

# Nolan Insights

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*People, Process, and Technology*

## ANALYTICS IN ACTION



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Nolan is an operations and technology consulting firm specializing in the insurance, banking, and healthcare industry. We help companies redesign processes and apply technology to improve profitability, service, quality, productivity, and costs.

Our consultants are senior industry experts, each with over 15 years of specialized experience.

Visit our Website at [www.renolan.com/analytics](http://www.renolan.com/analytics) to download articles, client success stories, and industry studies.

# Nolan Insights

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## *People, Process, and Technology*

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## INTRODUCTION

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Welcome to this special edition of *Nolan Insights: Analytics in Action*. Our consultants are seeing rapid adoption of advanced analytics in the financial services industry. Although analytics has been used by financial services organizations (FSOs) for over a decade, it has usually been applied in individual business units for specific purposes by a small team of specialists. Recently, however, we have seen several factors come together into what we believe could be a perfect storm of initiatives moving FSOs to integrate analytics in their everyday business.

First, the analytics software industry has grown significantly in the past decade in terms of sophistication of techniques, the sheer number of applications available, and, perhaps most important, the ease of use for typical end users. Sophisticated analytic tools and techniques are no longer restricted to academia, professional researchers, or those with advanced degrees, but are now available to the broad financial services business community. In our studies, we have found more than 40 different functional areas in a typical FSO that could benefit from the regular use of advanced analytics.

Second, this functional capability has been enhanced by the concurrent growth in the availability of massive volumes of data from the internet and third parties. This external data can be combined with FSO's own powerful data warehouses, which have also significantly improved in quality over the past decade.

Finally, many analytics vendors offer utilization of their capabilities in the "software as a service" business model, eliminating the large up-front capital fees and effort for system implementations of older business models. This allows relatively fast utilization of, and therefore investment returns on, analytic tools.

In this edition of *Nolan Insights*, our consultants share with you some of the emerging trends in financial services analytics. We include results from a recent survey on analytics and then move on to how you can evaluate your company's analytic maturity, the many ways carriers are putting analytics to work, and how to strategically apply analytics throughout the enterprise. In the end, you'll have a good snapshot of what we're seeing in the industry today.

We hope some of our observations will help your own company to increase its competitiveness with the exciting capabilities of advanced analytics. ▀

A handwritten signature in black ink, appearing to read "James C. Dean". The signature is fluid and cursive, written over a light blue horizontal line.

James C. Dean, Vice President

# THE STRATEGIC IMPORTANCE OF MANAGING TO YOUR BANK'S ANALYTICS

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President

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This year, in-branch transactions are down again as more customers are switching to electronic channels for their routine transactions. This will escalate as some banks introduce in-branch fees for certain transactions.

This trend bore out in our most recent Bank Performance Study in a way that was not surprising. In high-performing banks, the transactions per teller per month actually decreased by 7% over the past two years. The interesting comparison is that in average banks, the transactions per teller per month decreased by 21%. What is rather startling is that the average banks in our study had a reduction in transactions per deposit account of 14%, while the top-quartile banks' reduction in the same metric was 28%. The gap in performance between top-tier banks and average banks in our study shifted from a 7% gap in 2009 to a 21% gap in 2010. The lesson in this is that the retail operations of the average banks did not respond to the shift in consumer behavior, while top-performing banks managed through it. The question is whether the average banks did not respond to known data or did not measure it as a strategically important metric.

The latest Nielsen data and estimates show that there will be more than 142 million Smartphones in use in the United States at the end of 2011, up from 12.5 million in 2008. Retail bankers should be paying attention to this industry metric. If they don't, they might find that their infrastructure does not support the new consumer reality. Customers will be using their Smartphones, pads, and computers to handle routine transfers of funds and payments at an ever-increasing rate, with estimates that over 50% of transactions will be executed in this way by 2015 in the United States.

The strategic importance of key behavioral trends should shape the technological and service models we build, ushering our customers into the electronic age. This is already how things are done in Europe, where checks are a distant memory. What analytics does your bank use to monitor customer behaviors and the shifts that are taking place? Are you channel-sensitive, or do you manage each channel as a separate silo? Measures and analytics are the intelligence that you will require as we trend to the new banking reality. ■

