

## BUSINESS PROCESS MANAGEMENT - OVERVIEW

**INCREASE** your efficiency

**REDUCE** your operational risk

**IMPROVE** your productivity

**LOWER** your operational costs

**OPTIMIZE** your performance

The Singularity Process Platform™ is a Business Process Management (BPM) suite that enables organizations to model, redesign, execute and optimize their processes.

The Platform orchestrates and drives human workflow and system activities ensuring optimal routing of work and automated management of exceptions.

The solution provides organizations with the tools they need to focus on business performance improvement, enabling them to capture, analyze and act on key performance indicators.

And the Platform provides the ability to view and control end-to-end business processes across multiple systems using one easy-to-use interface.



## INTRODUCING THE SINGULARITY PROCESS PLATFORM

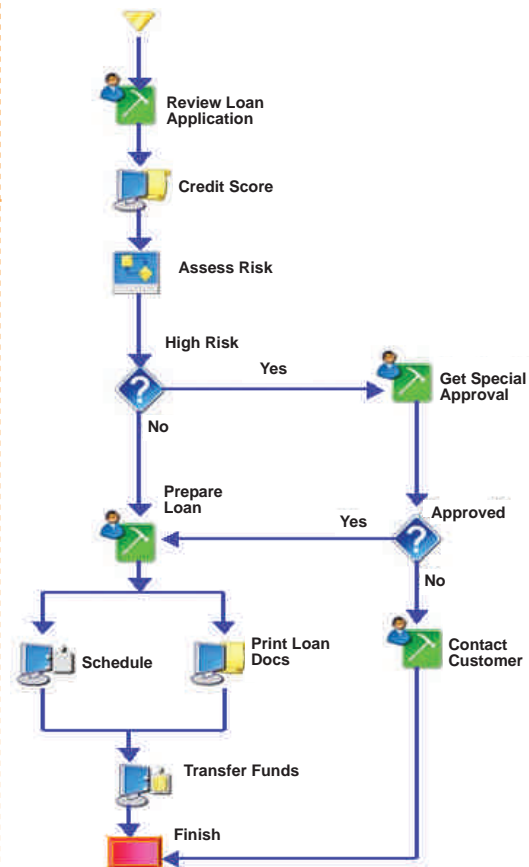
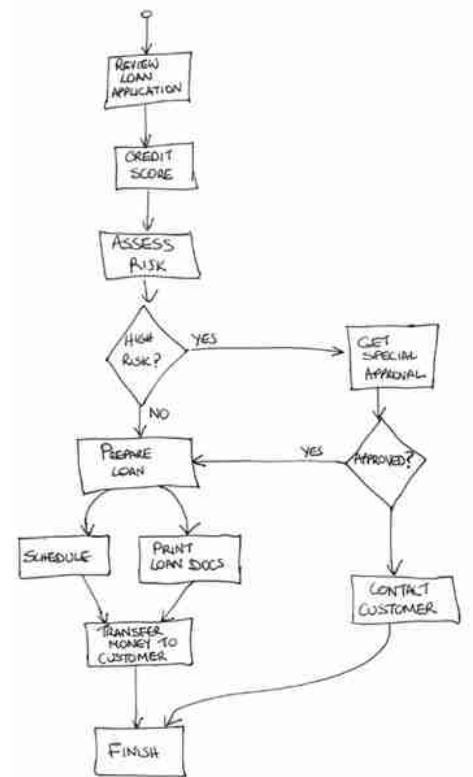
The **Singularity Process Platform** is an award-winning Business Process Management (BPM) suite that enables organizations to model and optimize their processes. Singularity believes BPM is all about performance improvement - achieving significant organizational gains through better management of processes. More efficient and better executed business processes mean lower costs and better ROI for the organization. Singularity delivers these benefits to our customers with our uniquely powerful solution.

