadmap plan and forecasted versions going forward.

When to refine and document the specification

Many people think that agile development is carried out without specification. However, this is not accurate, especially when dealing with comprehensive administrative software solutions like Plexus in the Life and Pension policy administration domain. These solutions require significant specification.

For instance, calculation formulas necessitate precise specifications and are not suited for an iterative trial-and-error approach. The challenge lies in avoiding excessive time spent on specifications within a waterfall process, where next level is not prepared, resulting in specifications being abandoned. This often leads to the specifications becoming outdated when development is eventually planned, combined with changes in people involved.

In agile development, the aim is to write the specification as late as possible until just before development, facilitated by close collaboration between business experts who understand the problem and the development team crafting the solution. Prioritising interaction and engagement among individuals over rigid processes and bureaucracy is key. However, ensuring that all prerequisites, knowledge, and necessary team members are available at precisely the right time demands meticulous timing and planning.

Cadence

The easiest way to ensure control with a complex timeline involving multiple people is by introducing a cadence. By eliminating complexities and exhaustive planning for recurring activities, you can regain command.

For instance, when faced with the task of purchasing groceries for a large family with diverse preferences, instead of collecting various requests with differing timings, opt for a straightforward approach: "Let's go shopping once a week - what would you like for the upcoming week?". This way, you accumulate all requests and shop accordingly. Any forgotten wishes can wait until the next week.

Shortening the cadence minimises the impact on your family's comfort, making each shopping trip hassle-free. Actually, the agile theory stipulates that if something appears complicated and challenging, it should be done more frequently. Therefore, instead of go shopping every six months with a truck, consider weekly trips with a car or even a bike! Establishing a consistent cadence with smaller batches will bolster predictability regarding required load and capacity. Utilising the "yesterday's weather" approach simplifies and enhances accurate capacity management - no need for complex one-off adjustments.

The Keylane planning cycle

At Keylane, we establish a dynamic Product Roadmap that extends two years into the future. We plan with 100% utilisation based on "yesterday's weather" for the next two-month release cycle and less for releases further on the horizon.

Our planning cadence is two months per release, with each release comprising four two-week sprints. Our teams embrace the Scrum framework to plan, realise, and execute project deliverables.

Product Management and Product Owners collaborate to prepare epics for the upcoming release, and present these epics during the Planning Event for the agile teams. A primary responsibility of the Product Owners is to explain and answer any inquiries the team might have about the epics before they are accepted as meeting the Definition of Ready (DoR). While this is not a complete specification, this information provides the necessary knowledge for the team to understand what must be delivered and establishes a plan for resolving any uncertainties that arise. This plan ensures the availability of all key people required for engagement and refinement i.e., with Product Owners, Keylane consultants, and crucial stakeholders at our customers.

Commitment Levels

At Keylane, we use Commitment Levels as a means of communicating the certainty and predictability of each epic to all stakeholders. Naturally, an epic scheduled for realisation 1½ years down the line is not planned with the same level of predictability as an epic currently in realisation with development.

This is not a waterfall process. Reprioritisation can take place at every state. We optimise for business value. But it is important to track and stick to our commitments and how this links to customer deadlines, contractual obligations as well as compliance and legal timing.

**We use the following commitment levels to control and communicate about the Product Management funnel:**

5 Roadmap backlog
Requirements not complete, no T-shirt estimate, no delivery date. Simply a good idea.

4 Requested
Requested by customer, no planned version, not matched with capacity. Initial planned with customer programmes.

3 Planned in roadmap
Planned version, T-shirt estimate, matched with capacity. Contractual obligations.

2 Planned & effort commitment
In process with PO and team, DoR in process and the team understands the requirements, we have first estimate from the team.

1 Ready for realisation
DoR accepted by team. In sprint plans. Solution design in draft.

The subsequent sprint plan encompasses various tasks: refinement work, workshops to finalise specifications, demonstrations, and prototypes of key processes made in the development branch, design review sessions to verify the direction, and more. This culminates in the execution of development tasks, encompassing coding, testing, automated testing, documentation, and manual creation. The ultimate aim is to achieve and meet the Definition of Done (DoD). This completes the work cycle, and the epic becomes ready for release. At the core of this process lies the agile principle: "*The people who do the job plan the job*".

