

The new generation of CIO

The emergence of the role of Chief Information Officer (CIO) over the last five years or so has signified a substantial shift in the way organisations think about technology. While the lexicon of jargon and acronyms, the bits and bytes, ROM and RAM may be the preserve of the Chief Technology Officer (CTO), the language spoken by the CIO is that of business strategists and market analysts.

Indeed the CIO has a far more outward looking role than many of his technology counterparts. Rather than responding to demands from users about specific functionality, the CIO looks at what the business needs now, what it will need next—and what it will need in five years time. All this requires him to have a finger as firmly on the pulse of external conditions as on internal activity.

For CIOs in the globalised and highly complex energy sector however, that pulse is beating rather erratically. The industry as a whole is experiencing a period of almost unprecedented flux, and companies are having to adjust in order to remain competitive.

Increasingly, organisations that aim to raise their growth trajectory are doing so through diversifying the geographical regions in which they operate, optimising their business, expanding the commodities in which they will trade, and broadening the types of execution that will be undertaken. Indeed, such changes may be the minimum needed to stay alive.

Whole new continental markets and distribution opportunities have opened up. Existing markets are more liquid and closely correlated. Alternative energy sources are becoming more material contributors to total supply. Instrument and commodity bases are proliferating. Regulations especially on emissions are key drivers of marginal energy prices. And higher absolute prices reflect multi-decade growth in energy demand from China, India and elsewhere.

All these changes present CIOs with a two-fold challenge. First they need to ensure that the organisation can optimise returns from current business or trade portfolios that include natural gas, power, and oil as their staples. Second they need to remain adaptable enough to address all the new underlyings, instrument types and risk reporting needs that are swiftly emerging.

Technology, of course, has the opportunity to make a major contribution to the bottom line, and liberate the business to pursue new avenues. For energy traders, the ability to leverage uncertainty, manage risks and vastly increased optionality in near real-time, across large geographies and complex multi-company organisations is a key goal.

But many legacy systems are simply not designed to support firms in today's climate. They are unwieldy, and while performing their basic functions with a greater or lesser degree of success, cannot support an organisation through the changes that the energy industry is currently experiencing – and will continue to see.

In short, for their business users, these systems are millstones. Instead, they need technology more aligned to the strategic need. Take as an example an organisation wanting to expand operations into Eastern Europe. Feasibility assessments need to be carried out, geological, political and technical, alongside projections of predicted supply weighed against possible cost.

The problem with traditional vertical systems is that historically they have been commodity specific. A system can cover, say, power deal capture, risk and settlement, but another system may be used for gas. So, in the first instance, each of these functions needs to be carried out for each commodity. And then, once an operation opens in Romania, for example, it must roll out two systems: one each for power and gas. Furthermore, the company will have a hard time getting to a consolidated risk position with two systems.

Therefore using technology that can provide a single managed value chain is becoming a key part of good business strategy. CIOs need a multi-commodity solution that can be rolled out on a global scale, that can be interconnected with other systems and that is built on architecture that can scale rapidly to meet evolving demands of users.

Such demands require a radical re-think on the development and delivery of technology. A one-off installation of a partially customized solution, that is upgraded infrequently, places limitations on the organization's ability to move with its market. Rather, this kind of model forces CIOs into a trade-off between having the technology

in place that will fully support the current business, and minimizing the upheaval and disruption caused by installing new systems – a compromise that can only become more problematic with the quickening pace of change.

Instead, smart CIOs are looking at new technology that can be deployed quickly, cover current markets and adapt to new industry conditions, without the burden of exhaustive capital costs and the need to take on a lot of skilled and expensive new technical staff.

Service-orientated software, that can be accessed remotely and has a single source code base that can be quickly updated, is regarded by a growing number of organisations as a preferred choice over the standard 'out of the box' software. Not only does it give their organisation the IT flexibility it needs, but enables it to concentrate on fulfilling business strategy, rather than activities such as system support and managing storage and data backups.

This in turn requires a rapid evolution in the way that vendors and customers work together. Cold or distant vendor relationships are a weakness: it is difficult to pass on user or management team demands, implement extra services, or customise the software to a precise specification. Study after study has shown a collaborative relationship between software provider and client will produce the best returns for both parties, derived from enhanced agility, service, responsiveness, integrity and trust.

As successful CIOs know, technology is an essential element in the integration and delivery of business value. They have long seen IT not as a cost centre, but as an essential contributor to higher business growth. And they have found that selecting forward-looking platforms and applications creates compound benefits over time, of closer future co-operation with business areas and inspired further uses of technology.

The energy industry is at an exciting moment from an IT perspective. While perhaps most in-production applications were not designed to address strategic CIO goals, new technologies and service models are now available to do so. This implies a wave of new IT investments creating exceptional returns – and gratified CIOs.