WHITE PAPER

THE BPM PATH TO PROFITABILITY IN INSURANCE

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Introduction

To retain and acquire new customers in the current digital era, the insurance industry needs to evaluate solutions that address the challenges of increased customer churn. The solutions also need to reduce operational costs and generate forecasted profits.

This paper aims to identify and define insurance business functions that will benefit from a business process management (BPM) methodology, and help achieve strategic benefits in their mission to create value for stakeholders.

These business functions will be defined through a process categorization framework, which illustrates their candidature for a managed approach on the BPM platform. These processes are elaborated in detail and their constituent sub-processes are described as part of the process catalog for core processes.

Once the processes have been identified for migration on the BPM platform, the metrics to measure process performance improvements will help the business calculate migration improvements.

This will validate the strategic investments and benefits realized through their BPM platform of choice. Additionally, these metrics will enable businesses to visualize the processes' performance quantitatively.

These quantitative insights will help the management realign resources and activities with rapid turnaround cycles, while enforcing control of running processes. The enhanced flexibility and visibility of processes augmented by process control can drive the realization of strategic benefits across functional domains encompassing the insurance carrier's operations.

To realize the strategic benefits provided by BPM, the first step is to take a closer look at the underlying business process driving day-to-day operations of insurance carriers.

The processes can be viewed from multiple perspectives to determine the layers developed since process inception to match evolving market changes.

Applying multiple pivots of applications, resources, data objects, and human and systems actors allow us to determine the organic functions of a process.

Based on the above analysis, this paper looks at key insurance processes of lead management, underwriting, and claims to illustrate business benefits achieved through adopting BPM.

The business processes and the metrics described are by no means exhaustive and are intended to serve as an illustration of the process catalog subset.

Current process landscape in insurance

As insurance carriers grow in scope and complexity over the years, their processes can become fragmented across geographies and products. Acquisitions can also be a factor in duplicate process flows and overlapping functions.
This can lead to several disconnected systems operating with complementary functionality in modules within the enterprise. As business participants perform activities across multiple application interfaces, it can lead to inefficiencies in monitoring and tracking. This is due to lack of an integrated view of operations at the function level. The quadrant in Figure 1 analyzes the functions based on certain process characteristics to showcase insurance processes in the enterprise that are the most suitable for BPM adoption.

