

# Using IT Analytics to Achieve Better Business Performance

---

White Paper

BY LISA KELLY

# Using IT Analytics to Achieve Better Business Performance

---

Analytics are playing an increasingly important role in utilizing IT resources for maximum return.

Lisa Kelly looks at how IT analytics is rapidly becoming a crucial factor in helping businesses optimize performance and increase profits.

However, companies need to understand how best to deploy analytics and how to integrate the process into their IT departments. Only then can the benefits be fully realized.

This special report investigates how this can be achieved to maximum advantage for both the business and its customers.

---

# Top 10 Issues to Consider When Deploying IT Analytics

## Align the IT Environment with Business Objectives.



IT and the business must work together to determine their objectives and aims. The CIO and senior business managers should make decisions based on what is best for the business, not based on who shouts the loudest for their department or application's pre-eminence. Financial objectives play a clear part in any decision to deploy IT analytics.

"Be clear in what you want and can deliver. The business wants to know the cost of developing and delivering a product," says Roy Illsley, principal analyst at Ovum.

What really interests the business is getting value for money. Defining overall financial priorities can help make the business case for investing in IT analytics. The relationship between IT and the business has never been closer or more important. Understanding how they impact each other is essential, and this is where IT analytics can shed light.

"You can't manage business processes without managing IT, and you need machine-learning technology to be able to understand, predict and analyse problems," says Gartner analyst Will Cappelli.

---

## Deliver the Right Services at the Right Price.

# 2

Deploying IT analytics can uncover some unexpected findings that can help shape how IT resources are most efficiently delivered to the business.

“Aside from the cost of operations, equipment and capacity use, there are questions about ‘Are we delivering the right services at the right price?’ IT analytics should show investment value. The business wants the true cost of developing and delivering a product,” says Illsley.

As an example, he says analytics may reveal that one-tenth of the business that appears to be the most profitable accounts for 90% of the IT cost. “The outcome may be to get rid of it and focus on the other nine-tenths of the business,” says Illsley.

He says IT analytics gives a sound footing to moving toward chargeback or resource accounting and provides a firm grip on what IT resources are consumed where, and how best they should be utilized.

“Find out what you are doing, what you should be doing and what is important to the business,” says Illsley.

---

## Demonstrate Value to the Business Quickly.

# 3

Another concern for the CIO is to ensure IT analytics yields results that are effectively understood and used, which means consideration of the user interface.

“Think about how the data and information are presented and can be used. It is no good having wonderful graphs that people just get lost in. Demonstrate the value of the tool quickly by making it easy to use or else it will become shelfware,” says Illsley.

Making informed decisions about why and how to use IT analytics tools will ensure their deployment is successful and indispensable to the business.

“Users want quick, actionable information; it goes back to terms and knowing what you are trying to solve. That way you can generate reports where you can clearly see what needs to be done,” says Illsley.

---

## Build the IT Department's Reputation.

# 4

IT analytics can help IT and the business speak a common language which can enhance the CIO's reputation.

"Creating reports that business people can actually understand in their language leads to acceptance that IT is doing a good job. That is important for a CIO's reputation. Give the right key performance indicators [KPIs] in business language that allows the business to decide," says Tony Lock, programme director at analyst group Freeform Dynamics.

Gaining efficiencies and the use of automation will give the IT department space to refocus on innovation. "Automation is linked to the degree to which the IT department might shrink or realign its purpose," says Steve Wallage, managing director of consultancy firm, BroadGroup. "It is not just automation per se, but if IT is doing lots of things more effectively and efficiently, the previous level of IT resources will not be required. This implicates the future role of the IT department and the role of the CIO."

He says it can be a turning point for the CIO to take on more of a business role and be regarded as not just someone who focuses on operational costs.

---

“The CIO can focus on particular areas such as data center usage, the server estate or particular applications and the efficient use of software, but they should be careful not to be overwhelmed. Priorities have to be worked out and value proved to the business. People and allocation of resources will inevitably change, and the CIO can assume more of a business role,” says Wallage.

## Take a Holistic Approach.



The systems that organizations are trying to monitor and manage have become more complex. “They are more modular and there are more moving parts that are more independent of each other,” says Cappelli.

