

WEBINAR

Barcelona, 8 de novembre de 2024

ROBOTIZACIÓN DE LOS PROCESOS FINANCIERO-ACTUARIALES EN LAS ENTIDADES ASEGURADORAS

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Robotización de los procesos financiero-actuariales en las entidades aseguradoras

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Agenda webinar

Agenda

- Principales retos a los que se enfrentan en la actualidad los departamentos financieros y actuariales de las entidades aseguradoras.
- Qué entendemos por Business Process Excellence (BPE).
- Qué soluciones proponemos para automatizar, orquestar y controlar los procesos complejos y críticos de las entidades aseguradoras.
- Ejemplos de soluciones en el ámbito financiero / actuarial:
 - Genéricos: Contabilidad / Solvencia II / IFRS 17 / DGSFP
 - Específicos Vida / No Vida: Tarificación, Reserving, Derivación hipótesis, etc.
 - Demo

Principales retos a los que se enfrentan en la actualidad los departamentos financieros y actuariales de las entidades aseguradoras

Key insurance sector challenges leading to transformation

Key challenges include delivering value add and the war for talent

1 Governance, risk and controls

- Strengthening requirement including more strategic solutions
- Reducing reliance of large volume of spreadsheets is a key area of focus

2 Cost pressures

- Transformation required but little appetite to spend big given recent significant IFRS 17 spend
- Strong focus on quick benefit delivery for modest spend to instil confidence for more spend

3 War for talent

- Retention of skilled staff is a big challenge for many companies
- There is a need to make the Finance & Actuarial departments a more exciting place to work to attract and retain such employees

4 Future enhancements

- Shifting the dial from production to value add; achieve more value from costly resources
- Enhanced real-time MI dashboards with ability for what-ifs to help navigate the business

5 IFRS 17 embedding

- Significant strain on reporting function due to additional complexity and granularity of data / results
- Programmes have had to be tactical to get over the line embedding work starting now

How do these key challenges resonate with you?

Market themes – Automation

Insurers are eager to improve their processes using automation. Currently though, the reliance on multiple systems has often left insurers with an ecosystem that has poor interactions, with a lack of controls, quality and audit trails.

WTW 2021 Global Automation in Insurance Report

In an A.M. Best survey, **89%** of respondents cited system / process inefficiencies as one of the three most important challenges that insurers are looking for innovative solutions to overcome.

A.M. Best Insurers Agree Innovation Is Critical for Future Success

92% of employees reported higher levels of satisfaction as a result of automation.

Forbes Insights: Accelerating Business Insights with Intelligent Automation

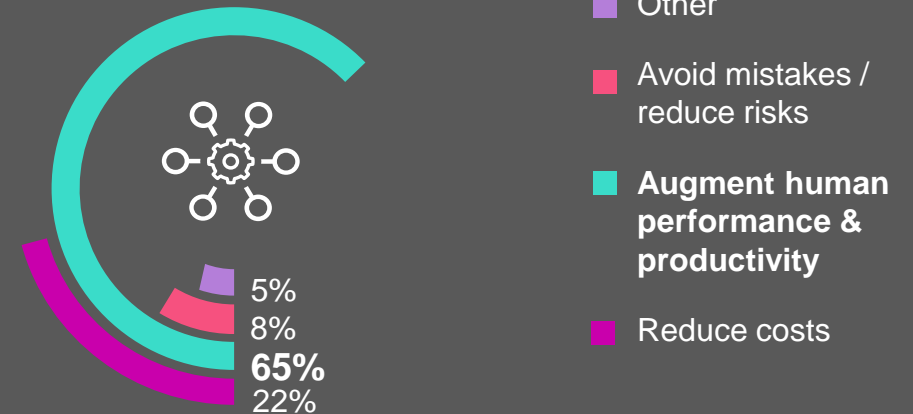
65% of insurance professionals say the key goal of automation is to augment human performance and productivity.

WTW Future of work Global Survey, Insurance

“Reengineering eliminates work, not jobs or people.”

Michael Hammer, Beyond Re-engineering

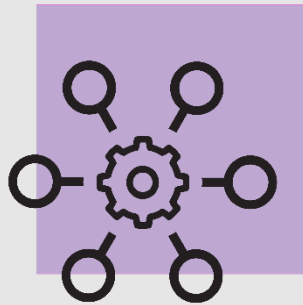
Insurance Industry



Qué entendemos por Business Process Excellence (BPE)

Business Process Excellence

The core pillars which we believe are needed to support your business-critical processes



