



The Translation Layer: The Role of Analytic Talent

Increasing the business impact of customer insights and analytics



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Lori C. Bieda is Vice President of Client Insights and Database Marketing for Canadian Imperial Bank of Commerce (CIBC), one of Canada’s “Big Five” banks. She leads a team of 80 analytics experts ranging from database marketers, market researchers, modelers, statisticians, analysts and programmers. With more than fifteen years of marketing, communications and analytics experience, she has made a career out of translating data into profitable business strategies and teaching teams to do the same. Lori is a published writer and industry speaker who has worked across the consumer and business-to-business marketing sectors, helping organizations unearth the maximum business benefit from today’s data-rich environments.

Executive Summary

The Translation Layer is the first of three white papers in a series entitled *Increasing the Business Impact of Customer Insights and Analytics*. The series explores what leaders of insight teams, analysts and researchers need to do to improve the impact of their work so that data can be better leveraged to shape business decisions and drive business benefit.

This paper focuses on the translation layer, defined as the role that analytical people play, or *ought to* play, within organizations to bridge the gap between information and powerful business applications. This paper explores the evolution of the analytics community and explains why they must evolve further to increase the impact they have on the organizations where they work.

Two subsequent white papers will explore *how* to evolve today's analytical talent from its current technical focus into stronger business drivers and insight integrators. Such an evolution will help organizations gain access to the full power of their data.

These next papers will explain how to create a superior culture within analytics teams – one that breeds excellence and cultivates innovation. They will present how to create a culture where analytical talent can thrive for the benefit of an organization's business, customers and employees.

Some information from this series is based on surveys and interviews with more than 100 individuals within Canada's analytics and research community. Participants work in a range of industries, including financial services, retail and telecommunications. Their valuable insights and generous offering of time is much appreciated.

Introduction: Mining for gold and the translation layer

Most insights professionals view data as a potential gold mine – a rich well of information that, when tapped successfully, can deliver tremendous value to an organization.

As insights professionals, we often believe the truth in the data shall set us free. We pan through it, like gold miners, waiting for the flecks of golden insight to appear. Once we find these valuable flecks, we freely share them in charts and reports and haul them off to meetings, hoping that once the business people see them, they will be enlightened.

If only.

If only the glimmer in the data were that brilliant; the facts so obvious.

If only the mere appearance of them would mobilize an organization into action.

But it's a long distance between the backroom data "gold mines" and the boardrooms where the gold is being sold. Bridging that distance – the vast gap between knowledge and action, a key enabler to compete on analytics – is ever more resting on the shoulders of the analytics community.

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The translation layer

For large organizations with multiple lines of business and deep, rich databases, making sense of information has become a business itself. What is needed now, more than ever, is a good *translation layer* to ground businesses in fact-based decision making.

The analytics community is uniquely positioned to become the translation layer. Further into the paper, this community – composed of analysts, typically working in teams who gather business insights from an organization's data – is defined in detail. Whether they're called "analytics teams" or "insights teams," they have the skills to see shades in the data where many others can only see black or white, or parts of the puzzle. They can provide clarity on business issues and leverage information to accurately predict potential business outcomes and find optimal solutions to business opportunities.

This team, if evolved from its current *service provider* mindset into a *business driver*, has the power to grow businesses and improve the quality of relationships businesses have with their customers. But first, analytics teams must step outside of their functional silos. They need to start looking at the business more holistically and connect the dots *across* the business and within the context of the organization's strategy. They need to evolve from data providers into insight integrators.

■ Analytics teams must step outside of their functional silos; they need to evolve from data providers into insight integrators.

Defining the information sources and the “analytics community”

Most organizations have a data bank of information managed by people who provide the business with access to it. Traditionally, we’ve called those people “analysts” and the information source they use is the “database.” Yet as data has mushroomed and become easier to access than ever before, our information sources have grown. Very few organizations have all of their data in one place. Business intelligence originates from many places and databases, and is derived both from the raw data and its resulting insights. Some information is not database-sourced at all (i.e., market research, consumer trends, client feedback).