*Singularity believes BPM is all about performance improvement - achieving significant organizational gains through better management of processes*

## WHAT IS BUSINESS PROCESS MANAGEMENT?

**Business Processes** describe how organizations do business - the sequence of human and system activities required to complete a business goal such as procurement. The processes can be simple or complex, take minutes or days to complete, and can be automated, manual or both.

**Business Process Management (BPM)** combines disciplines for managing business processes with enabling technology. Management methodologies for modeling and optimizing an organization's processes have matured in the past decade. More recently, the widespread adoption of web services has made it possible to fully automate enterprise processes, orchestrating the activities of both people and systems.



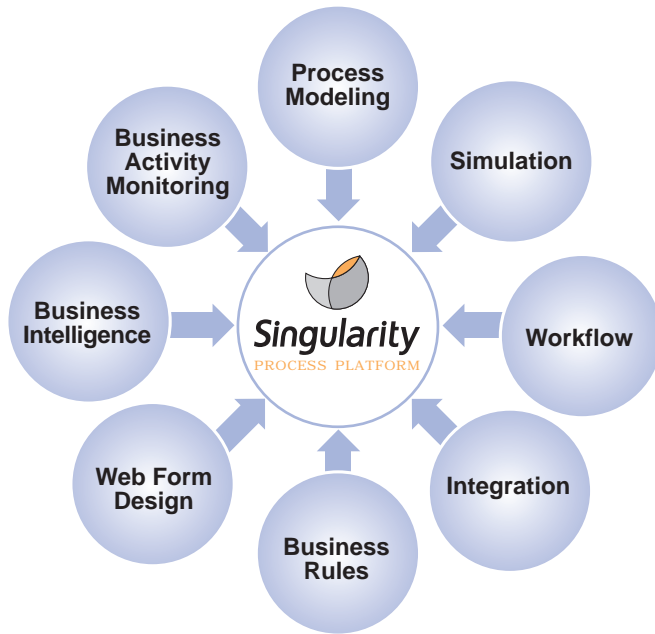
*"The Singularity Process Platform allowed us to achieve in weeks what would otherwise have taken months"*

**Philip Murray**  
ICS Computing



## PROVIDING A FULL-FEATURED BPM SUITE

The Singularity Process Platform supports the entire lifecycle of business process management, from initial modeling, through execution, monitoring and optimization. The Platform provides capabilities for process design and simulation, workflow control for managing human tasks, integration tools for linking system activities to processes, and business rules definition for specifying business logic.



Underlying this process management capability, the Platform provides sophisticated version control and release management. Processes are corporate assets - an organization's business processes are what makes it unique. Our process asset management capability ensures processes can be easily shared and re-used, enabling customers to leverage their investment by creating a process catalogue.

*Processes are corporate assets - an organization's business processes are what make it unique*