Automation



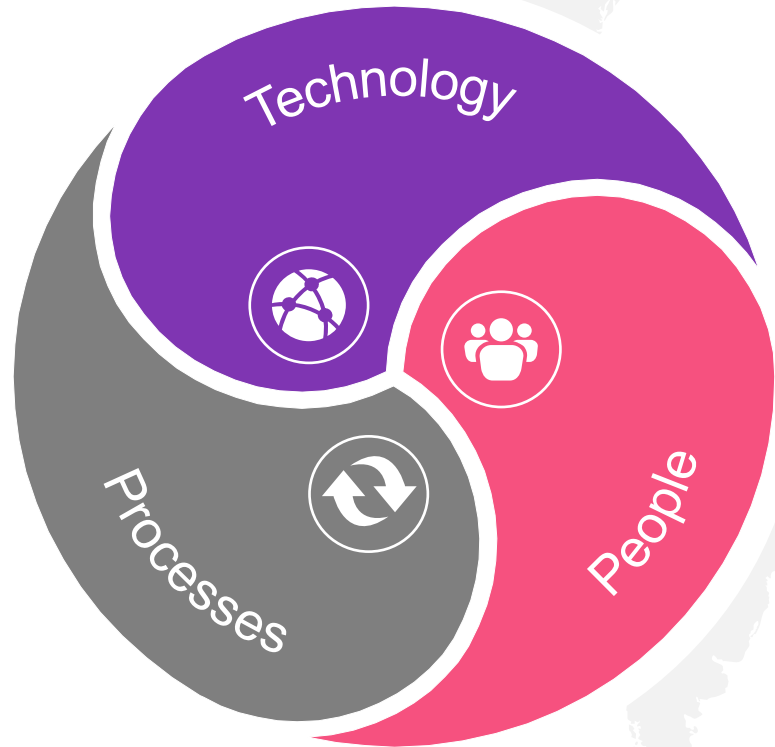
Integration



Governance

Our vision

“The leading firm for integrating People, Processes and Technology to build robust automated solutions, solving our clients’ real-world problems and achieving overall process speed, quality and control”



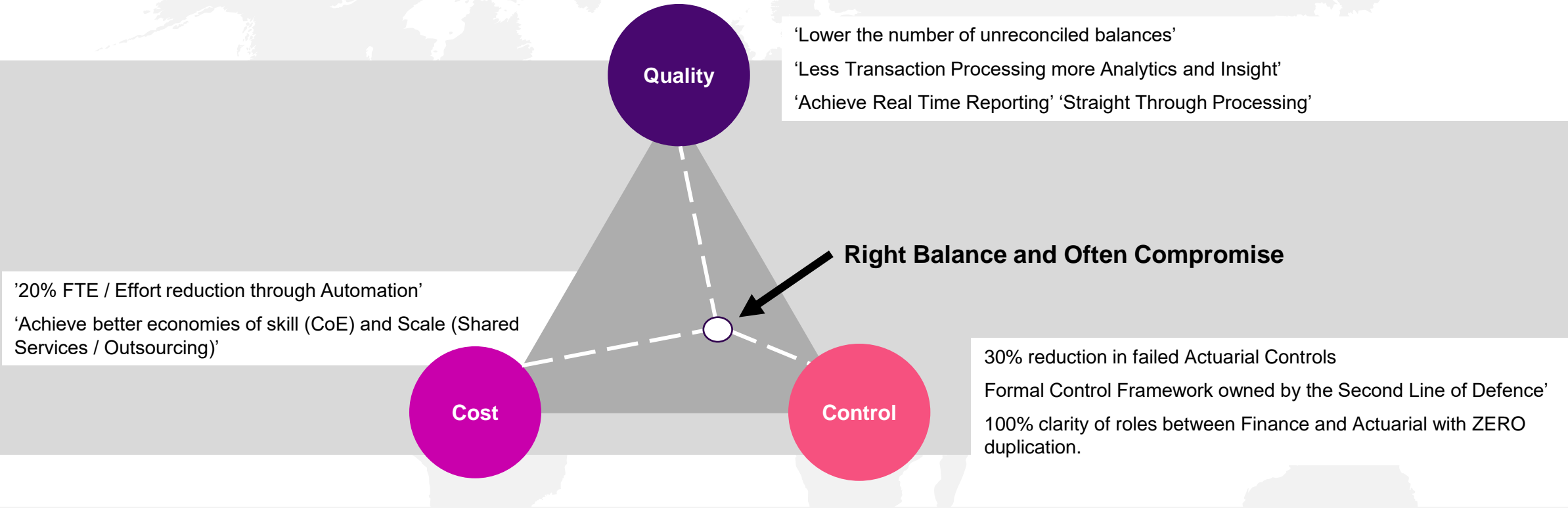
At WTW, Business Process Excellence means designing and building new and **innovative solutions** for our clients on a platform which brings a layer of robust automation and control to their financial processes.

We are uniquely placed to deliver on such solutions, given our unique blend of best-in-class **Technology**, industry experience and process oriented **People**, and **Process** re-engineering skills.

BPE implementations will only be successful if **all 3 of these aspects are considered together**; projects will fail if these elements are only looked at in isolation!

Clear Strategic Imperatives

The factors to consider when setting your vision







Key areas to probe:

How
What
Why

do you define priority – rarely all the three can be achieved at the same time!!!
tangible measures will you use to support your prioritisation?
these measures, what are examples of the new features or current pain points

BPE Solution Benefits

The key over-arching benefits which we achieve when deploying automated solutions

	Automated workflows to orchestrate WTW, 3 rd party and in-house software, allowing for end-to-end automation of complex, multi-system and multi-actor processes.	Faster processes; Low manual effort; Less cost
	Improved process governance within the business, allowing data flows and results to reach their intended targets in a consistent and controlled fashion.	More controls; Better audit
	Automated KPI generation, progress-tracking and reporting processes.	Better information
	Focus your human resource on critical and value-add tasks rather than manual 'handle-turning'	More efficient resourcing

BPE Propositions

The core areas in which WTW work to deliver robust and cutting edge BPE solutions to our clients

Complex Process Orchestration & Control

We are experts in designing, building and re-engineering complex financial processes for our clients. Our unique blend of people, process and technology allows us to help you automate business critical processes, thereby increasing efficiency and control. Our other propositions listed below can be considered as specific instances of this over-arching proposition