Executing agile development the right way demands meticulous planning and precise timing for all involved parties. This responsibility falls upon our Scrum Masters, who play a pivotal role in facilitating sprint planning and ensuring the team operates efficiently, collaborates well together, and reaches out in case of any impediments. Additionally, Scrum Masters guide the team through the execution phase, ensuring that tasks progress and are completed in alignment with the sprint plans.

The Keylane Product Management Funnel

Deliveries:
◆ Customer Paid
◆ Roadmap
◆ Compliance
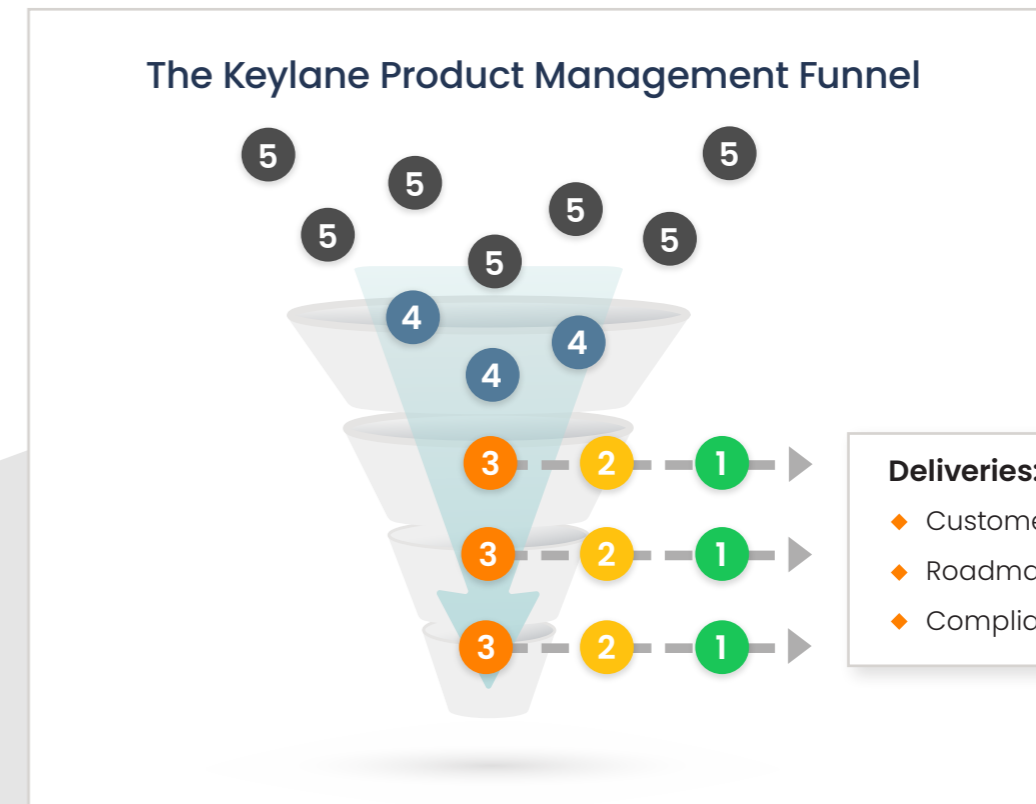
Enhancing predictability

The inception of our planning cycle in Keylane dates back to 2021, coinciding with the introduction of our agile development and scrum feature teams. Building upon this foundation, we further strengthened our planning framework by introducing Planning Events by the end of 2022. These events play a crucial role in refining the planning process, especially concerning the transition between commitment level 2 (involving Product Owners) and commitment level 1 (with the scrum teams).

