

## Resource Centric Planning in an Agile World

### Agile and Hydra “The Best of Both Worlds”

The Agile approach to IT Development projects is becoming ever more popular. However, up until now it has been difficult to see how it can be easily reconciled with the needs of businesses to manage their resources, track costs against budgets, planning and understanding what progress is being made on the projects they invest in.

This paper analyses the challenges that businesses face while using Agile and what advantages Hydra offers to close the gap between the advantages of Agile development and business planning and tracking. This analysis is supported by a description of the Agile development environment at Willis, one of the World’s largest brokerage and reinsurance service providers, including how Willis currently use Hydra and its plans for the future.

Hydra’s unique approach to PPM focuses on planning and tracking the progress of a project around the resources utilised. Agile is similarly centred around what real people are doing. That means Hydra is in a perfect position to work with tools developed to manage Agile, while providing the link to Executive level Management Information and planning which often Agile systems lack.

### The Business challenges of managing Agile Projects

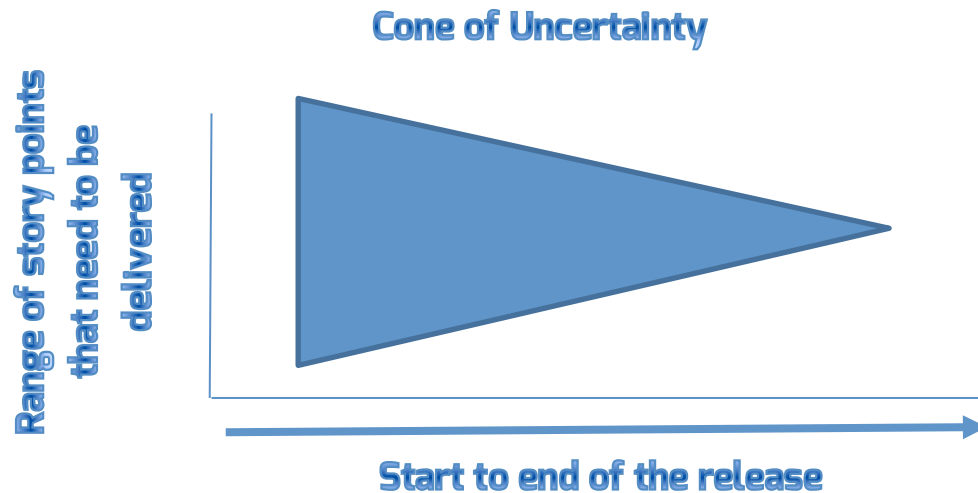
In the Agile World projects (Releases) are not defined by a plan as such but by criteria of satisfaction for a releasable piece of software that could be promoted to the Live environment. These criteria include: the functionality it should have, when it needs to be delivered, when it can be scheduled and what budget has been allocated to it. However, businesses can either know when the Release will be delivered but not what it will do, or they may know what it will do but not be clear about when it can be delivered. They can’t know both because of reasons that are described below.

This uncertainty challenges the businesses’ need to constantly track projects against their priorities (which can change), whether budgets/functionality are on track and what progress is being made towards final delivery. In traditional waterfall methods control and tracking is often relatively straight forward as business’ expectations can be matched with each stage gate at initial planning. Agile instead creates a dynamic picture based on what is actually being done by real people, that is difficult to constantly reconcile with business planning needs.

#### **Agile Project (Iteration) Planning – why this is a problem**

Agile embraces uncertainty as reflecting the real world. The Agile approach is based on the idea that whilst there may be some initial estimate of how complex a release is (often measured in Story Points) this can’t be certain at the start of the project. Certainty will increase with time as more is learnt about the project and what the person commissioning it (Product Manager) wants. This is known as a Cone of Uncertainty.

## Resource Centric Planning in an Agile World



In a situation of uncertainty it is wise to plan only as far as you can see and in Agile this means planning in a series of short time periods or iterations lasting from 1 week to 1 month. These iterations are delivered by Teams in Scrums rather than by individuals. A team decides how they will complete the story point allocated by the Product Manager or Scrum Master for a current iteration. A critical issue is the velocity or efficiency of the team to burn through story points and that depends on their skills and abilities along with a host of other soft factors, which determine how well they perform as a team.