Best-in-Class Life Cashflow Systems



We provide holistic end-to-end (E2E) cashflow systems to our various clients to fully & holistically orchestrate, govern and control their full actuarial valuation process; from data preparation & assumptions through to effective modelling to extraction & reporting

Pricing Process Automation



We are heavily invested in ensuring that we can offer best-in-class automated pricing systems to our clients. Such systems mean that more information can be delivered earlier in a robust fashion, ultimately providing better insight into selections and drivers of results

Automated Capital Modelling



We offer a range of automated solutions to help our clients effectively understand their solvency position, across both the Life and P&C space. Our solutions offer flexibility and scalability, ensuring you receive robust & timely key capital sensitivity information

Automated P&C Reserving



We continually look to improve P&C reserving functions through providing automated reserving solutions to our clients. These solutions ensure that reserving functions can efficiently generate regular and valuable insights, which are integral to company-wide decision making

IFRS17 Enterprise Solution



We have developed a powerful solution which covers all regulatory processing aspects of IFRS17. This solution helps our clients meet the regulatory requirements of IFRS17 across both Life and P&C, with the solution able to be modularised to fit specific client needs

All of our propositions are powered by our Automation, Governance and Orchestration platform 'Unify'. These solutions can be deployed on your architecture, or we can host them for you via Software as a Service



Qué soluciones proponemos para automatizar, orquestar y controlar los procesos complejos y críticos de las entidades aseguradoras

Unify

Component Details

Web UI & Repository



Web based interface

Customisable dashboard

Fully comprehensive audit trail stored for all items within the repository, viewable within the Web UI

Robust permissions and access controls

Live view of current workflows running on the system, along with associated MI

Comprehensive API allowing users to control all aspects of the Unify WEB UI via API calls

Ability to schedule jobs at specific times / recurrences such that workflows can run fully autonomously

In-built and automatic version control of all objects stored within the repository

In-built and automatic version control of all objects stored within the repository

Unify

Component Details

Workflow Designer



Easy “drag and drop” functionality

Intuitive web-based design interface – no desktop components required

Immediate validation and error catching

Integration with WTW’s own software (RiskAgility FM, ResQ, etc.)

Ability to run command line executables / connect to external system’s API’s

Based on Microsoft Technology – .NET functionality and logic included as standard

“Out of the box” integrations (Python, PowerShell, SSIS, Excel, etc.)

Ability to build workflows which easily scale and parallelize to meet your business process needs

Custom activities enable you to build workflows to suit your exact needs

Unify

An enterprise platform for automated solutions to achieve efficiency, quality and control



50,000

manual hours saved
on some of our largest
implementations



50-80%

Typical reduction in
process execution time

6-36 months

Typical payback periods for our clients. This is achieved through re-deployment of the workforce to 'value add' activity, reduction in technology cost and native solution audit and governance



Experts to support in your
local time-zones

100+

Companies and
Subsidiaries licence
Unify globally alongside
our unique value
propositions

\$2tn

of actuarial liabilities calculated
globally each year using Unify



Our deep actuarial transformation expertise and experience

Successfully delivered over 100 transformation projects globally in recent years

#	Company	Data validation	Assumptions management	Solution design	Workflow automation	Model Optimisation	ESG	Reporting	3 rd Party Integration
1	Large UK Insurer	✓		✓	✓	✓	✓	✓	✓
2	Consolidator		✓		✓	✓		✓	
3	Mutual	✓	✓	✓	✓	✓	✓		
4	Consolidator	✓	✓	✓	✓	✓	✓	✓	
5	Consolidator	✓	✓	✓	✓	✓	✓	✓	✓
6	Mutual	✓	✓	✓	✓	✓	✓	✓	✓
7	Global reinsurer			✓	✓	✓	✓		
8	Consolidator	✓	✓	✓	✓	✓	✓	✓	✓
9	Mutual	✓		✓	✓	✓	✓	✓	✓
10	International Group		✓	✓	✓	✓	✓		



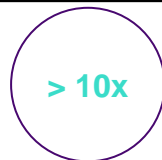
Reporting time improvement



Rapid investment payback



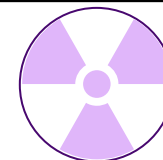
FTE efficiency for redeployment to "value-add" areas



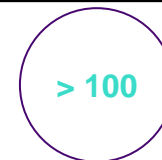
Improvement in model speed leading to significant Op Ex savings



Insurance reserves calculated using WTW automation technology



Reduction in operational risk leading to release of reserves



Transformation projects delivered globally in recent year



Reduction in time taken to calculate projected solvency results



Complex Process Orchestration & Control

How Unify can be deployed to help improve business critical processes

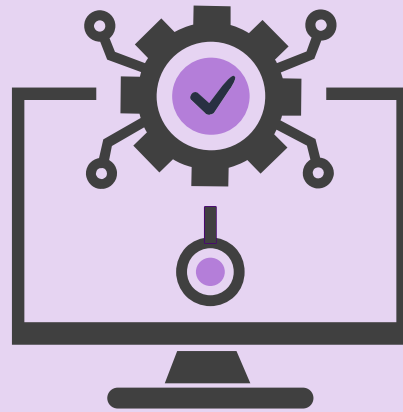
We have deployed **Unify** for various complex business processes across our clients' Finance and Actuarial functions, covering processes such as:

- Data Processes
- Assumption Processes
- Modelling Processes
- Results Aggregation / Extraction Processes
- Reporting Processes
- Finance Processes
- Pricing Processes
- Claims Processes
- Administrative Processes



When re-engineering processes, we always carefully consider the right technology and methods to use in order to bring about **effective process change**. We regularly work with the following:

- Removal and refactoring of Excel
- Embedding robust audit trails throughout the process
- Improving the user experience through custom UIs
- Building of data validation and reconciliation routines
- Orchestration of complex modelling software
- Deployment of Python scripting to solve business issues
- Automated population of visualisations and dashboard analytics
- Deep system integration via REST API / other methods



“We would not have been able to complete our quarterly reporting process without Unify”

Due to increasing regulatory & business demands, our clients need automated and controlled solutions across their business to help alleviate pressure on their limited resources.