“This means information gathered about one part of the system in a particular way is less likely to give an understanding of the whole than was possible in the mainframe world of the past.

“With the data centers, cloud, virtualization, the modular approach to architecture and mobile, you can look intently at one piece of the puzzle and have no idea about the whole picture,” adds Cappelli.

---

He says with the entropy (the degree of disorder and unpredictability) of IT systems increasing enormously, it is important to understand all the data.

“You need all of that data to be able to understand what is going on in all the systems for multiple different perspectives to get to that understanding. Increasing data and growing entropy of IT systems is driving a move to IT operations analytics,” he says.

## Choose the Right Analytic Tool.



Clive Longbottom, founder of analyst group Quocirca, says the form of analytics you will need will depend on your desired outcome.

“The trick is to choose an analytics package and stack of infrastructure that supports what is required. Taking different approaches to try to solve different needs can lead to compromises and problems with not all tools referencing the same datasets,” he says.

Illsley recommends a step-by-step approach. Look at what IT analytics can do for your organization and learn to walk before you run.

“Start with a discreet set of objectives and build to a point you are comfortable with. Look at services, cost and user perception,” he says.

Eventually, making the links will lead to a greater understanding of how IT resources can be optimized, and he says real value can be achieved if tools have a “what if” capability. “A what-if feature can be useful

---

to know what effects adjustments will have on resources and the business,” says Illsley.

A business should consider how this predictive feature enables businesses to become aware of potential problems before they happen. It takes analytics beyond merely looking at trends.

Gary Richardson, a director in KPMG’s data and analytics engineering team, says organizations need to stop obsessing about rear-view mirror analytics. “The way to go is with what is coming to hit you, and predictive and prescriptive analytics.”

## Consider the Volume of Data.



Data collection and event monitoring are essential to effective IT analytics to ensure an infrastructure is working at maximum efficiency. But every organization faces the challenge of managing a vast expansion of IT data, says Cappelli. “We have 300 times the amount of data we were working with in early 2000. This amount of data is a critical aspect of IT analytics.”

Agents in software for monitoring, wire and packet flows to understand the behavior of the network and end-user experience of business applications, data from log files and information humans have from social media sources are all vital sources of data. They must be collected effectively and require powerful analytics tools.

“There is enormous information about everything in the IT environment. The business has to become more data-centric in the

---

way it looks at things. The data comes first, looking at the critical sources of data including traditional sources and information from social media,” says Cappelli.

Jonathan Barber, co-founder of consultancy Optimos, says CIOs are facing the same challenge. “Structured and unstructured data is getting bigger and growing faster; but there is increasing capability of big processing technology,” he says.

The emphasis on data collection means businesses are looking for tools that, in the words of Donald Rumsfeld, former US secretary of defence, can look for the “known unknowns” as well as the “unknown unknowns” to help inform business decisions.

“The desire to capture the unknown unknowns is very important. There is so much data that the patterns that govern that data – the anomalies and trends – are not available to the human eye,” says Cappelli.

This is where automation becomes key. “To get value out of data and entropic systems, you need some kind of automated pattern learning technology to work on that data when the data stream enters the data lake and for real-time complex event processing,” says Cappelli

---

## Use Automation.



Looking at how you automate is an important consideration for a CIO, says Michael Azoff, principal analyst at Ovum. “To process the vast quantities of data, you could not manage without automation. The next stage is not just picking up signals, but knowing how to undo faults, correct and troubleshoot.

“A CIO needs to decide whether to completely automate, or to use data to advise about adjustments,” says Azoff. Good tools can empower people and allow them to get a lot more done, more quickly and accurately, he adds.

Identifying what you are trying to optimize is a critical decision, and Azoff says this will vary depending on the nature of the business.

For example, an online retailer may decide response time is vital to generating more sales and preventing customers from clicking on a more responsive rival site. Each organization should consider what it is trying to optimize. This might include infrastructure, utilization, costs, service levels, end-user throughput and response time.

However, one variable may affect another, so it is good to involve all business units to work out priorities and the impact of any change.

“There will be different sets of parameters for each business, but it is vital to focus on the parts of the business that matter to the users,” says Azoff.

