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The New Rules of Enterprise Architecture —Updated Edition

Learn the seven new rules of a more powerful and effective approach to EA, updated for today's landscape.

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For too long, Enterprise Architecture (EA) has existed as a black box, a mystery to the rest of the organization. Even if stakeholders understand the inherent value of EA data, few are able to extract it themselves, and fewer still in a way that's context-driven, dynamic, and timely. And that's assuming the data can be extracted from the EA in the first place.

With the right technology and culture, EA has the potential to become a driver of business change. But the EA will need to reach out to the wider organization first, making them aware of the information they have and how it can be used.

To help your business meet the challenges of the future, EA will need to undergo fundamental changes.

The seven principles outlined here are critical to helping you build a capable EA function that really delivers for all of your stakeholders.

SECTION ONE

Enterprise Architecture for the Enterprise, not just the Architects

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Infrastructure maps are great, but business leaders are more interested in creating value through improved data-driven decision making.

Traditional Enterprise Architecture (EA) is focused entirely on architecture. You build and populate a model and then use it to generate scenarios. But it's not possible to make sense of the outcome without understanding the model. Your business leaders aren't interested in understanding architecture. They need EA to help them make better decisions faster, with insight and intelligence about their operations.

Strategic decisions rely on senior decision-makers being able to interrogate the constantly evolving digital business ecosystem. And these questions could be quite complex.

Where should we invest in people and technology?

How can we increase scalability and agility while reducing risk?

New EA looks beyond architects and C-suite executives to consider what would benefit the rest of the organization. With improved access to information, cross-functional teams can begin to generate contextual data insights in real time, allowing them to make smarter decisions too. **The ultimate goal should be stakeholder self-service, removing the EA from the decision loop to accelerate insight creation.**

To make this happen you will need to change the way you approach enterprise architecture. The EA team needs to think from the outside in, treating stakeholders as customers. Ask yourself: what do my stakeholders need to make data-driven decisions, and how can I build a user interface that gives them access to EA information?

You may also need to relax your reliance on formal frameworks if they limit data sharing and actionable insights. Ultimately your stakeholders are not excited by EA diagrams. They are interested in the ability to generate data-informed insights and the value that creates.

Here are three factors to consider as you plan your future EA capabilities:

What are the questions my stakeholders are struggling to answer?

How do we upgrade our EA tools to facilitate self-service by our stakeholders?

Are our EA frameworks limiting flexibility - and how do we need to adjust them?

SECTION TWO

Start with Real Business Problems

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If your EA function does not solve real-world business problems, it is not fit for purpose.

Business is about technology as much as technology is about business. Yet the 'tech for tech's sake' approach of traditional EA tends to leave business problems out of the equation. Out of touch with what the organization really needs, traditional EA has earned a reputation as a bottleneck for achieving business results — too slow, too bureaucratic, too technical.

In the data-driven organization, enterprise architecture is only successful if it is helping to answer hard business questions. Yes, EA understands interconnections between systems, processes, products and their performance — but it must do more, such as referencing measurable business outcomes. Stakeholders need access to business performance measures like cost, revenue, risk and time-to-market.

Sharing architecture views helps stakeholders understand and manage impacts. Your senior decision-makers can prioritize a small set of their most critical business concerns and model potential outcomes. An agile, lean, and flexible approach leads to targeted solutions, encouraging an iterative approach that resolves new challenges as they emerge. EA analytics can show how your architecture strategy moves the needle on business performance.

Leaving rigid frameworks behind and adopting a customer-centric approach, you develop services that invite collaboration with the rest of the business. By interacting and engaging directly, you can show stakeholders the value you can provide.

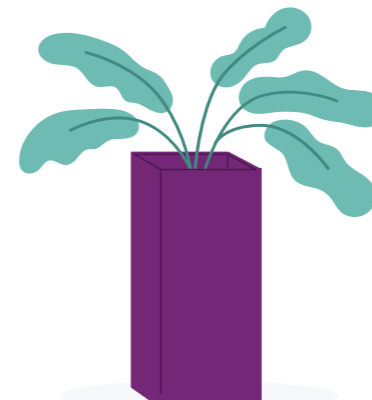Moving forward, you need to address these questions:

Is our EA function built around business functions? What needs to change?

