TECHNOLOGY INNOVATION

<PAPYRUS ACM>

Empower Knowledge Workers

Empower Your Business

EMPOWERED

Papyrus Adaptive Process and Case Management

INSIDE

- ▶ **Knowledge Work** and Adaptive Cases
- ▶ **Papyrus ACM** Quick Facts

KEY ADVANTAGES

- ▶ **Process adaptability** with Design by Doing
- ▶ **Business and marketing control** their processes, content and templates
- ▶ **Flexibility and compliance** for manager, architect and knowledge worker
- ▶ **Consolidated view** of inbound and outbound documents and status

# Empower Knowledge Workers – Empower Your Business

Knowledge workers are found at the heart of every service- and customer-driven operation in a business, performing mission-critical and complex activities from customer claims management and contract management to account management and fraud investigations, among others.

Cross Industry	Healthcare	Insurance	Financials	Public Sector
• Accounts payable	• Virtual patient records	• Claims handling	• Loans operations	• Grants management
• Contract management	• Claims processing	• Underwriting	• New accounts	• Tax processing
• Employee on-boarding	• Member enrollment	• New accounts	• Wealth management	• Investigation
• Problem tracking	• Revenue cycle management	• Policy management	• Branch operations	• Case management
		• Partner Management		• Environmental

## *Knowledge work is mostly UNSTRUCTURED and UNPREDICTABLE*

Knowledge work is about decision-making that requires transparency and real-time access to content and data in the context of the business process.

As knowledge work does not have a predefined flow, it requires clear goals, authority assigned to a performer, and definition of the means (budget or resource) to achieve the goal.

Exploration & Innovation - J. March 1991
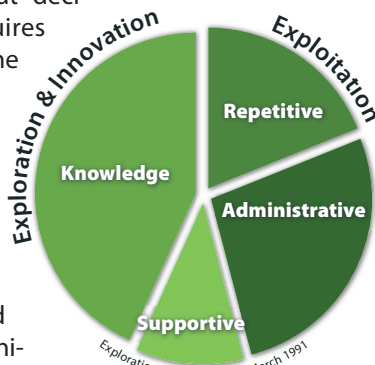
Spectrum of work processes

Economist James March defined that for businesses to succeed in the long run, they need to both exploit existing knowledge and explore and innovate continuously. A strong cost focus can cause business management to lose sight of effectiveness. BPM automation further faces the danger that skilled workers become redundant or leave in frustration.
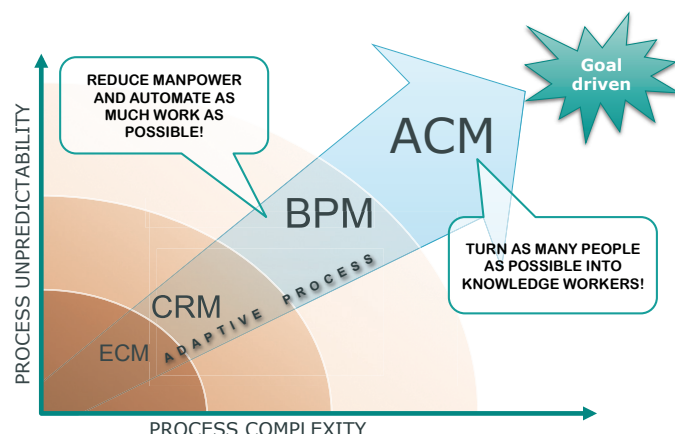
ACM for Knowledge Work

Businesses benefit from empowering employees and turning as many production workers as possible into knowledge workers.