## DELIVERING BETTER, FASTER PROCESSES

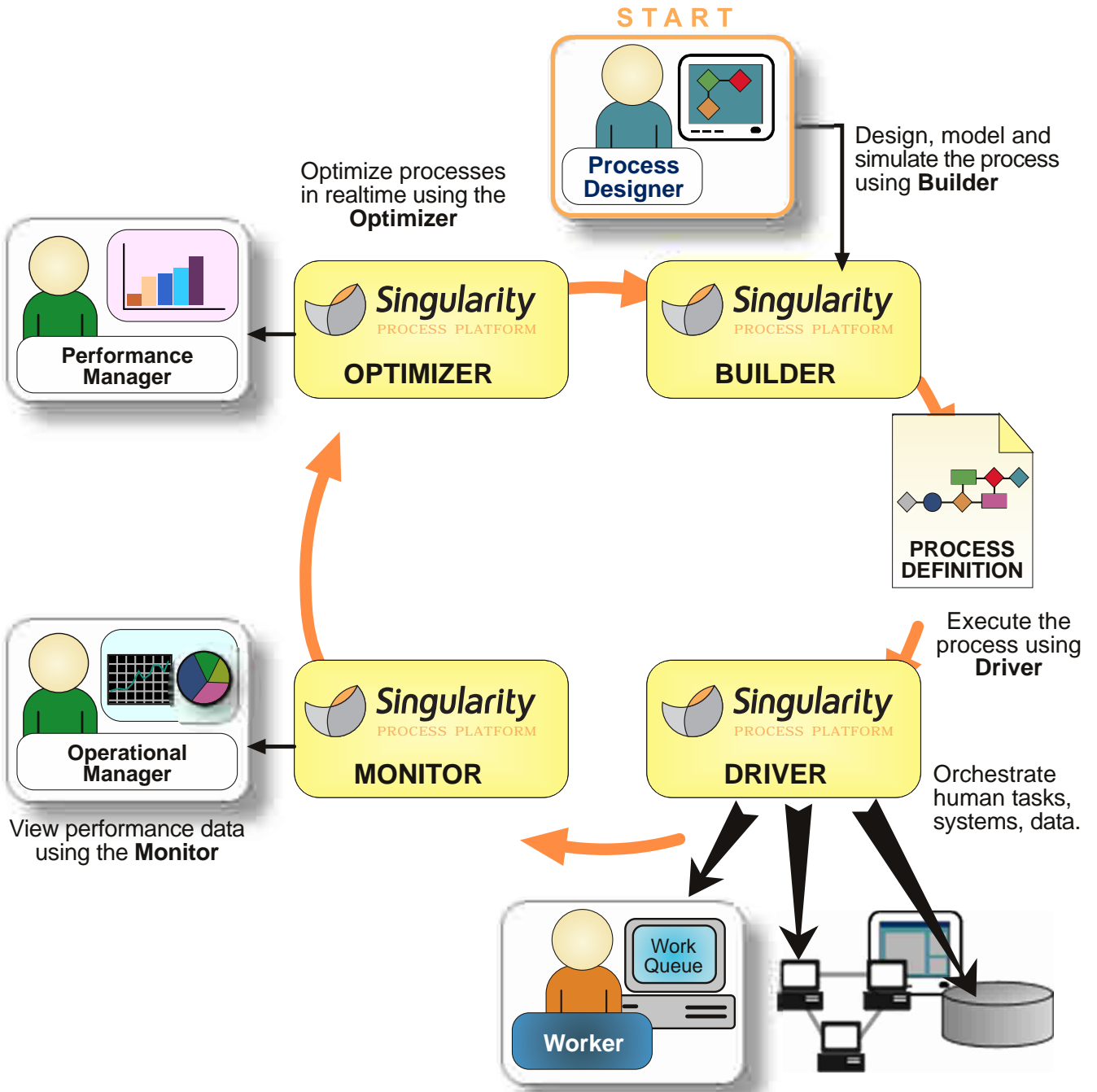
The business processes that Singularity optimizes can range from the simple to the complex.

- Automate the new account opening procedures for one of America's largest financial services corporations
- Guide public service staff through customer case management for some of the top UK local governments
- Manage the scheduling of field engineers for a multi-billion dollar US manufacturer
- Co-ordinate the creation and distribution of content for a Knowledge Management employee portal for a major international bank
- Orchestrate and simplify the complex securities trading processes for some of the world's leading investment managers
- Manage invoice processing for a major international management consultancy

In each case, we have helped our customers save money, generate more business and make better use of their resources.