How can we frame the EA value in terms of business performance measures?

How can we encourage and grow engagement with our stakeholders?

SECTION THREE
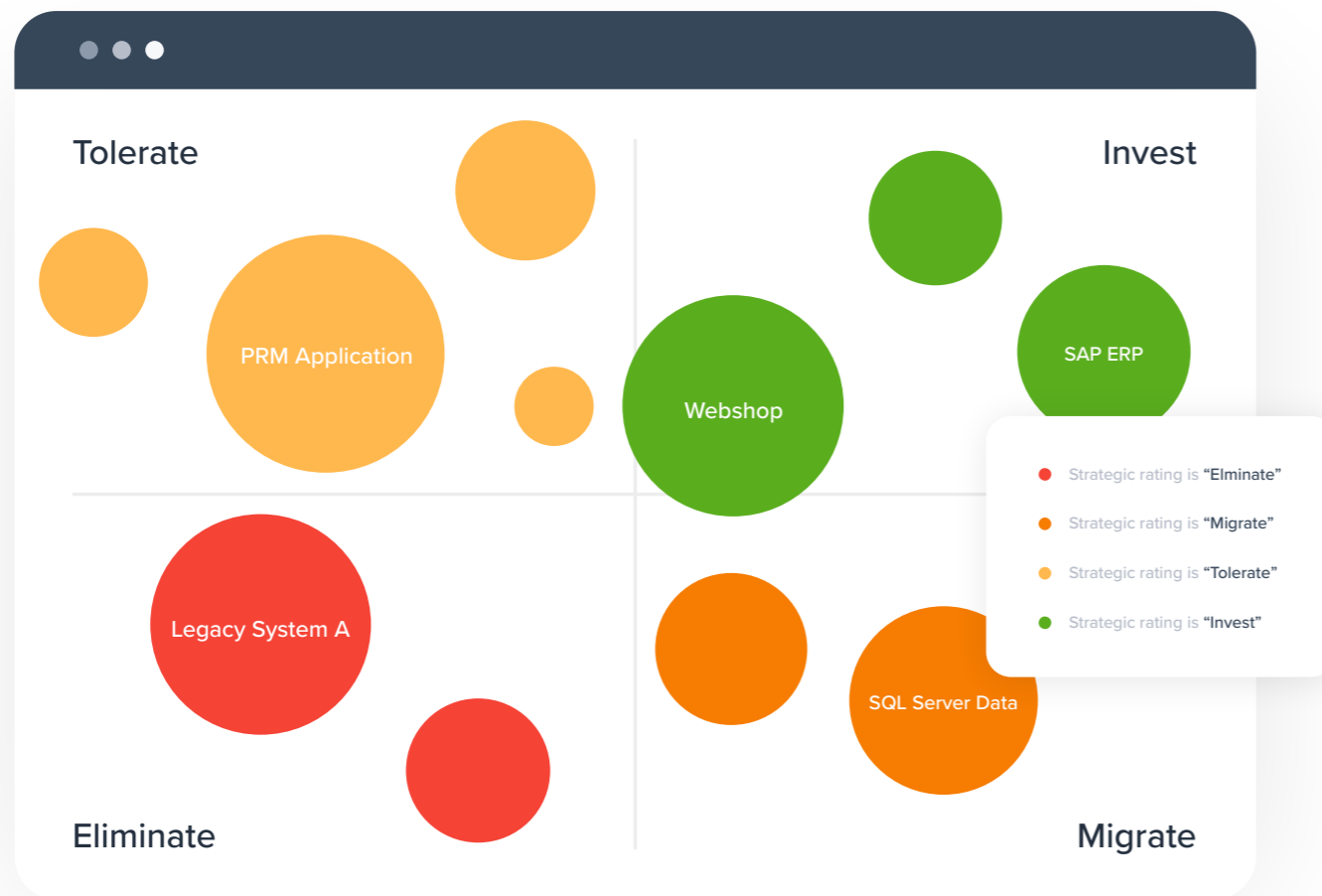
Build Decisions on Data, Not Opinion

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Data always beats opinions and gut instinct when it comes to strategic decision-making.

