

Guided Autonomy Governance Model

Resolving the Tension Between Corporate IT and Business -Led IT

Rick Davidson

As the title of this white paper infers, how can one guide autonomy? These two words appear to contradict each other. However, we are faced with contradictions and paradoxes every day in business. We live in a world where tension exists between opposites – structure vs. chaos, conformance vs. creativity, risk vs. stability, growth vs. efficiency. However, to function in this world it is important to deal with this tension. A case in point, tension or dissonance exists today between corporate IT and business-led IT when it comes to provisioning IT solutions. Cimphoni's Guided Autonomy Governance Model offers a solution to resolve this dissonance.

The Challenge

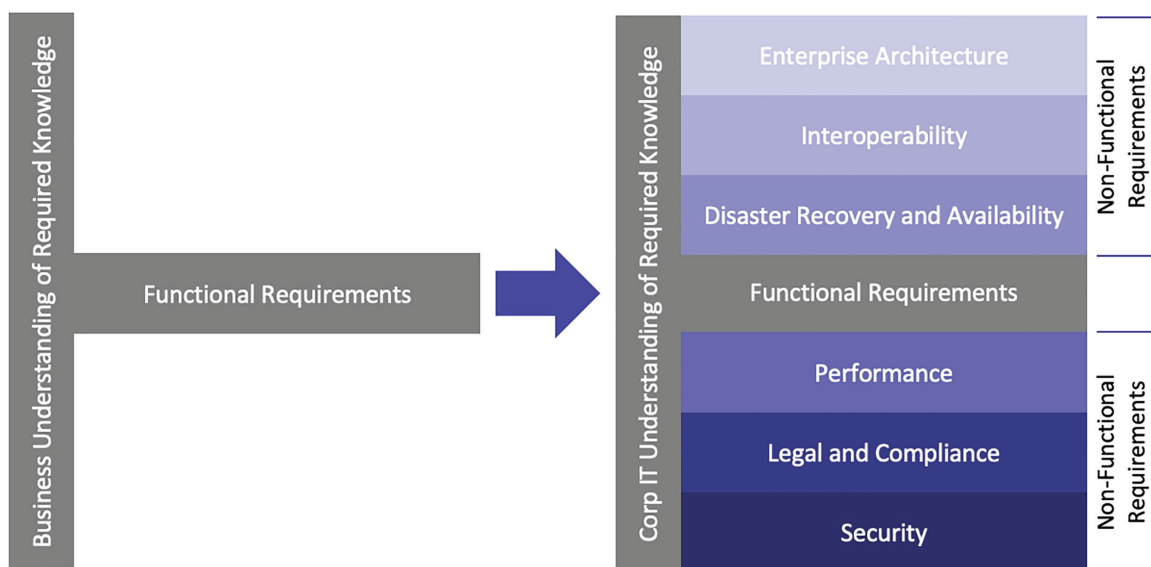
All businesses are faced with choices, some paradoxical and some straightforward – choices regarding products, markets, customers, culture, employees and technology, to name a few. This white paper addresses how businesses can make more effective choices relative to how IT-enabled solutions are conceived, developed, deployed, used and supported. According to Gartner, companies are moving toward increasing degrees of business-led IT, or as some call it, "shadow IT" or "rogue IT." To state the obvious, this trend toward business-led IT has created dissonance between the corporate IT function and the business areas pursuing their own IT solutions, lacking transparency with,

and guidance from, their corporate IT colleagues.

Of course, there is some justification for business-led IT. A common concern of business leaders today is the lack of speed and agility demonstrated by their corporate IT organizations. Or, that corporate IT lacks the resources (people and \$\$) to move forward on a project. Business leaders also complain that corporate IT is deficient in the requisite business knowledge to be helpful or offer insightful solutions. Finally, business leaders are frustrated that corporate IT places too many hurdles or constraints on solutions that are challenging to address (e.g., security, legal, compliance). In other words, they hear too many, "no we can't," and not enough, "yes and here's how," responses from corporate IT. Is it a surprise, then, that business-led IT is gaining momentum?

There is also a strong case to be made about the downsides of business-led IT. Although many business leaders know that there are more factors to consider beyond functional requirements (see Figure 1), they often lack the skills, time or patience to incorporate them into the vendor selection process. As recently reported by Gartner, corporate IT functions often play "clean-up" about every eight weeks after business-led IT solutions are purchased and deployed with minimal corporate IT involvement.

