Best Technology - Enabled Process Improvement

Project Puccini - PEX Excellence Award 2015 Finalist

Team:

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Company Description

Generali PPF Holding provides know-how, professional and operational support for insurance companies in 10 countries – Bulgaria, Croatia, Czech Republic, Hungary, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia.

Vital Statistics

- Leading insurance group in Central & Eastern Europe
- Over 12 500 employees with 15 000 tied agents and 11 million clients
- € 3.1 billion gross written premiums in 2013
- A joint venture of Generali Group (6th largest insurance group globally) and PPF Group

Strengths

- ✓ Knowledge organization with leadership approach
- ✓ "One Stop" total insurance solutions & services provider
- ✓ Customer centric model embracing service excellence

Challenges

- Brokers' pressure for increasing commissions
- Constantly changing compliance requirements
- Drive to improve efficiency and profitability
- Aligning Corporate Insurance business practice with global Generali Group policies/rules

Business Process Excellence

(1) Large scale Project Puccini was initiated to boost process visibility & efficiency for Corporate Insurance Underwriting across member companies in Central & Eastern Europe

(2) *When:* March 2011 - to date

(3) *How:* Bizagi BPMS; core project team consists of 32 business and 13 IT personnel across 5 member companies within 4 countries

FUNCTIONS >	Multi-company and multi-language support for most complex insurance processes:
Underwriting & Policy Admin: re-insurance, loss control & risk management , product management

PROCESSES >	New Policy Underwriting, Pipeline Management, Renewals, Change Policy, Document Management, Manage Partners, Risk Management, Reinsurance Support

CULTURAL IMPACT :

❖ *Standardization of practices across member countries (a shift from paper to automation)*

❖ *Increased customer satisfaction due to faster response times*

❖ *Huge boost to employee productivity and morale*

❖ *Knowledge and experience sharing across member companies (best practice propagation)*

Project Context

Problem ›
High-Insurance Risk exposure, high-complexity processes carried out manually and on scattered systems impacted productivity & speed of delivery for 4,000 quotes handled each month which materialises into over 7,000 policies annually. The work involved is complex, based on staff expertise and experience, with policies tailor-made for specific clients' needs. Large risks exposure is often covered by the insurance company in partnership with other coinsurers and reinsurers.

Scope ›
In March 2011, after three months of development, the first version of the company underwriting process was delivered in two member companies. Since then, project scope has widened significantly to include the whole lifecycle of insurance policy and far more complex deployments in our largest member country, Ceska pojistovna in the Czech Republic.

To date, 51 processes have been delivered in 4 countries in 5 languages. Our BPM solution has proven cost-effective, scalable & highly functional, delivering agility within our constantly shifting regulatory environment.

Project Impact ›
- ✓ Structured processes for the complete insurance policy lifecycle
- ✓ Reduction in quote/offer preparation time by 40%
- ✓ Most complex Renewals preparation time cut from 1 day to 1-3 hours

Technology Use

Data-centric Process Management System

- Built on core business logic
- Entities are defined, stored and reused
- Underwriting Process solutions "rewrapped" for other member countries
- External data is virtualized enabling efficient "local" handling and fast delivery

BPMS Functionality

- ✓ Control and visibility; graphical real-time monitoring (who, what, when, where)
- ✓ Alarms and notifications; generated by exceptions to SLAs or non-compliance
- ✓ Business data design: enterprise class modeling, reusable in applications & processes
- ✓ Performance analysis and reporting; graphical reports with deep insights into operational performance by process and activity
- ✓ Process versioning including sub-process, activity forms & support for process clone and copy
- ✓ Auditing and traceability (who changed what and when);
- ✓ Workload routing & balancing; graphical editor to define work allocation rules
- ✓ Business rules; graphical design of business vocabularies and policies