Process standardization is a key element in the cost savings of BPM because implementing processes is so cumbersome and expensive. It therefore promotes "good-enough" processes rather than a perfectly customer-oriented outcome.
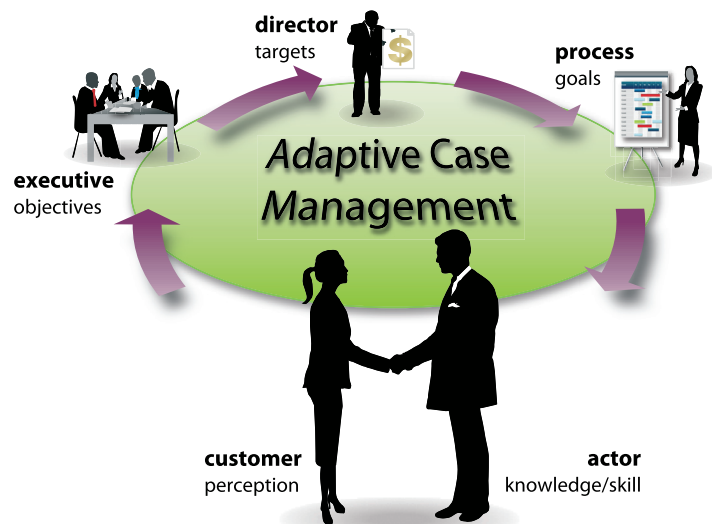
ACM is "empowerment technology" that focuses on the WHY and WHO and not on the HOW, because that knowledge is "between two ears only" (Peter Drucker).

Top-down business transparency ensures that knowledge workers understand why they are doing things, and real-time process transparency enables process owners to intervene immediately when customer quality assessments are poor.

Adaptive Case Management

Empowerment is not about social networking - it's about authority, goals and means. Effectiveness and transparency are achieved by linking customers and process performers in the process context.

Why would empowerment work better than reward and punishment, or strict even quality monitoring? Each action in an empowered organization drives productivity forward, while rigidly planned organizations (hierarchically or not) waste precious energy and time on analysis and designs, policing procedures and reward/punishment systems. Each controlling or monitoring action and each reward will cause counterproductive forces in the organization.

Only empowered actors can use intuition and experience to implement many small, low-cost improvements that follow the business architecture and can be verified for benefits within days.

■ Five elements of ACM

Empowering knowledge workers requires adaptive technology to enable business communications and processes using five basic elements:

- **Entities:** SOA or other interfaces connect the silos to the process environment.
- **Goals and goal rules:** Direction and measurement ensure results
- **Content:** Inbound and outbound correspondence
- **Rules:** NLR (natural language rule) editing
- **GUI:** Users can define forms and wizards from widgets
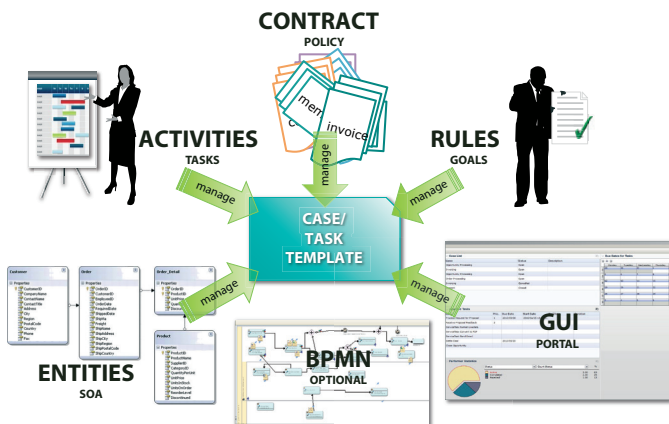
■ Goal-oriented, adaptive processes

ACM first empowers the high-level knowledge workers in a business by enabling the executive to communicate business strategy (in terms of models) to them. It helps align financial goals with process and budgetary planning, to empower both management to define the goals and actors to add the tasks that achieve them. Driving processes with GOALS rather than flowcharts, and then mapping inbound and outbound CONTENT to them, supports the processes that generate new knowledge and successful outcomes.