Traditional EA uses opaque and complex tools. Only a couple of people in the organization have the expertise to understand and interpret the outputs of its analytics platform. Because so few people can extract and action those insights, it has little material impact. Any tool is only as good as the information or guidance it provides. And if your EA relies on quickly-outdated manual documentation and diagrams, there's a very real risk that your insights are built on faulty observations.

In contrast, by starting with the right data, new EA presents business and IT leaders with accurate recommendations for guiding policies and projects to achieve targeted business outcomes. You do this using APIs and integrations that allow you to view EA in real time. Live data gives you confidence that you are viewing the most accurate intel, and visualization tools allow you to process it – especially when dealing with thousands of data points. Visualization gives you huge scalability in generating shareholder-meaningful viewpoints. And because the pictures are always up-to-date, they are always completely relevant and useful.

Visualizations and bespoke dashboards allow you to filter and rationalize complex information according to your users' needs and context. Graphs and charts allow you (and your stakeholders) to understand performance and trends at a glance using continually updated analytical output. Even when dealing with the most complex insights, dashboards provide a way to cut through general noise and focus on the metrics that really matter.

Tolerate

Invest

PRM Application

Webshop

SAP ERP

Legacy System A

SQL Server Data

Eliminate

Migrate

● Strategic rating is "Elminate"

● Strategic rating is "Migrate"

● Strategic rating is "Tolerate"

● Strategic rating is "Invest"

Three questions that will help focus your EA development efforts:

How much do we rely on static, manually updated records?

Does our existing EA toolset offer live API and integrations, or do we need to consider a more capable alternative?

How could we design and deploy visualizations that help our stakeholders easily access the metrics that matter to them?

Bringing in all this data might sound like a lot of extra work but, with effective use of automation, it can actually free up EAs to focus on higher level use of their skills.

SECTION FOUR

Governance is Good, Collaboration is Better

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Involving other stakeholders to collaborate with your data will strengthen cross-function relationships and improve delivery of business strategy.

A major hallmark of the digital era is the democratization of technology – making IT and data easier for everyone to use. Complex technologies that have also been the preserve of experts – such as analytics – are heading in the same direction.

Crowdsourcing knowledge ensures that important information is captured from previously unrecognized sources — and output will need to be democratized to ensure it is available wherever it's needed. Moving towards open data encourages greater collaboration and alignment between stakeholders, reducing the need for resource-draining retrospective governance. Watching these activities, the EA will come to understand interrelationships between systems, processes and people.

These observations can then be applied to continually improve cross-functional collaboration.

Like other processes built on democratized data, EA should take advantage of automation technologies to streamline data management. Architects are then free to focus on other higher-level tasks.

It's not just technology, however. Your EAs need to speak the same language as your service users. No more context-less, complex diagrams, jargon or being 'that person who always says no'. Instead you need to rationalize and democratize your offering. Tailor and contextualize it enough to be accessible and actionable by those other departments.

Integrating IT and business performance data means that trade-offs can be clearly understood. With improved visibility, it becomes easier to work collaboratively towards a common goal. Inviting stakeholders to participate and taking their needs on board will drive higher levels of engagement. You can't keep a quality overview or improve organization-wide alignment if you are working alone. Engagement will help the EA build the support they need to achieve their strategic goals. Ultimately, wider engagement with your work should really be a measurable metric of EA's value to the organization.

Always remember that the EA user experience must be designed around their needs as you align with business strategy.

Three questions to consider moving forwards:

How do we need to adjust systems and processes to enable knowledge crowdsourcing and sharing?

How can we automate our EA technologies to manage low-level activities unattended?

What level of engagement do we require from stakeholders to achieve the EA strategic goals?

SECTION FIVE

Turn Data Into Insight Into Action

If EA data does not drive action, your business is missing a significant opportunity.

Data is good. Insights are better. But action is best – the ultimate goal of enabling the EA teams of the future. Most EA platforms provide plenty of data and, for those with the skills and experience to interpret them, insights. But when extracting insights is difficult and slow, it becomes much harder to take action at the speed demanded by a business undergoing digital transformation.

As you move towards truly data-driven business, there is a genuine risk that you may begin to lose your overview. Without the ability to 'see' everything, you cannot provide clarity to your stakeholders.

Building strategy-focused metrics on top of EA data allows you (and your stakeholders) to make sense of disparate information.

