

THE VALUE IMPERATIVE

**HARVESTING VALUE
FROM YOUR
IT INITIATIVES**

GERALD G. GRANT AND ROBERT COLLINS

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Gerald G. Grant • Robert Collins

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Gerald G. Grant
Carleton University
Ottawa, Canada

Robert Collins
Ottawa, Canada

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For Joan and Jill

Preface

Fate brought us together in 2008, when the city of Ottawa put together a task force to look at how it was using information technology (IT). We came from very different backgrounds. One of us had been in the high-tech industry for more than 25 years working largely in the private sector. The other had been in the halls of academe. Despite this difference, we were both students of IT and how organizations used it.

As a CIO, it was painfully obvious to Rob that it was very difficult to bring technology to bear to truly affect organizations. This was not just from experience in one corporation but also through interactions with many customers visited around the world. It seemed that every CIO was struggling with the same problems. Few had had real and lasting success. Many were challenged by the inability of IT executives to be part of the strategic discussion.

As an academic researcher, Gerry had been very deliberately studying how corporations and governments invested in IT and what they got from those investments. Almost every organization understood that they needed IT to be competitive or deal with the pressures of growth with limited budgets. However, very few were satisfied with the results of the significant investments made in those technologies.

Both of us had come to the conclusion that, as an industry, we weren't very good at ensuring value was delivered from IT investments.

Modern computer-based IT has been around now for the better part of seventy years. During that time it has advanced and morphed from room-sized computers with limited capabilities at the end of the Second World War to the Internet and smartphones of today. This advance has been mind-bogglingly fast and has changed both business and everyday life around the world.

But change has not come evenly. The very pace of technological advance has tended to hide some fundamental problems that have existed from the start. These involve not just the technology, but also the management and application of that technology. The human and organizational factors have not kept pace. They have remained relatively static and, to a shocking degree, ineffective.

As a result, the IT department in any organization has somehow remained a breed apart. It is disconnected from the reality of the whole. Communication between it and the rest of the organization is fraught with misunderstanding. This leads to failures, recrimination, and, sometimes, wholesale changes that fall well short of their goals.

This can be seen when one listens, as we have, to organizations struggling to successfully deploy IT to support their efforts. The disconnect between people and groups within the organization is obvious in questions people ask us.

The organizational leadership often finds IT an enigma. Why don't we get the value from technology investments we expect? Why are projects always late, over budget, and short on functionality? Why doesn't IT deliver value? The IT leadership views the big picture through a completely different lens. What does the organization want? How do you convince executive leadership to invest in things like core IT infrastructure? Both sides are really asking, "Why don't they get it?"

IT's role in corporate governance has a checkered track record. The business asks why IT can't speak English (or French or Russian or Chinese). What, they ask, is a CIO? To whom should IT report? Wouldn't we be better off to just outsource the whole thing? The IT leadership rarely tackles these questions head on. Its focus appears to be on other things. How can we be a partner to the business? What are the best practices that others use and how do we compare? Why don't we have the CIO at the senior executive table? Why doesn't the CIO report to the CEO? Why don't the business functions participate in projects?

Often the clash comes at budget time. The executives ask, Why does it cost so much and why do you need so many people? IT asks, How do you expect us to succeed with such a small budget and so few staff? How can we control costs when those costs are driven by things outside IT's control?

Even technology is no longer a safe haven for IT. Business people ask, Why can't IT do things that their nephew can do in a few days? Why can't I use my new gadget? Why do systems fail so often? Why are they so slow? They compare them to their home Internet access and smart phone and find organizational IT wanting. IT struggles to explain the complexity of the legacy in the

organization and the hype that surrounds the latest technology. The business is looking to advance, and IT appears to be trying to control and counter that.

When we first started at the City of Ottawa, the task force was pretty sure that, as a group of experienced IT professionals, we were not going to have any trouble pointing out what had gone wrong. Naturally, we turned our attention naturally to the IT department. We were surprised to discover that there was a very good group of people who were following all the appropriate practices and all the industry standards. Yet they were perceived as failing.

We spent a lot of time trying to figure out how technology should be used differently. What new advances should be adopted and what old applications should be thrown out? We kept coming back to the issue that the IT group didn't seem to be in sync with the organization. It was then that Gerry brought his academic research to bear. Cutting through the techno-babble that had come to dominate the discussion, Gerry forced the group to focus on governance.

When the time came to submit our report, we made very few recommendations about technology. We made a lot of recommendations about governance and planning. This came as a surprise to everyone. In essence, what we were saying is that the IT group was okay, but that the organization as a whole was failing. This was exactly the opposite of what had been expected.

The two of us were pleasantly surprised that, coming from such different backgrounds, we had such a common view of the problems that IT faced. After the task force was complete, we continued to discuss the challenges and failings of IT. Gerry then shared his research and ideas that became the agricultural model. Identifying the failure of the engineering model and the false lure of “alignment” that organizations sought was a major breakthrough. It meant that we had to take a different look at how investments in IT were undertaken, delivered, and measured.

