White Paper

A Modern Platform & Emerging Technologies, with Power BI and Wearables

The Impact on Claims Performance

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Introduction

Today, a typical claims department has more work and increasingly more data to manage than in years past. The sheer volume of transactions and a lack of automation can prevent claims staff from being able to focus on the tasks that truly impact claims costs, outcomes, and customer service.

Many insurance organizations recognize that their claims departments are hampered by inefficiency and are looking to modernize their operations. In this white paper, we examine the factors that are driving organizations to update their legacy systems; outline key criteria that define a modern platform, and introduce two new and emerging technologies that can further impact claims performance:

- The first area is Business Intelligence (BI) with the introduction of Power BI. These sophisticated BI capabilities deliver reports, graphs, and charts at amazingly fast speeds. Data is rendered dynamically with flexible viewing options and the ability to make changes on the fly. The result is that organizations are now empowered with insights to make more informed and strategic business decisions.

- Another development is the emergence of wearable devices. These gadgets and their various applications are just beginning to be realized, but by all estimates, they will have far-reaching implications for insurance programs. Organizations should keep an eye on this area, monitoring how these devices can potentially change the way we investigate accidents, prevent claims, and minimize risk in the future.

Business Drivers to Modernize

An outdated IT platform can be quite costly to maintain, consuming as much as 80 percent of IT budgets. Antiquated systems often lack contemporary functionality, forcing insurance organizations to resort to labor-intensive workarounds. For example, legacy systems have a cumbersome data analysis process, causing IT departments to spend significant time and resources generating queries and reports. Since first attempts rarely yield useful insights, multiple queries are required before an organization can obtain the right information.

Many insurance organizations are undergoing a massive effort to rethink their IT infrastructure and how it can support and complement their human expertise, as well as automate business processes and establish quality controls. An

important step in this process is defining, or recommitting, to the organization's vision, mission, and core business objectives.

Change is the only constant, so as insurance organizations embark on ambitious modernization projects, they must ensure that the new system can support their ongoing evolution. For example, technology should support continued compliance with regulatory requirements and new legislative mandates. Finally, insurance organizations also want to enhance customer service with technology that helps them to respond to customers as claims are reported, and to deliver personalized service and communication throughout the settlement process.

Criteria for a Modern Platform

Since organizations need an IT infrastructure that accommodates changing business needs, it's critical that a modern platform meet two key requirements—provide in-depth claims-handling functionality and offer significant system flexibility—both factors help organizations deliver a unique and highly sophisticated claims strategy.

From an architectural standpoint, a modern platform must scale well to support an organization's need to grow, expand, and launch new products and programs. A modern architecture should leverage business intelligence (BI) tools, so insurance organizations can analyze data and identify opportunities to improve productivity and overall profitability. Business users, rather than busy IT staff, should be able to configure and fine-tune workflow for enhanced efficiency and the timely application of specialized claims experts, such as investigators and subrogation specialists.

Other key criteria include data warehousing and a service-oriented architecture that brings together data, systems, and people on one integrated enterprise platform. Central to inter-connectivity is the provision of a wide range of integration options and interfaces with other insurance solutions, as well as internal and external stakeholders.

SIMS Claims from Systema Software

To meet the industry's need for a modern claims platform, Systema Software has designed and offers the newest and most advanced claims management solution: SIMS Claims™.

Many insurance organizations have been impressed with the completeness of the SIMS product and its ability to adapt to an ever-changing insurance environment. The system can be configured to support a company's evolving

business strategy and continued differentiation in the market. SIMS meets these needs by providing:

- *Extraordinary Functionality* – SIMS offers a robust set of out-of-the-box features that can handle any claims environment.

- *Extremely Flexible* – SIMS provides a high level of flexibility. Business rules are easily configured for task and workflow automation. Organizations are able to configure and modify data fields, screens, security, dashboards, and reports to meet their unique requirements.

- *Superior Support* – Unlike other vendors who outsource support, Systema Software handles all technical support issues in-house. This means support is provided and guided by system experts.

- *Continuous Innovation* – Systema Software continually invests in R&D and the SIMS product roadmap. The company values client input and uses it to drive product development. As a result, its customer base receives the mutual and cooperative benefits of all client-contributed ideas. Systema prioritizes projects and provides new releases twice a year.

- *Highly Scalable* – SIMS Claims scales to handle large volumes of transactions and a large number of users efficiently and effectively.

- *Seamless Integration* – SIMS was designed to fit any insurer's enterprise. It easily integrates with other applications, using pre-built connectors, batch processing, Web services, and other custom interfaces, which help to simplify enterprise-wide integration and interoperability.

Emerging Technologies

As insurance companies reengineer and automate operations for optimal efficiency and outcomes, they must keep an eye on two key developments—Business Intelligence (which includes Power BI) and Wearable Devices.