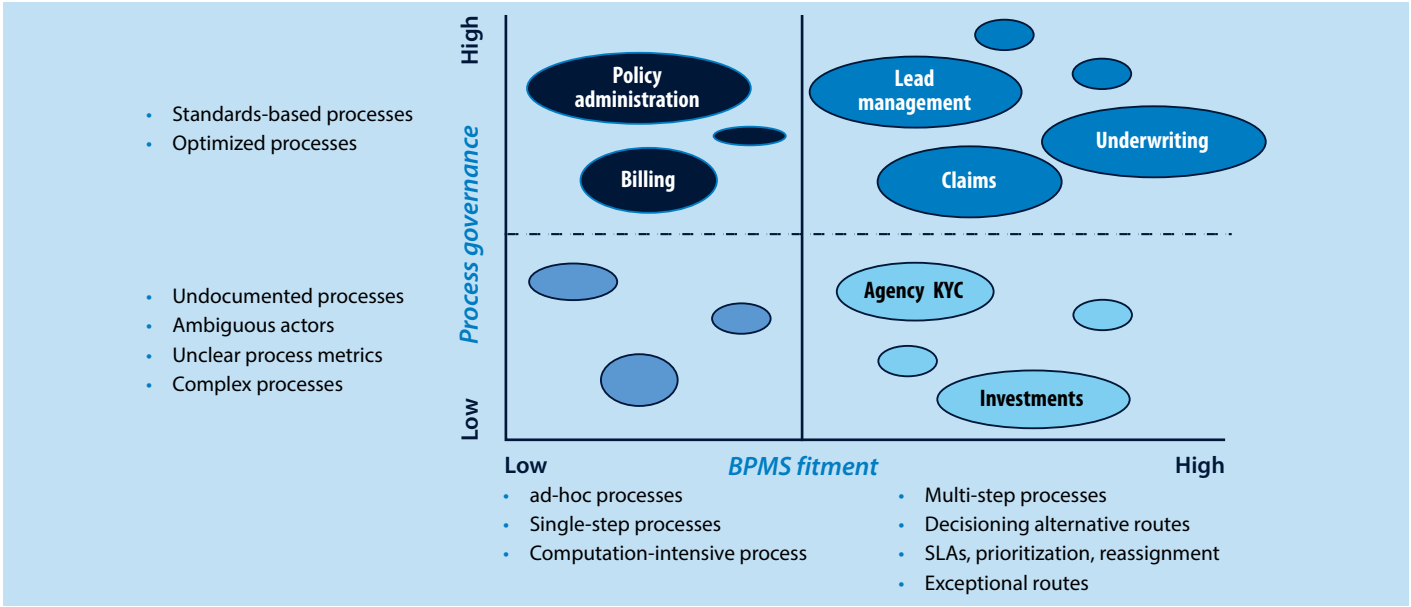

Figure 1: BPM quadrant

There will be multiple processes across the enterprise units of large-scale insurance carriers that will pass the determinants for BPM implementation.

The business and technology drivers in these areas, which can be addressed by BPM are depicted in Figure 2.

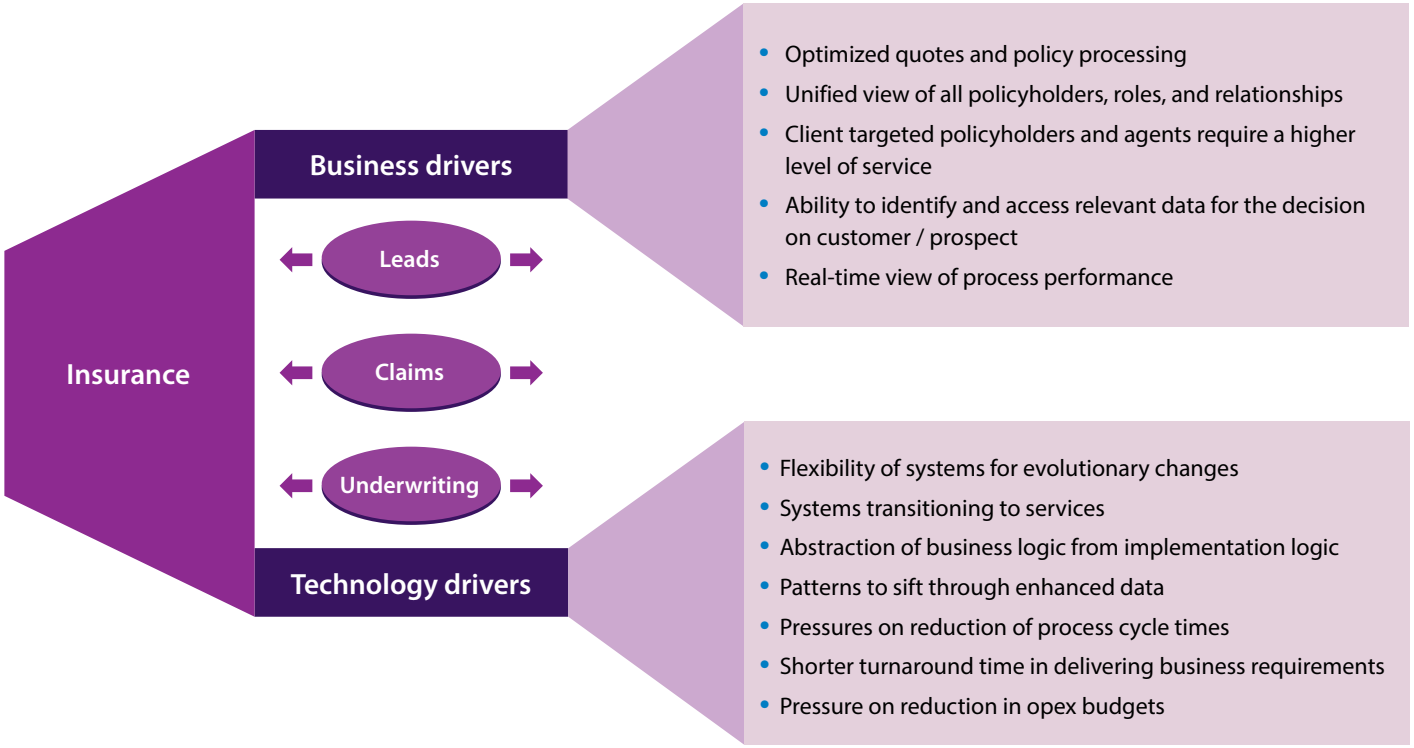

Figure 2: Insurance core business drivers

Insurance products range across auto, property, casualty, commercial, and life, and are serviced by different process implementations and application systems.