Over the next several years, we continued to develop these ideas. The rigor of the academic was married to the experience of the practitioner. That juxtaposition resulted in a lot of back-and-forth. It was that give-and-take between big picture models and real-world pragmatism that, we believe, is the key to coming up with far-reaching yet realistic solutions to IT challenges.

This reached its peak when Rob took a role as a transitional CIO to change an organization's approach to IT because they felt they were failing. This provided an opportunity to put into practice what we have been preaching. This full testing of the theoretical models resulted in rounding them out in more ways than one. Not only were they more complete, but the concept of cycles became the backbone of our work.

Having tested that work, we continued to communicate more in talks and seminars. We spoke not only to IT professionals but to business professionals of all stripes. We found a special resonance with financial leaders. CFOs had come to regard IT as a giant hole in their budget that was getting bigger and bigger and one that they could not control or even understand. They latched on to the models that we provided, in some cases like a drowning man grasping a life preserver.

In all of the presentations, seminars, and discussions over coffee, one question came up again and again. Where is the book that contains all of this?

Well, here it is.

Acknowledgements

That we should focus on value is the main thesis of this book. Value creation and delivery is almost never the work of a single individual or entity. It is a cooperative and collaborative process. Indeed, we got a significant amount of value from the collaborations we had with colleagues in roundtable discussions; the opportunities to share our ideas with willing participants in seminars across North America and, in turn, to learn from their experiences; and the challenges to our ideas from both colleagues and students in the academic realm. All of this has resulted in a work that speaks to the essential issues organizations and their managers face in articulating and orchestrating value delivery from IT investments.

First, we would not be successful without the support of families, particularly, our wives Joan and Jill who have put up with us and set high standards for us to achieve. We dedicate this book to them. Special thanks to Julian Grant for applying his graphic design skills to make our diagrams look more professional. We are grateful for his patience and willingness to accommodate changes as we learned more and thought about things differently.

Every idea has a genesis. We must give special thanks to the many scholars and practitioners on whose shoulders we stand. Many have challenged conventional thinking about the way IT is viewed and managed in organizations. We are indebted to Christina Soh and M. Lynne Markus for their process view on how IT creates value in and for organizations. Their insight is foundational to our concept of value realization. Other scholars such as Claudio Ciborra challenged the neat and highly structured view of IT management that is often presented in academic and practitioner publications. They gave us the inspiration to think differently about this dynamic and multifaceted endeavor.

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While we acknowledge the contribution of others to this work, they are not responsible for any errors or mistakes that might appear in the text. Those are ours.

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Business and IT Challenges for Today's Organizations

Digital information technology (IT), tools, and services are everywhere and underpin almost all aspects of modern life, whether in business, government, or society at large. Most everything we do nowadays is dependent on them. These technologies make possible new business models; new ways of connecting, collaborating, and creating; new ways of organizing and working; and indeed, new ways of socializing and entertaining. Today, large organizations such as governments and hospitals, once considered bureaucratic and inflexible, are being transformed by the innovative use of digital IT. In fact, their use is key to breaking down the traditional walls between departmental silos in both business and government. This can be seen in healthcare, where large-scale investments in IT seek to create much-needed efficiencies in healthcare service delivery, while at the same time enhancing care delivery quality and positive patient outcomes.

With all the excitement about the potential for IT to facilitate the delivery of extraordinary value, there is the sober reality that many IT-dependent projects fail to deliver their promised benefits. In the USA, the botched roll-out of the Obamacare website in October 2013 is a most public present-day example of failure that can occur when business or government becomes dependent on digital business models to deliver services to customers or citizens. The difficulty with the government of Ontario's implementation of the Social Assistance Management System (SAMS) in 2014 is another prominent example. Clearly, when dealing with complex technologies, there are opportunities for failure. However, as a report by McKinsey and Company

(2013)¹ confirms, many of the challenges documented are less the result of technological failures. More often, failures result from poor governance and management; inflated and unreal expectations about technology and what it can do; unrealistic timeframes for project delivery and benefit realization; and the shortage of and poor allocation of financial, human, and technological resources, among other non-technology reasons.

The Business Management Challenge

In addressing the issues faced by organizations in delivering value from IT investments, we cannot start by concentrating on the technology or focusing solely on the IT department. We must start by looking at the overall business and its strategic imperatives. What are its challenges and goals? How is it faring? Only by understanding the big picture, independent of technology, can we be properly prepared to assess how technology can be brought to bear and where best to apply it in pursuit of organizational objectives.