# EXECUTIVES SPEAK OUT ON ANALYTICS

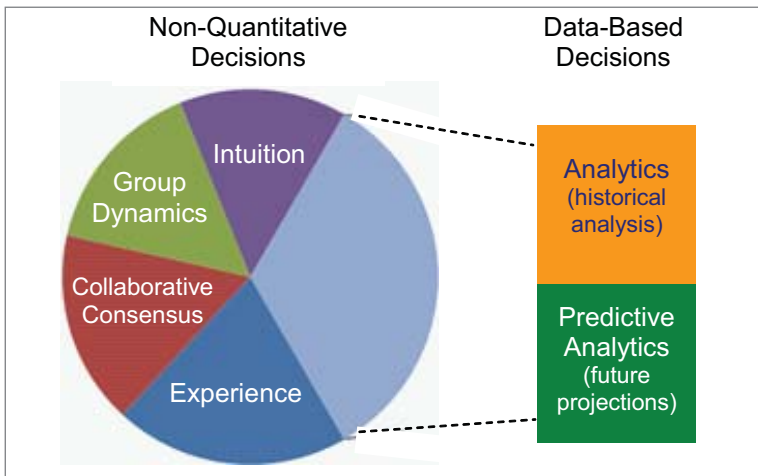
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The importance of analytics has become increasingly apparent over the last few years as the complexity of the market, demands for customer differentiation, available information, and technological advancements have converged. While many companies have used a variety of business intelligence and analytical devices extensively to manage their business, the recent convergence has shifted the focus from a predominantly historical perspective to one incorporating multivariate modeling predicting the outcome of complex scenarios. To what extent are today's companies integrating the various forms of analytics available into their decision-making process? The answer can be found, at least in part, in a recent survey conducted by Nolan and *Tech Decisions*.

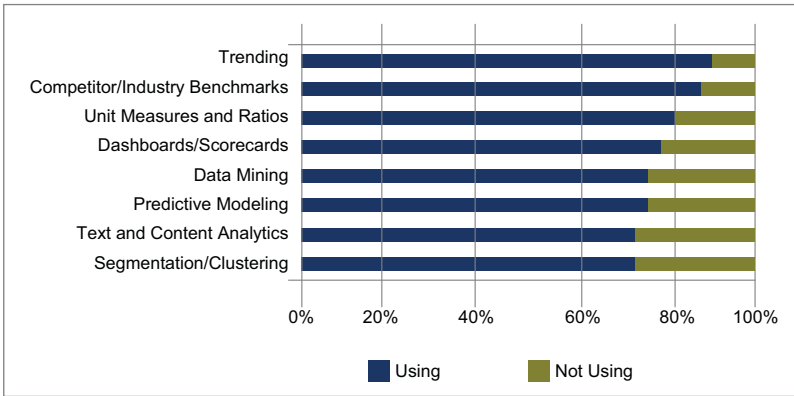
Figure 1. Basis for Decisions



Not surprisingly, the most common element in the decision-making process across more than 200 companies surveyed was experience, outranking any form of analytics or group dynamics. While there is no replacement for practical experience, the risk organizations take in using this approach rests in assuming that the future can be based upon a subset of data used to make past decisions. Experience provides an excellent benchmark against which to measure progress but might not be the ideal source of directional information to use in determining future actions. The

87% of respondents whose use of analytics consists primarily of trends, scorecards, performance reports, ratios, and comparisons are missing the opportunity to find relevant patterns in a vast array of interdependent variables. And it is within these patterns that future outcomes can be more accurately determined.

Figure 2. Relative Frequency of Use by Analytics Type



Unfortunately, according to the respondents, investments in these capabilities will be limited to a range of “not at all” to “limited” over the next two years, even though the opportunity for effective differentiation and profitability would probably require significant investment. It could be argued that for the sake of a penny’s savings, a pound of opportunity is being lost.

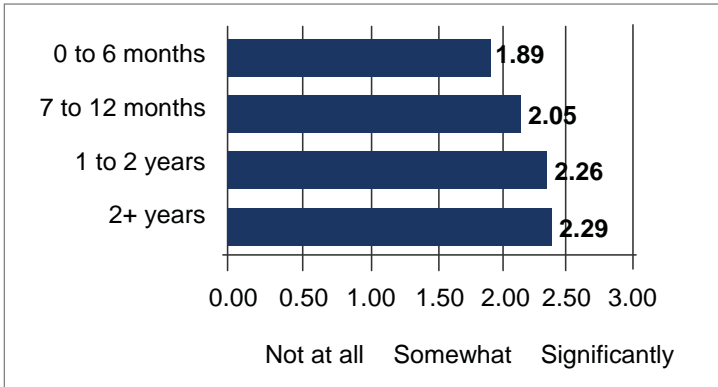
We found that while the reliance upon experience and historical data provide some comfort in the decision-making process, several other common barriers stand in the way of the industry expanding the use of analytics. The number-one identified barrier is inaccurate, fragmented, and insufficient data spread across multiple disparate and often antiquated systems. Without quality data, the ability to leverage analytics is clearly limited, requiring companies to first overcome a broad range of challenges associated with cleaning up and keeping clean the relevant data. Related to the data quality challenge is the reality of inadequate technology resources, compounded by the fact that these same resources are required to clean up the data, maintain transactional systems, and assist in the implementation of analytical models. Without the necessary resources, companies are somewhat trapped by their current processes and information, a problem clearly identified by the survey participants. Still, it is worth recognizing that several vendors and service providers have specialized resources available to assist with data cleansing and

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toolset implementation. Assuming an appropriate priority and willingness to invest, companies have options to leverage these resources as part of a quick-start program that incorporates knowledge transfer and training with resource supplementation.