Design-by-Doing
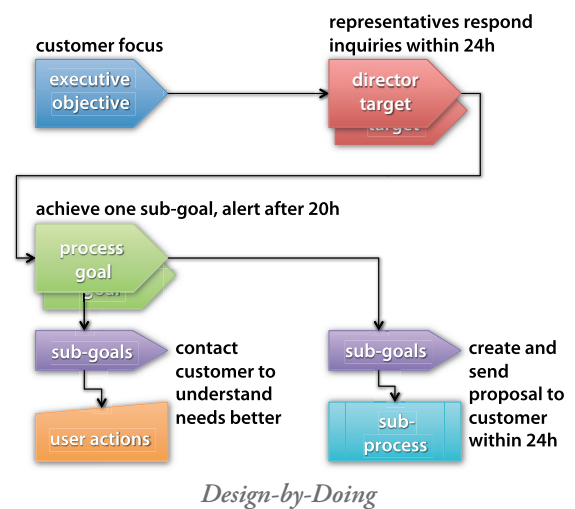
New knowledge requires the creation of new data, new content, new rules, new goals, new user interfaces and new roles - by the business users who need them. Business user empowerment must be linked to a common GOAL-oriented approach - business users don't understand complex gateways in 2D BPMN flows.

"Business users do not just influence the design, they actually create the process on the fly." - Max J. Pucher

■ Benefits of Papyrus ACM

ACM allows the business to selectively and securely empower all the people that take action and those for whom action is taken. ACM is about communication and process as ONE. ACM leaves the automation of the low-value, highly repetitive tasks to BPM, while providing the platform for the high-value, unique and skill- or knowledge-intensive customer service processes. This is where customer loyalty is being created and maintained.

But ACM also empowers because it interconnects the management layers and enables continuous innovation and optimization without ANY bureaucratic governance overhead.

- Empowers non-technical business users
- Builds virtual process organizations
- Users create dynamic knowledge processes
- Assembles optimized process templates
- Delivers real-time customer perceptions
- Gathers actionable process knowledge
- Links business and process goals
- Provides operational transparency

ACM Empowered: Closed-Loop Busi

Processing a case involves a substantial amount of business communication - both incoming and outgoing – that adds to the complexity and challenge of effectively managing successful progress and resolution.

■ Papyrus Adaptive Case Management

ACM exposes structured (business data) and unstructured (content) information to the actors of structured (business) and unstructured (social) organizations to interactively create, modify and securely execute – with knowledge gathered during run time – structured (process) and unstructured (case) work in a transparent and auditable manner.
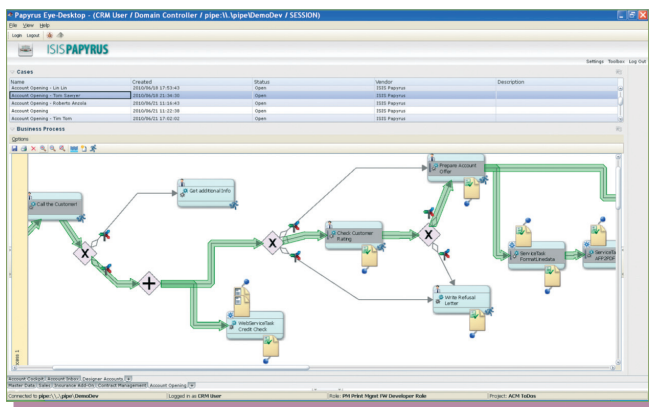
Using the templates for data, content, rules, actors and GUI, a business user can create or modify case templates or instances. By means of the Case Builder, those templates can be assembled by drag-and-drop and linked to BPMN activities that are assigned to a hierarchy of process goals.

Adaptive processes, despite lacking a predictable and repeatable progression, nevertheless go from a less ordered to a more ordered state through user action.

During execution, the actor may receive suggested actions but can decide otherwise (given the authority). The decision is stored in the template and available to other actors, but it is not turned into hard-coded flowcharts that replace human intuition.