Enhancing the Organization's Ability to Achieve Its Strategic Objectives

Organizations, whether in the private or public sectors, must consistently deliver high-quality services that their customers or constituents are willing to pay for. If they don't, customers or constituents will go somewhere else with their money or their vote. Therefore, a key business challenge faced by executives is how to enhance their organization's ability to achieve its strategic objectives while meeting customer needs. Organizations that are deficient at setting clear objectives are likely to be less successful at generating and sustaining long-term growth. A key question though is, What are these objectives? Often, objectives are viewed from the prism of completed projects and service implementations. If the main objective of any endeavor is to get the project implemented on time and on budget, then the metrics and measures that matter will center on project delivery dynamics. However, just ensuring a product is made or a service is implemented does not guarantee use and successful adoption from customers or clients. The strategic objectives have to focus beyond the project delivery cycle to embrace the full business model. Objectives must focus on the customer or constituent to really be of substantive value.

¹ Brown, B., Sikes, J., and Willmott, P. (2013) Bullish on digital: McKinsey Global Survey results, McKinsey and Company Insights and Publications, accessed January 1, 2014 at http://www.mckinsey.com/insights/business_technology/bullish_on_digital_mckinsey_global_survey_results

In the Obamacare health insurance website debacle, for example, it seems that an inordinate amount of focus was given to the timeline for going live with the site on October 1, 2013. Consequently, important features and processes were cut and severely curtailed to meet the implementation time deadlines. While the timeline was important, if more focus had been placed on the customer experience and outcomes, different decisions might have been made about cutting functionality and curtailing important processes such as robust stress testing.

Similarly, engineers at Volkswagen² lost sight of what their customers value when they introduced software that allowed them to pass emissions tests in a way that did not reflect how the vehicle performed in real life. As well as angering regulators, Volkswagen lost the trust of their existing (and future) customers. The immediate costs of penalties are, by some estimates, potentially billions of dollars. The long term costs from lost sales due to the lack of focus on value perceived by customers will not be known for many years.

Market Flexibility and Operational Dexterity

Another challenge faced by organizations is market flexibility and operational dexterity. How can they be responsive to the market while at the same time being nimble in their operations? Businesses such as Dell have long thrived on their celebrated business models that embodied flexibility and dexterity. Dell's much-vaunted order-processing and supply chain management system provided significant competitive advantage for many years. However, even these models are proving to be less sustainable in highly competitive industries. More recently, Dell has had to redefine its strategy, and restructure its business and operations to survive in the IT industry. Other companies, facing similar challenges, have merged with other players (Compac and HP), been acquired by another company (Cognos by IBM), or gone out of business (Nortel Networks).

Time to Market and Cycle Times

Reducing time to market for a product or time to access and use of a service is also a challenge that organizations consistently face. Businesses must reduce the cycle time between order generation and service or product delivery if they are to survive in a dynamic and hypercompetitive world. Customers or

² Boston, W. and Sloat, S. (2015) Volkswagen emissions scandal relates to 11 million cars, *The Wall Street Journal*, accessed April 27, 2016 at <http://www.wsj.com/articles/volkswagen-emissions-scandal-relates-to-11-million-cars-1442916906>.

constituents are no longer willing to wait for long periods to get the service or product they want. They have become accustomed to getting things done almost immediately and are therefore more likely to be impatient waiting for everything to fall into place. The idea of comparing government service delivery with that of for-profit services such as Google, [Amazon.com](https://www.amazon.com), and Facebook is now embedded in both business and political discourse. The standard for online service delivery has risen dramatically. Municipalities such as the City of Ottawa in Canada's capital are taken to task for not being able to provide the seamless experience similar to that of buying products and services through [Amazon.com](https://www.amazon.com) or eBay. Why must citizens wait, or worse yet, make several trips to a municipal office to pay a bill? Constituents now expect there to be little delay between the origination and the delivery of a service order. Anything less is a failure.

Orchestrating Dynamic Supply Chains

Products and services get delivered through an interconnected network of people and organizations. A key challenge for organizational executives is how to effectively orchestrate dynamic supply chains for products and services. Supply chains, for the most part, have long ceased to be vertically integrated into the same firm. Nowadays, there are many supply chain players and they are distributed across a wide variety of organizations in many geographic settings. Digital IT, therefore, takes on greater significance because it is essential to the flow of information across the supply chain. Without it, some supply chain arrangements are impossible. Supply chain orchestration and logistics services provided by a company such as Li and Fung of Hong Kong are legendary for their complexity and efficiency. The speed and quality of information flows within the supply chain are critical to business success.

Often people think of supply chains as only relevant to products that we buy. However, services also have supply chains. Service value chains are critical to effective service delivery. For firms and service organizations to be successful, they must optimize supply chain processes while ensuring that there is sufficient flexibility to deal with emergent issues generated in the operating environment.

Building Capabilities to Innovate and Grow

Organizations that have been successful in the past, particularly, face the issue of how to innovate and grow the organization into the future. A good example is the situation faced by Blackberry. As an innovator in the smartphone