Thus, the scope of business information needs to be broadened to include an ever-expanding list of things, such as:

- Marketing databases and data warehouses.
- Financial databases and financial reporting.
- Channel databases and reporting (call centers, retail locations, online activity sales force, etc.).
- Risk information (credit bureau, payment behavior).
- Back-end marketing campaign analysis.
- Predictive analytics (modeling, forecasting, optimization).
- Customer feedback and escalations.
- Employee feedback and surveys.
- Segmentation results (customer, market, other).
- Proactive data mining.
- Consumer trends.
- Market research (proprietary, syndicated, qualitative, quantitative).

The analytics community

The analytics community is made up of individuals who sit in between an information source and a business output. They are as underleveraged as they are important, and as precious to a business as the gold they unearth in the data.

Most people in this analytics community tend to have technical expertise, including SAS® programming skills. They often have experience with statistics (some basic, others very advanced) and some possess professional accreditation, such as Certified Market Research Professional (CMRP) designations. We know them as: database marketers, market researchers, modelers, statisticians, analysts or business analysts, and programmers.

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The evolution of analytical teams: *The road to heaven is paved with data*

Fifteen to 20 years ago companies were struggling to obtain data, create databases and get their data in order. Technology advances have made data capture and manipulation easier than before; today, data is omnipresent. We're always on the hunt for more and better information, but in our data-rich environments, having access to data has become table stakes. What's differentiating is how you use it.

The PhDs

Analytics teams started with a group of people who mined information warehouses and later, marketing databases. They ran standard queries, extracted information and passed it on to business users. Before long, statisticians and PhDs appeared and they were plunked into data groups with the logic that if someone could lead analysts, perhaps they could also speak the same language as statisticians. In other words, “techie” to “techie” speaking “techese.”

Some were even rolled into marketing, risk and product teams, but their skill was largely misunderstood, their value untapped. They were the “data guys,” best if we left them alone.

The centralization of insights

Later on, many analytical groups opened their arms and welcomed more people into their fold: a few database marketers, some market researchers. Some of them went kicking and screaming, claiming they were different or didn't belong – that their homes were really with the marketers or the strategists; that the kind of insights they thought about were unique. They all spoke different languages, but they were heaped together into a diverse group and we implored them to speak the same language. The truth was, each of these analytical experts were more like their counterparts than they were willing to admit. They were all in the *insights* business, each of them were just using different instruments to extract their gold.

More and more, the collection of business insights showed up under a single leader. The problem was they were just that – a collection of individual experts with varied disciplines and no clear, common thread that bound them. They operated (and most still do operate) in analytical silos, much like how businesses operate with multiple product lines and leaders. They just all answered to the same leader, and sat around management tables checking one another out with a reserved curiosity.

So, while the data may have been consciously pooled in one place, and a leader anointed head of it, getting to the business intelligence – the golden nuggets of insight that lie resident in the company's data banks and data brains – was still increasingly difficult, like getting our arms around water.

The leaders of analytical teams

The leader, the person managing these analytical communities, was usually a hybrid of some sort. Some were seasoned analytical types, others were CRM or technology people; sometimes marketers or even general business people took the reins. We never really understood who they were, or what we were looking for exactly when management created their job descriptions. We just hoped they knew something about data and could explain it in plain terms to everyone else.

As the analytics teams took shape, the analysts worked in back rooms cranking through data. They would stumble upon insights that could help the business, but they had limited means of getting their secrets out. They were highly dependent on the people asking them for the data. They were dependent on those people knowing what they were asking for, knowing how the information could be used, and considering the problem with a broad enough lens to ensure the analysis could deliver sufficient value back to the business. Sometimes the requests were so broad that it was unclear what they were asking for. Other times, the requests were so narrow that we wondered why we had invested in a database and insights team at all.