# COMPONENTS OF THE SOLUTION

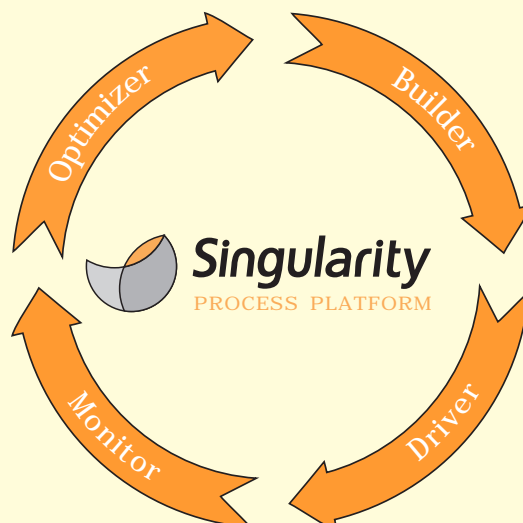


## Optimizer

- Self Optimization
- Load Balancing
- Dynamic Process Invocation
- Real-time Performance Improvement

## Monitor

- Business Activity Monitoring
- Real-time Dashboarding
- Historical Reporting
- Alerting
- Process Instance Search
- Analytics



## Builder

- Business Process Modeling
- Business Rules
- Forms Design
- Simulation
- Resource Management
- Performance Management

## Driver

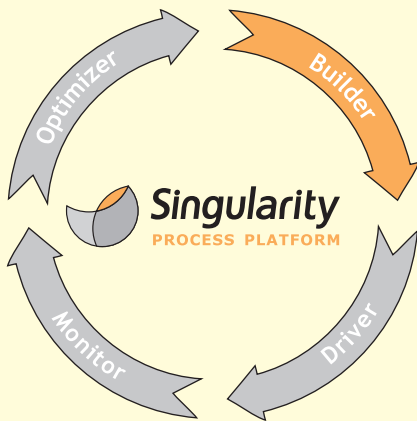
- Business Process Automation
- Workflow
- Exception Management
- Escalation Management
- Event Manager
- System to System Integration
- Data Integration

## BUILDER

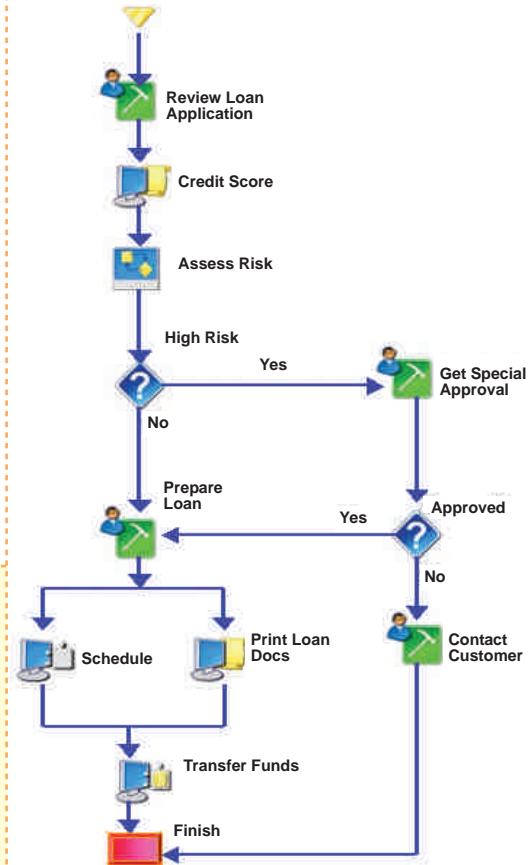
The Builder component provides an easy-to-use visual environment for modeling and testing processes using a 'drag-and-drop' approach. The Builder can also import process maps created in Visio or other modeling tools.

The Builder's great strength is the ease with which it allows business users to integrate software systems and databases into their process models. Our graphical modeling components are designed to support faster model-to-deployment time – our drive to 'Zero Code'.

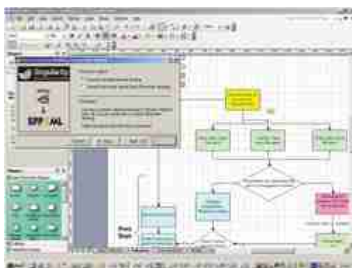
Once modeling is complete the Builder enables customers to deploy and execute processes without additional coding or integration – the model *is* the process.