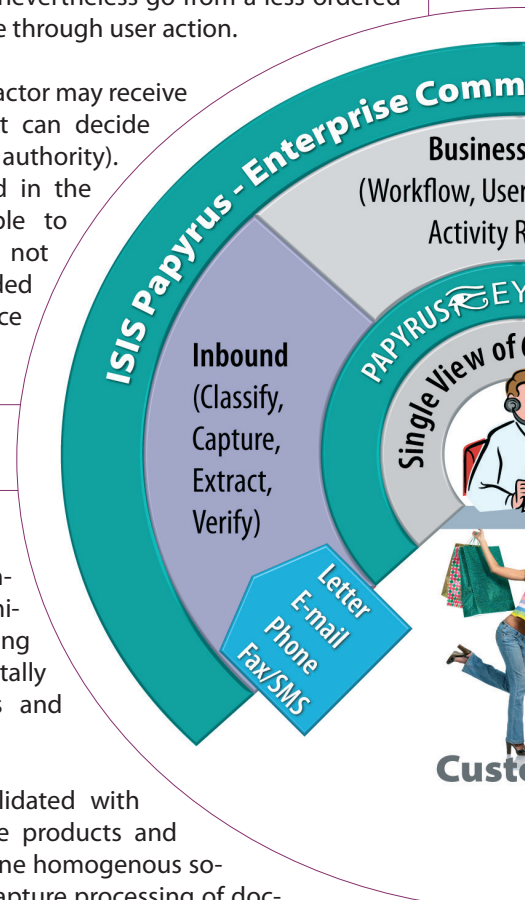## ■ Embed inbound business communication

Capturing and archiving inbound documents is an essential element of a full case management solution. Typically, inbound documents range from known forms and semi-structured accounting documents to totally unstructured letters and e-mails.
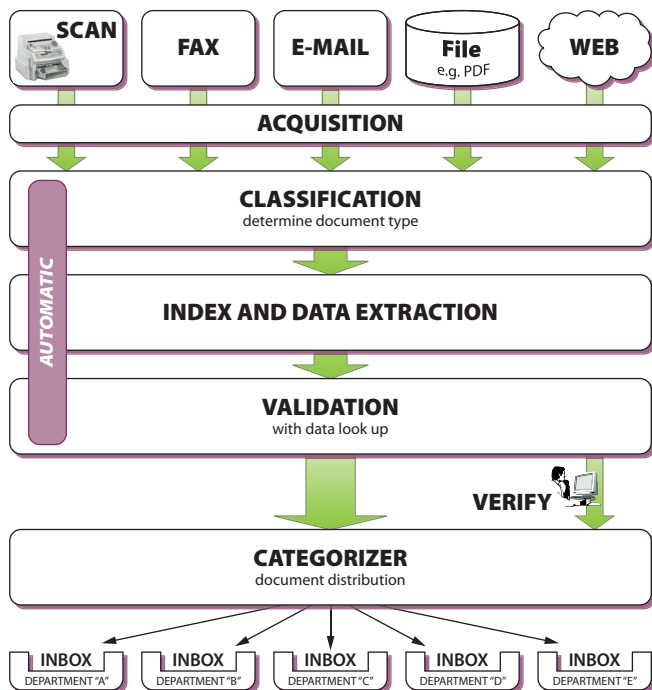
ACM is fully consolidated with the Papyrus Capture products and can be installed as one homogenous solution. Automated capture processing of documents as they are received must occur efficiently to quickly start activities triggered by their content.

With the use of classification taxonomy, documents are handled based on their apparent similarities, before any OCR reading has taken place. To classify and extract business data from scans requires training a relevant sample set, but not programming. Adding barcode reading can help identify relevant detail information such as case or customer numbers.

Papyrus captures ALL incoming content, performs machine-learning classification, extracts and validates business data, and executes automated business responses and initiates straight-through or user-interactive processes.

RULE #1:
"There is no process without content, and content without process you don't need."