Unify assists our clients by providing them with a robust platform to build and foster efficient and controlled business processes.

Pricing Process Automation

Mitigating risk through automating your pricing process

Pricing is an ever-evolving field where there is a general desire to continually improve the following:

- **Agility** – The ability to respond to opportunities more quickly
- **Granularity** – Understanding the process in more detail to drive better results
- **Speed** – Performing tasks faster to realise benefits sooner
- **Resource** – Making effective use of your resource and improving engagement

Our clients require an environment that embraces the concepts of Software as a Service, Platform as a Service, low-code programming and advanced analytics, in order to rapidly **analyze all data** from different sources to make decisions and implement them at the **point of sale** (more frequently multi-channel).

An increase of different types **of Data Sources** & Tools (Radar, Emblem, Python, R, Cloud Providers, ...) requires an **Agile & Flexible** environment, which enables overall process & integration governance.



Our solutions can be deployed for the following, across both commercial and personal lines:

- Pricing Data processing / validation
- Risk / Demand model creation
- Tariff changes impact and creation
- Pricing Management Information (MI)
- Monthly monitoring of business mix and Actual vs Expected (AvE)
- Use of benchmark data, risk models and competitor premium models to generate reporting on predicted profitability, change in market situations and rank information
- Price optimization / Dynamic pricing / Trading pricing
- Radar Live rate deployment



Typical Pricing Automated Workflow

Data Processing



Customised data transformation processed automatically

Data Validation



Automated checks alongside governed human reviews

Model Creation



Pricing model generation which adapts to the new data

Impact Analysis



Automated production of impact assessments and options



Automated Capital Modelling

Providing our clients an automated platform to build capital planning and scenario testing solutions

WTW have made **significant investment** in our tools over many years to be best-in-class in all areas of capital management; from data, through modelling to reporting.

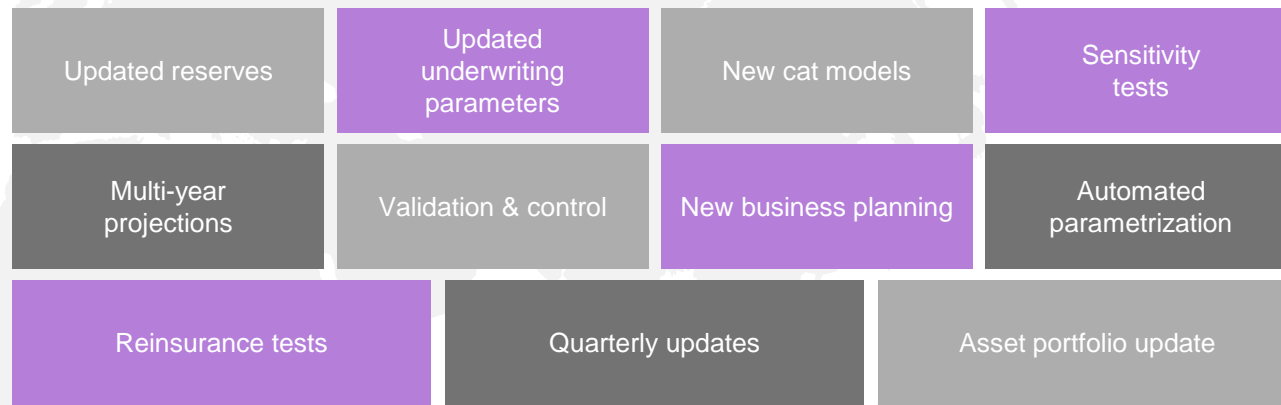
Automation helps enable and facilitate **better capital planning** through end-to-end solutions helping you to **do more, faster for less**

WTW can assist you with creating an automated capital platform, with our support ranging from initial Proof-of-Concepts to major model system transformation; we're here to help.

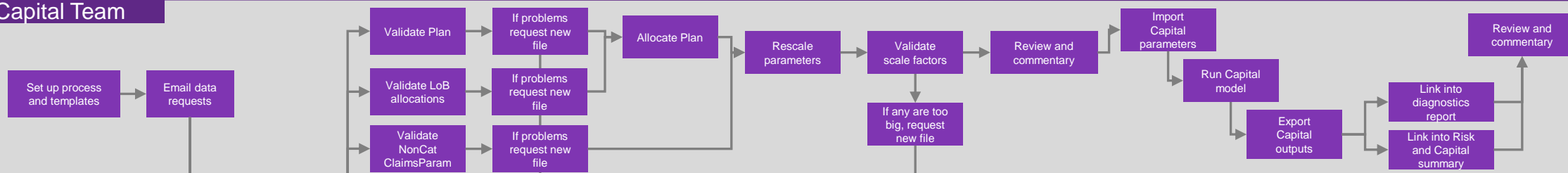
- Minimise cost of ownership in all areas.
- Maximise delivery certainty.
- Deploy cutting edge IT tools.