Singularity aims for “Zero-Code” – to enable business users to implement new business processes without requiring technical support.



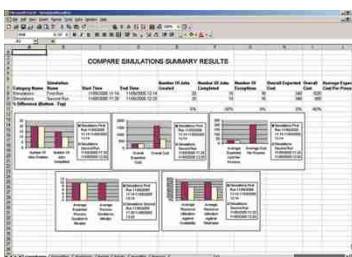
Graphical process modeling



Import and re-use Visio and other process maps



Easy-to-use Wizard for database integration



Export Simulator data to Excel for quick analysis

## BUILDER HIGHLIGHTS

**Ease-of-integration** – Point-and-click discovery and integration to external systems using web services, COM and .NET Enterprise Services enables business staff to build complete processes without technical support. The Data Access Wizard provides a simple step-by-step mechanism for integration to databases.

**Advanced Workflow rules** – workflow can be routed based on factors such as the utilization of resources, resource availability, staff skill-set or priority of the case being handled. Workflow approval can be routed to individuals or groups of users, and delegated up or down the organizational hierarchy.

**Simulation** – Customers can simulate their processes using historical, live or test data. The output data can be routed to Excel or a business intelligence tool for subsequent analysis if required.

**Sophisticated Exception Management** – Any exception can be configured to trigger a process, allowing customers to specify fine-grained automated escalation processes to rectify exception events, avoiding process bottlenecks. Standard escalation processes are included out-of-the-box.

**Forms Generator** – Customers can quickly generate screens for managing the interaction of staff with new processes, including log-in pages, menu pages and customized work-queue web-forms.

**Process versioning and release control** – The Builder provides integrated change control, versioning and release management.

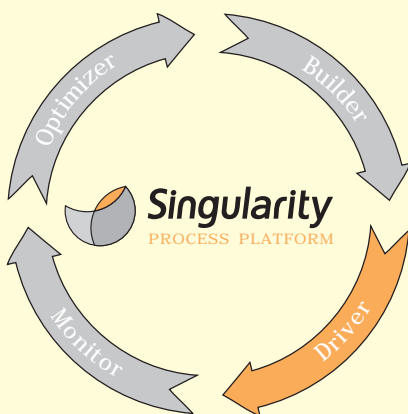
**Self-documentation** – The Builder automatically generates Word, HTML or XML formatted process documentation, detailing all the features of the process, including images of the process maps.

## DRIVER

The Driver component is the robust and scalable process execution engine for the Singularity Process Platform. Processes are executed according to the business logic, rules, policies and resource profiles specified in the map created using the Builder component.

The component drives process execution to completion, orchestrating the combination of system and human activities. The Driver connects and coordinates the activity of applications, turning legacy systems into reusable assets that can easily be combined in new, valuable ways.

Reflecting the dynamic environment in which organizations operate, the Driver can react at runtime to changes in throughput, capacity, workload and utilization to modify its scheduling and routing of workload and process tasks. Should an exception occur, it can launch a new 'Escalation' process to rectify the cause of the problem without manual intervention.



## DRIVER HIGHLIGHTS

**System and Service Orchestration** – The Driver coordinates and interleaves calls to multiple systems and services, enabling existing applications to be easily and quickly combined to implement valuable new processes.

**Scalability** – The Platform has a modular, stateless, multi-threaded architecture which allows for additional processing components to be added as demand increases, and supports clustering, failover and load-balancing.

**Active Directory and LDAP support** – the Driver component can import user accounts and organizational information stored in Active Directory or an LDAP directory.

**Multi-channel capable** – the Driver supports alerting processes calling out over email, SMS and other channels, providing great flexibility in managing exception-alerting and process monitoring.

**Dynamic Process Invocation** – the Driver can invoke different processes at runtime dependent on process and system state, optimally selecting the best process and workflow routing.