■ Papyrus EYE Widgets

Most BPM products only offer simple forms, while Papyrus enables intuitive, fully functional graphical user interfaces. Dashboards, process queues and application dialogs read data models from the repository and are simply populated with business data from an SOA interface through drag-and-drop. Empowered employees can create user inter-faces without programming through the powerful Papyrus EYE Widget technology. Widget definitions are centrally managed, version-controlled and time-stamp deployed to all production servers.

EYE Widget applications are deployed identically in the desktop and in the browser. User-definable themes enable CSS-like configuration. The Papyrus Client is deployed as a Browser plug-in.
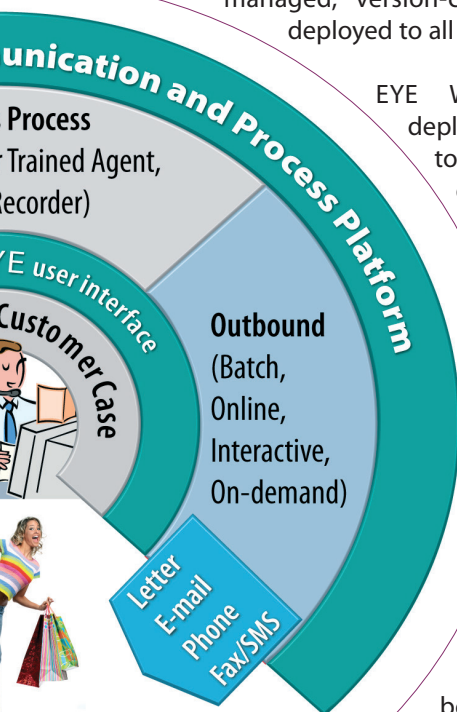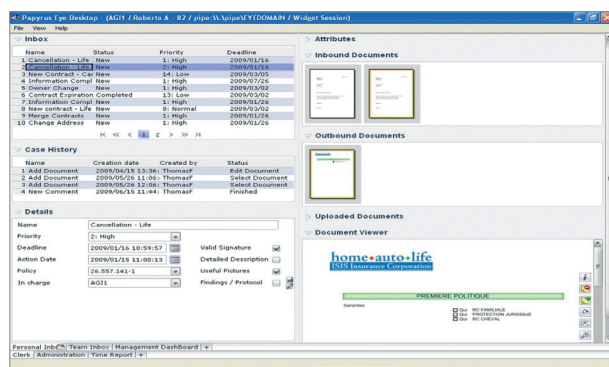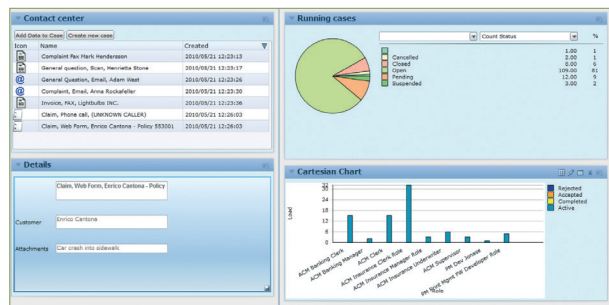
■ Embed outbound business communication

The use of Papyrus outbound products closes the communications loop with the customers, clients, stakeholders, agents and vendors with high-quality content.

Data-driven, specific business documents must be either generalized or personalized. While the core structure is defined initially by IT experts, the final content must be under full control of the business users to maintain text and messages: multi-language, resource management (fonts, forms, logos) and change management supporting batch, online, interactive (thin and thick client) and Web form/document solutions.

To ensure compliance and enable adaptability, both process managers and business users can apply rules to document events for automation and case status tracking at any point in the process, including required predefined tasks and documents via template and allowing ad–hoc activity and Content at run time.

