MB - Consulting

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Chapter 1 — Introduction

What Companies Don't Want to Hear About But Should.

Companies call consultants when something goes wrong. External events may have triggered a crisis. Some catastrophic events may have disrupted the normal routine.

One problem is not often addressed, although it can have potentially devastating consequences: the slow erosion of a company's standing due to multiple factors, often dismissed with a shrug, that hamper productivity.

Two factors stand out: dilution of responsibilities and difficulty in accessing valuable information. These are visible effects to other problems hidden underneath. Diving from the tip of the iceberg to the roots of those problems helps us understand and figure out ways to improve the situation.

The promise of technology is to make life easier and relieve the burden of daily tasks by removing all repetitive, burdensome tasks from the workload. Technology has delivered, but has created another problem, that did not exist before: the inability to think outside of the applications that are being used. A standardized, idealized workflow works partly, but it fails to address specific, tricky situations which require more nuanced thinking. These non-addressed areas may turn out to develop into a deep, invisible, overarching, weakness that builds up as time goes by, and can seriously impact a company's future prospect.

The available tools aimed at creating, sharing and storing information within a company cloud have enabled collaboration between teams, that have the ability to

work from different locations. Information is now practically entirely digital and can be accessed from multiple devices. But the ease with which information is created also comes with the fact that it has become more difficult to find valuable information within a haystack of data that may contain drafts, unsynchronized data sets, and obsolete versions. The various silos and access rights to information increase a dependency towards those who know where the good information is.

The penetration of artificial intelligence technologies is highlighting these weaknesses in ways that seem to push further away any control that information owners have over their content.

By taking a deep dive into the problems facing many companies, it is possible to find ways to get back on top of the situation. The approach developed in this book builds on common sense. It reveals that when there is an elephant in a room, the first thing to do is to acknowledge that it exists. The next thing to do is to understand how it came there, and which part of it can be used to our advantage.

This book is for company executives and decision makers that are aware about the difficulties that are currently eroding the standing of the companies, and are ready to look into the roots of the problems to define a strategy that would put them in charge, rather than relying on quick and dirty fixes that will only work temporarily.

Chapter 2 — Is there anybody in charge?

Business applications contain pre-digested features

Applications that are sold on the enterprise market have a common characteristic. They have pretty much everything figured out. The applications have been tailored for existing markets, such as healthcare, industry, sales, grant management, software development, etc. The workflows are pre-defined. This is very attractive for companies, who do not have to figure out by themselves how to proceed. Most applications contain customization features, letting space for building features for specific situations. They use the "no code" approach, which let non-technical users add features describing specific use cases.

These applications are quite popular because they can be used out of the box, and their default behavior has been designed to cover a lot of territory. They allow companies to operate quickly and efficiently.

These applications are designed to be easy to use, but still need their users to get familiarized. Once users invest the time needed to feel comfortable, they are providing everything most companies will ever need to operate successfully.

However, the fact that everything has been pre-established leaves no room for thinking. There are no opportunities for employees to think deeply about their function.

If there is something specific that can't be done within the framework that is in place, it becomes a lingering problem without a solution. Often, the problem itself is not raised, as there is not even the space to think about it.

Within such an environment, users are not in control. They still can fix some minor issues such as the ones caused by the no-code automations. But they can not really revamp the process to fit another workflow. This situation creates a dependency betweeen what users can do and how they should think and the design of the software applications that they are using.

Nobody considers themselves responsible for such a situation. Users can't do anything outside of the applications that have been installed and often purchased without their consentment. The IT departments, once they have installed these applications, consider that their responsibility is to ensure that the applications are working as well as possible, and fix any hiccups or problems that can arise, providing support to the users. But they are not in a position to claim responsibility for what the applications are providing, and for what they are not providing.

The Quest for Magic solutions

Software products are often sold as well-thought of solutions that handle workflow, project management, customer relations, sales. Companies adjust their practices to what software enables them to do. Some customization is possible, to handle specific cases, although this requires technical expertise, that needs to be performed by the IT department.

Users need to adjust to what the software lets them do. It is not always easy, and sometimes there are tasks that can not be performed well using the existing tools. From there there are two ways: one is to figure out what the exact requirements are, and look for a product, or an extension that would be usable to perform these. Another way is to look for new generations of products, purchase

one after having done a cost/benefit analysis, and then revamp the tasks according to the requirements imposed by this new software application.

Often, it is the latter that is chosen, because the notion that users can have their word to define their own requirements independently of any existing software seems out of question. This was a general case for small businesses, which don't have the potential to tell software companies what their requirements are. But it now affects big companies as well.

If it has all been figured out, then the only way to adopt it is to believe that this is a magical solution that has been thought of by super-smart people who know what any client of theirs would ever need.

Will AI solve all pending problems?

The addition of artificial intelligence processes goes one step further and reinforces the mindset that software companies have figured out what any user will need. This leads to the thinking that a company loses its lead on the data that it owns. This attitude can have negative, sometimes fatal, consequences.

Not even thinking of the privacy concerns, the large language models may come up with information which can contain errors, with no ability for the companies to intervene in the processes. In some cases, this can lead to devastating consequences, including breaking the law, or misleading customers in doing things that may have bad consequences for them. This may result into lawsuits, and if the consequences are really bad, the amounts a company may have to pay may lead to its demise.

It is important therefore to realize what AI is, in order to use it smartly and not creating processes that entirely depend on AI. Of course it is tempting to do so, because it replaces human work in ways that can significantly lower costs. But if the price to pay is to precipitate the fall of a company because trust has be

lost, the temptation of lowering the cost may be gravely misleading.

AI is more or less a sophisticated way to automate processes, something that has been done for decades, since computers exist. Instead of getting data from a small, limited, data set, AI processes extract information from large data sets, that may cover much more than the limited set of data handled by one company in particular. But at the end of the day, AI is just the result of calculations, and it can not be overstated that it is all what it is.

Unprecedented: Confronting the Unexpected

A company is equipped with a software infrastructure that is part of an eco-system. It contains many software components that are designed to work together. The inherent complexity of these eco-systems has the potential to create messy situations. It is difficult to disentangle the way information is actually created, stored, and accessed. Given the number of components used, a full audit of such a system can only be accomplished by personnel who masters these different layers. Often, this level of expertise is something that has to be sought after externally.

Given that context, it is hard to take a critical viewpoint on the information system. It is possible that things that do not work as expected results from defaults in the configuration. It is possible that some of the problems result from failing to migrate information from different versions.

An information system uses models that describe how the data should be structured. Databases are made of fields, or objects with predefined properties. The whole information system relies on a common understanding of these data models, their field values, also called metadata content, and the values of the individual instances.

Even documents can be structured, either with a predefined document type such as in XML, or with predefined templates, which offer a lighter level of consistency and are easier to implement.

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