

# Integrated Portfolio Management: A Source of Boldness and Tenacity

Prepared for:



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## EXECUTIVE SUMMARY

*Integrated Portfolio Management: A Source of Boldness and Tenacity*, commissioned by Software AG and produced by Aite Group, explores the benefits of supporting enterprise architecture management (EAM) and integrated portfolio management (ITPM) with automation built specifically to support these activities.

Key takeaways from the study include the following:

- Organizations that support ITPM with software designed specifically for this task benefit from increased alignment among their senior management teams, their strategic outcomes, lines of business, and IT.
- Among the sources of greater alignment between senior management's goals and IT is greater tenacity for completing projects. Equipped with extensive information about their projects and the potential impacts of each on all of the highly interdependent assets in the enterprise, organizations are better able to anticipate and avoid project disruptions and their associated costs. These organizations are also far less likely to reduce the scope of their projects as a risk reducer, better enabling project teams to meet management's goals.
- Concurrent with increased organizational tenacity is increased strategic boldness. More confident in their ability to minimize risk at the project level, organizations that use ITPM software are more likely to increase the number of projects on their roadmap, a phenomenon that also enables the achievement of management goals.
- Increased operational continuity is also a benefit of adopting software designed to support ITPM. With a repository of data on every asset, project, and supported process in the enterprise—including their interdependencies—organizations become more resilient to disruptions of all types.
- Equipped with a granular, enterprise-wide repository of their assets, organizations with an ITPM tool are able to reduce IT costs by both eliminating redundant assets and avoiding the purchase of new technologies that would otherwise create new redundancies.
- Among the smaller benefits of implementing an ITPM tool is increased productivity. Benefitting from a granular and centrally available repository documenting their enterprises, IT staffers are able to spend less time auditing their enterprises and performing the research that is required at the beginning of most IT projects.

## INTRODUCTION

In order to thrive, organizations must be ready to change and do so rapidly, whether as disruptors seizing an opportunity or organizations defending themselves against disruptive competitors. Unfortunately, organizations tend to change slowly, especially large ones. The people that form an organization, along with the organization's cultures and processes, resist and postpone the discomfort and perceived risk of change. Also difficult to change are the many components of an organization's ecosystem, such as vendors, suppliers, interaction channels, and distribution assets. But core among an organization's barriers to change is typically its IT landscape, often referred to as its "enterprise IT."

Typically the amalgamation of thousands of independently made decisions and purchases by organizations and lines of business with varying levels of autonomy, the typical enterprise IT is characterized by a sprawling structure, poor documentation, and a loose alignment with the senior management's goals and objectives. Tasked with taming their infrastructure, many IT departments have staff dedicated to enterprise architecture management (EAM), the craft of bringing order to enterprise IT by documenting it (including its internal and external dependencies), rationalizing it, and making it more responsive to senior management's strategic goals. Spanning the enterprise and touching upon many organizations and individuals, many in their own cultural and technological siloes, EAM is no easy task. Harder still is the task of ITPM, which requires EAM as its basis and ensures that the assets in an organization's IT landscape are both agile and capable of supporting senior management's objectives and goals.

It is in the context of an organization's need for an ITPM practice that can create an enterprise IT capable of rapid change that Aite Group examines the benefits of systems designed specifically to support EAM and ITPM as an alternative to ad hoc or homegrown systems built with, for example, Microsoft Office capabilities. By identifying the benefits of systems designed to support EAM and ITPM, this paper can be used by proponents of an advanced ITPM practice seeking to make the case for its support with a software tool. This research can also be used by members of senior management teams seeking a better understanding of systems that support ITPM and their potential benefits.

## METHODOLOGY

This white paper is based on extensive examinations of deployments of Software AG's Alfabet product, a system designed to support ITPM, at nine large organizations. These examinations comprised lengthy interviews that explored the impacts of adoption on the organizations' cultures, business processes, the performance of the enterprise IT, and its alignment with management's goals. Quantified wherever possible in this process were identified benefits such as seized business opportunities, eliminated costs, or avoided costs. Also informing this body of research is the author's career in performing return-on-investment (ROI) analyses on deployments, which spans more than 10 years.

# EAM AND ITPM

EAM is the practice of documenting, monitoring, and governing all of the IT assets, at a variety of levels of granularity, in an organization’s technological enterprise and contextualizing those assets with one another as well as with the enterprise’s business structures, such as processes, products, or organizations. Organizations undertake EAM, in part, to pursue ITPM: alignment between an organization’s IT landscape and its desired level of agility, goals, and objectives. Among the asset types within the scope of EAM and ITPM are homegrown systems, off-the-shelf systems, software, services, operating systems, databases, and hardware. Also within the scope of ITPM are non-asset phenomena such as ongoing projects, planned projects, and asset interdependencies as well as their owners, life cycles, vendors, and level of support.