You can then deploy algorithms to understand performance interdependencies and trends across your entire estate, to drill down and better understand a specific sub-section, or to navigate through a complex estate to a specific business outcome.

You can also help stakeholders better understand the potential results of their decisions in advance, using the Digital Twin of an Organization (DTO) concept:

> "A DTO is a dynamic software model of any organization that relies on operational and/or other data to understand how an organization operationalizes its business model, connects with its current state, responds to changes, deploys resources and delivers expected customer value. It holds disruptive potential to create visibility, to deliver situational awareness and to support improved enterprise decisions."
>
> *Marc Kerremans, 2017, 12 Powerful Use Cases for Creating a Digital Twin of Your Organization, Gartner*

Managing the complexity of the digital business ecosystem is difficult and risky. The DTO helps decision-makers collaborate to explore options and reduce the risks of paths they choose. Anyone can ask a question and receive an answer. New EA empowers, granting responsibility and ownership.

The DTO is the ultimate example of turning EA data into action.

2016   2021   2026
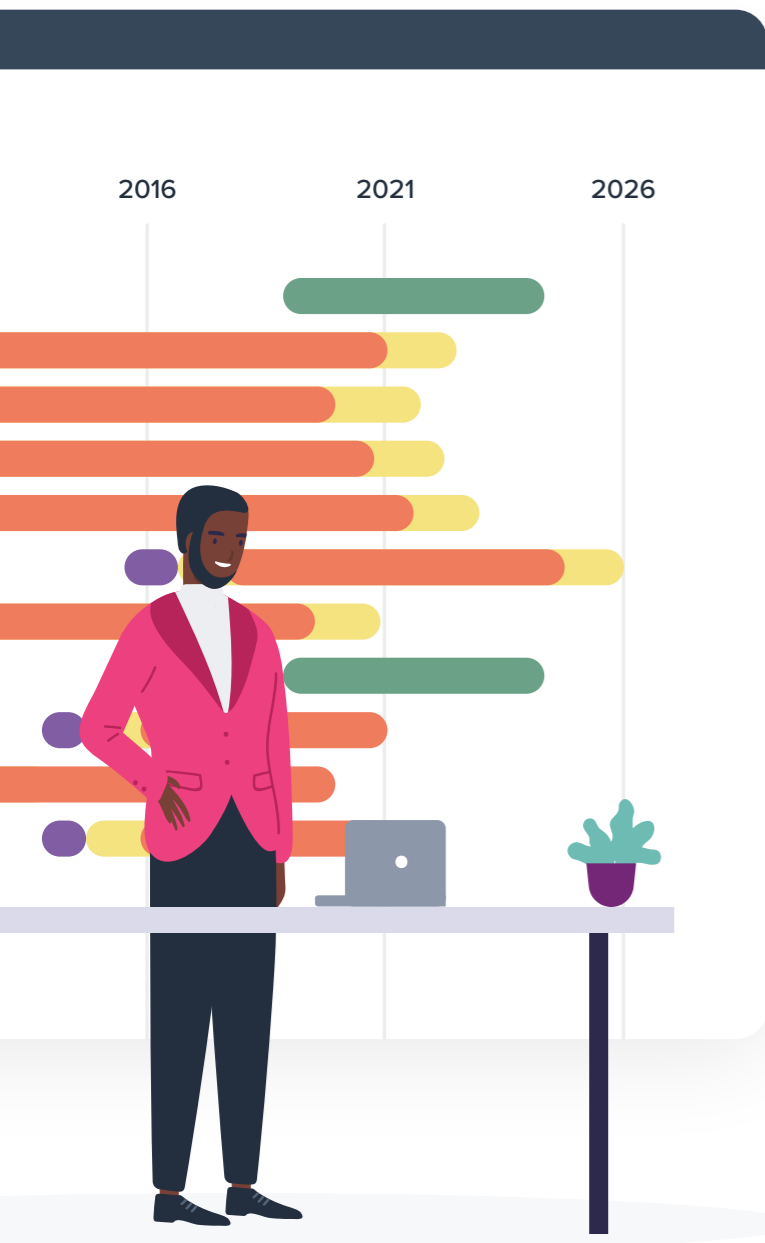
Remember though, simplicity will be crucial to uptake by other stakeholders. You should use algorithms to highlight relevant information according to need, for instance. And automated analysis will highlight areas of concern, provide the additional guidance to help you plan your next steps and free up resources to be used on other strategic activities.