Papyrus provides the complete output and print management functionality, including PrintPool for bundling and WebArchive for Web distribution of business content.
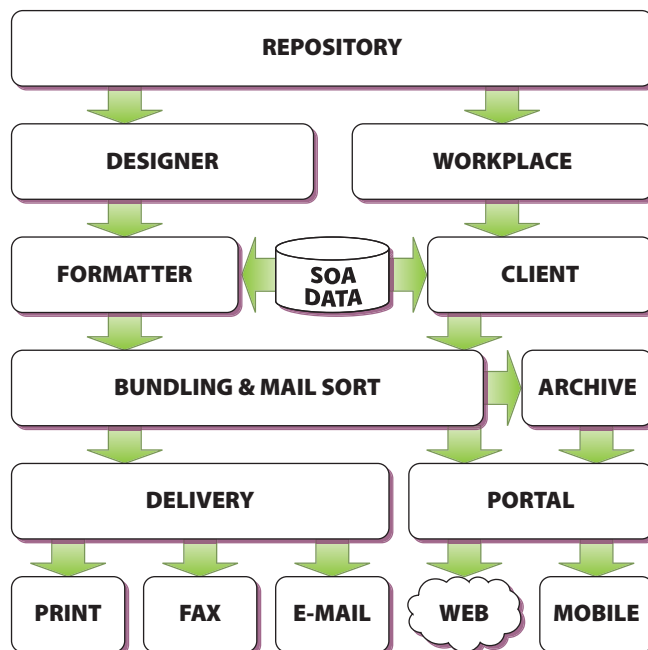
## ■ Papyrus User Trained Agent - UTA
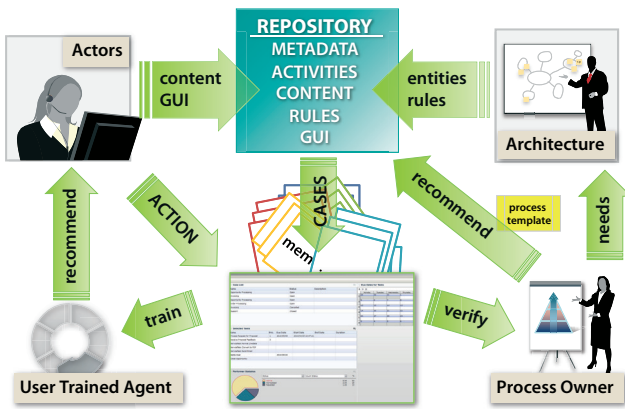
For the purpose of process mining, the Papyrus User-Trained Agent performs pattern recognition on the data objects and their relationships across the complete state space of a business case each time an action is performed by an actor role.

The UTA analyzes what elements of the pattern are relevant for its subsequent repeated actions. That will include information about previously executed steps and their results. If the actor performs that recommended action the confidence level of that recommendation is raised, if not, the confidence level is lowered. One or more of the most confident recommendations can be presented.

■ Natural Language Rules

Rule entry in Papyrus is a natural language (NL) capability without complex syntax that guides the user and offers both multilingual presentation and editing from a single-rule definition.

Rules are defined in the process engine and must be tested and approved. NL rules can access any data model stored in the central metadata repository, and the execution of rules is verified against user role policy setting. Normal change management processes apply.
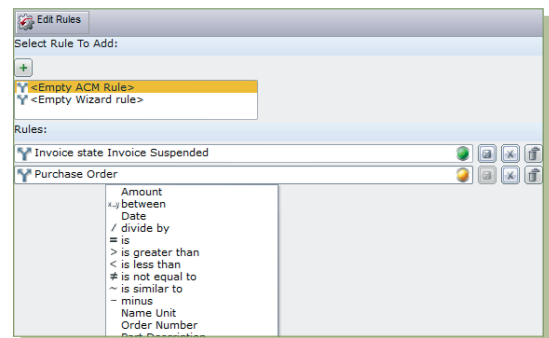
Papyrus Natural Language Rules (NRL) Editor

■ Informal communications network

Adaptive Case Management can apply rules to document events for automation and case status tracking at any point in the process, including predefined tasks and documents, allowing the addition of ad–hoc activity and content.

- External events, such as receipt of a phone call, letter, fax, or e-mail related to the case, are added to the case folder and new tasks or processes are created.