Automating your capital processes can help enable:



Capital Team



Finance

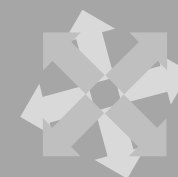
Provide Plan

Pricing

Provide LoB allocations

Provide NonCat Param

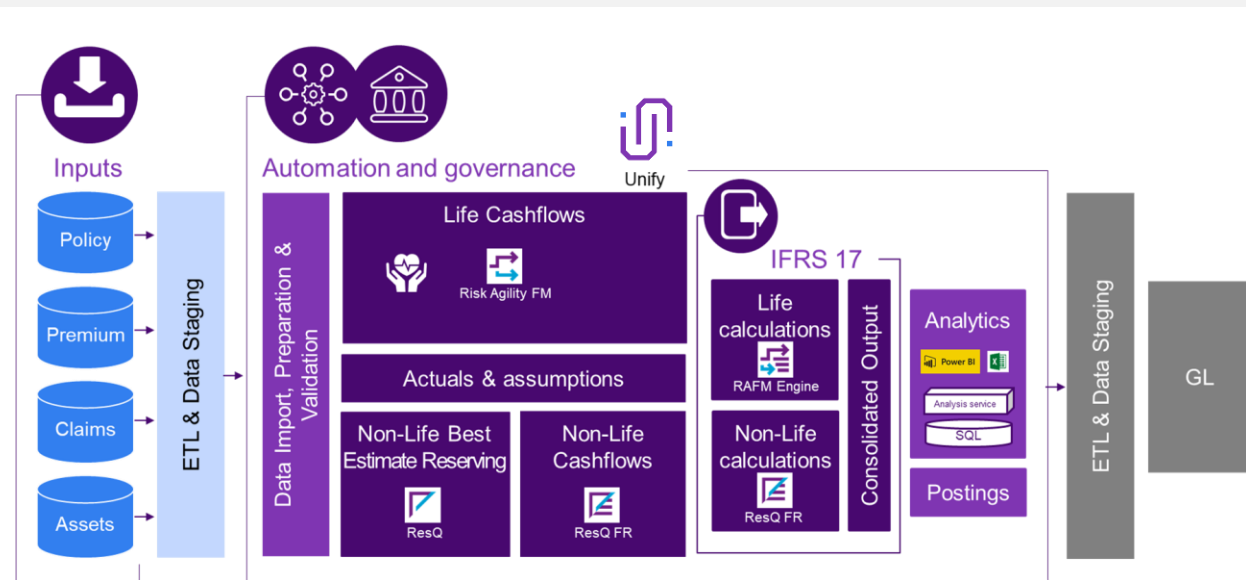
Overview of a typical Capital process which can be fully automated on our platform





IFRS17 Enterprise Solution

Financial Reporting Processes using WTW's IFRS 17 Accounting Framework



Fully automated end-to-end processing

WTW's Unify underpins our enterprise solution technical architecture and reporting workflow to help you to:

- First and foremost, get the IFRS 17 numbers out how and when they're needed.
- Integrate multiple systems throughout the production process and use financial information more widely in interpreting and managing the business directly.
- Automate where it improves workflows, governance and use of your experts' time.
- Create a fully governed environment with comprehensive, seamless audit trails.

Our solution can be customised and expanded for each of our clients depending on their specific business needs. We are also able to offer a variety of deployment options for our enterprise solution (i.e. hosted CSM services, full on-premise / client cloud deployments).

Many clients globally make use of WTW's IFRS17 Enterprise Solution powered by Unify, delivering a solution which is robust and regulatory compliant – all achieving the required level of speed, quality and control to meet the demands of IFRS17.

Unify is the security net for your CFO in the IFRS 17 reporting process.



Ejemplos de soluciones en el ámbito financiero / actuarial

Demo



Appendix A: Case Studies



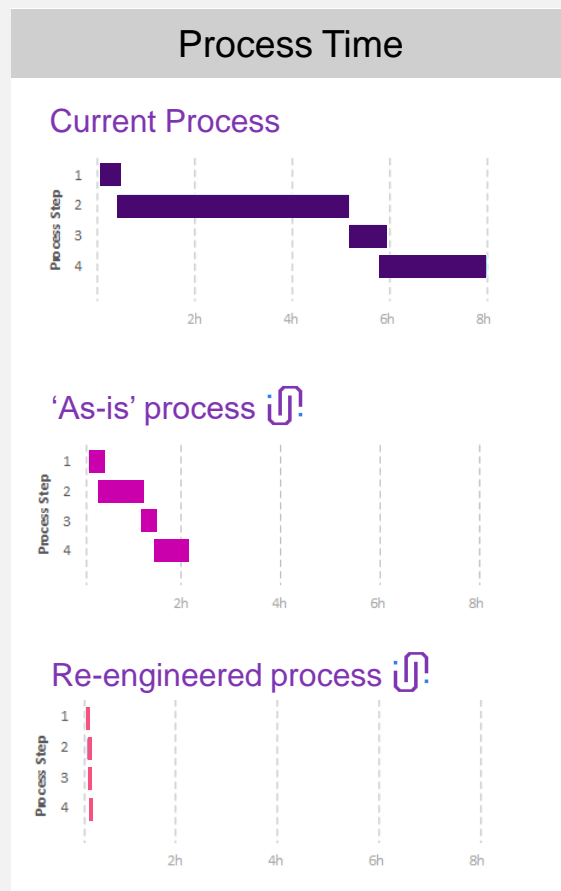
Case Study: Automating & Re-engineering Liability Basis Production (1/2)