IT departments accomplish ITPM with varying levels of scale, granularity, and tool support. In large organizations, ITPM can vary in its level of maturity across different lines of business and legal entities. IT departments variously pursue ITPM with systems designed for its support or homegrown capabilities based on, for example, Microsoft Excel or Microsoft Access. The maturity of organizations’ EAM and ITPM efforts vary broadly. Some organizations, early on the EAM maturity curve, use this practice merely to document their assets so that redundancies can be identified and costs reduced. Others more advanced in EAM maturity use this practice to pursue ITPM, creating such extensive mapping among all tracked artifacts that their goal is the alignment of IT with the organization’s business model and senior management’s goals and objectives.

In its examination of Alfabet as a system capable of supporting ITPM and EAM, Aite Group identified features and functionality in five areas relevant to IT departments, lines of business, and the management teams to which they report (Figure 1).

**Figure 1: Alfabet Features and Functionality**

<b>Application portfolio management</b>	<ul style="list-style-type: none"> <li>• Reports and alerts for ensuring completeness and data quality of the application inventory</li> <li>• Analysis of the enterprise portfolio based on attributes that include cost, risk, usage, and performance.</li> <li>• Ad-hoc creation of as-needed attributes for portfolio assessments</li> <li>• Application lifecycle reporting for checking applications’ conformance to organizational goals</li> </ul>	<b>Technology portfolio management</b>	<ul style="list-style-type: none"> <li>• Identification of relationships among parameters such as technology usage, vendors, suppliers, contracts, and consultants</li> <li>• Ranking of technologies according to selected key performance indicators</li> <li>• Assessment of potential impact on the enterprise of new technologies such as cloud or mobile</li> </ul>
<b>Project portfolio management</b>	<ul style="list-style-type: none"> <li>• Inventorying of all projects in the enterprise</li> <li>• Monitoring and assessment of interdependencies among projects, applications, and processes</li> <li>• Governance and standardization of the inventorying and tracking of projects</li> <li>• Organization of the project portfolio along parameters such as project type, business capabilities, or organizational ownership</li> <li>• Creation of ad-hoc portfolio categories that enable portfolio management to conform to the organizational project roadmap</li> </ul>	<b>Demand management</b>	<ul style="list-style-type: none"> <li>• Centralized inventory of all available business capabilities and business requirements to avoid redundant purchase and projects</li> <li>• Association of demands with parameters such as impacted capabilities, supported strategies and organizational goals</li> </ul>
		<b>Configurability</b>	<ul style="list-style-type: none"> <li>• Open configurability to accommodate different industries, individual company norms, financial metrics, and levels of maturity.</li> </ul>

Source: Aite Group, Software AG

## DIGITALIZATION AND ITS DEMANDS ON ITPM

Much is currently being made of what is called the digital revolution. One could reasonably be skeptical of this term, given its current level of hype. But when a close examination is made of the phenomena associated with digitalization, huge changes are indeed seen. Although potentially bearing a different definition depending on who is asked, digitalization is an important phenomenon that has businesses of all sizes responding to six trends:

- **Customer demands for rapid and omnichannel interactions and processes:** Customers, both retail and business, now seek to consume content, browse product offerings, purchase, close transactions, and complete onboarding over any medium of their choice: online, mobile over web, mobile over a device-enabled app, in person, with a call center, or in a face-to-face interaction. Customers also demand the ability to switch, without disruption, from one channel to another midprocess.

Providing a good example of omnichannel interactions enabled by the digital revolution is the wired home. Manufacturers of refrigerators and freezers are now including within their products sensors that anticipate when a consumer will run out of certain groceries. These devices will respond to such pending outages by accessing the consumer's account at a major grocery chain, ordering groceries, and scheduling their delivery. Such a broad integration of capabilities, entities, and data sets—both within and beyond an enterprise's firewall—are achieved through digitalization rather than incremental projects accomplished in sequence.

- **Blurring of content and data:** Some industry leaders have begun treating customer portals as passé, eschewing them as insufficiently customer-driven and too company-driven. Instead, when a customer begins an interaction over any interaction channel, served up to that customer is advice, options, and free content, finely tuned at a granular level for that customer based on a big-data analysis of that customer, his or her history, preferences, and propensities. Travel-related and credit card portals such as Kayak, Expedia, and American Express now craft far more tailored customer-facing content, which goes beyond updates about a customer's flight or the weather in the destination city to include free content and promotions based on factors such as the traveler's demographics, spending habits, and restaurant choices.
- **Value chain compression by leaders and innovators:** With the relatively low cost of technological assets such as memory, analytics, and alternative data sets, entry barriers to markets held by long-established players such as brokerage firms and retail banks have been reduced. Examples here are the alternative lenders in the small and midsize business (SMB) lending market and the robo-advisors in the wealth management space typified by Schwab. Another example is the embrace of the Internet of Things, which requires businesses to acquire, store, and analyze vast and rapidly growing sets of data that offer insights to make companies more connected to their products, and by extension, their customers, to whom they become better able to provide highly performant products and cross-sell more products and services.