Business Intelligence

Business Intelligence (BI) is an umbrella term used to refer to a variety of tools designed to analyze raw data. BI as a discipline is made up of several activities:

- *Data Mining.* This process analyzes data from different perspectives to uncover trends and relationships between seemingly disparate pieces of information.

- ■ ***Data Analytics and Predictive Modeling.*** Data analytics can uncover meaningful patterns, while predictive modeling is a subset of analytics that identifies relationships that ultimately help to predict outcomes.

- ■ ***Dynamic Reporting.*** With dynamic reporting, organizations can "drag and drop" new data elements and dimensions into their analysis, drill down or up into hierarchies of information, and "slice and dice" data to get to the kernels of information that drive meaningful program improvements.

These capabilities can improve an organization's ability to make more informed decisions and better manage risks. In a 2013 survey of North American insurance professionals, 82% of participants said they used BI capabilities, but the most common application was in the areas of pricing and underwriting.

The industry is just beginning to expand its use of BI tools, but it's still not a standard practice in claims management. In addition, BI continues to evolve to offer more sophisticated capabilities, and organizations should monitor developments, such as Power BI.

Power BI

Power BI is a cloud-based service that works with Excel to provide a complete self-service BI solution. With both Excel and Power BI for Office 365, organizations can give their staff powerful ways to work with claims data.

Using Excel, they can visualize data in new and exciting ways in order to gain valuable insights. Insurance organizations can easily deploy collaborative environments using Power BI sites to share and view reports. Imagine being able to quickly set up a website that offers sophisticated reports and charts, accessible to users who are invited and designated with rights and authority to view this information.

The Q&A feature is yet another powerful aspect of the tool, which allows users to type a question using everyday language, just as they might enter for a Google search. In response, Power BI provides an interactive chart or graph as the answer. These visuals can change dynamically as users modify the question, for example, by typing in additional parameters. Finally, since the tool supports HTML5, users can access reports via any mobile device from anywhere.

To address the industry's needs for BI tools, Systema Software offers SIMS Insights, a module that includes sophisticated BI and Power BI capabilities.

__Wearable Technology__

Now that we've discussed BI as a tool that is impacting claims in today's current market, we also wanted to outline an exciting, new area to watch—wearable technology—which we expect will have far-reaching implications for insurance programs.

Wearables are essentially computer-powered devices that can comfortably be worn by consumers, and are capable of collecting, storing, and transmitting valuable data points.

The first wearable was introduced in 2006 when Nike and Apple teamed up on the Nike+iPod Sport Kit. The Sport Kit used sensors in Nike shoes to track and transmit performance measures—such as distance, average speed, and calories burned—to Apple products.

Although wearable devices first gained traction as fitness trackers, including devices like Fitbit and Misfit, they're quickly advancing in capabilities, and many experts forecast a transition from fitness to healthcare. In the near future, wearables could predominantly be used to monitor vital statistics, such as blood pressure, body temperature, heart rate, respiratory rate, and sun exposure.

Wearables could then be used to transmit a snapshot of health and fitness information to physicians, emergency response teams, hospitals, and personal trainers. In fact, Apple is already making plans for such a scenario, extending its strategy beyond just Apple Watch to include HealthKit, a centralized hub that will allow other devices and apps to share data in interesting ways. Apple has also partnered with the Mayo Clinic and leading health record company, Epic Systems, in the hopes of one day making this data available to doctors.

Technology giants like Samsung, Google and Microsoft have also entered the wearables market, investing significant research dollars and creating their own data hubs—such as SAMI, Google Fit, and Microsoft Health, respectively.

Consulting services may arise around wearable data troves, such as medical consultation, fitness coaching, and weight loss training. Software companies may strive to automate insights—beyond just motivating a user to take more steps to reach a daily goal—and cloud-based software could consolidate various wearable data, making it available for deeper analysis.

Here are some wearable scenarios to consider:

- Physicians are already beginning to see the impact with wearable data delivering insights into chronic conditions, such as high blood pressure. Patients commonly bring cell phones or printouts of blood pressure readings to share with doctors, who can then see if the condition is under control or if patients require modifications to their medication.

- In a recent survey, Towers Watson and the National Business Group on Health found that 76% of employers surveyed were exploring the use of personalized digital health technologies, including mobile health applications, wearables, and social media to encourage greater physical activity among employees. It's anticipated that a focus on becoming healthier will enable employers to realize gains in productivity, as well as lower healthcare costs.

- Field claims professionals could use smart glass products, such as Google Glass, to capture near real-time assessments of losses in personal or commercial lines, and significantly speed up the claims process, as well as making it more accurate.

- Smart shirts may evolve to use sensors to track heart rate and respiration rate, alerting doctors if patients are about to have a heart attack or stroke.

Google Glass has the potential for even more unique applications. Currently, through its Explorer Program, beta versions are available to developers but each carries a hefty $1,500 price tag. Some apps currently in development include the following:

- One firefighter in North Carolina's Rocky Mountain fire department developed an app that displays incoming emergency dispatches, maps where fires and other emergencies are located, nearby fire hydrants, and building floor plans, which could be accessed hands-free as firefighters enter burning building. They could also gain access to extraction diagrams to help free accident victims who trapped inside severely damaged vehicles.