Iterative planning limits what a business can know for certain. If the business requires the release at a certain date, it will determine how many iterations are available. The complexity of the projects will determine how many story points need to be completed at each iteration. In turn, the ability of the team to burn through these story points will probably cause a backlog. However, whatever the backlog is, the release will happen when it is supposed to but the business will not know what is in it and exactly what will be delivered until a date very close to the release itself.

On the other hand, if the business requires a specific functionality for release, the story points will determine the number of iterations that the release will need, based on an estimate of the speed with which the team can burn through them. Again this is subject to review but as no backlog is allowed that probably means there will be more iterations required than estimated and the release will be delivered late.

Information from the iteration plan will therefore be critical in updating the Release Plan and providing intelligence to the Executive team which tracks expected delivery, budget and functionality of the releases against what was originally expected. Changes in priorities of releases including the addition of new ones may also then impact on the release plans, as this means the reallocation of resources across the teams. In small organisations this can be achieved informally but in larger ones, specific tools are required.

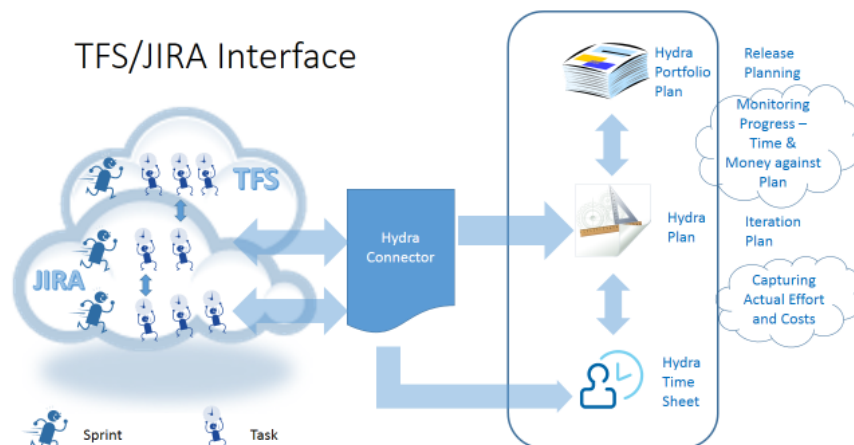
## Resource Centric Planning in an Agile World

### Hydra and Agile:

Hydra's unique approach to PPM is to link dynamically planning and business intelligence with resources (people or teams) both in the present and the future. Hydra's Portfolio view shows the current real world with respect to projects, their costs and estimated delivery against initial base lines. It also enables our clients to optimise resources available and understand what additions will be required at what cost and when they will be most effectively employed.

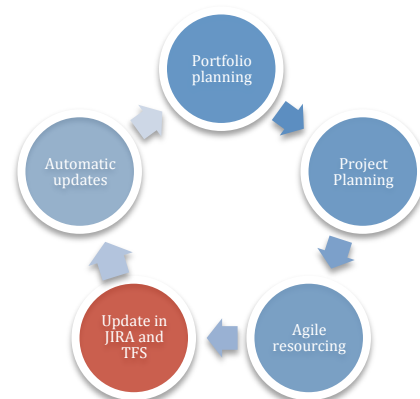
***Hydra is an ideal Strategic Release Planning tool and also offers advantages in resource and team planning for Agile environments***

The dynamic linkage between actual work done by the team against burn rate of story points in the iterative plan will show an up to date picture of cost against budget, actual delivery against what is expected and even story points completed against expectation and burn down. This is achieved through the unique Hydra Connector for JIRA and TFS.



Information flows automatically upwards into the release plan providing high-level intelligence for the business, presenting the real world picture of delivery against expectation and budget in the release plan. It also enables what-if planning at the release level to see what the likely impact would be of introducing a new release and giving it a high priority. Hydra can also identify what additional resources may be required.

Additionally, Hydra's resource-centric approach to



## Resource Centric Planning in an Agile World

managing projects (releases) is an ideal basis to dynamically link the resources available with the requisite skills and abilities to meet the challenges of the planned releases. That will then suggest the maximally efficient team composition based on their availability.