This brings to the forefront some of the less explicit but more ingrained barriers to implementing advanced analytical systems and solutions. In particular, a perception that the costs of these solutions actually outweigh the expected benefits persists. Whether the result of a previously failed project or the inability to effectively project the business value, a good portion of management still questions the returns that could result from investing in the expansion of analytics beyond the historical models currently used.

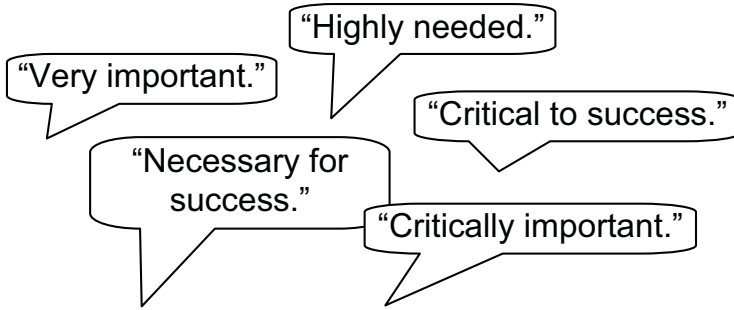
*Figure 3. Likelihood to Invest*



Given our industry’s current expense sensitivity, failure to be able to project a satisfactory ROI is often the death knell for proposals. Not surprisingly, this barrier is often paired with the next most common one identified by survey respondents—a lack of executive sponsorship for the projects. Absent sufficient returns and executive support, rolling out new analytical toolsets and models proves difficult to impossible. Compounding these barriers are the final two identified: a lack of business expertise and the consistently present cultural barriers to data sharing and ownership. Taken in total, these organizational constraints represent a much more difficult field of hurdles to surpass than the more technical resource or data ones. These issues represent the need for understanding, collaboration, education, and trust that are integral to any cross-organizational process that leads to change. Recognizing and directly addressing these hurdles should be a foremost consideration in any implementation planning.

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Where does this leave us? Despite the challenges that surround the expansion of analytics within our industry, the opportunities for increased profitability are making more companies take a closer look. Over 35% of those surveyed described the growth in use of analytics over the next two years as:



Recent meetings involving the Society of Actuaries have looked at the use of external data elements in multivariate models for underwriting and mortality management, recognizing that for most companies, a mortality improvement of 8% would represent tens of millions in saved claims. Other industry associations working in conjunction with companies and analysts have begun to measure the potential impact of applied analytics in marketing, agency management, and customer segmentation as the drive for greater profitability by customer shifts the industry’s focus from broad-based to finer levels of differentiation. Although the PC industry has proven the value of analytics in the specific areas of pricing—through credit scoring models, claims, better management of exposure to fraud, underwriting, and more complex risk rating profiles—there remain ways to expand into new areas for PC and, in general, for Life and Annuities. As best put by one of the survey respondents, “Those companies that do not embrace technology and analytics will be left behind in the dust by those that do.”

Interested in learning more about the role of analytics in the insurance market, and especially recent advances in the application of these powerful tools to specific needs? Please check out our analytics information page at [www.renolan.com/analytics](http://www.renolan.com/analytics), where you will find this information as well as the complete survey results and relevant articles on the subject. And if I can help you determine how best to approach integrating and implementing advanced analytics into your organization, drop me a line at [steve\\_callahan@renolan.com](mailto:steve_callahan@renolan.com). ■

# BUSINESS INTELLIGENCE: MOVING FROM TOOLS TO APPLIED CAPABILITIES

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Whether you call it *business intelligence*, *predictive analytics*, *artificial intelligence*, *neural networks*, or a *data warehouse*, the desired results all center around effectively using data and analytical tools to make better business decisions. Advances in technology and tools coupled with the demands of the marketplace have driven forward-thinking companies beyond the traditional reliance upon trends, ratios, and variances into the domain of sophisticated models and simulations. Today, BI, as many now call it, has quickly become the umbrella label covering most of the new and long-standing information-generating practices. Given the competitive advantages created by better-informed decisions, the big question is: Where is your company in the evolution of BI capabilities?

Where is your company in the evolution of BI capabilities?

Speaking with clients about their company's evolutionary progress, we repeatedly hear a common set of questions focused around execution—specifically, applying the tools versus choosing the tools themselves. The most common ones include:

- How well are we applying the tools already in place?
- How is our company measuring the value of its BI investments?
- Are we getting the desired impact from existing tools?
- How do we prioritize future investments in BI?
- How advanced is our BI capability compared to competitors?