There are several process challenges associated with this. Some of them include:

- A single customer or household can be interested in multiple products but cross-selling opportunities are restricted by the lack of a unified process platform.
- Capturing customer details repetitively at a household level also increases customer frustration over providing the same demographic data during multiple interactions.
- Agents, call center executives, underwriters, and claim adjusters have unstructured tasks and methods of communication (e.g., paper or email). The users need to follow repetitive manual procedures and retype data. This administrative overhead can lead to lowered productivity and satisfaction levels.
- There can be a lack of transparency on the status of the interaction in the process cycle.
- These challenges faced by insurers illustrate the need for a more rigorous process management approach.
- This approach can be handled effectively by philosophies and analytical toolsets of BPM.

Once this determination is achieved, BPM tools such as business process reengineering, process automation, work flow management, and business activity monitoring can be applied to suitable use cases.

Determinants	Pattern	Actors	Insurance processes	Outcomes realized via BPM
• Excess of manual files, Xls, paper work patterns • Human activities required in one or more steps for process completion • Multiple eyes on unit of work	Workflow	• Agents • Customer call centers • Mobile • Customers / prospects • Claim adjusters • Underwriters • Management • Data systems	• Lead management • Underwriting • Endorsements • Renewals • Billing • Disputes • Claims assignment • Case management • Subrogation	• Controlled work execution • Standardized workflows for specific work packages • Auditing and routing • Standardized data models across users • Collaborative work tools
• Tracking task processing times • Identifying bottlenecks impacting process cycle times	Business activity monitoring and measurement			• Visibility into process and user execution metrics • Business insights for process improvement • SLAs for controlling process performance thresholds
• Are users working on multiple systems as part of their day-to-day work? • Are onboarding / expansion costs high?	Unified work bench			• Enhanced productivity • Standardized onboarding • Reduction in duplication of technology systems across products and units
• Do users spend time on remediation of previous work? • Are exceptions and escalations decisioned in an unstructured manner?	Exception and escalation routing			• Reduction in process cycle time by minimizing successive passes. • Reduced leakages in underwriting and claims • Structured exception and escalation workflows
• Do projects take too long to deliver? • Is there a backlog of projects?	Application development			• Improved IT reactiveness • Reduced backlog

Figure 3: Process categorization framework

It is crucial to bring business users such as agencies, underwriters, and claims adjusters onboard at this stage. They need to become believers in the future state workflows, where they will be participants. This framework can be quite different as there is a structured approach with which the activities will be performed.

They might require orientation on the abilities afforded by the BPM platform to update workflow logic in a controlled manner. For instance, in case of a group loss event such as a natural disaster, claims adjusters can update their approval threshold to accommodate the surge in claims.

Once business users start using the process proactively they will witness a performance surge and also drive improvements in the overall processes thereby translating to increased profitability.

The benefits unlocked through BPM implementation cover both tangible and intangible measures. Additionally, analyzing the process metrics can help quantify process performance benefits and organizational bottom-line.

Higher levels of customer delight and employee satisfaction can result as standardized processes reduce frustration and delays.

The combination of direct quantifiable ROI and indirect ROI, resulting from increased customer delight levels, can provide validation of the organization's BPM methodology.