FIGURE 1. FUNCTIONAL VS. NON-FUNCTIONAL REQUIREMENTS



Courtesy: Gartner

The Solution

CIOs can either embrace the move to business-led IT by providing leadership, guidance and education or they can abdicate their role as business change agents and customer/employee advocates. For those considering abdication, think twice. This trend, business-led IT, is not going away anytime soon. Below is a framework that describes what CIOs can and should do to embrace the benefits of business-led IT while also mitigating the associated risks.

The first step for CIOs, which is completely within their control, is to address several of the business concerns mentioned previously – e.g., lack of speed and agility, lack of IT resources to move forward on a project, lack of the requisite technical, leadership or business skills to develop a solution that works, lack of a robust solution delivery process or too many IT constraints (security, performance, disaster recovery). Consider this a “back to the basics” approach. The list below is not a panacea to address these concerns. In fact, many of the actions discussed below are quite familiar to most CIOs. However, this list is a good starting point. And, unless the concerns mentioned above are addressed, it will be difficult for CIOs to discuss their concerns with business leaders related to business-led IT.

- **Agile Scrum/Minimal Viable Product** – Pursue a collaborative and incremental software development/configuration approach that reduces time-to-value, allows for on-the-fly changes to scope and, through a minimal viable product approach, yields the progressive delivery of business value.
- **Outsourcing (onshore, offshore, near shore) for key skills** – Although there is some overhead in managing a distributed IT team, leveraging an external talent pool can provide access to needed technical talent, address IT resource demand swings and lower the lifecycle costs of technology.
- **Cloud solutions for provisioning storage/compute** – Utilize the capabilities of cloud vendors (e.g., Microsoft Azure, Google Cloud Platform, Amazon Web Services) to rapidly provision and de-provision storage and compute resources.

- **Mature solution delivery process** – A robust Integrated Development Environment (IDE) that supports code repositories for sharing and version control, Continuous Integration/Continuous Delivery (CI/CD) tools to manage the software deployment pipeline and Development Operations (DevOps) practices to quickly create scalable and reliable solutions.
- **Key contract provisions** – A list of non-negotiable vs. preferable contract terms and expected discount levels will provide business leaders with at least a basic framework for negotiating critical contract provisions and pricing.
- **Enterprise architecture standards, principles and guidelines** – These define the “sandbox” in which business-led IT solutions can operate and still comply with security, legal compliance, integration, performance, disaster recovery and other Non-Functional Requirements (NFRs).

The second step for CIOs, the implementation of Cimphoni’s Guided Autonomy Governance Model, is more difficult as it involves a great deal of collaboration, potentially some conflict, and a slow and steady approach to consensus with the CIO’s business peers. Specifically, the path to consensus will a) require conversations that align authority and accountability, b) encourage agreement on constraints that manage the risk/reward tradeoff and c) reach acceptance that there will be some degree of chaos in order to go faster. So, what does this mean?

1. **Alignment of authority and accountability** – It is not possible to have authority without accountability (tyranny) or accountability without authority (futility). The idea is that you reap what you sow. IT governance models need to reflect the connection between these two management principles to deliver the desired business outcome over the long term, regardless of who is developing, deploying and supporting the application.
2. **Agreement on constraints** – Constraints exist in everything we do. But the lack of awareness or respect for these constraints eventually manifests itself in undesirable outcomes (e.g., in the case of IT, system

failures). Enterprise technology standards, policies and principles serve as constraints to guide software provisioning (purchased or custom developed). These constraints, normally in the form of NFRs (see Figure 1), ensure applications are secure, available, resilient, compliant and able to integrate with other applications.

3. **Acceptance of some chaos** – To enable speed and agility in an organization, some acceptance of chaos and its progeny, failure, is necessary. The challenge is to “ring fence” the chaos to minimize the impact that failure can have on the business. This will allow enjoyment of the fruits of being first to market with a creative product or service while also benefiting from the learnings that come with failure. As Thomas Edison said, “I have not failed 1,000 times, I’ve just found 999 ways that didn’t work.”
4. **Agreement on a corporate culture based on trust among its members** – The implementation of traceable, objective, transparent, mutually agreed and shared KPIs so that all stakeholders are aligned around the shared purpose of business value creation through continuous improvement and innovation.