**Services Everywhere Architecture™** – the Driver and all other Singularity components implement a pure Services Oriented Architecture, so that each component can call any other service, and can itself be called as a service. This greatly facilitates execution and eases orchestration of external applications.



*"We have achieved tangible ROI. Singularity and the Singularity Process Platform have been central to this achievement"*

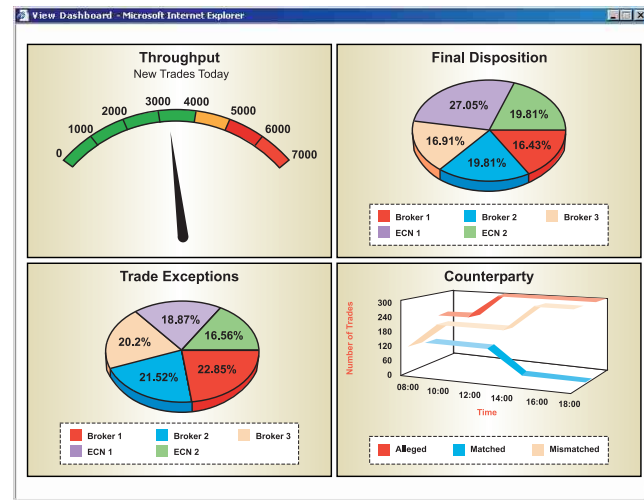
**Dwayne Lusk**  
**Texwood Industries**

## MONITOR

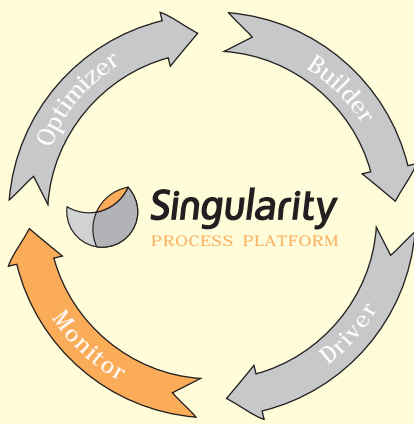
The Platform's Monitor provides comprehensive Business Activity Monitoring (BAM) functionality for viewing process performance.

Organizations can define monitoring points across each step in a process lifecycle. Performance data and business intelligence is gathered at each of these points during process execution and reported in real-time. The data is also recorded and can be subsequently analysed.

The Monitor includes a dashboard for visual display of real-time and historic performance information. User definable reports are provided for viewing and analyzing historical data.



Powerful Business Activity Monitoring (BAM) married to an easy-to-use Management Dashboard



## MONITOR HIGHLIGHTS

**Real-time Dashboard** – the management dashboard provides an easy-to-use view of process performance. The dashboard is fully user-configurable, with the customer being able to choose which data to show and how it should be displayed (e.g. bar-chart, speed gauge or other format).

**Detailed Metrics** – customers can configure the Monitor to measure any business indicators, such as utilization, capacity availability, delivery cycle times, cost of execution.

**Performance Management** – the Monitor provides real-time performance visibility, including the throughput of systems and the productivity of process participants. This information can be used to identify process inefficiencies, performance bottlenecks and potential solutions.

**Event Manager** – the Monitor uses an event manager to monitor and trap pre-specified process events that are to be measured and viewed. The event-driven architecture of the Platform provides flexibility to record and report on any business event or activity.

**Alerting and Exception handling** – the Monitor can be configured to either trigger alerts or entirely new processes when pre-defined thresholds are reached, for example when a backlog of customer cases reaches a specific level.

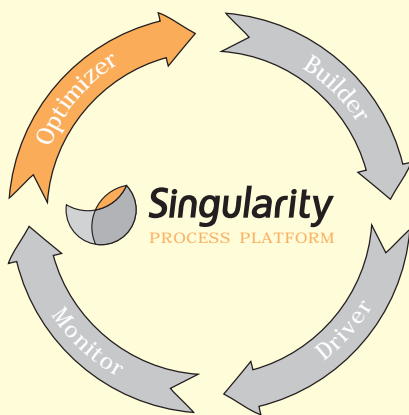


## OPTIMIZER

The Optimizer component enables execution-time improvement and self-optimization of business processes. It can execute a process differently, or execute a different process, depending on circumstances - for example during periods of increased demand.