Technology Use

Highly usable & accessible

- Multilanguage, out-of-the box web portal available on virtual desktops (Citrix + IE/Google Chrome) for 400 business users in 5 Generali companies
- Automated Case Management unites underwriting process across member companies AND within Generali PPF Holding Corporate Insurance department

Data-centric System

- ✓ BPMS architecture delivers full data access across applications and processes allowing us to retain the core business logic and quickly adapt it for the localized needs of member countries.
- ✓ With Bizagi's data virtualization capabilities, data can be handled as if it was local meaning that users don't need to know the physical data location whether it is registries, databases, policy admin systems and third party geocoding.
- ✓ It is this data centricity that delivers business agility in the development stages and enables case management.

Underwriting Process
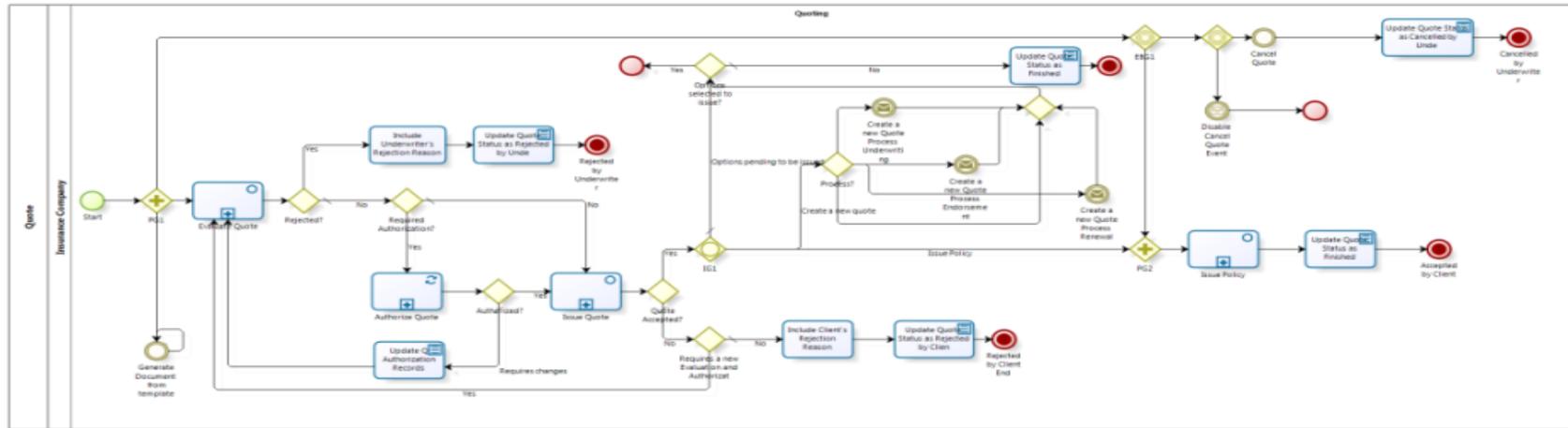
Processes are connected across several departments and authorization levels: The underwriting process is managed through an automated case; items flow across several company departments within a particular member insurance company (Underwriters, Loss Control Engineers, Reinsurance Specialists, and Product Experts) as well as within Generali PPF Holding Corporate Insurance department.

Support for parallel offer preparation: offers can now be prepared in parallel via multiple sub processes, each part being prepared by a specialized underwriter. Once the quote preparation process is complete and the clients' business requirements have been set up, one or more quotes can be merged into one or more insurance policies. Alternatively, offers can be split into multiple policies (i.e. "policies" sub processes) through automated procedures.

