Moving from “Best Practice” to “Next Practice” to Drive Effective Digital Transformation

by Greg Smith and Carl Bate

In this article, we will argue the past is a poor playbook for the future when it comes to delivering real business value from technology. Whilst successful exploitation of legacy technologies is critical, the best practices that the IT industry has promoted and applied for the last 20 years have little value in this endeavor.

In a fundamentally changed world, technologists will need to embrace and adopt “next practices” if they are to be successful. Before moving on to this challenge, though, we first need to establish that the situation we face as technologists has indeed changed fundamentally.
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Digital Transformation: Technology Is in the Driver’s Seat
by Munish Gupta
We are constantly bombarded with the message that we are living through a period of unprecedented change; that technology is rewriting the rule book across all industries; that any organization that fails to fully master technology will become commoditized, obsolete, or extinct; and that the only possible solution to these challenges is to implement the latest technological miracle cure.

While we can discount the inevitable hyperbole — and, all too often, the self-interest — at the heart of these opinions, there is undoubtedly a foundational shift occurring in the information technologies that underpin our businesses and organizations. We have not yet found a consistent way to articulate this foundational shift; perhaps the closest we have come to a widely accepted definition is the categorization of business technologies into “digital” and “enterprise IT.” Digital has become synonymous with customer-facing technologies that embrace the world of social, mobile, cloud, big data, and emerging technologies such as AI, while enterprise IT remains the de facto term for back-office and enabling technologies.

These two categorizations extend to different worldviews and ways of working, with their respective practitioners adopting a tribe-like mentality to self-identify. The internecine battle between these technology tribes is a pointless distraction for most large-scale organizations. For these businesses, the new digital technologies and approaches will need to leverage and exploit the over 20 years of investment in enterprise IT if they are to fully realize their transformational potential. New digital capabilities will need to build upon existing IT-enabled operational capabilities.

In this context, the scope of digital transformation needs to be widened to incorporate both the harnessing of emerging technologies and patterns and the genuine exploitation of legacy technologies and services. However, we should be careful not to confuse exploitation of legacy technologies with the application of so-called IT “best practices.” Simply replacing old enterprise IT with new cloud enterprise IT by itself may not cut the mustard. We find this approach can often add to enterprise IT complexity (as not everything gets switched off as expected), and even the successful programs need to interact effectively with digital.

In this article, we will argue the past is a poor playbook for the future when it comes to delivering real business value from technology. Whilst successful exploitation of legacy technologies is critical, the best practices that the IT industry has promoted and applied for the last 20 years have little value in this endeavor.

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**COMPLICATED VERSUS COMPLEX**

Through the Cynefin framework, knowledge management expert Dave Snowden has created a useful typology for describing the different contexts within which all organizations and their associated technology functions operate. Snowden defines and describes four primary domains:

- **Obvious.** The relationship between cause and effect is clearly identifiable and understood by all.
- **Complicated.** There is an identifiable relationship between cause and effect, but the relationship needs to be discovered through analysis or investigation.
- **Complex.** A relationship between cause and effect can be identified in retrospect, but not in advance.
- **Chaotic.** There is no identifiable relationship between cause and effect.

These definitions provide a useful framework for articulating how the world has radically changed for most businesses over the last 10 years and why the change is truly fundamental. Over this period, the majority of businesses have moved from primarily operating in a...
complicated world to now having to compete and excel in a complex one.

At the heart of this move from complicated to complex is the increasing importance of human factors in all facets of business, and in particular the liberation of the customer, who is now increasingly able to operate as an independent actor, with all the challenges and unpredictability this can lead to. As a broad generalization, we are also moving from a world of predominantly closed system interactions, which can be controlled, measured, and codified, to a world of open system interactions, where we need to constantly sense, adapt, and respond to emerging needs and challenges.

The interplay of complicated and complex can perhaps best be illustrated through a sporting analogy. In motor racing, a Formula 1 pit crew can change from dry tires to wet tires in less than 10 seconds — a complicated and highly orchestrated process that is analyzed rigorously and practiced obsessively to ensure reliable execution in race conditions. However, all teams have broadly similar capabilities, and whilst a failure in the ability to change tires faultlessly can certainly cost a driver his position on the winning podium, mastering the complicated tire-changing process does not allow the driver or his team to significantly outcompete their rivals. But what happens when there is a possibility that it may start to rain during the race?

In this scenario, the F1 team needs to rely on a sophisticated sense-and-respond mechanism, which does have an ability to directly impact race outcomes. If you predict the weather conditions better than your competitors, respond appropriately, and carry out your pit stops perfectly, you will create a significant opportunity to outperform your rivals. Unfortunately, though, the opportunity will be short-lived. Your competitors will very quickly change their tires over to wet-weather tires and put themselves back on a level footing. However, the same finely honed capability will present another opportunity to outperform the competition if it stops raining, the track dries out, and you decide to revert from wet tires to dry ones.