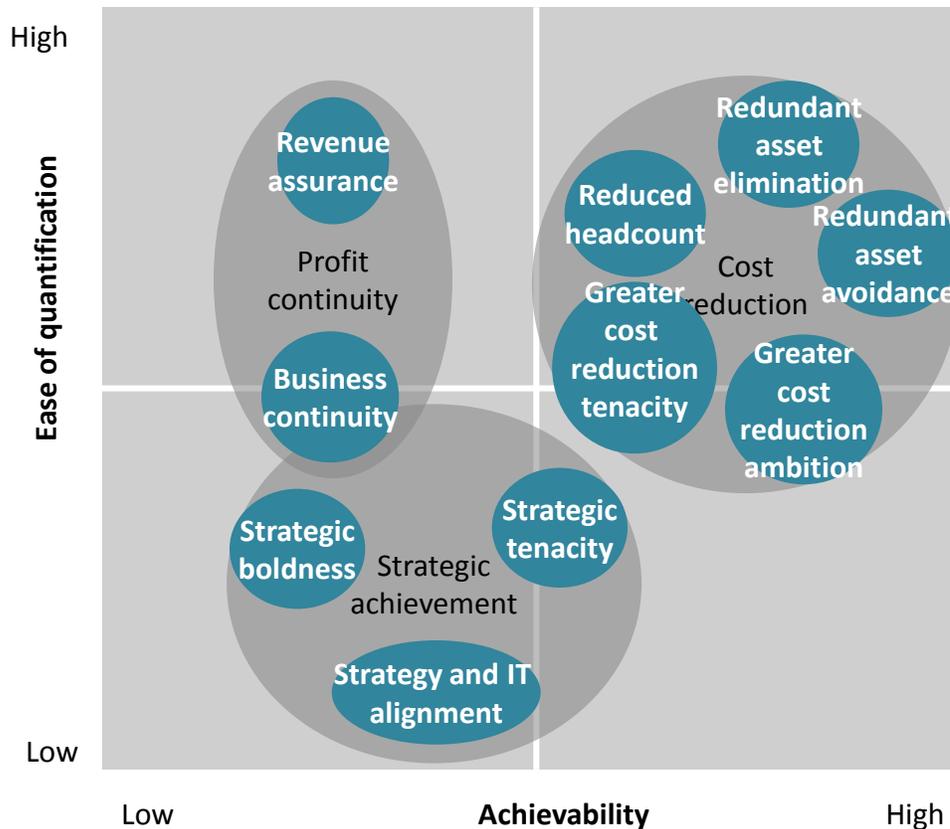
- **Soaring customer expectations:** Often accompanying leaders' compression of their own value chains—and by extension, those of their industries—are compressions of both margins and required response times. The entry of robo-advisors to the wealth management business did away with the 100 basis point fee previously earned by the entrenched wealth management firms. The entry of the alternative lenders to the SMB lending market has left small businesses expecting lenders to respond to a credit application in three days or less, not three weeks or less.
- **Constraints upon agility from regulators and institutions' risk managers:** With regulations such as the Dodd-Frank Act and TILA-RESPA Integrated Disclosure (TRID) changing on a nearly monthly basis, institutions' traditionally built analytical data tools, such as SQL and traditional business intelligence, are often so rigidly constructed that they cannot be modified on a schedule that accommodates regulatory deadlines. This leaves businesses with unattractive alternatives: risk fines and their accompanying adverse PR or build vast and costly departments of analysts who manually build the data sets and reports that satisfy regulators.
- **Competitive and regulatory pressures that outstrip followers' traditional technological resources:** With customers expecting more in the way of content, interactions, and response times, traditional approaches to technology are often insufficiently agile. For example, many brick-and-mortar insurance agencies are concerned that they'll be replaced in carriers' ecosystems by the new online insurance agencies, which have entirely digital assets across their marketing, distribution, and underwriting infrastructures. Unfortunately, the traditional approach of achieving such levels of automation and value chain compression with a series of deployments of off-the-shelf capabilities will likely require years of work on vendor evaluations, beta tests, capability tuning, and training, during which competitive position would be lost to rivals.