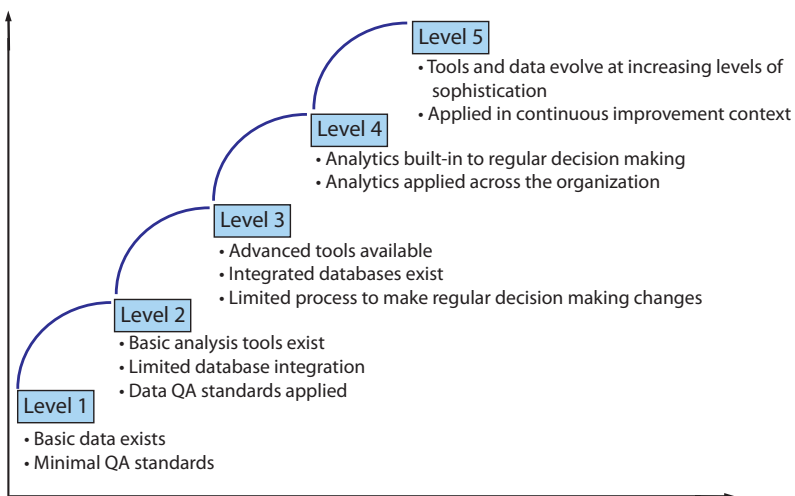
We have found that one of the most common challenges that companies face as they move further into the world of BI is the tendency to focus on the solution instead of the problem. This is especially true for newcomers to the BI game. Companies often center their attention on the quality and sophistication of the actual data and tools rather than the problems they want solved. How many data sets? How accurate is the data? How well is the data integrated? What supplemental data should be bought? What kinds of analyses can be generated from the data we have? And who are the vendors with the richest functionality? All good questions, but the

focus wrongfully revolves around availability of tools and data instead of the problems to be solved and the decisions to be made.

At the same time, decision makers are looking for the information coming from better use of analytical tools. They typically ask questions that are similar to those just listed yet more specific to solving a particular business problem. For example: What trends and opportunities exist in claims losses, fraud, or subrogation? How can we better pinpoint underwriting and pricing opportunities by customer/product/channel segment or segment combination? What trends in claims litigation will lead to better outcomes? How do we explain a price change to a customer with our channel partners?

Unfortunately, aligning these two groups' efforts can be a challenge. More often than not, once the tools are available, people become dazzled by the “shiny objects” and their new analytical outputs. Process takes precedence over results, and the intended informing of decisions gets overlooked. A case in point; recently, a client conducted an enhanced analysis of claims that clearly identified material opportunities. Translating these opportunities into reality stalled because there was no change management in place for modifying claims adjuster practices.

## Business Analytics Capability Maturity Evolution



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Knowing where you are is the first step to getting where you need to be. Because not every company is at the same starting point in terms of leveraging BI, the Nolan Company uses a capability maturity model to assess how much an organization has evolved (see inset chart). This framework can be used to determine how aggressively a client may want to pursue expanding their BI capabilities.

*...it's not so much  
what tools you  
use as how well  
you apply them.*

Whether you work for a Level 2 challenged by database integration or a Level 4 struggling to operationalize continuous improvement into BI models, keep the focus on being a more effective executive. Remember, it's not so much *what* tools you use as how well you apply them. Keep that in mind as you continue along the competitively enlightening path of applying BI to your decision-making. And if you are interested in finding out where you are on the BI evolutionary cycle, drop me a line at [steve\\_discher@renolan.com](mailto:steve_discher@renolan.com). ▀

*Please visit Nolan's website at [www.renolan.com/analytics](http://www.renolan.com/analytics)  
for additional resources on Nolan's  
business analytics capabilities.*

# BEYOND DATA: PUTTING ANALYTICS TO WORK

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Analytics tools are evolving and rapidly being adopted across the insurance industry. While many insurers have made significant investments and great strides in implementing business analytics software, many are also struggling with effective use of the resulting management information. A successful analytics program should provide a positive ROI, which in turn requires taking it beyond software and reporting and into the realm of management practices and operations improvement. A sound approach to supporting analytics-driven improvement efforts includes the following steps:

- Work with the finance or reporting area to establish a baseline that tells a story in terms of potential opportunities.
- Work with functional areas and/or lines of business to help them understand and fine-tune the data and identify and validate opportunities.
- Develop improvement initiatives that are structured, scoped, and quantified to fully address each opportunity area.
- Lead or facilitate the improvement initiative in a manner that maximizes data visibility, participation, buy-in, and overall positive impact.
- Reinforce continuous improvement principles throughout the process so that the overall analytics process is further streamlined and fine-tuned with each initiative.