Manual Interventions

Current Process

'As-is' process

Re-engineered process



EUCs

Current Process

'As-is' process

Re-engineered process

Manual interactions reduced from **48** to **6** in the “as-is” process, and only **2** on the “re-engineered” process,

Process timing compressed from **8 days** to **2 days** in the “as-is” process (75% improvement), and only **2 hours** in the “re-engineered” process (99.5% improvement).

4 EUCs reduced to just **one**

“ Unify demonstrated capabilities to meet our key benefit pillars against a detailed and granular checklist of areas we were keen to assess against. It also showcased capabilities we don't currently have and could start to take advantage of. ”



Case Study: Automation of Valuation Process (1/2)

The Challenge

- WTW were engaged by a large multinational insurer to conduct a functional Proof-of-Concept (PoC) to demonstrate the transformation benefits that Unify could bring to their valuation process, which made use of a non-WTW cashflow system.
- Short 5 week timeline which included: software installation on client environment, training of client staff, the design, development and testing of the workflows and creation of robust documentation of the process.

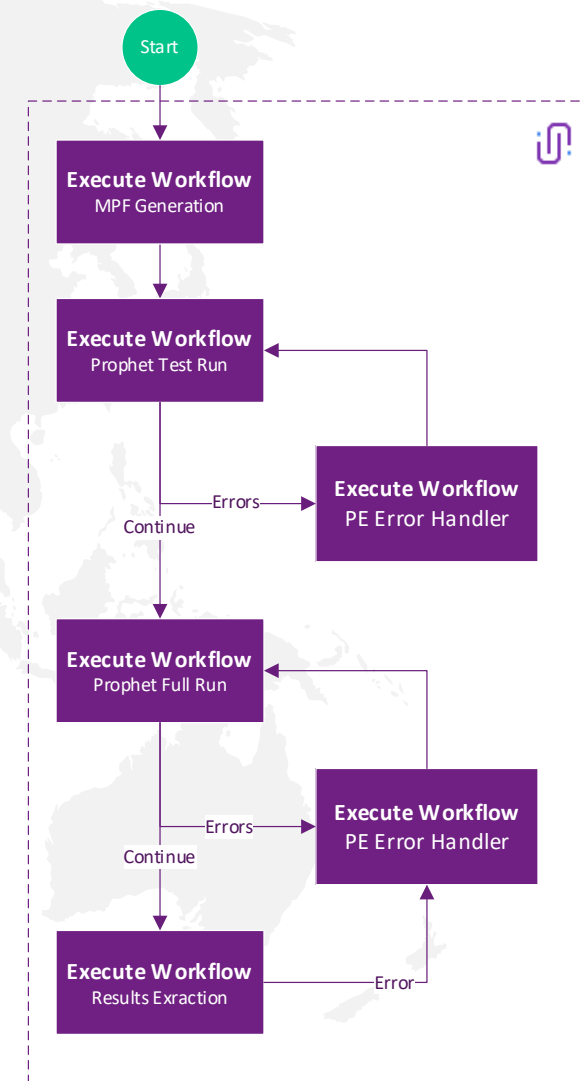
Our Approach

Our objective was to demonstrate:

- **Integration** – Proving that Unify could successfully control and orchestrate key elements of the client's ecosystem, including software such as Prophet.
- **Efficiency** – Showing time savings through the deployment of standardised and repeatable processes, removing the need for manual intervention.
- **Governance & Controls** – Demonstrating Unify's abilities to: create clear to follow audit trails (run monitoring, history, traceability and versioning), preventative controls and improved lines of defence.
- **Ease of Use** – The ability for users to be able to quickly get to grips with the software and build effective business processes with ease.

This was demonstrated by successfully:

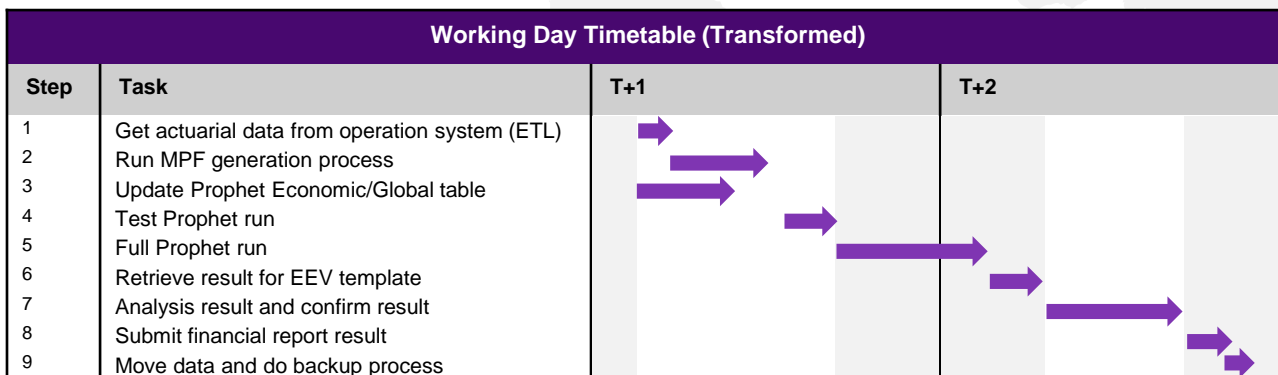
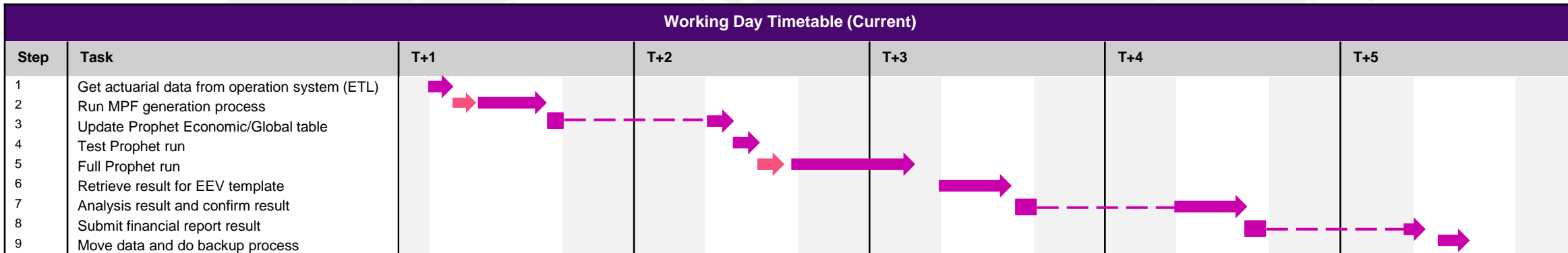
- Automating and enhancing the client's model point generation process
- Integrating the clients native cashflow modelling software with the workflow using API access
- Streamlining of the client's results extraction process reducing the amount of human interaction and wait time





Case Study: Automation of Valuation Process (2/2)

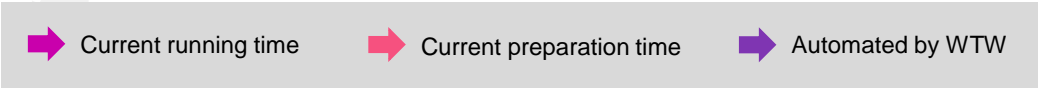
WTW has **successfully orchestrated the cashflow liability production process** and shown a wide array of benefits. The benefits shown here are **scalable** within the client, helping to **reduce WDT, reduce manual effort, reduce risk, improve the overall control environment** and ensures a great user experience.



WDT compressed 60% from T+5 to T+2

Manual interactions reduced from 32 to 6

Re-runs due to manual set-up issues minimized





Case Study: Reduction of run time in the reporting process

Client: large multinational insurance company based in Hong Kong

The Challenge

- The client required a transformational improvement in the weekly Group Solvency Estimation.
- Concerns surrounded the run time of the process.
- The process required significant manual effort and running a large number of VBA macros in Excel.
- The process lacked clear audit trails for manual adjustments.

Our Approach

Our objective was to:

- Establish a standardised and repeatable Capital Forecast Model.
- Improve weekly reporting and management information.
- Reduce manual processes and enhance process flexibility, resulting in reduced manual effort and time.
- Provide more insightful analysis on capital forecasts and sensitivities.
- Achieve significant improvements and cost efficiency of processes, with clear to follow audit trails and improved lines of defence.

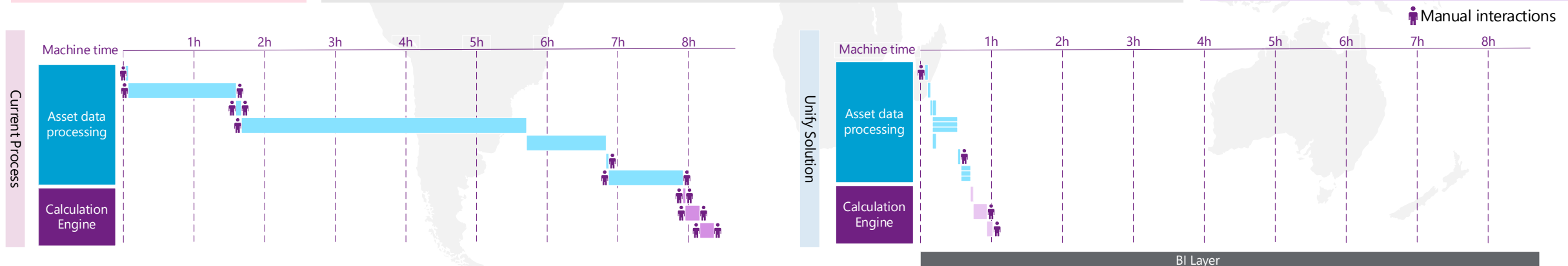
This was achieved by:

- Reducing the use of VBA macros in Excel, adopting an agile approach for timely changes within a controlled environment, accelerating end-to-end processes.
- Parallelising processes wherever feasible to reduce the run time of extensive calculations.
- Ensuring that processes are efficient, easy to maintain, and well-documented, automating controls with emphasis on preventative controls and standardising processes.
- Working with a delivery partner firm to provide scale and flexibility in our implementation with the client

Benefits delivered by WTW

Automation benefits delivered in the Group Solvency Estimation process:

- Enhanced and streamlined the Capital Forecast Model process, optimising efficiency by minimising reliance on VBA macros in Excel and modularising transformations within existing spreadsheets.
- Implemented automated validation processes and introduced real-time monitoring for the review process.
- Delivered a reduction in run time by over 85%, significantly decreasing the number of manual interactions.