In short, digitalization has leaders and innovators in a range of verticals acquiring market share and changing established rules and pricing by fundamentally changing the role and impact of technology on established business processes. Profoundly beneficial though digitalization may be, it's not easily achieved. Achieving a digital approach requires a business to be the master, in all ways, of every technology on its enterprise so that the value of each can be maximized as a result of its interaction with other technologies and their combined impact on the customer and the value they receive from a company's goods and services. Given the speed at which some disruptors have achieved digitization, business leaders should take care to ensure they have the ability to rapidly extend to new customer segments, markets, and channels all of the existing assets, data sets, and mashups in their enterprise. This requires knowing what technologies are possessed, which are most proficient, which are redundant, how much each costs, and how each relates to another and the new business requirements that exist as a result of the digitalization phenomenon.

## BENEFITS OF ITPM SUPPORTED BY AUTOMATION

Aite Group examined organizations that had adopted Software AG’s Alfabet, and among the benefits identified are reduced IT costs, IT assets that aligned more tightly with management’s goals, and improved business continuity. These benefits, their ease of quantification, and ease of achievement are identified in Figure 2.

**Figure 2: Ranking of Benefits by Achievability, Ease of Quantification, and Magnitude**



Source: Aite Group

It’s important to note that used here are two concepts not commonly associated with technology. Boldness is the desire for some type of achievement or distinction; in this case, strategic changes in pursuit of opportunities, defense of market position, or cost-reduction projects. Tenacity is the quality or property of holding together firmly, in this case the ability to maintain the intended scope of cost-reduction projects or strategic initiatives despite potential operational risk and other barriers to success. Both qualities, Aite Group finds, can be enhanced as a result of Alfabet.

## STRATEGIC ACHIEVEMENT

Virtually all organizations have strategic initiatives aimed at increasing their profits, whether by increasing revenue, improving revenue mix, or reducing costs. Unfortunately, such objectives are often difficult to achieve. Among the barriers to success are a shortage of funding, the slow pace with which corporate cultures typically change, and an inability to use technology to achieve change. It is this last barrier to strategic change that Alfabet adopters, Aite Group finds, are able to improve as a result of tool-based EAM and ITPM.

An absence of tool support for EAM and ITPM can dampen a management team's ability to change in three ways. A general lack of knowledge about the enterprise's assets and their interdependencies can cause senior management to pursue a more limited scope of initiatives than the enterprise can actually support. Even when management pursues strategic initiatives while embracing its enterprise IT as an asset, a lack of sufficiently granular information about that enterprise IT can cause management to fear that new initiatives will disrupt operations. The resulting projects are often designed to be risk-averse and limited in scope, and they have similarly limited outcomes. Lastly, if a senior management team does not have IT as a valued partner, the enterprise IT often lacks alignment with senior management's goals and objectives.

Aite Group finds that an effective use of a system designed to support EAM and ITPM, such as Alfabet, enables organizations to operate with more strategic boldness, to be more tenacious in its completion of projects along its technology roadmap, and to benefit from a tighter alignment with its IT departments.

## STRATEGIC BOLDNESS

Knowledge about an organization's infrastructure, and the resulting ability to gauge the scope and types of transitions an enterprise can handle without disruption, is the largest source of increased strategic boldness. A user in the process of modernizing the infrastructure at a major publisher says,

We establish more strategic goals in our organization because we're now less risk averse about projects. Alfabet continuously tells us if our IT landscape is compliant with our goals. We get more compliant, we mitigate risk, and we become comfortable taking on more projects, both those for strategic initiative and cost reduction.

An Alfabet user at a European railroad also observes that reduced risk at the project level put more projects on the organization's roadmap and says,

We have so much information about the enterprise and how it will be impacted by any given project or change that we've reduced project risk to the point that we take on a lot more projects.

Able to use Alfabet to see if the enterprise can accommodate management's goals, this user also says,

We have lots of ambitious goals about analytics, performance management, and rolling out online delivery of content. But end-of-life and poorly performant IT

assets in our enterprise will keep us from getting there. We've always known these bad assets are out there. Alfabet tells us where they are.

Another user in the banking sector relies heavily on Alfabet to carry out a management team's strategic objectives and says,

The ROI of Alfabet actually comes from the achievement of business objectives. It can't tell us that we need to diversify our mortgage business away from the Texas oil patch; we do that. But Alfabet tells us how to do it in terms of the operating systems, applications, hardware, backup assets, and points of presence that are required.

A user at a large telecommunications player where Alfabet exerts more governance over how people collaborate and discuss technology says,

What's more important than preventing redundant projects and purchases is that every unit in the business speaks in the same language about IT and has the same information about the enterprise. So when IT has to change, it changes faster, and things happen uniformly across all of our telcos.