Moving beyond spreadsheets and static data sets, Visualizations help stakeholders understand how to plan – and to see the effects in real time. At the higher level, aggregating past metrics and performance data allows you to clearly demonstrate continuous improvement.

New EA should help you to navigate the complexities of dependencies and impact, providing guidance to the outcome.

Three questions for the future:

How do we expand our algorithms to enrich the insights offered to stakeholders?

Can we create a digital twin of our organization using current tools, or do we need to consider our options?

Can our stakeholders run their own scenario testing without EA involvement?

SECTION SIX

The Future is a Work-in-Progress

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Your EA function must help your business adjust strategy quickly and accurately if you are to meet the challenges of the future.

If recent times have taught us anything, the future is unpredictable. Changing economic circumstances, shifting customer preferences, and unforeseen industry challenges can all disrupt the best-laid plans. To fully integrate with Agile teams, your roadmaps must be adaptive. Traditional EA functions are slow and monolithic, unable to keep pace with the change demanded of modern business.

Agility is driven by innovation, which needs to be built into the heart of your EA function. You must be able to consider, and model, multiple future scenarios, rather than planning only for what you believe will be the most likely.

Adopting more flexibility will improve both agility and scalability - as long as it is present in the entire EA function.

Choosing flexible tooling allows the EA to adjust operations as corporate strategy changes. A flexible mindset and approach to strategy will also help the EA keep pace with the rate of change demanded of them.

Better still, automation allows you to increase your ability to model many more futures quickly and efficiently. The more scenarios your stakeholders can model, the better informed their strategic decisions become. Running ad-hoc complex impact analysis on the fly can address a changing landscape faster and more accurately.
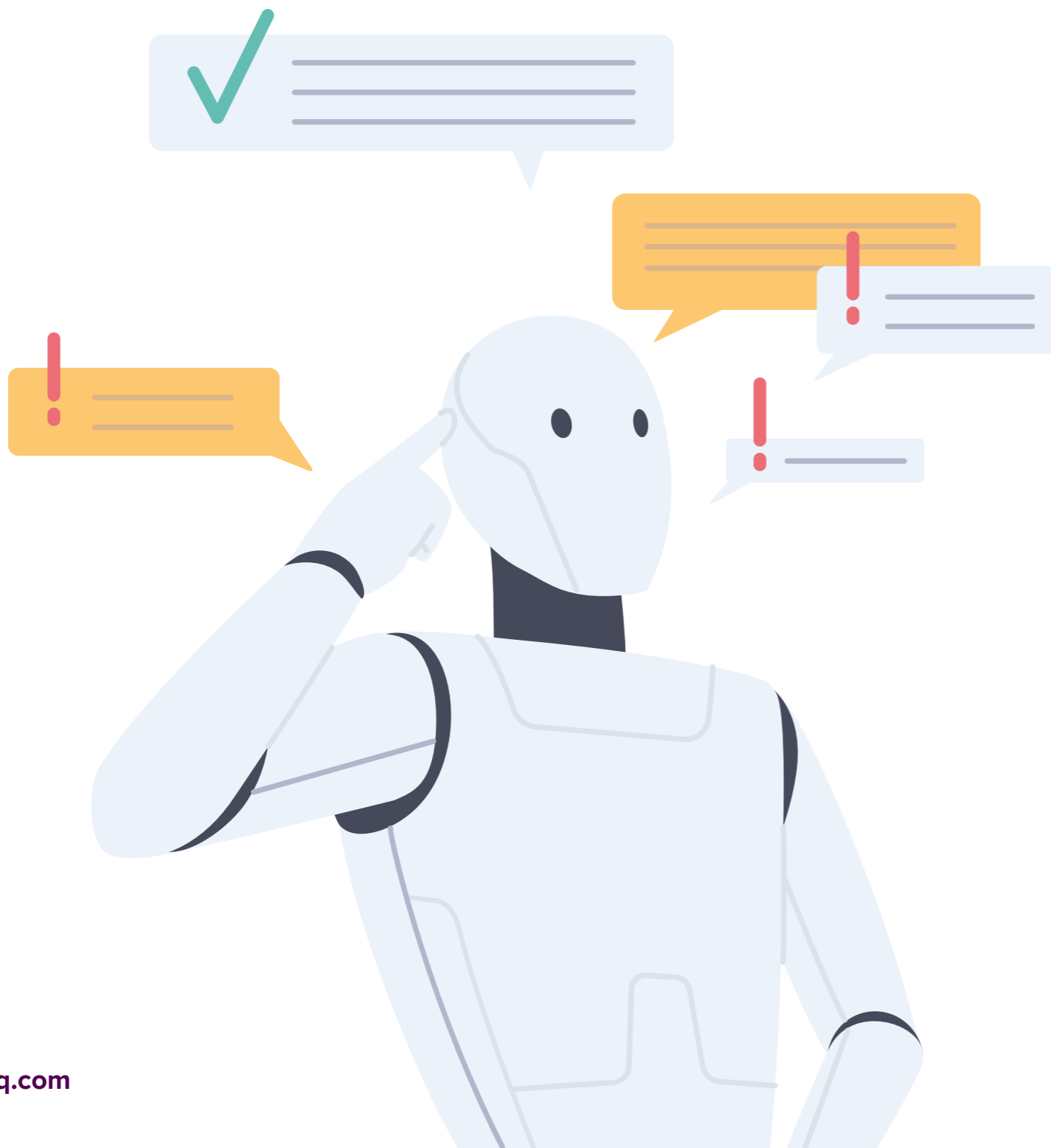
Changing the roadmap just became a whole lot easier.