Our Planning Event draws inspiration from SAFe (Scaled Agile Framework), though we embrace flexibility in its application. Not bound to rigid adherence, we tailor the event to suit our unique needs, omitting certain roles and methods from the SAFe model. Led by Product Management, the Planning Event spans an entire day and kicks off with a comprehensive plenum presentation. During this session, Product Owners and Product Management unveil the prioritised epics from the roadmap and present how the main epics link to the overall product strategy, customer commitments and how they will improve the product.

The subsequent portion of the day is dedicated to collaborative effort. Teams engage in detailed refinement, delving into discussions about epic planning and who is needed in the realisation.

EPICs On-time Delivery

Releases since Dec 2022, an average of **80%** of committed epics were set to Done.

Planned   Done as planned

2022.06   2022.08   2022.10   2022.12   2023.02   2023.04   2023.06

The introduction of Planning Events has notably elevated the level of predictability within our Product Development department.

Key questions come to the fore: What is the draft solution design? Which competencies are required for successful execution? Are there gaps in skills? What dependencies exist? What potential risks and architectural challenges lie ahead? This collective exploration results in the creation of sprint plans that encompass every aspect necessary to achieve Definition of Ready and adhere to the roadmap's intended release timeline.
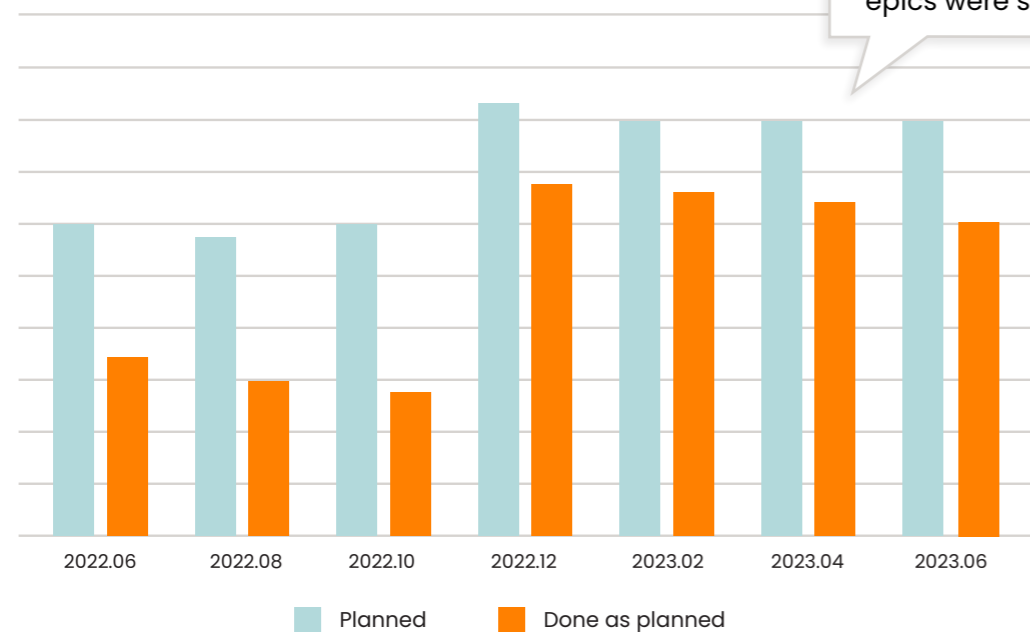
At the end of the day, a plenum session brings all teams together. The primary objective is to evaluate whether the teams have successfully aligned their efforts with the roadmap's priorities. Subsequently, each team casts a confidence vote on the planning. Should the average vote not meet acceptable thresholds, the teams will have to replan.

The introduction of Planning Events has notably elevated the level of predictability within our Product Development department. Prior to implementing this initiative, the department's planning predictability stood at 60%. However, we are pleased to report that this figure has surged to an impressive 80% on average. It is important to note that our Development department is consistently very busy, delivering not only 100% but sometimes even exceeding 110% effort. So the 80% predictability means that we actually end up each release delivering 80% of what we planned to deliver. In the agile context, this achievement aligns with recognised best practices.

For those seeking further insights into our agile approach and planning methodology, we invite you to reach out to **Jacob Goltermann, Head of Product Management, jacob.goltermann@keylane.com**

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