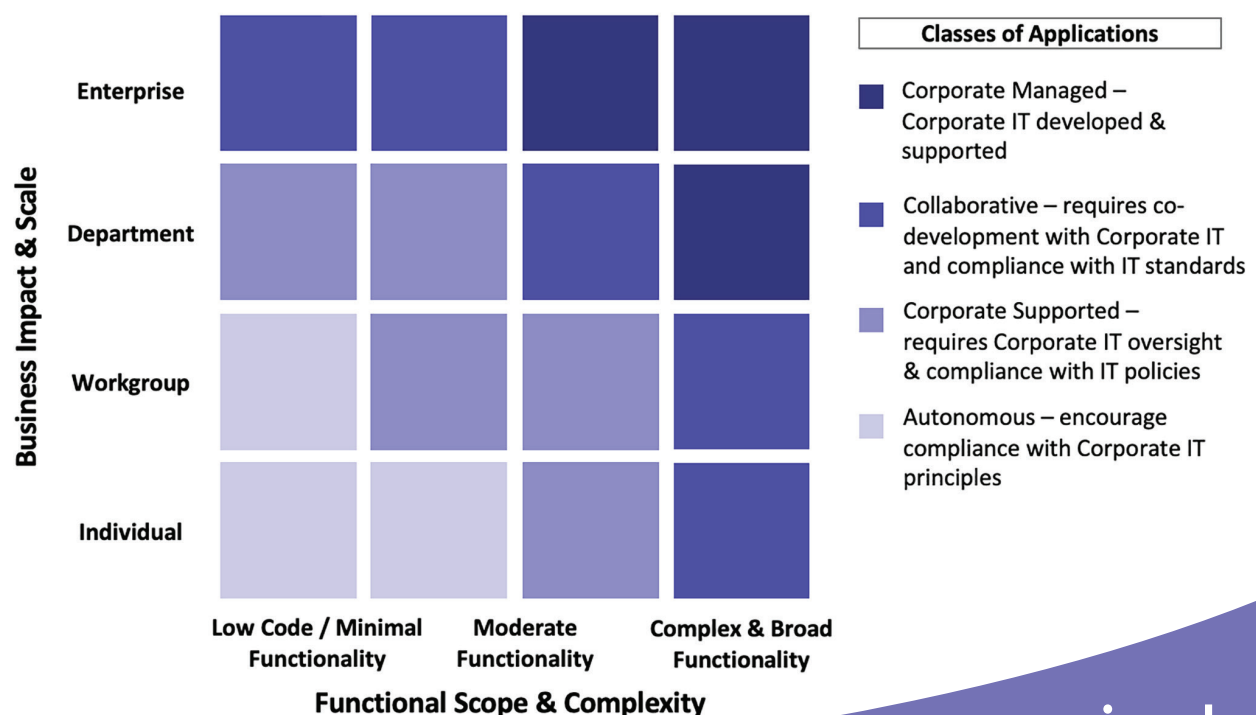
Guided Autonomy addresses these four requirements using a contextual governance model that aligns authority

and accountability for software applications throughout their life cycle, from initial concept to deployment and usage. It also describes a set of constraints in the form of NFRs that apply to these applications during this life cycle. Finally, it recognizes the important role that failure (with accompanied learning) plays in the adaptive growth of an organization.

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The Guided Autonomy governance model shown in Figure 2 starts with a contextual view of applications across two dimensions – a) the classification of software applications based on their business impact and scale (vertical axis) and b) an assessment of the functional scope (i.e., business requirements) and complexity of these applications (horizontal axis).

FIGURE 2. GUIDED AUTONOMY GOVERNANCE MODEL



The shaded boxes in Figure 2 define four classes of applications based on a mix of corporate vs. business-led IT involvement. These four classes are described as follows:



Corporate Managed

Corporate Managed – Applications in the top right corner of the framework are used across the enterprise and support key functions critical to the operation of the business and value generation (e.g., enterprise resource planning – ERP; eCommerce – website, hosted catalogs, EDI). As such, these applications require high levels of security, performance, regulatory compliance and resilience. Taking time to address the NFRs to mitigate business risk is worth the effort. Unless NFR expertise is present and mature within business units, the corporate IT function has the responsibility for ensuring compliance with all NFRs. As a reminder, business leaders, key business stakeholders and subject matter experts own the definition of functional requirements and development of the business case to justify investments for all classes of applications.