Process Architecture

We used process design principles based on RIVA method[1] with BPMN 2.0 as the implementation standard. The RIVA method identifies processes as lifecycles of Essential Business Entities. Our Process Architecture:

Process Entity	Process (Entity life cycle)	Collaborative Processes
Coverage Request	Manage Underwriting	Quote, Manage Opportunities, Manage Partner Account
Quote	Quote	Evaluate Quote, Authorize Quote, Issue Quote
Policy	Issue Policy	Quote, Finalize Policy
Insurance Partner	Manage Partner Account	Manage Underwriting, Quote, Finalize Policy
Insurance Opportunity	Manage Opportunities	Manage Underwriting, Manage Partner Account
Product	Prepare Product Quote	Quote
Document	Manage Documents and Communications	Manage Underwriting, Quote, Finalize Policy

BPMN 2.0 allows business needs to be captured and processes to be executed according to desired behavior.
The process/application design and implementation consists of six definition/implementation steps:

- Process maps (51 processes, 713 process elements implemented)
- Data models (218 master entities, 209 parameterizations)
- User interfaces (2300 user forms including sub forms)
- Business Rules (6100 business rules and expressions)
- Participants (21 business roles, 11 user skills, 28 user groups and 27 locations)
- Integrations (12 integrations/interfaces)

[1] See e.g. the book Ould, Martyn A.: Business Process Management: A Rigorous Approach.

Case Management

The advantage of the selected BPMS is that it is fully data-centric; business entities and their relationships are defined and stored in common Entity Relationship fashion (we work with MS SQL Server and Oracle). Within this environment, Case Management was implemented via standard BPMN building blocks, such as inclusive gates, signals and standalone sub processes.

Infrastructure and Integration

The solution is built upon Bizagi BPM Suite Enterprise.NET 9.1.8 running in a virtualized cloud environment. The underlying infrastructure: MS Windows 2008 R2 Server, IIS 7.0+.NET 2.0 and MS SQL Server 2008 R2.

Our solution is integrated with several internal systems including: existing policy administration; registry of corporate entities; and database of country addresses. Integration is delivered via web services, data virtualization/replication, email support, LDAP, Component Library, to name just a few:

- o Replication and virtualization of data entities enables integration to historical insurance policies data
- o The historical policies are fed from flat files via SFTP batch job into the source databases consuming various Web Services exposed via participating insurance companies' ESBs
- o Java EE component runs in JBoss AS 7.1 container connecting to Lotus Notes application via N-RPC/DIIOP interoperability protocol
- o Online connection to the national corporate entities registry in particular country is accomplished via HTTP protocol and XML messages
- o Access to third party geocoding (addresses, flood zones) database
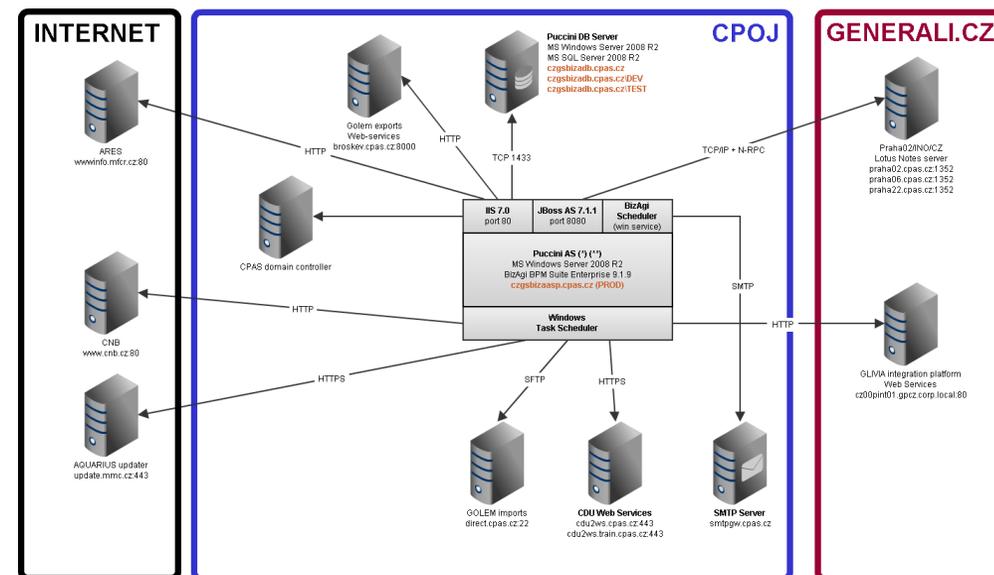
Business Impact: Value Stream