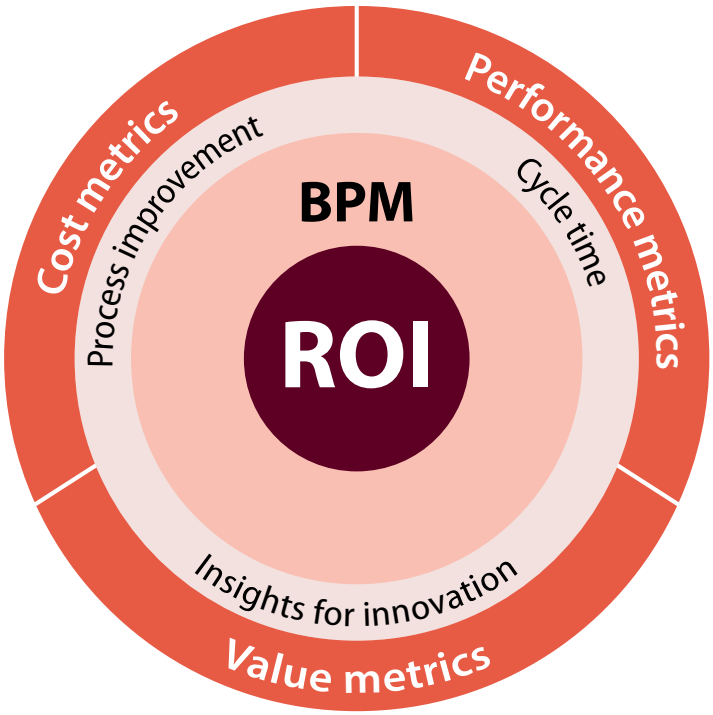

Figure 4: BPM profitability metrics

The metrics to measure the performance of the process can be categorized into three indices – cost, performance, and value.

- Cost metrics can determine the technology, infrastructure, and maintenance cost of the BPM platform. Cost metrics include reduction in application development and support, person hours, operational costs, minimized downtimes, and higher availability.
- Performance metrics can determine the performance of the runtime processes at the business level and at the non-functional level.
- At a non-functional level, the responsiveness of the process can be measured in terms of fulfilling activities such as calculations, data retrieval, presentation at the axis of time, and throughput. At the business level, the productivity and cycle times can be measured at an aggregate view.
- Value metrics are derived metrics such as enhanced customer delight and process user satisfaction. Value metrics also cover operational cost savings and profitable new product developments, which occur through insights as part of setting and measuring process metrics and identifying opportunities.

Insurance carriers can measure the process performance in lead management, underwriting, and claims processes at a high level by identifying process metrics as gauges. These process metrics should be linked to strategic SLAs with the operational process activities, participating application services SLAs, and human workflows.

The ongoing data of individual activities in business processes allow the management to identify high performance as well as unearth bottlenecks at application and employee levels. By setting and measuring the process performance for validating the ROI, organizations can also identify areas for further analysis which can trigger new insights and fine-tuning of business rules governing process outcomes.

The lead management, underwriting claims process catalog, and their corresponding process metrics are described in the following sections.

BPM-enabled lead management

Lead management processes typically involve subscription of leads for a variety of product policy types. Along with leads, existing policy events such as renewals, upcoming premium increases, endorsements, and cancellation also need to be tracked to successful closure.

The number of work channels and customer interaction touch points have increased as a result of the emergence of social media. Consequently the volumes of available leads and campaigns have also exploded. This necessitates a dynamic allocation of leads to the right representative with the necessary combination of skills and capacity.

To achieve this dynamic intelligence, a combination of validation and routing rules is required based on whether the event is originated by:

- Type of actor customer / prospect
- Channel such as individual or bulk aggregators, social media
- Nature of product line and agent types

These rules determine process execution sequences, which can result in multiple outcomes such as a system-defined quote, or routing to agent / call center.

The rules also need to factor in the current

workload and availability of the servicing representative. For example, if an agent is on leave then work items should not be allocated to the agent.

A BPM platform can address the above requirements with dynamic lead assignment features based on case load, availability, and other assignment rules. It will allow the service managers to monitor the workload against service times through monitoring dashboards. The solution can also involve communication through multiple channels, with reassignment and escalations.

Unum, the leading disability insurance provider, deployed a BPM solution which integrates five workflows over 25+ legacy applications and 300 service operations to reduce the lead time averaging three to eight weeks in converting a quote to a policy issuance. The cycle time has been reduced 87 percent to a consistent seven days SLA.

An illustrative subset of lead management process catalog is described in Figure 5.