## **Benchmarking**

Benchmarks are an element of business analytics, and they should be viewed as a means to an end. The end purpose should be to improve or validate performance, not to simply take measurements or make comparisons. If you embark on benchmarking, establish a solid link between the resulting analytics and a comprehensive activity-based management program. In

*...formally  
incorporate the  
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other words, formally incorporate the benchmarks into your ongoing improvement initiatives. Benchmarks are often thought of as an external comparison (e.g., relative to peers, competitors, or “the industry”), but benchmarks are just as valuable when used internally to analyze different geographic locations (such as service centers or sales offices) to determine performance strengths, weaknesses, and best practices.

### **IT Assessment**

IT costs and allocations are often not clearly understood. In one recent example, an analysis of resource utilization and allocations revealed that an insurer’s IT function was costing far more to operate than industry norms. The data indicated that on the development side, over 40% of the activities being performed were not critical and could be streamlined, consolidated, or eliminated. This provided a business case to develop and implement a new project/portfolio management process that would result in a capacity increase of 10–15%. Ultimately, this lowered overall IT costs and recast IT cost allocations more equitably.

### **Cross-Functional Expense Views**

Many financial service organizations view expenses from a functional or business unit perspective. Functional managers are responsible for managing these expenses within the scope of their organizational structure. Business analytics tools can provide new and different views of expenses that can in turn provide new insights into opportunity areas. Expenses that seem insignificant within a given unit can be significant when viewed more broadly. For example, expense line items such as travel can be selected and views created at various levels, such as enterprise, function, line of business, region, office, and even purpose. By using the ability to view data in a variety of ways, potential opportunity areas can be quickly identified. Further investigation supported by management action can then drive more effective policies, improved consistency, and reduced overall expense.

### **Unit Costing**

Marrying expense and volume data from different perspectives can create some interesting insights into unit costs. Unit costs are an ideal metric for measuring efficiency within an operation by simply looking at how many pieces of work the organization is getting and how much it is costing to get each piece done. The key here is to focus on the core work volume and understand its definition. If a global view is desired on the

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expense side of the equation, all expense line items can be included, as opposed to limiting expense scope to personnel-related costs. However, both views can be valuable, depending on the audience. Limiting expenses to personnel costs provides a more precise view of productivity management effectiveness. The global view is a bit more complex in that it requires allocations of overhead, but it can provide a true view of what a function or process costs an organization.

## **Product Costing**

Product costs are useful for evaluating product pricing and profitability. Accurate views of product costs require a fairly sophisticated business analytics capability, but the value can be significant. Understanding costs at this level can help to ensure that products are priced effectively and profitably in the marketplace and to determine when it makes sense to underprice a product in order to gain market share. Identifying unprofitable products can lead to their redesign or elimination in order to improve overall profitability.

## **Incentive Plan Financial Soundness**

The key here is to determine if there is a direct relationship between business results and what is being paid to employees in variable compensation. Ideally, business result trend lines and incentive payout trend lines should match one another to a degree, with the business result line climbing at a faster rate. Business analytics data can be developed for key business metrics and corresponding incentive payouts. These become the basis of incentive plan fine-tuning or redesign to ensure ongoing financial soundness and ROI.

## **In Summary**

The examples I've provided here are just a few of many possibilities. With techniques and tools evolving at a remarkable pace, we have really only scratched the surface of business analytics. But the basics remain the same: organize data so it "tells a story," and then use it to drive performance and profitability improvement. The speed, scale, and accuracy with which you do this can create major cost and competitive differentiators for your organization. ■

## ANALYTICS MANAGEMENT SERVICES

Increased competition and economic pressures are forcing financial services organizations (FSOs) to find new ways of examining their risk appetite, pricing, and distribution channels to improve profitability and market share. Nolan provides services designed specifically to help FSOs effectively adopt and manage analytic capabilities across the enterprise. These include:

### FINANCIAL SERVICES ANALYTICS OVERVIEW

This program lays out the current landscape of analytical opportunities in FSOs. The differences between Business Intelligence and Predictive Analytics, and their differing methodologies and tool sets, are covered. The analytics life cycle and the methodologies to choose the right tools for specific applications are reviewed. Also delivered is a custom roadmap to build the organization, skills, capabilities, and change management methods which are essential for creating an effective analytics environment.

### ANALYTICS MATURITY MODEL REVIEW

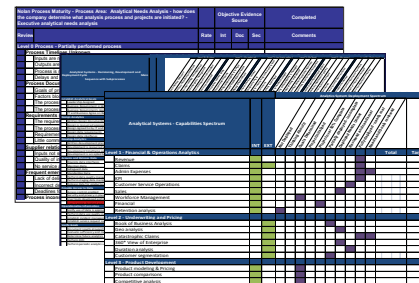
This program creates an enterprise view of how and where analytics are being used and determines how existing analytics can be leveraged throughout the overall business. A comprehensive review answers questions such as: Do we have consistent data and QA statistical practices applied? Are we duplicating efforts? Do we have an analytics strategy? The result of this effort is a gap analysis between best practices and current activities and a roadmap to maximizing the analytics investment.