- For internal events, case workers assign tasks and initiate processes as needed to work on the case, and business rules within the case may automatically create and assign tasks or trigger fully automated actions.

- Those tasks and activities define the case context and are visible, along with case documents, in the shared case folder, where the state of the case as a whole is determined by the combined state of all tasks and documents.

■ Embed social media and Google Maps

Papyrus enables Rich Internet Apps, chat, wikis, blogging, user-configurable GUI presentation and social interaction with co-workers - all under control of the role/policy authorization and in context with the process.

The EYE Widget UI allows the dynamic inclusion of general Web content, such as Facebook, YouTube, Twitter, LinkedIn or Google Maps into the application. This allows the business to create very customer-oriented applications without opening these applications to misuse.
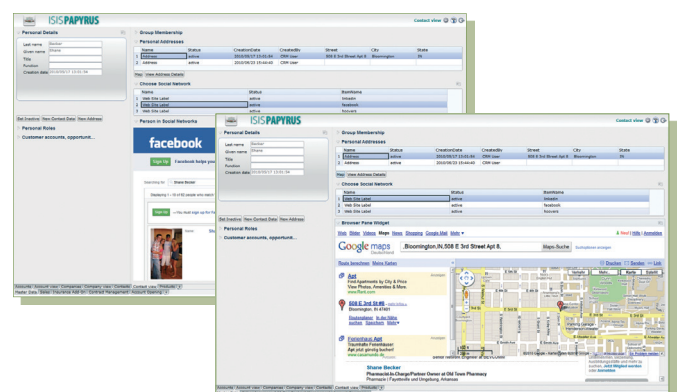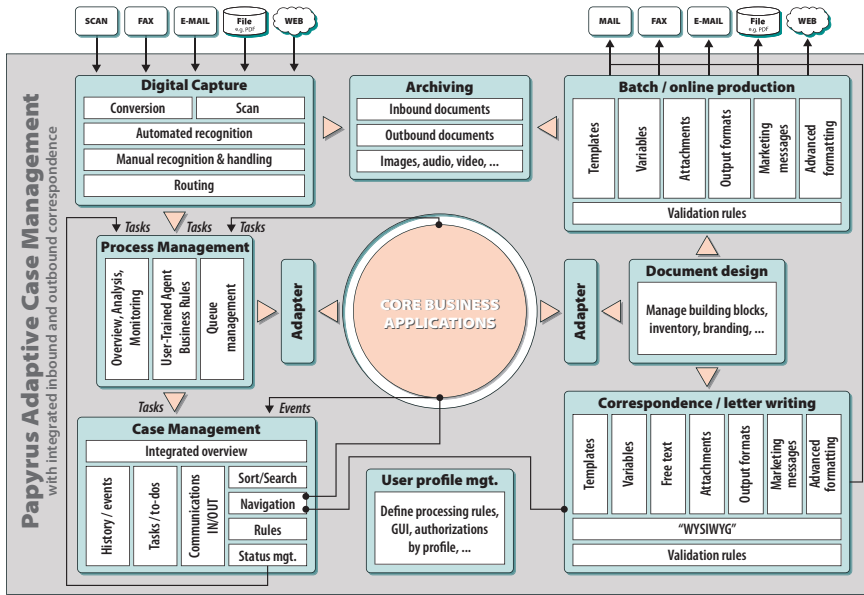
■ ACM Customers: AG Insurance

AG Insurance, a subsidiary of *ageas* (formerly Fortis SA/NV), selected the ISIS Papyrus Platform for adaptive case management to enhance insurance services (claims, underwriting and general services) and resolution in several business lines.

AG Insurance will use the Papyrus Business Communications and Process Platform to optimize processes, tasks, communications and documents across a wide range of insurance activities.