Process	Description	Sub-processes	Description
Lead management for prospects	This process model will cover the acceptance of leads in standardized lead types and route, and assign the leads to appropriate handlers based on business rules and close with end states of closed quote, bound quote, and policy issuance.	Quote inquiry	This processes quote enquiries from different channels, validates for data and business rule routing determinants sufficiency.
		Premium calculation	This is used to calculate the premium and will be largely automated.
		Bind quote	This process will track a lead against any corresponding bind events or update events to manage the latest instance view of the prospect until the conversion to a customer data object.
		Policy creation	This process will trigger post the bind event and perform necessary orchestration involved in customer notification and document archival.
Lead management for customers	This process model will process events from existing customers at a household level and will create and route work items based on type of event, renewal, reviews, and endorsements.	Quote events	This process accepts quote enquiries from different channels, validates for data and business rule routing determinants sufficiency.
		Renewals	This process is triggered on upcoming renewal events and creates tasks for appropriate handlers with customer policy party data with rules configured customer contacts.
		Reviews	This process is used to trigger periodic reviews of customer party and policy data.
		Endorsements	This process is triggered when changes occur to policy rules or customer household party information, which can trigger change in policy coverage.

Figure 5: Lead management process catalog

Lead management metrics

Process metrics across the different insurance products and business units can monitor and track the defined performance gains in lead management after migrating them on a BPM platform:

Process	Sub-process	Performance metrics	Description
Lead management	Quote inquiry	Quote counts by servicing channels quote processing times	These metrics measure average quote numbers, time taken to process quotes by servicer.
	Premium calculation	Premium value by product types and agencies brokers	This metric measures premium calculations by line of business (LOB) and product types. It can be spliced by quotes and binds.
	Bind policies	Bind counts by servicing channels and bind processing times	These metrics measure average bind numbers, time taken to process quotes by servicer and agencies.
	Policy creation	Conversion rate	This metric measures conversion counts of quotes to binds, this measure can be viewed against servicing channels such as agencies, call centers, and brokers.
	Renewals	Renewals retention	This metric measures the policies which get retained and renewed successfully.
	Premium reviews	Premium changes	This metric measures cross-sell / upsell results against agencies / call center reps.
	Endorsements	Premium amount	This metric measures the average documentary changes per policy.

Figure 6: Lead management process metrics

The lead management conversion rate metric can be analyzed by a further breakdown of the conversion failure numbers. You can splice the data based on failure to bind against the rejections by agents. The rejection rate can be analyzed to check reasons for rejection and to eliminate false positives such as incorrect party data or credit scoring.

The agent's resolution of lead work items can be analyzed by work item type to calibrate business rules, which can route the tasks to call center representatives, thereby freeing up agency time to focus on high-value leads.

A substantial part of the agent's time is consumed daily in paperwork and archiving / retrieval operations. Process automation capabilities will reduce data entry and retrieval times while servicing leads and increase the bind ratio significantly.

This can also avoid the time lost in errors with respect to policy laws and interpretations as business rules govern the presentation and entry of data based on the policy type and prospect background.

BPM-enabled underwriting

The underwriting processes are rules- and decision-intensive. The objective for underwriting is the automation of simple and medium complexity premium calculations. Complex quotes and endorsements require routing to specialized underwriters. These routing rules may be decided on product lines, customized products, value of the product, and client types.

A BPM platform can enable underwriters with guided prompts and risk models to evaluate risk under party and policy factors and then transform the process into rules-driven decisioning.

This will lead to a reduction in risk / premiums leakages along with reduction in cycle time. Compliance rules across products and states can be enforced while creating customized insurance product packages. For example, data for an auto policy can be pre-input while evaluating a boats application.

The underwriting components of a BPM solution in underwriting will typically include modules in Figure 7. BPM components for underwriting use cases usually include a predictive scoring model calibrated with risk selection, dynamic updation of underwriting business rules to validate, prompt underwriter entry, and overall risk validation. The process rules component drive requirements for an assignment predicated on expertise and current workload.