In this example, we are primarily operating in a complex, open system domain, where external factors (precisely when will it start to rain, how heavy will it rain, what race strategy the competitors will adopt) can have a major bearing on success or failure no matter how good the driver and team are at the aspects that they control (driving the car, changing the tires). Choosing the right strategy is critical — but then the chosen strategy needs to be executed perfectly. Mastering the complex allows a team to create a race-winning opportunity; mastering the complicated allows the team to seize the opportunity.

When we start to look at our businesses through a similar lens, we see that the truly game-changing opportunities or challenges we face are also a blend of the complicated and the complex. Being able to understand the difference between the two domains and manage accordingly is thus the key to success. An inability to differentiate between complicated and complex leads to one of the most fundamental causes of business and technology failure — the illusion of control.

Too often we believe we can precisely predict the outcome of our projects and actions because we have created detailed execution plans; we have a strong grip on delivery; we have locked down performance of external suppliers through precise contracts; we have applied a comprehensive governance framework; and we are obsessively measuring our progress. Then we “go live” and things don’t quite work out as planned. As we are all painfully aware, the track record of major business technology projects delivering anticipated outcomes and benefits is spectacularly bad, and yet we continue to slavishly apply so-called best practices and are still surprised when another major technology investment fails to live up to expectations.

The fundamental challenge is that technology best practices have been designed for complicated, closed systems and are wholly unsuited to delivering successful outcomes when challenged with complex, open systems. Under these circumstances, we need to understand best practices but fully embrace and apply next practices.

**BEST PRACTICE VERSUS NEXT PRACTICE**

The need to move from best practice to next practice manifests itself across multiple dimensions within an organization and at multiple scales, from individual activities to overall industry ecosystems. Consequently, successful guiding principles, which are required to
help with the transition from best to next, need to be able to inform and assist decision making within this “fractal” context.

At a summary level, next practice guiding principles can be categorized into four main dimensions:

1. Business leadership
2. Organizational and behavioral
3. Operational
4. Technology

The principles shown in Tables 1-4 (below and through page 44) are drawn from a library of over 50 examples and are intended to illustrate how principles can assist an organization in challenging conventional wisdom and avoid reversion to “tried and tested,” which all too often now is “tried and failed.”

**CONCLUSION**

Feedback from early adopters of next practice has found that this way of thinking helps make explicit the underlying trends and disruptions we all experience in our daily lives but struggle to articulate within the corporate environment — beyond labeling them with the overused “digital” tag. However, we also find that merely creating another tribe — this time a next practice one — only adds to the issues.

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<th>Best Practice</th>
<th>Managing the Complicated</th>
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<td><strong>Assumption is that the system is closed.</strong> Strategic plans assume certainties, with management focus and resources prioritized on “delivering the plan,” which will often be multiyear in duration. Failure to deliver the predetermined plan is not an option.</td>
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<td><strong>Internal focus dominates.</strong> The majority of management attention is on internal factors (e.g., overseeing internal resources).</td>
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<td><strong>Metaphors and inspiration are drawn from engineering and the physical sciences.</strong> Terms like “engine of growth,” “software factory,” and “the machinery of the business” dominate, reinforcing a mechanistic, reductionist mindset and diminishing the attention and focus on human factors in the business.</td>
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<td><strong>Strategy defines challenges (a priori).</strong> Strategy — that is, where we play and how we win — is deterministic. The business is focused on analyzing and then answering the questions it sets itself.</td>
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<th>Next Practice</th>
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<td><strong>Assumption is that the system is open.</strong> Strategic plans assume uncertainties and emergence, with management focus on delivering the next part of the plan, deliberately assessing feedback, and constantly tuning resource allocation to deliver the part. “Pivots” are allowed as new evidence is discovered that challenges the initial hypothesis.</td>
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<tr>
<td><strong>External focus dominates.</strong> The majority of management attention is on external factors (e.g., customer and market feedback).</td>
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<td><strong>Metaphors and inspiration are drawn from biology and the natural sciences.</strong> The notions of emergence, memes (ideas and concepts that can self-replicate across the organization), and discovery are favored over invention.</td>
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<td><strong>Challenges define strategy (a posteriori).</strong> Strategy is emergent based on real-world feedback, even if it doesn’t fit with the prevailing mental model the business has of its world. The primary strategic questions to be answered emerge from a wide-ranging survey of data and insight and are unknown or only partially known before the analysis.</td>
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Table 1 — The business leadership dimension.
We propose next practice as an “and,” not a wholesale replacement for good and established practices. Most fundamentally, it should be a way to help creativity, continuous learning, and common sense prevail. We hope this article has triggered a reaction — one way or the other! — and we welcome the ensuing debate and challenge as part of the evolution of the next practice mindset.