Case Study: Eliminating spreadsheets in the reporting process

Client: A large UK subsidiary of a CFO Forum multinational

The Challenge

- The client required a transformational improvement in the end-to-end Solvency II reporting process
- Concerns surrounded the implications of Brexit divergence meaning the potential for Solvency II “Dual Reporting”
- Teams were stretched and there was limited contingency in the working day timetable.
- The process required significant manual effort and a large number of spreadsheets
- Ambition was to integrate with and deliver common benefits to the IFRS 17 programme

Our Approach

Our objective was to ensure that:

- Our client can confidently meet the quarterly and annual UK and EU Solvency II reporting timelines
- Capital sensitivities and capital forecasts can be delivered in an efficient and timely manner to facilitate Stress and Scenario testing, Business Planning, ORSA, etc.
- More insightful analysis on capital forecasts and sensitivities, and performance measurement was available
- Processes and controls were materially improved and cost efficiency delivered

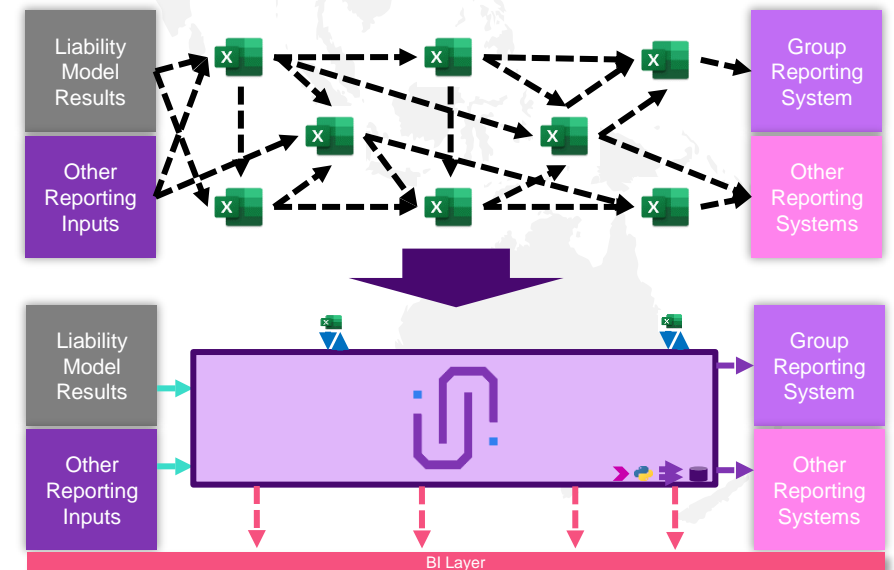
This was achieved by:

- Upskilling the team through training and development, reviewing the mix of team member skills to facilitate agile model maintenance and analysis and evolving the culture to focus more on value-add activity and continuous improvement
- Limiting the use of Excel in Production environment, being agile to allow timely changes in a controlled environment, accelerating end-to-end processes with capacity to deliver larger number of Solvency II results and maintaining a high level of user understanding (i.e. no blackbox solution)
- Ensuring that processes are efficient, easy to maintain, and well documented, automating controls with emphasis on preventative controls and standardising processes, reporting formats and documentation

Benefits delivered by WTW

Automation benefits delivered in two components of the end-to-end reporting process:

- Assumptions – improve and streamline the assumptions process to work more efficiently with our actuarial liability models and to support the storage and versioning of assumptions for dual reporting purposes
- Results Extraction – Solvency II quarterly QRTs – re-design of the process with bridging connections to areas of the remaining Results Extraction process and automation of the required data uploads to our Group consolidation system





Case Study: Automated Analysis of Change

Client: A FTSE 100 Insurance Company

The Challenge

The client was looking at one of **their end-to-end actuarial processes, from policy data and assumptions preparation, through to sign-off of the results**, with the objective of achieving significant process acceleration, without changing the results.

Our Approach

Design phase

- Develop a collective understanding of the existing process
- Specify the design principles we want to adhere to
- Design the Unify workflows and user interactions in detail
- Specify the developments required to each component

Implementation phase – collaboratively with the client

- Targeted developments to the underlying components
- Implement Unify workflows (for each component and E2E)
- Integration with various 3rd party components
- User acceptance testing performed largely by client

The implementation covered the end-to-end process, delivering significant automation and control to the process, using our workflow automation and governance solution, Unify, as a primary driver of change.

Benefits delivered by WTW

Impact on working day timetable

The end-to-end process will mechanically run in **31 hours compared to 113 previously**, assuming all inputs are immediately available and all results instantly reviewed and accepted. This represents an **73%** improvement.

- Since we now utilize a 24 hour day, this means the full process could complete in 2 working days

Impact on user effort

- Through automation, the points of user interaction are now entirely limited to review and analysis time. This has reduced user effort from **55.5 hours to 7.5 hours**, giving an **87%** improvement
- All user time is now value-add

Governance and audit trails

- Unify enforces review cycles to be performed by the designated users, with 65 review points added to the process
- The full audit trail and responses are automatically stored.
- All output is automatically stored

Now rolling out the project across the whole business.



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