## STRATEGIC TENACITY

Strategic tenacity is found to be an important complement to, and enabler of, strategic boldness. Similar and closely related to boldness, it is the drive to maintain the scope and vision of a project despite actual or potential deterrents to success. Such tenacity arises at organizations that use Alfabet because they have more information about how planned and in-flight projects will impact every asset and process supported by the enterprise. Thus informed, these organizations better plan their projects, which benefit from more thorough contingency planning. Able to use Alfabet to avoid the downward changes to project scope and costs that arise when projects stumble, the user in the publishing industry says,

Having an enterprise IT that is nonconforming to management's goals is very expensive. Projects get underway, then unanticipated system disruptions, typically outages, happen. Some are customer-facing or revenue-generating and therefore intolerable. So you spend lots of money on consultants and software seats that you can't retire after all. Knowing what the upstream and downstream implications of a change are enables us to plan better and not descope our projects or spend money putting out fires.

Avoided project scope reductions and cost overruns were also a benefit for the Alfabet user at a European railroad, who says,

We have so much reference information about how applications and processes are connected that whenever we do a project, we do much more preventative work and contingency planning. We have very few surprises or cost overruns; very few of the disruptions that cause you to give up on some of the scope of a project.

A user in the banking sector who overcomes project resistance at the line-of-business level uses data in Alfabet to support the business case for transitions and says,

In banking, everyone knows that it's important to adopt new channels, many of which have a lower cost per transaction and really fast adoption. And although this is true here, we've been a bit slow to adopt at times. But when people see, through Alfabet, the costs of different channels and their cost per interaction, the need to change is validated, and from an objective source. So people get more aggressive about following through by greenlighting and supporting projects.

A user at a large European conglomerate where Alfabet enables accelerated project troubleshooting says,

One advantage of having Alfabet as the system of record is that it also provides a single view of the world and one way of talking about the enterprise. People use the same jargon and terms to talk about the things that are important in planning and carrying out projects, so we overcome project obstacles, big and small, a lot faster.

## ALIGNMENT

In addition to providing visibility into the enterprise that broadens the scope of management's initiatives and the tenacity of the resulting projects, Alfabet also enables management teams to detect gaps between their intended and actual enterprises and find ways to close those gaps. A user at a bank that has used Alfabet to tighten the alignment between IT and management's strategy says,

Management has established for the organization 13 priorities, each in order of importance. These priorities have been used to assign strategic relevance scores to every asset, process, project, and potential project in the enterprise. Even though this took a while, it means that IT can almost instantly align with what management wants to do. Before we did things on a more ad hoc basis, and often a project's approval was based on the political clout of its sponsor.

The ability to continuously monitor the degree of alignment between organizational goals and IT assets is also enjoyed by the user at the European railroad who says,

We tighten our alignment between IT and management's goals using Alfabet. In it, we have documented end-state goals for each of the lines of business. Responsibility for closing the gaps is held by business people in each of these units; they know what the gaps are and report on them monthly using Alfabet.

In pointing out the benefits of the open configurability of Alfabet, the user at the bank also says,

We embraced Alfabet's open configurability. You can assign any parameter you want to an asset, and for the parameters you choose, a range of scores. We just happened to choose 13 strategic priorities with revenue generation, reporting, and compliance as the top three, from which all decisions are made. Someone in the hospitality business might have chosen 13 different priorities or taken an entirely different approach.

At the telecommunications provider where Alfabet is similarly embraced, but at a less granular level, the user says,

We use this as not just a repository or a list, but a way to compare our as-is environment with what senior management seeks for our strategy, so that we can identify and close gaps and hit strategic goals without surprises.

Other users indicate that enterprise planning is achievable and cost-effective only with a tool designed specifically to support EAM and ITPM. The user at the telecommunications provider says,

Alfabet enables us to view our technology landscape with so much breadth and detail that we can compare it to our strategic direction. This kind of scale and granularity wasn't possible using Microsoft Office tools, which is what we had previously been attempting.

## PROFITABILITY CONTINUITY

Important though the goal of growing profits is, almost of equal importance is ensuring that an enterprise is resilient to the many disruptions to which profit generation is susceptible. Among these are natural catastrophes, terrorist attacks, system outages, bug-driven crashes, and cybercrime. Inevitable though these occurrences may be, organizations vary widely in their preparedness. Alfabet, Aite Group finds, can increase an enterprise IT's resilience by serving up extensive data about asset and process interdependencies as well as the availability of backup assets, so that the harm from disruptions can be prevented or mitigated.