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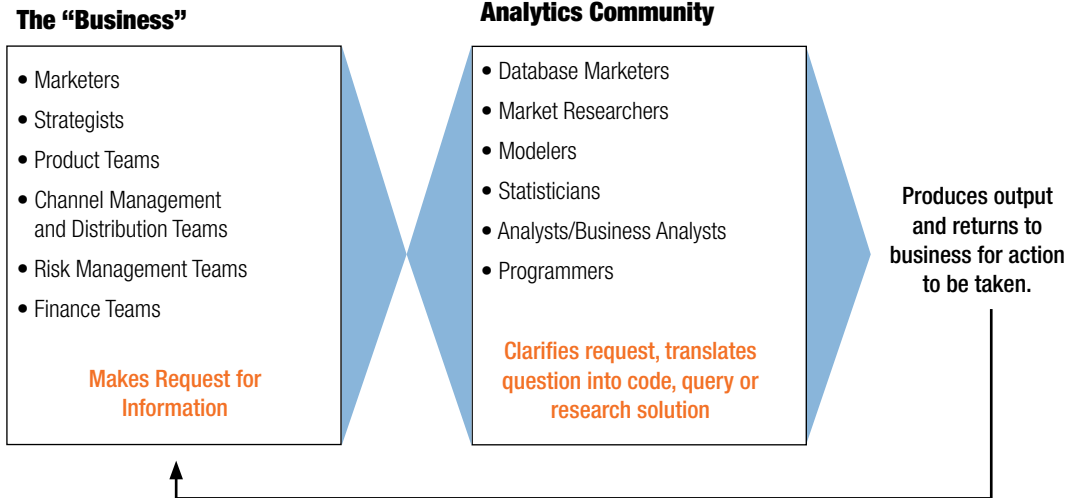


Figure 1. The current business/analytics exchange.

But as the years passed, central analytics teams began to form. Large insight and analytics teams appeared in data-rich industries, such as financial services and telecommunications, to name a few. This collection of analytically minded people signaled change (analyst contributions were being valued differently), but it also signaled a challenge: It was difficult enough to make sense of *one* business problem, but how would we leverage our full range of insights to make sense of what was happening to the business overall?

Yet, the most significant thing this signaled – the collection of analytical minds all in one place – was opportunity.

Discovery time: The answers are in the data

The answers are in the data. They may not be apparent in the way that we’re looking at our data today, but the answers to why a business is growing, or why it is not, where to invest and where to dial down, are in the data - right under our noses.

If not already sitting in our databases, or derived through some solid back-end analysis, then some smart market research can unearth the unspoken customer need we are trying to meet. We can tap into the voice of the customer. We can understand our brand health relative to competitors. We can find out the gaps and the opportunities in the market. They exist, but they need to be excavated, the gold placed all in one cabinet.

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Competing on analytics

In Davenport and Harris' important book, *Competing on Analytics*, their research contends:

“At a time when companies in many industries offer similar products and comparable technology, high performance business processes are among the last remaining points of differentiation. Many of the previous bases for competition are no longer available. Unique geographical advantage doesn't matter in global competition, and protective regulation is largely gone. Proprietary technologies are rapidly copied and breakthrough innovation in products or services seems increasingly difficult to achieve. What's left as a basis for competition is to execute your business with maximum efficiency and effectiveness, and to make the smartest business decision possible. And analytical competitors wring every last drop of value from business processes and business decisions.”

Customer-centric business models

At a high level, there are three basic business models: cost-centered, product-centered and customer-centered. Unlike the Walmarts of the world, most companies don't have the luxury of competing on price (typically only the largest can, as their scale affords them buying power). Few organizations can differentiate themselves as Apple and Microsoft have on first-to-market product innovation. The next greatest innovation is costly and the company must be wholly designed to support such a strategy. The vast majority of companies are striving to compete by knowing and serving customers better than the competition, and in doing so, they earn share of wallet and subsequent profits.

For those firms in highly complex, competitive, transaction-based industries, analytics mastery is a must and the key to customer centricity. Quick wins and huge competitive leaps are virtually nonexistent any more. Mature businesses are playing largely in parity markets where business gains are garnered by unearthing and tweaking more insight “gold” than competitors. Such analytics mastery requires information and the diligence to dig and to find opportunity. But it also requires a phenomenal translation layer to get at the insights.

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¹ Davenport, Thomas H., and Jeanne G. Harris. *Competing on Analytics: The New Science of Winning*. Boston: Harvard Business School Press, 2007.