- DriveSafe has also developed an app to alert drivers when their eyes begin to close. It's still being fine tuned, but could significantly benefit drivers who may be on the road for long shifts of 12 hours or more a day. There's been lots of interest from insurance companies, as well as software and hardware developers for the transportation industry.

It's anticipated that wearables could be used along with other emerging technologies:

- Robert Wilson, president of WorkersCompensation.com, anticipates wearables enabled with Radio Frequency Identification (RFID) could provide accident investigators with important additional information. For example, an employee could have been running when he slipped and fell, or perhaps an employee who claims to have strained his back on the loading dock may have actually been sitting idle in the break room. Wilson anticipates that biometric sensors could be cross referenced for other vital statistics at the time of injury, such as a worker's level of stress, to provide a broader view of an accident than ever before.

If wearable technology offers a healthier and more productive workforce, adoption could continue to rise. By 2018, the wearable market could reach 130 million units sold with a market value of $6 billion, according to market researcher IDC. In the meantime, key concerns must also be addressed, including:

- *Privacy.* The Health Insurance Portability and Accountability (HIPAA), which protects patient data and medical records, does not yet apply to data from wearable devices.

- *BYOD Policies.* Similar to cell phones, companies will have to consider including wearables in their Bring-Your-Own-Device (BYOD) policies to address issues, such as security for the device data and preservation and collection of electronically stored information, if a regulatory request is issued.

- *Abandonment.* A recent poll by PricewaterhouseCoopers found that one-third of users who bought wearable devices abandoned them after six to 12 months. A key to ensuring continued use is to create a user experience and perception of ongoing value and benefits.

In the meantime, organizations should continue to monitor the use and benefits of these devices, and how it could impact employee health, wellness, productivity, and healthcare costs—as well as workers' compensation claims management and investigation.

Key Benefits to Modernization

As more organizations look to leverage a modern claims platform and to incorporate emerging technologies, they may be able to realize extensive benefits that include the ability to:

- *Reduce claims costs.* Modernization enables an organization to better manage claims costs and outcomes. Organizations will have the BI reporting tools to identify high-cost areas and leverage opportunities for savings.

- *Leverage data.* With dashboards, BI tools, and dynamic reporting, modern platforms help facilitate both a big-picture and granular view of claims. With this understanding, organizations can make business decisions that impact the bottom line.

- *Introduce new products.* When organizations introduce new insurance policy products, they must configure operations to handle associated claims. A modern system can help make updates to the claims side quickly and easily.

- *Enhance customer service.* A modern platform helps organizations facilitate the delivery of timely, responsive, and personalized service to their customers, which can boost satisfaction and retention.

- *Improve operational efficiency.* Organizations increase the efficiency and productivity of claim departments, particularly with the use of business rules for task automation and document management for paperless claims processing. In this area, organizations often see a significant return on investment.

- *Leverage IT benefits.* Due to the superior design of modern systems, IT departments benefit from the ease of maintenance, security, and upgrades. Staff members are freed up to spend more time on value-added projects, such as process enhancements.

- *Ease the burden of compliance.* Continuing to comply with new and emerging regulations can be an administrative and financial burden. Compliance can be complex, but modern platforms automate, streamline, and facilitate this process for greater ease and cost savings.

The Future of Claims Technology

Insurance leaders are striving to continually improve their claims operation. Today, leveraging a modern platform and emerging technology is the primarily means to that end. The IT strategies discussed in this paper are making it easier to administer and automate complex claims transactions, which involve multiple parties, multiple systems, and various regulatory concerns.

As adopters have found, the more complex and cumbersome the claims transaction, the greater the opportunity for modern systems to improve efficiency, savings, and service. Modern platforms also incorporate data warehousing and Power BI tools to enable organizations to gain deeper insights to further drive performance.

Recognizing that more organizations are looking to modernize, the solutions they consider must fit a vision for the future, meaning it must have powerful features and an extraordinary level of flexibility. In the end, there is no blanket solution, but above all else, organizations need infrastructure capable of accommodating an ever-changing insurance market.

To receive more information or to schedule a demo of SIMS Claims or SIMS Insight, please contact:

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About Systema Software
Systema Software, LLC, provides flexible, comprehensive solutions and services to the insurance industry. SIMS Claims is an innovative, award-winning claims administration system, which is highly praised by clients and well recognized by industry experts as a leading claims solution. Together, our team of Big 4 consulting and industry veterans, experienced software developers, and project managers deliver an architecturally strong enterprise platform, designed for superior speed, scalability, and performance. With advanced technology and focused customer service, Systema Software has experienced phenomenal growth and success, earning high rankings on the national Inc. 5000 and local Fast 100 lists of fastest-growing private companies.

For more information, visit us online at www.systemasoft.com.