ENDNOTES

1 The term “next practice” has probably arisen independently multiple times, but we were first introduced to the concept by C.K. Prahalad.

2 “Cynefin” (Wikipedia).

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<td><strong>Command and control.</strong> Management always knows best and tells staff what to do, often in highly prescriptive ways with close scrutiny.</td>
<td><strong>Influence, enable, and empower.</strong> Management creates overall direction and principles and then empowers people to use their talents to deliver the best outcome in an emergent and often unpredictable set of specific circumstances.</td>
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<td><strong>Hierarchies and chain of command.</strong> Decisions are made by the most senior person. Activities are directed and delivered through individuals that are perceived to be wholly under the control of the organization.</td>
<td><strong>Networks and shared incentives.</strong> Decisions are made by the most qualified person. Activities are delivered by a network of individuals with widely differing levels of direct control from the organization but with aligned incentives to ensure coordinated, win-win outcomes.</td>
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<td><strong>People thought to be totally rational, calculating machines.</strong> Ways of working and KPIs assume people are totally rational (based on management’s view of what “rational” looks like).</td>
<td><strong>People thought to be predictably unpredictable.</strong> Ways of working and KPIs assume the business is more like an economy than a factory, and that human factors (such as those defined by behavioral economics) dominate. Individual actions may not be precisely predictable, but the sum of activities is stochastically reliable.</td>
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<td><strong>Staff seek permission.</strong> Permission is required to undertake an activity that is not preordained or tightly defined; responsibility is held by the few.</td>
<td><strong>Staff ask for forgiveness.</strong> Staff are encouraged to use initiative to achieve goals but also to take responsibility for actions; responsibility is held by the many.</td>
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Table 2 — The organizational and behavioral dimension.

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Best Practice  
*Managing the Complicated*

- **Stability and predictability.** Management culture, KPIs, and incentive systems are all based on predicting the future and then precisely delivering to that prediction. Change is seen as disruptive.

- **Procedures, rules, and routines.** All activities are broken down into discrete elements, with staff then expected to precisely follow specific procedures (although they don’t always seem to). Staff often view procedures as centrally imposed and feel they “get in the way of getting the job done.”

- **What has worked in the past.** Actions are based primarily on prior experience and learned behavior.

- **Measure and manage.** Management is based on what is known as well as retrospective analysis and reviews (e.g., month-end reviews).

Next Practice  
*Embracing the Complex*

- **Agility, emergence, and adaptability.** Management culture is based on delivering value early and often and accepting emergent phenomena. Self-disruption is seen as not only to be expected, but as a positive.

- **Algorithms, checklists, proxies, and heuristics.** Rules of thumb and tried-and-tested shortcuts are used to guide decisions, along with checklists for specific activities. Proxies are used to allow early insight into the performance of a system. Staff view tools as helpful and take personal ownership of their ways of working.

- **What could work better in the future.** Actions are based primarily on expertise and continuous learning, even if this challenges habits and prior successful ways of working.

- **Sense and respond.** Management is based on continuously seeking out what should or could be known and reacting in near real time to emerging situations.

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Table 3 — The operational dimension.
Established enterprise solutions. Technology strategy is primarily based on well-known enterprise solutions and technologies. Governance is applied via rules and regulations that direct which technologies can be used and how they are implemented.

Change management. People are told what the new ways of working are, and the assumption is that staff will adopt them rationally once they have gone through required training and familiarization.

Up-front grand design and big-bang delivery. Large-scale programs follow significant periods of design, without usage; team size can be 100+.

Legacy as millstone to be replaced. The assumption is that legacy is the problem and needs to be replaced wholesale to allow major changes.

What would the Web do? Technology strategy is primarily based on emerging technologies and consumer-style solutions. Governance is via principles and patterns.

Adoption engineering. Focus is on influencing changes in habit and being in the shoes of the recipient, not mandating change centrally; techniques like MINDSPACE\(^1\) and SCARF\(^2\) can be used to allow users to self-adopt. Adoption of change is driven by “path of least resistance” and mimics users’ experience with consumer technologies.

Emergent requirements and incremental delivery. Smaller programs deliver early and often; team size tends to be 15 or less.

Legacy as lodestone to be leveraged. The focus is “What problem are we solving for whom?” and the assumption is that legacy may be part of the answer. Teams ask the question “What is the minimum we can change and still deliver the benefit?”

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Table 4 — The technology dimension.