The Power of ONE System

"The Papyrus approach to fully integrated customer communications aligns perfectly with our business and technology requirements."
– AG Insurance

About AG Insurance:
With a market share of 25.1% (by the end of 2009), AG Insurance is the market leader in Belgian insurance. It owes this position to a broad and high-quality product range, excellent service and its cooperation with a network of independent insurance brokers, Fintro agents and BNP Paribas Fortis agencies. AG Insurance employs more than 4,000 specialised staff members.

"The Papyrus Platform offers a win-win for AG Insurance, ... the Insurance staff and system can respond, react and adapt efficiently to the diverse and changing needs of customers without sacrificing quality, speed or compliance."
– Annemarie Pucher, ISIS Papyrus CEO

■ ACM Book: *Mastering the Unpredictable*

How Adaptive Case Management Will Revolutionize the Way That Knowledge Workers Get Things Done
- By Keith D. Swenson

Contributor:
Max J. Pucher,
ISIS Papyrus Chief Architect
(Chapter 5: Elements of ACM)

A global team of respected business process leaders and technologists have collaborated to highlight the key concepts, important ideas and recommended approaches for harnessing, enabling and empowering knowledge work in the organization.

For executives and managers of knowledge workers, *Mastering the Unpredictable*:

- Explains why previous trends don't meet the need
- Explains the current technology gap and the new technology coming to fill the gap
- Lays out the options available to increase organizational efficiency
- Equips them to best take advantage of the evolving trend

A comprehensive, flexible and scalable solution

for consolidated management of inbound and outbound customer communications across channels, departments and systems.

Papyrus Adaptive Process Platform
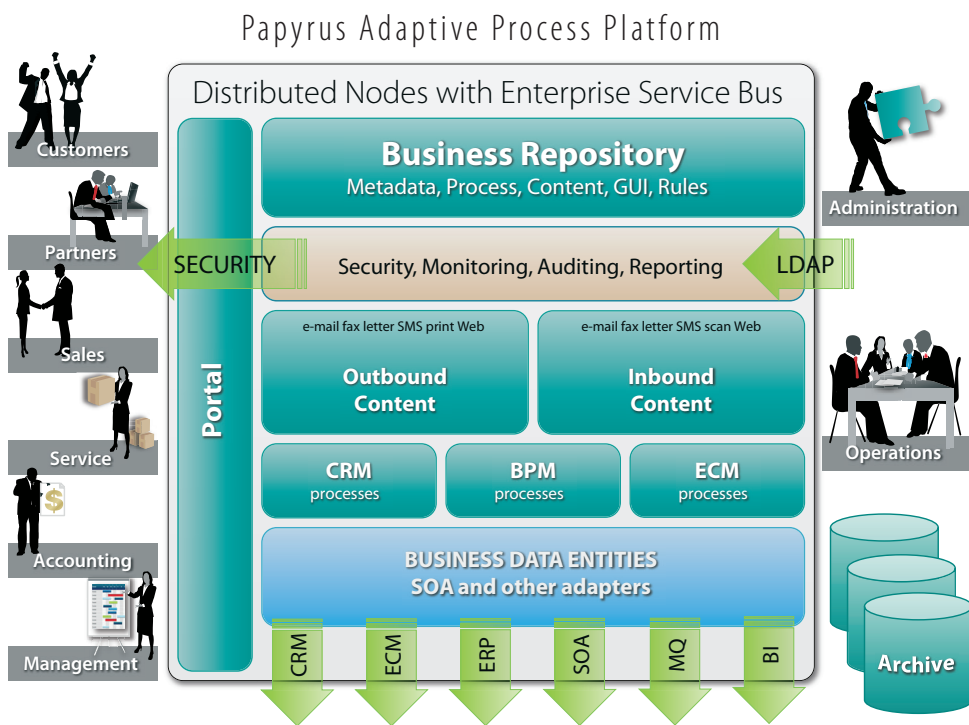
Organizations can define, measure, and manage process, content and data in complex service environments with a shared customer view and customized GUIs.

These mission-critical ACM applications are built from a foundation of Papyrus standard software components.

A one system solution or just the capabilities you need