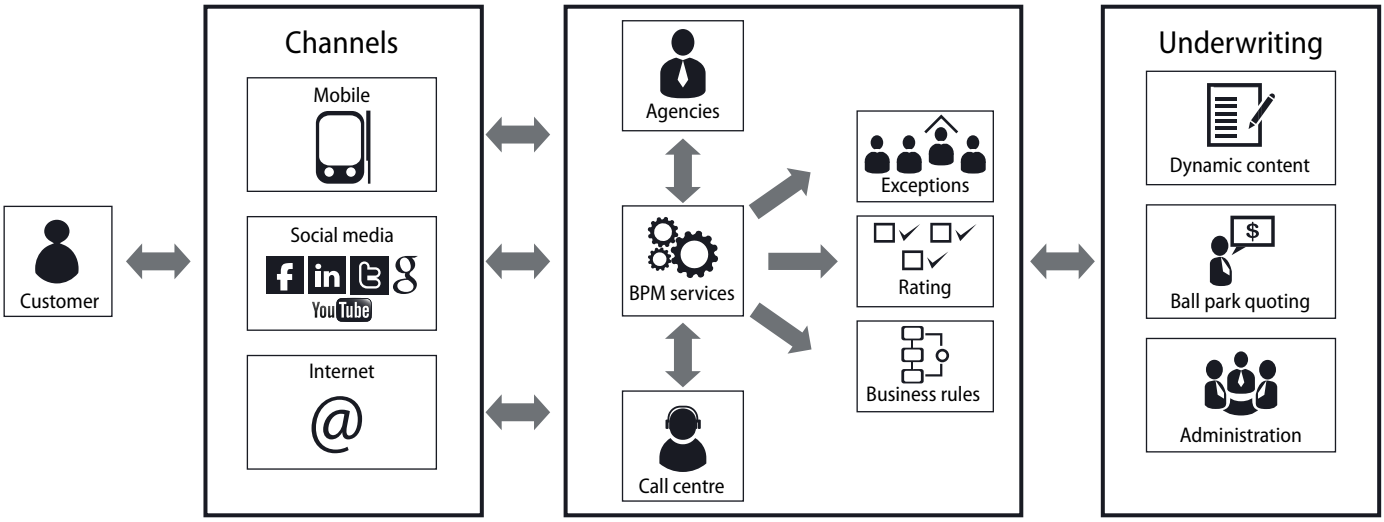

Figure 7: BPM-enabled underwriting

This will result in reduced backlogs on critical resources in activities from submission, eligibility data gathering, risk evaluation, underwriting, negotiation, and binding across product types in product policies.

Farmers Insurance Group realized the reduction of underwriting process times from two weeks to an average of 15 minutes. It also witnessed a 50 percent increase in combined policy sales due to more effective underwriting performance.

An illustrative subset of underwriting process catalogs is described below

Process	Description	Sub-processes	Description
Rating acceptance	This sequence of activities involved in the process of underwriting quotes, renewals, endorsements for multiple product types with manual escalations, and to result in estimated premium for the quote / policy.	Information assessment	This process accepts a validated quote from lead management process and determines the policy pricing model to perform the premium calculation.
		Premium calculation	This is used to calculate the premium and will be largely automated. It can provide the input to a third-party component based on the insurance products being underwritten.
		Case routing	This process will be triggered for certain product types, complex events, and quote data factors for manual decisioning by underwriters.

Figure 8: Underwriting process catalog

Underwriting metrics

The metrics involved in underwriting can differ based on the complexity of the insurance products involved. Products which have multiple coverage areas can have multiple underwriting teams involved. The risk metrics for these assume specific importance to determine the organization's exposure. The process metrics in Figure 9 can determine the performance gains in underwriting after migrating the processes on a BPM platform. The underwriters will have control to analyze and simulate how rule changes can influence the accepted and declined policies, and coverages against exposures.

Process	Sub-process	Performance metrics	Description
Rating acceptance	Information assessment	Error count	Average amount of errors such as insufficient background information, inconsistent information.
	Risk evaluation	Premium valuation risk indices	Total premiums quoted and against risk indices by LOB and agencies.
	Case routing	Case count response time	This metric measures cases being routed through manual work flow and processing times.

Figure 9: Underwriting process metrics

Derived process metrics such as accident-year loss ratios, retention ratios on renewals, average cost of acquisition, average cost to remarket, average cost to renew, and premium value / change can yield risk engineering insights and unearth technical leakage occurrences. The technical leakage can be due to underwriting errors in the information gathering, risk assessment, coverage, and pricing activities.

They can indicate whether adjustments need to be made to the risk rating tiers based on the policy and claims associated with the policy. The percentage of cases which fall outside the automated risk guidelines are routed to manual underwriter decisioning and are handled by underwriters with appropriate auditing and decision codes.

The metric of decision codes count can determine whether new underwriting rules need to be calibrated for the policy product types.

BPM-enabled claims processing

Claims processing is a critical function for maintaining high customer satisfaction levels. Lengthy cycle times and lack of visibility into the progress can impact customer retention and customer feedback.