The Optimizer uses the performance data captured by the event-driven architecture of the Platform to determine the current state of the system and activate changes to running processes in real-time.

The Optimizer can be configured to support tactical operational decisions (e.g. use a different process to get rid of a backlog) or to identify longer term process enhancements.



## OPTIMIZER HIGHLIGHTS

**Performance-driven Optimization** – the Optimizer can reconfigure any aspect of a process to ensure that pre-defined performance levels (such as cost or utilization thresholds) are adhered to.

**Revised Resource Allocation** – the Platform supports automatic re-assign and automatic delegation of work in real-time, dependent on user-defined criteria such as resource utilization, resource availability, productivity and so on.

**Execution-time Process Optimization** – the Optimizer enables organizations to automatically add staff and/or computing power or swap in replacement processes when a threshold is reached e.g. “Backlog of customer orders reaches 6,000”. Non-urgent steps in a process can be temporarily by-passed during peak demand to ensure cases are responded to without delay.

**Load-driven Process Prioritization** – the Optimizer can automatically re-allocate resources to high priority tasks and de-allocate from lower priority tasks at execution time when demand is heavy, returning to default resource allocations when demand returns to normal.





## FIND OUT MORE

### **Quick Tour**

Take the Singularity Process Platform Quick Tour, a six-minute walkthrough, with voiceover, of the Singularity Process Platform offered for immediate viewing by you and your colleagues on your PC.

[www.profit-thru-process.com/quick-tour](http://www.profit-thru-process.com/quick-tour)

### **Demonstration**

Schedule a live demonstration of the Singularity Process Platform face-to-face with Singularity staff or via an online WebEx link.

[www.profit-thru-process.com/demonstration](http://www.profit-thru-process.com/demonstration)

### **Request further information**

For case studies, white papers and industry insights visit

[www.profit-thru-process.com](http://www.profit-thru-process.com)

or by contacting:

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## SUMMARY OF BENEFITS

- Lower business costs and increased efficiency through increased automation and optimized scheduling and routing of tasks based on workload, skill set and availability.
- Reduction in operational risk through the analysis, automated documentation, standardization and monitoring of business processes.
- Increased flexibility and greater adaptability to the changing business environment through the ability to quickly redesign and deploy processes.
- Reduced exceptions, through reduced re-keying of process-related data, earlier capture of exceptions and smarter handling of exception escalation.
- Lower cost of system development and support through the ability to combine and re-use existing systems in new processes without significant code-change.
- Visibility of operational performance, across the entire process lifecycle, at a process level rather than simply at the transaction or message view.

Singularity has received the prestigious Global Excellence in Workflow award presented by the Workflow Management Coalition and WARIA

## RESULTS ACHIEVED FOR OUR CUSTOMERS

- 80% reduction in client on-boarding cycle time
- 40% increase in throughput capacity
- 90% reduction in customer acquisition costs
- 50% reduction in failed transactions
- 50% reduction in management overhead

*"In Singularity we found a partner who understood the complexity of our challenge yet brought a pragmatism that delivered results"*

**Seamus Doyle**  
**BT Broadband**



Founded in 1994, Singularity is a leading provider of Business Process Management (BPM) solutions to world-class organizations such as JPMorgan, BT, Raymond James, Wyeth Pharmaceutical and UBS. Using our award-winning BPM solution, the Singularity Process Platform, customers build, execute, monitor and optimize high-performing business processes that deliver tangible results. Through offices in London, New York and Singapore, and development centres in Ireland and India, Singularity offers market-leading process technology combined with extensive consulting and project delivery expertise.



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