An information explosion

Everyone is hungry for data. Technology has made it easier for us to collect, monitor and interpret data. We can get constant “reads” on our progress, in real time. Where we used to field market research surveys annually or quarterly, for example, we now field daily populating online portals with our progress and adjust our course of action on the fly. Even our hunger for control groups has quelled, evolving over time into champion/challenger-type testing methodologies that allow for more fluid reads of ongoing performance and faster reaction times. We get more data quicker. And because we *can* get it, we *want* it. We are hungry for data, our stomachs bottomless.

As an analytics community, this has necessitated us being more nimble, but our ability to amass and make sense of information pales by comparison to the speed at which we collect it. Information is available from more places than ever before, and the drill-down potential at our disposal is immense, further complicating our task of synthesizing our findings.

Increased data complexity

The information we collect is also more complex and more detailed than in the past. Because of the sheer volume of information we can access, there is also a greater chance we will find more conflicting data. This is not necessarily due to the problem of data being sourced from various systems and each providing a slightly different result. It can be a function of what the market research data shows versus the behavioral data in the database or what proprietary research indicates versus a syndicated study. It can be because the “cuts” or time frames in the data differ; the warehouse doesn’t tie perfectly to the financials; or the characteristics of each customer segment are not easily understood.

Remember when once per year we asked our customers how satisfied they were doing business with us? Today, that information is often collected daily and we validate whether results concur with other syndicated and proprietary studies we’ve seen. We probe into the levers of satisfaction, attempting to trace back measurement for each one. We run a battery of statistical significance testing on each measure to try and see early indicators of progress or signs of trouble. We try and measure how customer and employee satisfaction relate. Are they correlated or are they causal? We attempt to measure and make sense of the relationship of satisfaction to revenue. Then, we model out the various scenarios and predict future outcomes. Sound familiar?

While the data may well be rich, the real insights can often be lost. Or at best, the story is fragmented. The end result: We end up data rich, but insight poor.

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The need for the analytics community to translate

It comes down to this: There are shades in the data that require a skilled eye to see. Having data doesn't suddenly turn a business black and white, although it's the best route to get us there. That clarity comes later, after a good translation layer has poured through our information and boiled it all *up*. It comes after all the analytical gymnastics are done.

It is no longer enough for analysts to stay in their silos of expertise, cranking out back-end marketing campaign analysis without consideration for broader market forces; the cannibalization impact one campaign has over another; what the voice of the customer is telling us; how the overall market is changing or converging; or the impact of the brand on our overall results.

If our analytics community isn't looking for those connections in the data, who will? And who else can?

If the responsibility for this translation is relegated to others in the business (marketers, product teams, finance teams, strategists or upper management), those others will never be in a position where they are close enough to the data to interpret it correctly across the business. The analytics community must "translate" for the good of the business.

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From service provider to business driver

Insights teams are usually one of the few groups in an organization that are product and channel agnostic. They tend to be focused on the *customer* and, in partnership with marketing, often play the "diplomats," brokering across teams to help facilitate decisions for the good of the overall organization and its customers.

Insights teams have the added advantage of managing customer data and insights, which uniquely positions them to be a strong "value-added" layer. Because of their heritage, many analytical teams have grown up in the service provider space, their success defined by delivering what they were asked to do, on time and accurately. Yet as data continues to become increasingly central to organizations, and a key business enabler, the role the analytics community plays needs to evolve. They need to become *business drivers*.