---

Illsley agrees it is crucial for the CIO to know what problems automation will solve. He advises starting off with key objectives and building out from there.

“You need a clear understanding of what you want to get out of it, what you want to know and the value of the knowledge to prove the value to the business. You come unstuck if you create a monster that you have to feed,” says Illsley.

## Ensure Data Quality and Trust.



Focusing on data, and its volume and quality can help avoid difficulties with automation, says Illsley. “When you look at automation, the CIO should understand the source of the data. If automation tools take in rubbish, they will spit out rubbish,” he says. CIOs should complete a data-cleaning exercise and look at all the sources of data, he advises. “It is essential to know what is trusted information in order for IT analytics to be successful.”

The other challenge with automation is trust. Ideally, companies should embed business expertise in automation to guard against mistakes.

Illsley says CIOs might want to consider the benefit of having one tool that can take all the information, look at it from different angles and use automation where appropriate. However, he warns: “If you start trying to use automation to change something complex, it can screw things up.”

---

Complex problems can be unravelled by powerful IT analytics. One such area is storage; and this is where automation and business priorities must work hand in hand.

“Business storage needs must be evaluated. There are issues surrounding future IT investment, as not everyone is willing to use less expensive storage or to archive. Noone wants to be disadvantaged and there is a tendency to say, ‘My application needs expensive tier one storage,’” says Wallage.

## Maximize Energy Efficiency.



Power usage can account for as much as 40% of operational expenditure in some commercial data centers, so reducing power spend makes financial sense, says Simon Campbell-Whyte, executive director at the Data Centre Alliance.

“For optimization, energy is a large part of the cost of running a data center, but often businesses do not measure that cost,” says Campbell-Whyte. He says IT systems are more complex today, and data centers come in all shapes and sizes.

“IT is changing. Five years ago, there was one design for a data center, and heat and power was not so much of an issue. Today, there is no single blueprint,” he says.

IT analytics can help to unravel complexity and reduce costs, but it is sensible to have corporate consensus. “The European Code of Conduct on Data Centre Efficiency says all stakeholders should

---

discuss what applications should be running and when, and energy measurement,” he says.

The financial imperative for the introduction of IT analytics has increased – over-provisioning is no longer acceptable, as energy costs are now much higher in comparison to the IT budget. Reducing that cost requires the right tools and commitment.

“Making data centers more energy-efficient is a multi-dimensional challenge that requires a concerted effort to optimize power distribution, cooling infrastructure, IT equipment and IT output,” says the code.

Analysts agree that powerful IT analytics tools can help businesses optimize the IT environment to ensure it can respond dynamically to changing business needs, and the realization of its importance is increasing.

“The recognition of the importance of IT operations and the importance of IT analytics has been quick and is growing,” says Cappelli.

## WORLDWIDE HEADQUARTERS

### UNITED STATES

TeamQuest Corporation  
One TeamQuest Way  
Clear Lake, Iowa USA 50428

## OTHER LOCATIONS

SWEDEN  
GERMANY  
UNITED KINGDOM  
MEXICO  
HONG KONG

With resellers in many additional countries.

## CONTACT US

[info@teamquest.com](mailto:info@teamquest.com)  
[teamquest.com/about-us/contact-us/](http://teamquest.com/about-us/contact-us/)

TeamQuest, the TeamQuest logo, VITYL and all other TeamQuest trademarks are trademarks owned by TeamQuest Corporation. All other trademarks listed or referenced herein are the property of their respective owners.

NO WARRANTIES OF ANY NATURE ARE EXTENDED BY THE DOCUMENT. The only warranties made, remedies given, and/or liability accepted by TeamQuest, if any, with respect to the products described in this document herein are set forth in a separate such license agreement. TeamQuest cannot accept any financial or other responsibility that may be the result of your use of the information in this document or software material, including direct, indirect, special, or consequential damages. You should ensure that the use of this information and/or software material complies with the laws, rules, and regulations of the jurisdictions with respect to which it is used. The information contained herein is subject to change without notice. Revisions may be issued to advise of such changes and/or additions.

U.S. Government Rights. All documents, product and related material provided to the U.S. Government are provided and delivered subject to the commercial license rights and restrictions described in the governing license agreement. All rights not expressly granted therein are reserved.