Collaborative

Collaborative – Applications in this class are still very important to the operation of the business, but there is more room for business-led IT and corporate IT to share responsibility for NFRs. These applications are bifurcated along two axes – those that are used enterprise-wide, but are stable and secure (e.g., business process automation – Camunda; business intelligence tools – MS PowerBI or Salesforce Tableau; collaboration tools like MS Teams or Slack) and those that are used by small workgroups and individuals, but highly specialized with narrow and deep functionality (e.g., research and development, product engineering and manufacturing quality management). Again, corporate IT should take a leading role in ensuring compliance with relevant NFRs, but there is some acceptance of deviation from these NFRs where the business risk is minimal.



Corporate Supported

Corporate Supported – These applications enjoy a little more autonomy than applications in the Corporate Managed or Collaborative classes. This is the area where innovation goes mainstream within a company because applications or technologies in this class have proven their business value (e.g., robotic process automation – RPA; industrial internet-of-things – IIoT; natural language processing – NLP). Although these applications can be used across departments, workgroups and individuals, the balance between speed/agility and business continuity skews more to the former than the latter. As a result, there is some acceptance of risk to realize a more than offsetting business benefit. Regarding NFRs, corporate IT serves in an advisory role, seeking compliance with IT principles that inform purchase decisions vs. requiring absolute compliance with well-defined technology standards



Autonomous

Autonomous – Applications in this class enjoy a great deal of autonomy for the simple reason that this class serves as an incubator for innovation. Experimentation, by definition, requires acceptance of failure. Applications and technologies in this class have yet to prove their business value. Therefore, the requisite for this class of applications is to limit the impact of failure to an individual or small workgroup. Because applications in this class can be custom developed using “low code” platforms like MS PowerApps or Salesforce App Cloud, there is an obvious question that needs to be resolved between business-led IT and corporate IT – who supports the application when it fails or when the individual that developed the application moves on? The answer to this question will define the level of corporate IT involvement over the life cycle of the application. This is where the CIO and senior IT leaders can support their business peers with a tutorial on prudent

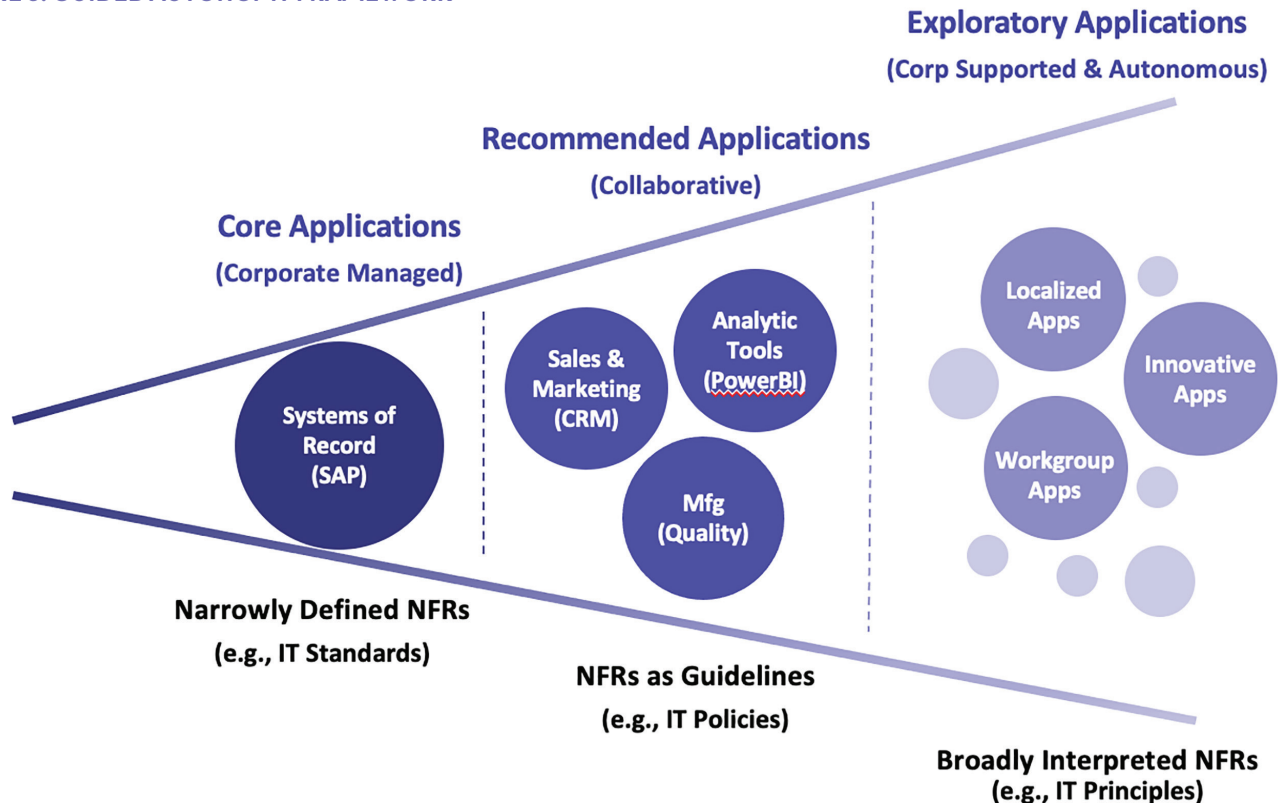
software development and support practices. Corporate IT can and should serve as an internal consultant to the business-led IT development team or individual, but not with a heavy hand.