A user at a U.S.-based hydroelectric utility that recently avoided drawing on its bank facility as a result of a billing disruption says,

When a car accident took out a transformer on which we relied for power, we were able to determine what operations would be impacted and what backup resources were required to resume operations. As a result, we determined that billing would be impacted and we brought them back up immediately instead of losing five days of billing.

Able to use Alfabet to prioritize investments in existing assets, this user also says,

We have done three things with Alfabet to make our revenue stream rock solid. First, we identified every business process in the organization. Then we defined them by all of the technological assets on which they are dependent. Third, we prioritized them according to business criticality. As a result, we know which assets are most important to invest in. Whenever an asset goes down, we know which processes it will impact, how revenue critical they are (sic), and what the designated backup assets are.

The establishment of contingency plans to limit the harm from outages is an outcome for the Alfabet user in the publishing industry, who says,

For every asset and project in the enterprise, we know what the cascading impacts of a bad project or system outage would be. Knowing ahead of time, we have

remediation plans and assets at the ready. These things enable us to minimize downtimes and sometimes prevent it all together.

Instant access to information about the interdependencies among all assets in an enterprise can also be a potent resource when mitigating the impacts of cybercrime. Although Alfabet can't detect or deter cybercrime on its own, it can provide the information badly needed once such a crime has been detected. Typically involving multiple points of entry, theft, and disruption, cybercrime has the potential to have a cascading impact on an organization's enterprise that is difficult to detect. The better documented an enterprise is, the sooner an organization can limit the potential impact of a cybercrime. At the European railroad where Alfabet plays a role in the organization's response to cybercrime, the user says,

Alfabet has actually become part of our cybersecurity preparedness. The system tells us how every asset is connected to one another. In fact, there's so much detail that when there is a DDOS attack or a potential breach, we know every possible downstream impact of such a crime. Although it can't prevent cybercrime, it can help us limit the resulting thefts, the outages, and the costs.

## **COST REDUCTION**

Although adopters of Alfabet were found to be using the capability to pursue indirect technology benefits, such as increased strategic change boldness and better alignment between an organization's goals and its enterprise IT, these users were also pursuing and achieving direct benefits, primarily IT cost reductions. By providing a cost-effective tool for identifying all the assets on an enterprise, including the interdependencies among them and how they align with organizational strategy, Alfabet enables cost reductions that include the elimination of redundant assets, the avoided acquisition of redundant assets, and the ability to pursue more cost-reduction projects that remain on scope.

### **AVOIDED ACQUISITION OF REDUNDANT ASSETS**

When centrally and consistently accessed as a planning and asset acquisition capability, Alfabet enabled organizations to avoid making purchases that would have otherwise been redundant. At many of the organizations using Alfabet examined by Aite Group, Alfabet is accorded two important designations. First, it is designated the system of record for enterprise assets, including their descriptions, usage, upstream dependencies, downstream dependencies, and—most importantly—the business requirements they fulfill. System-of-record status is often enhanced with governance that requires broad adoption by the line of business. This includes the requirement that anyone initiating a new IT project or investment first visit Alfabet to see if the business requirements can be met by existing assets. One user at a European car conglomerate who used Alfabet to avoid redundant asset purchases says,

Everyone has to go through Alfabet when they start a project; this is thoroughly governed. Because everyone hits Alfabet at the outset of a project when they are assessing their resource requirements, they often discover we already have assets they need. This has enabled us to avoid more than US\$11 million in unnecessary software purchases since 2010. This alone gave us a favorable ROI.

In addition to enabling an organization to avoid unnecessary technology purchases, Alfabet enables organizations to propagate the importance of doing so across the enterprise and, most importantly, to acquisitions or autonomously operating business units. This ability to propagate the benefits of avoided IT purchases is more than a nice-to-have cultural improvement. When existing assets are used to address new business requirements without new investments, the return on the equity invested in acquisitions and entrepreneurial lines of business can be higher. At a car manufacturer, an Alfabet user in charge of mitigating IT sprawl across multiple acquisitions says,

We completed a major acquisition in 2010. Before this, the acquired organization had little discipline about governing the enterprise or leveraging existing assets. But we have extended our discipline in this area by both requiring their use of Alfabet and establishing centers of competency for its use.

### REDUNDANT ASSET ELIMINATION

Another of Alfabet's benefits is visibility that enables organizations to identify redundant assets, which are typically then eliminated, along with their burdensome costs. Many organizations, and not just large ones, are an accumulation of various legal entities, autonomously formed lines of business, and acquisitions. Although such organic expansion enables revenue growth, it also causes ungainly IT sprawl that typically contains redundant assets that incur unnecessary costs related to software, maintenance, and consultants. Even more burdensome is sprawl's impact on agility. The more IT sprawl an organization has, the more expensive it is to achieve change when competitive opportunities or challenges present themselves. While such costly sprawl is common, far less common are organizations able to prevent it. Fewer still are the organizations that can use digitalization to mitigate or replace their IT sprawl.