Customers, Sales & Brokers

Able to view, at a glance, all the opportunities in the sales pipeline and can initiate business directly from the process:
- ✓ Easy to use, real-time reports
- ✓ Integration with the brokers' portal, direct entry of requests for coverage, real time quoting by Generali

Generali Managers

Better decision making through process analytics, real-time & historical performance, business process management with state of the art BPMS

Generali PPF Holding (Shareholder)

Able to view and manage processes in real-time and keep it in line with Generali Group standards

Supervision, audit and compliance

Processes are visible, documented and managed:
- ✓ Support for referrals' activities from member companies to Generali PPF Holding Underwriters
- ✓ BPMS provides detailed activity log making clear who made what, and when

Project Vision & Collaboration

Prior to implementing BPMS:

✓ Processes were mapped & best practice from several member companies outlined

✓ Business requirements defined & consolidated by insurance business owners

✓ Agile methods delivered first process in 4 weeks for close alignment of process & technology; the requirements were then amended for continuous improvement

Employees, Operations & Engagement

Step-change to automation has increased **employee engagement** as shown by business user-led initiatives:

✓ In the past each coverage and insured item were entered separately into the legacy system. New "Matrix entry" designed by underwriters allows for the insured items to be combined with coverage, deductible, limit, location, coinsurance and reinsurance attributes and the system automatically generates the correct insurance coverage combinations.

✓ Auto generation of Outbound documents for underwriters based on user-designed tailor made templates

✓ Support for full Insurance Policy sales value stream (including Brokers portal integration) has been designed by business and IT team in Generali Hungary. BPM application now provide seamless support for Brokers entry of requests for coverage and Generali Hungary quoting.

Interdepartmental cooperation – the facts:

✓ **2-4 senior underwriters** from each member company involved in specification phase, Guarantors assigned to each insurance line of business during application development and test

✓ **Weekly** continuous delivery and process improvements based on business users' specifications

✓ **2,500 business user requirements** captured across the entire project

✓ Project aligned with **Generali business strategy** including process standardization, automation, best practice sharing

Sustainability & Governance

Project implementation will end according to plan by the end of 2014. Starting 2015, processes will be supported by application maintenance delivered by a centralized BPM team. Process Improvement will go on in Agile development Continuous delivery mode with direct business involvement. Change Management Board (CMB) is formed and led by Generali PPF Holding Head of Corporate Insurance Underwriting and consisting of top business managers from member companies.

Employees & Operations

The impact of moving from paper-based systems to automated and efficient processes has made employees more productive and significantly improved morale. Prior to implementing BPMS, individual member companies' practices were mostly local. Now, this information is made available centrally, enabling business people in different countries to learn from each other and share know-how.

Continuous Delivery across several Member Companies

➢ IT Infrastructure is provided as a service from Generali PPF Holding private Cloud
➢ Time to market: 1 week
➢ IT departments involved: Infrastructure, Operations and Development
➢ Business department involved: Underwriting, Reinsurance, Sales, Risk Management and Product Management

Project Execution

Value and opportunities

Benefits of BPMS has seen extension of process automation into other **departments** (Sales, Reinsurance, Risk Management & Loss Control, Product Management) and **divisions** (Infrastructure, Operations, Development).