### EFFECTIVELY APPLYING ANALYTIC CAPABILITIES

This effort focuses on specific analytic activities within an FSO, such as:

- Distribution channels productions
- Customer call and service centers
- Risk management and fraud

The review addresses such issues as: Could we be using third-party data to enhance our results? Are our analytic processes built into our daily operations or applied in an ad-hoc fashion? Are we maximizing the capabilities of our analytic tools, and do we have the right skills and training with our staff?



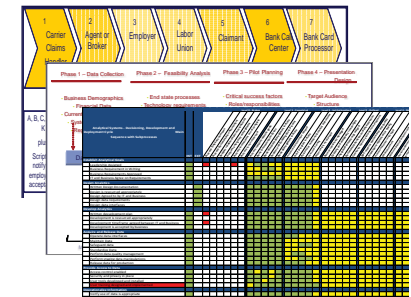
Area	Phase 1 - Data Collection	Phase 2 - Feasibility Analysis	Phase 3 - Pilot Planning	Phase 4 - Presentation
Business Description	...	...	...	...
Client	...	...	...	...
Product	...	...	...	...
Target Audience	...	...	...	...

### For More Information

The Nolan Company offers comprehensive services to help financial services organizations effectively implement and manage analytic resources. To learn more, please visit [www.renolan.com/analytics](http://www.renolan.com/analytics) or contact us at (800) 248-3742.

### ANALYTICS AS AN ENTERPRISE SERVICE

Experienced FSOs are developing analytics capabilities as a shared service—all data, analytical, and QA functions are supported by a team that is dedicated to the analytical function across the enterprise. This engagement identifies how the organization, governance, and budgeting of such a central service can be incorporated into the business.



Area	Phase 1 - Data Collection	Phase 2 - Feasibility Analysis	Phase 3 - Pilot Planning	Phase 4 - Presentation
Business Description	...	...	...	...
Client	...	...	...	...
Product	...	...	...	...
Target Audience	...	...	...	...

# IT EFFECTIVENESS: APPLYING BUSINESS ANALYTICS TO IT ORGANIZATIONS

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When you look at your IT organization, how do you know how well it is performing? What are the key metrics you use to measure performance? Are resources aligned with organizational goals? The metrics may only tell part of the story because typically they are internally and technically focused, as opposed to being business-result focused. The essential purpose of any IT organization is to enable the business areas to be more successful, so a deeper dive is required in order to link IT work activities with organizational strategy and business results.

Although no two IT organizations are identical, the typical insurance, banking, or healthcare IT organization consists of functions such as Network Services and Support, Application/Solutions Development, Data Management, System Availability, Enterprise Infrastructure, Enterprise Architecture, and a PMO or IT Governance group. Each of these areas will have its own set of performance metrics that provide insights into how well these functions are being performed. What is often missing, however, is a clear picture of whether IT resources are being allocated in a manner that delivers positive impacts to the business. This kind of measurement is, of course, not so easy to do. A very structured, focused, and objective effort is required.

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more successful...*

The Nolan Company approaches this challenge by combining business analytics and activity-based management techniques to identify baseline performance levels and to reveal potential improvement opportunities. This forms the basis of a comprehensive IT effectiveness assessment. We start at the highest level, normalize the data, and calculate an IT efficiency ratio ( $\text{Total IT Expense} / \text{Total Revenue} = \text{IT Efficiency Ratio}$ ) to establish a baseline. Our process then focuses on collecting, developing, and drilling down into IT expense data across functions and work activities. Business result and impact data is also collected and developed, and a link between IT expense and business impacts and results is established. This data then

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feeds an ongoing report-and-response process that prompts management actions based on key measures and trends.

My description here only summarizes the assessment and reporting process, but the benefits are considerable. Improvements in IT cost, effectiveness, and business impact are compelling. Among the most important impacts is the improved working relationship between business and IT—something many organizations don't expect. I'd like to hear how your organization has approached this important management issue. ▀

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*“I thought spending lots of money on new technology would be enough. No one told me we’d have to use it.”*

## ANALYTICS AS AN ENTERPRISE SERVICE

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In a recent Robert E. Nolan Company and *Tech Decisions* survey, most respondents stated that analytics were supported by “key resources within individual departments.” To maximize the opportunities for analytics, reduce operational costs, and improve overall quality, best practices suggest that analytic capabilities be offered as an enterprise-level shared service, similar to IT, legal, and finance.

Further, Nolan research has determined that analytics can be applied to more than 40 different business activities and lines of business within a typical carrier. To accelerate realization of the benefits, carriers should also have a strategic roadmap identifying the multi-year, prioritized rollout plan of analytics throughout the enterprise.