Analytics Community as SERVICE PROVIDER	Analytics Community as CONSULTANT	Analytics Community as BUSINESS DRIVER
<p>DESCRIPTION: Facilitates execution of analysis and research for the organization and provides analytical support to enable business decisions.</p>	<p>DESCRIPTION: Acts as a centralized hub for all analytics and research knowledge and expertise in the organization and facilitates best practice information exchange related to that expertise. Provides ongoing domain expertise consulting to the business to improve business effectiveness.</p>	<p>DESCRIPTION: Leverages domain expertise in analytics and research, combined with business knowledge, to filter, challenge and prioritize incoming requests for the benefit of overall business. Proactively identifies additional analytical work that aligns to the organizational strategy and needs to be done to improve business effectiveness. Integrates and synthesizes insights across the analytics team – taking the full slate of available insights into account and recommends action in the context of the organization’s strategy.</p>
<p>LITMUS TEST: This is the group you go to when a business need has been identified and you need some specific information to execute. These are the arms and legs to make that happen. Occasionally they are given some business context – the “why” behind the work that they are doing – but do not have an influencing role as to whether or not it makes sense, or will be done. That decision rests with the business. Relationships are sometimes governed by internal service agreements or software license agreements.</p> <p>Words to Describe Work: Service - Support - Enable - Accommodate – Reactive.</p> <p>How you know they’ve been successful: Business partners sometimes called “internal customers” are happy (customer satisfaction). Efficient turnaround of work (service). Accuracy of throughput (QC). Cost of work (efficiency).</p>	<p>LITMUS TEST: This is the group you go to when a business problem has been identified that is analytics/ research related. They are the experts you draw on to solve the problem and suggest a solution. They provide alternate ways of looking at the business problems, suggesting various ways it could be done. They are given some context regarding the business problem to be solved, but their opinions of it do not change the request or sway the outcome. The business has the final say. They try to manage trade-offs between requests coming in and prioritize them. They often consult with their business partners to determine which work is more or less important.</p> <p>Words to Describe Work: Optimizer – Expert – Consult – Knowledge – Reactive.</p> <p>How you know they’ve been successful: Readily provide good, sound analytics and research advice, and best practices to draw on. Departments readily access their expertise for advice. Efficient turnaround of initiatives. Accuracy of throughput (QC). Cost of work (efficiency).</p>	<p>LITMUS TEST: These are people you call when key business metrics (revenue, market share) are changing, as they have the ability to help understand why and help the business focus in the right place to address gaps and create opportunities. They align analytical work to ensure it yields the greatest returns to the business – seeing analytics as a business enabler. They have a strong role and voice in strategic planning and marketing (helping to identify and recommend areas of focus and opportunity evident from the data).</p> <p>Words to Describe Work: Business Driver – Proactive – Strategic – Aligned – Communication – Influence –Innovate.</p> <p>How you know they’ve been successful: The business meets targets (revenue, market share, etc.). Levers of growth and key trends are clearly understood. Favorable ROI on marketing dollars. Business is proactive in identifying business trends and action plan. Department provides relevant, accurate, timely customer information that drives profitable business decisions. Continuous evaluation of marketing efficiencies with view of decreasing costs and improving ROI. Marketing budget is constantly being evaluated and optimized (analysis drives redeployment).</p>

Table 1. The roles of the analytics community in an organization.

Areas of opportunity

There are three immediate opportunities for companies committed to evolving their analytics teams into business drivers. Each of them is highly dependent on the skill and development of the people who perform analytical roles and the leaders that oversee those teams.

Developing greater business acumen in the analytics community

- Individuals in the analytics community are typically specialists, with unique technical proficiency that allows them to oversee highly analytical work and add to it a layer of interpretation that only a skilled eye can see. They also typically progress *within* their silos of expertise: A modeler is promoted to lead a group of modelers; an analyst progresses through different degrees of SAS capability and takes on increasingly complex projects; a seasoned market researcher becomes a leader of researchers. Given this history of functional domain expertise, combined with the growing need for the analytics community to become stronger insights *translators*, analytical talent must develop significantly better business acumen.
- Analysts must understand how a business makes money to be in a position to enable greater business growth. They cannot evolve, and the business simply will not tap into the full value they can provide, if they are left in their individual silos of expertise without broader exposure to business strategy and priorities, business and financial performance, and market context.
- Investment in developing this knowledge base is essential and when done well, completely changes the value the analytics community can bring to the table to move a business forward.