The Guided Autonomy framework shown in Figure 3 describes the NFRs placed on software applications based on the four classes of applications. As previously mentioned, these NFRs are intended to balance risk and reward.

Key Take-aways

1. Business-led IT is a natural progression from decades ago when IT was described as the “data processing” department and overseen by technology experts. Today, information technology is viewed as a necessary and ubiquitous capability that enables businesses to operate competitively and efficiently. There is also an expectation now that business leaders must have more
2. Although business-led IT has been characterized by derogatory terms like “shadow IT” or “rogue IT,” its growth is the direct result of the business need to provision innovative technology solutions over a shorter period and with more control over its outcome. Not surprisingly, this growth has created tension between business-led IT and the traditional corporate IT organization.
3. Progressive CIOs will see this tension as an opportunity to increase collaboration with business leaders to deliver IT-enabled solutions faster while also sharing with them the importance of addressing non-functional requirements (NFRs). The purpose of the NFRs is to ensure IT-enabled solutions are secure, comply with regulations, perform appropriately and work well with the rest of technology used across the enterprise.

FIGURE 3. GUIDED AUTONOMY FRAMEWORK



4. Business leaders with responsibility for IT within their respective domains and enterprise CIOs need to develop a contextual governance model that recognizes the benefits of business-led IT while also providing a framework to manage all elements required to deliver effective and efficient technology solutions over the long term. We call this contextual governance model Guided Autonomy.
5. The Guided Autonomy governance model developed by Cimphoni provides this framework. The model looks at the applications (or more broadly, enterprise technology) and the impact that they have on the business. Clearly, those applications that are critical to the continuity of business operations need to be managed with a lot more diligence than applications whose business scope and scale are limited to individuals and workgroups. Understanding the role of business-led IT and corporate IT in this environment is important if management wants to benefit from the speed and agility that comes from business-led IT.

To explore the benefits of Guided Autonomy in your organization, contact Cimphoni. We can start with a [SnapShot Assessment](#) across the business to discover and prioritize opportunities to leverage Guided Autonomy to drive greater innovation and efficiency for your company. We would also encourage you to read more about our [business agility](#), [IT performance improvement](#) and [digital transformation](#) services at Cimphoni.com.

ABOUT THE AUTHOR

Rick Davidson, President & CEO

As Cimphoni's President & CEO, as well as its business transformation practice leader, Rick has 30+ years of experience as a senior IT executive, business consultant and entrepreneur. His business experience spans manufacturing, consumer products and entertainment, as well as financial and professional services industries. He has served as an Interim CIO for numerous organizations, including Seaworld Parks and Entertainment and AAA. He has implemented transformational initiatives in e-commerce, procurement, materials management, supply chain, product lifecycle management and CRM.

Prior to launching Cimphoni, Rick was a Managing Director of AlixPartners, where he was actively involved in several corporate restructurings, bankruptcies and turn-arounds. He also served as the Global CIO for ManpowerGroup, was a Partner at the Feld Group and CIO of CNH Global. He holds a Bachelor of Science degree in Electrical Engineering from Arizona State University and is a frequent speaker on digital transformation, internet of things and the role of information technology in the enterprise. Rick enjoys flying and plays guitar.

About Cimphoni

Cimphoni is built on the premise that technology, when properly applied and led, can deliver innovative solutions that transform businesses, enrich the products we use daily and improve the quality of our lives. The Cimphoni team is comprised of highly-experienced technology and business leaders with a thirst for innovation and a passion for solving problems.

Founded in 2012, we serve customers throughout the United States from our offices in suburban Milwaukee.

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If you are ready to take the next step in exploring how our Guided Autonomy Governance Model can help your organization, please contact us at (888) 470-0448 or info@cimphoni.com.