Before you can begin incorporating analytics as a strategic tool for the enterprise, many questions need to be answered about how such a service would work, such as:

- Who should manage it? IT? Finance? Actuarial? Accounting?
- How should it be staffed? By an IT specialist? A business analyst? Or analytics PhDs?
- What are the governance procedures?
- What tools and external services should it control?
- What are the working relationships with other business units in the firm?
- What would the costs and benefits be, and who pays for the service?
- How would existing analytics applications and staff be integrated?

The first step in developing such a service is to create a design team with a focused, 30- to 60-day research project. The team should develop core deliverables and an actionable roadmap leading to an enterprise service infrastructure. Activities the team should conduct include the following:

- Assessment of current analytics
- CBA of distributed vs. central service approaches

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- Structuring of a future-state analytics service
  - Organization structure and staffing requirements
  - Governance and budgeting processes
  - Tools, services, and QA management
  - Business unit and vendor relationship communication management
  - Implementation roadmap

At a minimum, the team should have an executive sponsor and representation from the core business units (actuarial, underwriting, claims, and marketing and sales), from the financial and accounting units, and IT.

It is also important that the team recognize that this specific project is not a technology project to determine how to use analytics, but a management project to determine how to predict the capabilities of analytics throughout the entire organization. A similar model could be the type of planning used to roll out the balanced scorecard management technique.

Analytics offers powerful capabilities not just for a few lines of business, but throughout the entire organization. Strategic adoption of analytics and a thoughtful rollout plan will earn you a competitive edge more quickly and effectively than ad hoc, unmanaged adoption by individual business units, the prevalent approach in the industry. ■

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# ANALYTICS AND TECHNOLOGY: TAKING UNDERWRITING TO THE NEXT LEVEL

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*Although insurers have made real progress in automating risk assessment processes, there is significant room for improvement in the quality, speed and consistency of risk decisions.*

Advances in healthcare, longevity, medical practices and information collation, combined with an increasingly diversified population, are bringing greater complexity to the underwriting risk assessment process. This is despite solid progress made over the past decade in automating risk assessment processes. Electronic applications, straight-through processing, workflow systems, and document management have converged to greatly improve the flow of information to and from underwriters. Notably less progress, however, has been made in gathering supplemental information or improving the quality, speed, and consistency of risk decisions.

Risk assessment remains a black-box consolidation of underwriter experience, supporting information, and intuition. Is untapped revenue and opportunity being blocked by the rigor of “old school” underwriting?

Given good claims experience, many companies are disinclined to “mess with perfection” in fear of loosening the knob too much. The risk of worsening the claims experience without necessarily offsetting premiums is a strong inhibitor to adopting new risk assessment models. Consider life insurance, where both the frequency of claims and the ability to adjust premiums are measurably less than annually renewable property/casualty lines.

With life, the challenge is exacerbated by underwriters’ skepticism that technology can approach the effectiveness and sensitivity of their decision making for even the more routine cases. A Society of Actuaries study indicated that only 1% of North American life insurers were utilizing predictive modeling in the underwriting process. This is despite proven successes in the property/casualty industry, where risk selection and the buying process have been effectively transformed through the use of scoring and modeling. In the life industry, opportunities abound to significantly expedite the underwriting process while saving millions of dollars in labor and laboratory test costs.

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## Days vs. Weeks for Underwriting Decisions

By identifying candidates who can be issued policies without ordering lab tests and medical records, consistently high-quality underwriting decisions can be made in days instead of weeks. Cost-effective models are already being used to supplement carefully defined application information with third-party data that includes personal history interviews, Medical Information Bureau (MIB), motor vehicle records (MVR), prescription databases, credit reports, career information, and family histories. With 30% to 50% of the business going straight through without any additional tests or records, service levels improve, underwriting resources are freed up, expenses are reduced, and proper focus can be put on the other 50% to 70% of complex cases requiring human oversight.

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Moving beyond individual decisions, predictive modeling can be used to analyze the risk profiles of entire market segments. Predictive indicators can provide marketers with insights into the likely profitability of a given product set in a given market segment prior to introduction. Then pricing can be fine-tuned to create greater competitive advantage. The result is profitable products that have unique appeal with a given market segment.

The advent of analytics is fast permeating the industry as more and more companies realize the benefits of analytic methods and systems. Advanced modeling and mining techniques, fed by increasingly comprehensive data, are driving predictions and simulations that add value not only for underwriting, but also for sales, marketing, claims, pricing, and service. As companies become more informed about discrete segments of consumer preferences and behaviors, they can provide more precise support and individualized solutions, leading to competitive advantage, increased customer satisfaction, and enhanced profitability. Toward that end, forward-thinking leaders are already investing in the technologies and management innovations necessary to ensure their companies stay ahead of the competition. ▀

## BEYOND ANALYSIS

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For many of us, our high school years were some of the most formative and memorable—both good and bad memories—and we can recall decades-old events in surprising detail. Recently, one high school flashback pushed its way up to consciousness as I sat in an operations review with a group of analysts, managers, and executives.