Among the benefits identified by Aite Group when it examined Alfabet deployments is the ability to document IT sprawl and reverse portions of it. Partially dysfunctional though it may be, IT sprawl is nonetheless relied upon by many individuals and lines of business within an organization; it therefore tends to persist over time. Despite this persistence, Alfabet's ability to examine enterprise IT assets at a highly granular level, including the business requirements fulfilled by each, means that organizations can identify assets and vendor relationships that are costly in their redundancy. Their elimination is a significant benefit for these organizations. Such cost reductions are being achieved at a telecommunications company, where a user says,

As a telco, we have accumulated far too many redundant capabilities as the result of a long string of acquisitions. The goal with Alfabet is to reduce the overall portfolio of applications by 50%, and to get to 15% of them annually. For the last six quarters we have been on track.

With Alfabet, a user at a European railroad has begun an initiative to reduce some of the IT sprawl caused by the organization's acquisition-driven growth and says,

Supported by Alfabet is an initiative, group-wide, in which we are identifying redundant capabilities and determining which ones we should migrate away from to save money. This is group-wide—across all of our acquisitions and even the ones that operate autonomously.

A user at a North American hydroelectric utility has a similarly aggressive roadmap and says,

In our enterprise are a lot of redundant capabilities that have been identified as a result of the view in Alfabet. First, we'll reduce the number of CRM deployments that track commercial customers from nine to two. Then we'll move on to systems that do things like track all our physical assets; this will go from 14 systems to three. We are comprised of (sic) six organizations, each with 20 or 40 systems, many of which are redundant and will be rationalized, saving us a lot of money.

Organizations that find redundant assets typically also find opportunities to eliminate redundant technology vendor relationships. Some use Alfabet to pursue standardization across many of the capability categories for which they own assets. On this benefit, a user at an American publisher says,

Alfabet is now integral to our requirements gathering and procurement processes. It was used to create an internal shopping catalog to which lines of businesses must go when they have new requirements. It's the first step on the standardization roadmap and enables our procurement people to have fewer contracts and negotiations with fewer suppliers.

## INCREASED PRODUCTIVITY

Although deployment of Alfabet requires an initial period during which the asset is populated with data on enterprise assets and, ideally, configured according to management goals, this system typically becomes a source of productivity improvements. These are possible in part because of all the organizational knowledge gathered into the system during the deployment. Also driving productivity improvements are many bodies of information, such as backward and forward compatibility of upgrades, compatibilities among assets, and whether a system is on extended support, which are automatically updated by Alfabet. Equipped with such enterprise-wide, granular, and centrally available information, IT personnel and project team members spend less time on tasks that would be far more labor intensive. At a telecommunications provider that has been able to achieve visibility into its enterprise without staff additions that would have otherwise been necessary, a user says,

At the last telco for which I managed infrastructure IT, we had two people just tracking asset inventory for two product families. Here, Alfabet is used to track asset inventory on 45 product families, and the application has enabled us to avoid hiring a small army of administrators focused just on asset tracking.

Comparing their use of Alfabet to more labor-intensive enterprise asset management in Microsoft Office, the user at the hydroelectric utility says,

It takes a lot smaller team to track and monitor assets in Alfabet. Before, we did it with a combination of Microsoft Office capabilities. To this, we dedicated three full-time and relatively high-level employees. In Alfabet, the periodic surveys and ad hoc research inquiries are lot smaller. For this, we require only two college interns working, and they're here just a third of their time.

Similarly, a user at a bank says,

With our relatively large scale and the granular way in which we associate IT assets with management priorities, we never could have done this in SharePoint, which would have required 10 additional people to do what we do in Alfabet.

The user at the European railroad that has reduced its demand for deployment team members says,

We're saving money by shortening the analysis phase at the outset of any IT project. At the beginning of a project, team members now spend a lot less time researching how that project will impact assets, their processes, data stores, and performance. In fact, sometimes the information they're seeking is already available. We've shortened this portion of the project by more than half.