The claim processes can span activities and information across many independent applications. This leads to lack of end-to-end visibility and lengthy cycle times. The status of the claim might not be viewed by the customer / third-parties at the activity level. Self-service options for customer can be limited.

Processing agents' time can be consumed significantly in interactions with brokers and claims adjusters, which need to be shared with relevant parties. Addressing these challenges can be difficult in the organization's existing applications.

Processes involved in claims processing typically involve:

- Workflows
- Processing of events by claims adjusters and agents
- Handling claims details
- Resolving the claim to the customer's satisfaction

Once onboarded, the claims department can initiate and receive claims notifications along with status tracking claims cases.

The claims cases can be assigned / reassigned to claims adjusters through workflow services with relevant data on policy and party retrieved to assist in claim adjudication. Claim codes will be aligned with premium / policy codes to facilitate reconciliation.

Monitoring dashboards will provide visibility on the execution of process steps and activities at an individual and aggregate level to ensure that customer claims are resolved to their satisfaction within timelines.

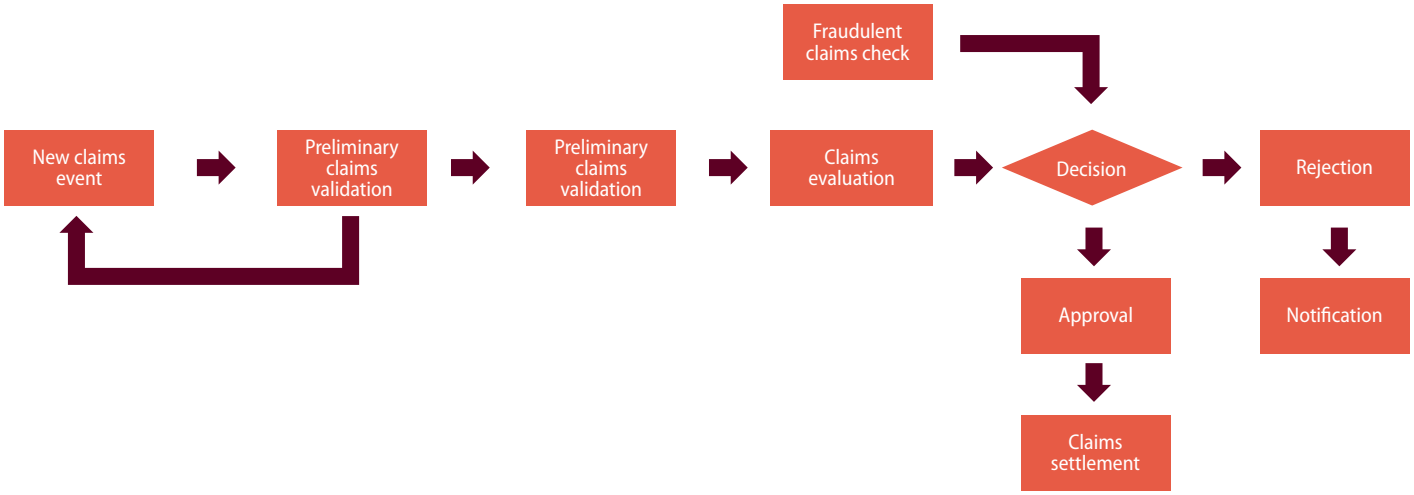

Figure 10: Claims processing workflow

The first notification of loss process can be modelled with intelligent data capture for FNOL, NOL, and FNOI, with dynamic flows and forms that respond to the customer's needs. It can integrate with the triggering of claims events originating through multiple channels from traditional telephone and mails to online and mobile avenues.

Claims processes require policy and party information for claims adjusters to service claims accurately. The data to process the claims can be retrieved from different formats such as PDF, flat files, mainframe formats, and databases for adjuster decisioning.

Additionally rules can flag and trigger claims fraud identifications process to identify potential fraudulent claims events.

Allianz Ireland, the country's second largest insurer migrated its claims processes onto a BPM platform and achieved an increase in efficiency up to 80 percent. Customers are now able to obtain the settlement in days. Allianz realized the ROI in six months instead of the target 18 months. A key aspect of the solution was the dynamic allocation of claims to the available agent.