What needs to change to allow the EA function to fully integrate with Agile teams?

How does our EA planning need to change to support flexible roadmaps?

Do we have the right mindset to encourage flexiblity? How do we affect culture change?

SECTION SEVEN

Build Scalability in EA

Your IT estate will only continue to grow and your EA function must be able to keep pace if it is to continue delivering value to stakeholders.

There are few certainties in life – but the exponential growth of your data estate is one of them. Despite knowing this reality, traditional EA struggles to keep pace with growth. Documents and diagrams are often out of date simply because systems cannot match the scalability of your infrastructure.

Moving forward, your EA must be scalable – as must your processes and delivery. Trying to maintain linear delivery alongside resource allocation simply will not work. Value-adding activities take time to design and implement. Those resources are currently being spent on non-scalable activities that offer your stakeholders very little value.

The move towards infrastructure as code points towards the future of your EA. Automation of discovery and updating

will be vital to ensure that data is both accurate and timely. Again, collaboration must be built into your scalability planning, to guarantee that stakeholders are able to access relevant information, even as the underlying data volumes increase.

Three questions to consider:

Do you have the tools in place to scale as your estate develops?

How can we keep pace with technology while delivering on the needs of our business?

How can we capture stakeholder input to drive EA change?

SUMMARY

EA Cannot Exist in Isolation Any Longer: Embrace Collaboration

EA and the role of the enterprise architect will change dramatically in any digitally transforming organization. Beyond only planning for the future technology needs of the business, EA can — and should — help deliver critical insight, not as an added value, but as a core source of truth to other stakeholders.

Redefining the EA practice means inviting engagement from cross-functional teams to create a culture of collaboration. You will need to educate stakeholders about what they should expect as your organization matures — and how they can engage directly with EA data to support strategic decision making.

The more you engage users, the easier it becomes to understand what they need and how to modify EA algorithms, automation and visuals to deliver. EA is being elevated to its rightful place as a strategic engine of digital transformation.

Here are three **"big questions"** to help you plan your future-ready EA function:

What needs to change to make EA data more easily available to our stakeholders?

How do we create cultural change to embrace collaboration, engagement, agility and flexibility

What can we automate to release EA resources to focus on high-level, high-value activities?

Achieving the elevation of EA will require progressive tooling, with high flexibility and strong automation capabilities. Identifying your critical business questions is the essential first step. For EA to answer them and deliver true value for the organization, the ability to generate clear, context-driven, and accessible reporting is crucial.

Discover how organizations are implementing the New Rules of EA and making real impact.

Learn how Ardoq is enabling New EA