### GREATER COST-REDUCTION AMBITION AND TENACITY

Taking a closer look at the cost reductions achieved by Alfabet users, Aite Group finds these benefits to be enabled, in part, by higher levels of organizational boldness and tenacity that, in turn, are enabled by Alfabet. In fact, the two benefits are found to be closely related and interdependent. With such detailed information about the assets in the enterprise and their interdependencies with projects, processes, and other assets, organizations have far more information about how all their assets would behave during cost-reduction projects. By using this information to anticipate and prevent potential outages, these organizations have become more tenacious about completing the projects on their cost-reduction roadmaps. Emboldened by a reduced level of operational risk at the project level, these organizations became likely to put more such projects on their cost-reduction roadmaps. The user at the publisher that uses data in Alfabet to overcome resistance to change says,

Here, people all say they want to simplify the technology environment and reduce its costs. But in reality, they resist change when it arrives. The data in Alfabet enables us to both prevent operational risk when change arrives, and it proves that we have this risk managed. This data also can be the "bad guy," diverting people's resentment from IT and senior management to the facts.

Thus informed about operational risk at the project level and emboldened by cost-related data from Alfabet, these managers are likely to have a greater appetite for taking on projects that can reduce IT costs. Such projects include the elimination of redundant assets or the retiring of systems that are on extended support, a significant inflator of IT costs. At the publisher that uses Alfabet to take on more cost-reduction projects, the user says,

We now see lots of opportunities to cut back on expensive IT sprawl. We have assets that are redundant, on costly extended support, and even systems that don't get used. We are going after all of it. We even caught a vendor that sold us a capability twice, and we are in the process of getting our money back, otherwise they are off our grid.

Benefitting from the ability to associate costs with systems and sometimes make the business case for their retirement, this user also says,

Having all the metrics in Alfabet about systems makes us proceed more aggressively. Recently, there was resistance to the retirement of a system that was on extended maintenance. People thought the licenses were less expensive than the cost of the project to sunset the system. But Alfabet made it clear that the system exerted significant time demands on expensive IT specialists. With this information, I was able to make the business case for retirement.

## CONCLUSION

IT departments have daunting mandates. They must provide their organizations with the infrastructure necessary to conduct business while also ensuring business continuity, supporting their management team's strategic goals, and conforming to a competitive landscape beset by a digital revolution and the competitive disruption it can bring. Aite Group finds that systems built to support EAM and ITPM, typified by Software AG's Alfabet, can bring order, governance, cost reduction, and strategic conformance to an organization's otherwise unwieldy IT landscape. Among the benefits of such a deployment are the following:

- **Strategic tenacity:** At the project level, the granularity of knowledge about an enterprise architecture, including how it will be impacted by projects and other types of technological transitions, means that project teams have the information they need to anticipate potential disruptions and address them with preventative measures such as contingency plans. The resulting reduction in operational risk to the enterprise enables organizations to retain the scopes of their projects and initiatives, rather than losing scope and the associated benefits to the mitigation of potential enterprise disruptions.
- **Strategic boldness:** Enhanced by strategic boldness at the project level, organizations using Alfabet typically pursue their strategic goals more aggressively by putting more projects on their transformation roadmaps. This is further supported by the increased agility resulting from the IT asset base's successful rationalization.
- **Strategic alignment:** By broadening the scope of outcomes at both the individual project and project roadmap levels, IT departments are better able to align themselves with their management teams' goals. Such alignment is also enhanced by the open configurability of Alfabet, which enables the assignment of rankings or scores to every enterprise asset and project according to their ability to deliver on management's strategic goals.
- **Reduced costs:** Enterprise-wide, deeply granular, and rich in data about the redundancies and interdependencies among assets, Alfabet enables organizations to identify and eliminate redundant assets and prevent new redundant assets from being acquired, resulting in significant cost reductions. Cost reductions can also be achieved by Alfabet users who use the richness of the system's data set to dramatically reduce the amount of time required to analyze the enterprise for the completion of audits and pre-project research.

## ABOUT AITE GROUP

Aite Group is an independent research and advisory firm focused on business, technology, and regulatory issues and their impact on the financial services industry. With expertise in banking, payments, securities & investments, and insurance, Aite Group's analysts deliver comprehensive, actionable advice to key market participants in financial services. Headquartered in Boston with a presence in Chicago, New York, San Francisco, London, and Milan, Aite Group works with its clients as a partner, advisor, and catalyst, challenging their basic assumptions and ensuring they remain at the forefront of industry trends.

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## ABOUT SOFTWARE AG

The digital transformation is changing enterprise IT landscapes from inflexible application silos to modern software platform-driven IT architectures that deliver the openness, speed, and agility needed to enable the digital real-time enterprise. Software AG offers the first end-to-end Digital Business Platform, based on open standards, with integration, process management, in-memory data, adaptive application development, real-time analytics, and enterprise architecture management as core building blocks. The modular platform allows users to develop the next generation of application systems to build their digital future, today. With over 45 years of customer-centric innovation, Software AG is ranked as a leader in many innovative and digital technology categories. Software AG has more than 4,300 employees, is active in 70 countries and had revenue of US\$975 million in 2015.

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