An illustrative subset of BPM process catalogs for claims is described below

Process	Description	Sub-process	Description
Claims acceptance	This process is triggered by the filing of a claim by a customer.	Notify claim	This process is triggered when the customer raises a FNOL, NOL, FNOI claim event on a policy.
		Record loss details	This process is used by the insurance carrier to record the loss details for a particular claim.
		Verify policy coverage	This process is used to verify whether the claim falls within the scope of the policy.
		Claim status	This process is used to enable the agent to view all current and historical claims against the policy.
Claims verify	This process is used to handle fraudulent claims.	Notify claim analysis	This process is used to do a preliminary claims check.
		Fraudulent claim trigger	This process is used by the insurance carrier to validate a triggered claim alert for fraud and decision.
			This process is used for post-fraud detection activities including notifying and post processing.

Figure 11: Claims process catalog

Claims processing metrics

The below metrics can determine the claims processing performance and identify activities and resource bottlenecks preventing peak performance. Once appropriate measures are taken to reduce performance delays, the ROI can be computed in the difference of the measures in the pre-BPM and post-BPM-enabled processes.

Process	Sub-process	Performance metrics	Description
Claims acceptance	Notify claim	Claims events	This metric measures the count of claims processed by the carrier. It can be pivoted across multiple factors such as open / close claims, product type, and LOB.
		Claim status counts	Business can view the count of claims across different statuses.
		Rejected claims	Number of claims in rejected state. This can be pivoted by rejection reason codes.
	Record loss details	Loss assessment	Loss assessment on the claims. This information can be pivoted against policy types, geographies, seasonal, or combination.
		Loss ratio	Determining estimated loss against earned premiums.
		Subrogation count	Count of claims which carrier can recover. This information can be pivoted by value.
			Number of claims which are in dispute.
		Average time	The average time taken for the claims settlement. This can be measured against respondent times and multiple sub-claims types.
Verify fraudulent claims		Fraudulent claim count	This metric measures the number of claims which is decisioned as fraudulent.
		Number of rejected claims	Number of rejected claims. This can be pivoted against the fraud status counts.

Figure 12: Claims process metrics

The number of approved and rejected claims metrics can be further analyzed against pivots determinants to show patterns related to coverage and demographical party information. This can enable development of newer insurance products with specific or more flexible coverages.

Additionally, it can track the status of claims against claims adjusters with customer feedback to arrive at the performance SLAs with audit and tracking notes. Metrics such as average time to settle a claim will be specific for each product and policy type, and LOB since different policies may vary greatly in terms of how long it takes to settle.

A claim can be a simple auto claim or it can be associated with medical claims against the same policy. The time to settle a medical claim might be different when compared to an auto claim. Rule-driven decisioning will reduce the scope of errors, which can result in financial impact on both the carriers and customers.

At a derived metric level, metrics such as average cost per claims over time and other indices can enable new insights in policy coverages and pricing. This insurance metrics measures the change in average cost per claim over time.

The figures of disputed claims and fraudulent claims can be tracked to identify patterns. These patterns can yield breakthroughs by arriving at measures, which can minimize fraudulent claims payouts and litigation costs.

Conclusion

The implementation of BPM solutions for process catalogs in lead management, underwriting, and claims functions will provide significant business benefits and ROI.

The operational nature of these process flows make them highly attractive to migrate to a BPM platform. These process flows are high in volumes and need skilled human interaction for decisioning and routing.

The challenges such as reducing lead times, consistency and flexibility in underwriting, and reducing claim processing times can be addressed through effective implementation of BPM solutions. These solutions provide the capabilities to simplify and standardize the core processes.

With standardized workflows, the solutions support dynamic management of tasks, activities, and human and system resources providing the customer greater visibility, while reducing the cycle times.

The success stories of insurance carriers who have adopted BPM show the way for the rest of the industry to embark on the creation of a BPM roadmap for their organizations.

The insurance carriers will then realize the business benefits of reduced operational expenditures, productivity gains, business insights, and realize customer and employee delight thereby driving profitability.

About the author

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Dev Menon is a BPM and SOA consultant. He has extensive experience in financial services and insurance domains. He has executed large-scale BPM and SOA projects for Fortune 100 clients in consulting and delivery roles.

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Effective implementation of BPM can lead insurance carriers to the path of profitability and maximize stakeholder delight

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