Father Ignatius, our freshman and sophomore English instructor, was an “old school” teacher. For weeks, he would drill us on the parts of speech, noun-verb agreement, sentence diagrams, and the horrors of dangling participles. He was a stickler for the use of active verbs as opposed to the passive tense; so much so that each week a class member was placed in front of the room and required to compose active and passive sentences, using subjects and verbs provided by Iggy. If the classmate stumbled, students were encouraged to shout out the error. The good priest was certainly not a “participation trophy” kind of fellow, but by the end of the semester, *everyone* had English language fundamentals down pat. More important, we learned the underlying lesson he wanted to convey:

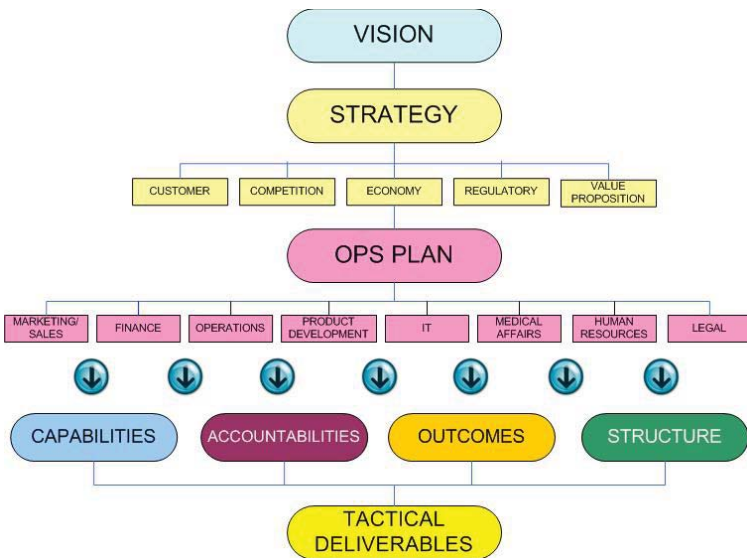
*Executives recognize the value of operational dashboards, financial summaries, and customer survey results.*

Passive has its place but is routine, often unremarkable, and not meant to inspire or compel a response; active is vividly descriptive, commands attention, and is motivational and risky (within some contexts). As I listened to the presentations and updates provided by the analysts and managers in the meeting and watched the reactions of the executives, it was clear that the latter weren’t getting what they needed and the former were being presented an opportunity.

Executives recognize the value of operational dashboards, financial summaries, and customer survey results. But, in an economy showing only painstakingly slow improvement, they are looking, more than ever, for solutions that assist measurable achievement of operational goals and to position their companies for eventual profitable growth. That search is an opportunity for managers of teams tasked with operations, market,

financial, cost of care, and actuarial analysis to fundamentally change their accountabilities and transform their level of influence on a company’s strategy and business performance. That transformation enhances the perspective of analytics from one that’s primarily *retrospective* to one largely *prescriptive* based upon a solid understanding of the customer, marketplace, and historical business results. It’s moving from passive to active; continuing to provide operational performance results but elevating one’s game by offering sound, fact-based, meaningful recommendations to address the company’s challenges.

Developing increasing levels of influence with company executives demands trust built upon credibility. One way to create that relationship is to begin with tactical recommendations, comparatively small in scope, that are directly associated with company goals and have outcomes that can be quantified. The following objectives hierarchy is one tool to help target recommendations.



Based upon the work already performed by analysts, select an ops plan function, a deliverable category, and then one or more tactical deliverables that analysis points to as opportunities for improvement. Develop alternatives that will measurably improve performance, ideally resulting in achievement of expected goals, and then force-rank the alternatives in order of effectiveness.

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And now, the risk: the presentation of recommendations within the context of sound business results analytics and other fact-based foundational elements. Starting small and targeting clear improvement opportunity areas helps limit the risk, but it also improves the chances for recommendation approval and ultimately (following a successful implementation outcome) enhanced credibility. It's this precious organizational capital that is the critical ingredient for increasing influence within the company, allowing the targeting of higher levels on the objective hierarchy and multiplying—sometimes geometrically—the positive impact of recommendations.

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In recent memory, there hasn't been a more perilous time for many businesses, but there also has never been a better time to improve performance and position a company for market leadership. Success will come to those willing to take thoughtful risk. The upside for the analytic function, analysts, and those who lead them is immense. All it requires is the willingness to stand in front of the class and compose sound, compelling recommendations in the active tense. ■

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