### Willis Reinsurance – Agile in the Real World

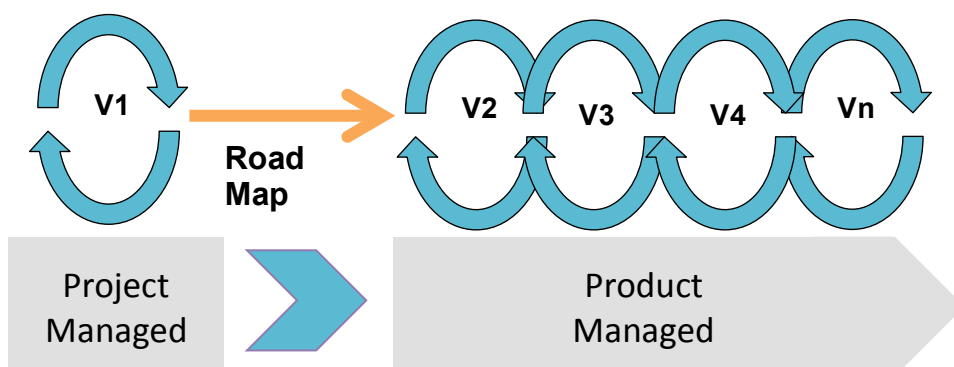
Willis is a global insurance broker and risk-advisor, originally established in 1828. It now has over 17,500 employees across the Globe servicing clients in sectors as diverse as bloodstock and space to everything in between like marine, energy and financial services. Willis sits between companies who seek risk advice (and ultimately insurance) and those who offer it. Willis advises clients about their exposure to risk, understand the likelihood of their exposure being affected by catastrophe and know how they can mitigate those risks.

Agile is used within Willis Global Analytics, a division which develops tools to allow brokers and clients to take informed decisions based on a thorough understanding of their assets and exposure and modelling a broader view of risk to determine the likelihood of catastrophic events occurring and their financial impact. The tools analyse portfolios and advise on how these risk profiles can be optimised. It does this with a team of 60 developers, catastrophe modellers, GIS analyst, testers and project managers **across** three geographic locations.

#### Willis and Agile

The Agile methodology has many variations, which can often become confusing. Willis adopted a practical and flexible model. At a release level the make-up of the teams and the time and number of the iterations for each release is determined by business decisions about the relative importance of Time, Quality and Features. These decisions can then be reviewed as the release is being delivered, to slow it down or speed it up in accordance with business needs.

At the individual release level, planning follows a common framework. New work is first given to one of the project managers to scope and develop a Road Map or framework. This initial blueprint is then handed over to the delivery team for iteration planning, which is managed by a senior developer acting as a Product Manager. The iterations themselves are delivered using Scrum and progress is tracked through TFS .



## Resource Centric Planning in an Agile World

The Project Managers involvement in the Product Team during this phase is largely to be a point of contact and channel of communication so that the Product Team can focus on delivery. They develop an understanding of any issues through informal “water cooler” means and then bring this to the Executive Management Team in two 30 minute Scrums each week. From this decisions can be taken about how best to support delivery such as flexing the Product Team make up.

### Hydra and Willis

The planning horizon for the Executive Management Team is no more than 3 months with the focus being on the here and now. Willis use Hydra Management Software to control a Project Portfolio and manage the resources and their availability. Hydra works with a Project/Product Resource Matrix to plan the use of resources in delivering software, along with soft factors based on the dynamics of relationships and a need to cross-engage between teams.

Soft factors and personal relationships will always be important for Willis but, as Agile becomes more pervasive in the organisation, these factors will need to be managed appropriately to achieve proper scalability. This means that using tools like Hydra will become increasingly important.

### Kru Patel, Executive Director, Willis Group

*“We are now embarking on integrating our ALM in which our Product Teams manage their releases, with Hydra Management in which we plan our portfolio and carry out our MI analysis. We also want to take a closer look at Hydra’s capacity planning and see how well it can support us in release planning along with the soft-factors that are so important to us!”*