Deep **understanding of processes and technical systems and standardization** enabled by:

o Creation of detailed Functional and Technical specifications including detailed process description (process maps, data, forms, business rules, performers) and interfaces definitions

o BPMN standard allowing for easy process discovery and development made processes visible and well-documented across all departments

✓ 1st version for two member countries implemented on time and within budget

✓ Solution for largest member company, Czech Republic (Ceska pojistovna): extension of original scope introduced delays as complex integration points were added. Legacy system integration and full scale insurance policies technical migration were delivered in 2013. Since then, the project is back on track and within the schedule and budget.

✓ Parallel implementations in Generali Poland, Slovakia and Hungary all implemented on time and in budget

Overall project cost: €1.5M across 2011-14; €400,000 are technology costs, €1,100,000 are personal costs

Solution cost 50% of competitive offerings; a figure likely to rise to 90% as the expected five remaining member companies of Generali PPF Holding use the platform.

Change Management

Change Management is an organic part of the Agile development and Continuous delivery process. This ensures the benefits of **long term process improvement** and **close feedback with business** users:

- **Steering Committee:** consists of Chief Operation Officer (COO) of Generali PPF Holding and COOs of member companies. The steering committee approves overall scope and prioritizes major project tasks.

- **BPM Central Team:** dedicated 6 member team working on support, reuse and best practice sharing. The Team managed over 8400 entries into the **Development/Change Management** Process.

The Development/Change Management Process support is implemented in the same BPMS environment:
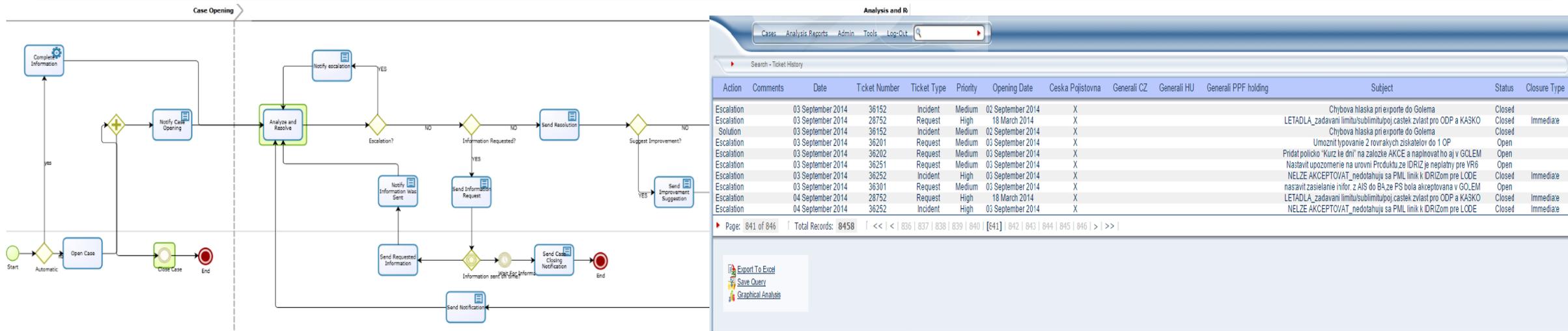
Summary

1. Following successful deployment and delivery, Project Puccini has come to life and matured into **full policy administration** while BPM extends beyond Corporate Insurance.

2. To date, 51 processes are in 4 countries in 5 languages. Our BPMS has proven cost-effective, scalable & highly functional, delivering agility within our **constantly shifting** regulatory environment.

3. **Quote/offer preparation time reduced by 30-40%** . The most complex policies (50+ coverages, 100+ insured locations) renewal required **more than 1 day**, this time was cut to **1-3 hours**.

4. BPMS initial cost was 50% of competitive offerings; a **figure likely to rise to 90%.** System architecture enables reuse, meaning multi-country, multi-language deployments become more effective with scale.

5. **Case Management** implemented goes far beyond "linear processes flow" and enables inter-company, inter-departmental business communications, including repeated feedback loops.

6. **Data Centric system** provides out-of-the-box real time process and business metrics.

7. Agile Development and Continuous Delivery have proven highest **value for money**.