Improving the communications skills of our analytics community

- The analytics community needs to dramatically increase the clarity and thoroughness of the insights they provide. Both “what” they communicate and “how” they communicate needs to improve.
- This involves distilling complex data into “stories” that make sense to the average business person. The audiences on the receiving end of our communications are not data experts; they are typically managers and generalists, and thus it requires a different level of communication. Our insights need to be properly framed in the context of the business strategy and come furnished with clear findings, implications and recommended actions.
- To accomplish this, analytical people must first communicate better and more frequently *within* insights teams. Database marketers, for example, need to talk to market researchers, who in turn need collaborate with analysts and modelers. This will allow insights professionals to create a fuller picture of what is happening across the business and why. Not only will it help explain variances in the data and research, but it will help us better identify opportunities as well.

■ Analysts cannot evolve, and the business simply will not tap into the full value they can provide, if they are left in their individual silos of expertise without broader exposure to business strategy and priorities, business and financial performance, and market context.

■ Our insights need to be properly framed in the context of the business strategy and come furnished with clear findings, implications and recommended actions.

- If we don't start working differently across our teams, we run the risk of misinterpreting results and reducing our impact on business results. If left in our silos we may deem something a unique phenomenon, when it is really part of a broader industry or consumer trend. We may declare a campaign a success, when all it really did was cannibalize another part of our business. We may identify an opportunity that when considered in the context of the business size and strategy, is really not a viable opportunity at all.
- Once we are assured we have our facts straight and a complete business story, we have significant work to do to simplify our messages. As insights professionals, we have a very different appetite for data than others. We believe it adds clarity, so we include gains charts, graphs, numbers and clusters, when most times it only serves to overwhelm audiences and slow digestion of content. We need to develop greater skill and focus on overall communication (written and verbal) to furnish our stories with the *right* facts to strengthen the message, rather than causing confusion that detracts from it.

Looking at our “return on insights”

- The organizational resources dedicated to mining the database and doing market research need to see their work differently. They need to commit to filtering incoming requests for data and research, and ensure they align to the organization's strategy.
- Analysts and insights professionals need to operate more like a business themselves, evaluating their own “return on insights.” This means looking at both the benefit to the business of where they spend their time, and the opportunity cost of NOT spending it in places where it will yield greater returns, and further the strategy. They need to be treating analytical resources in the same way a business looks at marketing dollars, to ensure wise investment.
- If amassing information is a strategic investment, we need to ensure we are yielding the maximum return from it. That starts with gaining entrance to it before the work enters the team.

■ We need to develop greater skill and focus on overall communication (written and verbal) to furnish our stories with the right facts to strengthen the message, rather than causing confusion that detracts from it.

■ Analysts need to be treating analytical resources in the same way a business looks at marketing dollars, to ensure wise investment.

Summary

The key ingredient: People

Information-based decision making affords businesses huge benefits. The key to tapping into the growing volume of insights and their rising complexity rests in the talents of our people – *the analytics community*. They are the essential *translation layer* between insights and action. Every organization, whether they've invested heavily in insights accumulation or are just starting to collect and analyze their data, needs a good translation layer. The analytics community must be prepared to rise to that new challenge, to step out of their silos and become *insight integrators* and *business drivers*.

The old way of managing this precious talent base no longer works. We cannot leave our analysts in the back rooms to perfect their technical expertise, hoping they will stumble upon gold. Our expectations of the analytics community have increased dramatically and will continue to do so. Accordingly, our approach to attracting, developing and retaining them must also change. They are a mobile group, highly sought after in the market, and companies with large analytical talent bases are constantly struggling to retain them.

A company's migration and ultimate success to compete analytically is highly dependent upon the analytics community. Thus, the people themselves have become a differentiating factor. They are the enablers that allow a company to compete analytically.

The time we invest in that translation layer is what will turn insights into business gold.

Look for further information on how to increase the business impact of customer insights and analytics in future white papers. The second paper in the series will focus on how to develop a culture for people in analytically based roles.

■ The analytics community must be prepared to rise to a new challenge, to step out of their silos and become insight integrators and business drivers.

About SAS

SAS is the leader in [business analytics](#) software and services, and the largest independent vendor in the business intelligence market. Through innovative solutions delivered within an integrated framework, SAS helps customers at more than 45,000 sites improve performance and deliver value by making better decisions faster. Since 1976 SAS has been giving customers around the world THE POWER TO KNOW®.



THE
POWER
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SAS Institute Inc. World Headquarters +1 919 677 8000

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