CONTENTSTACK

5 Steps to Convince Your CTO

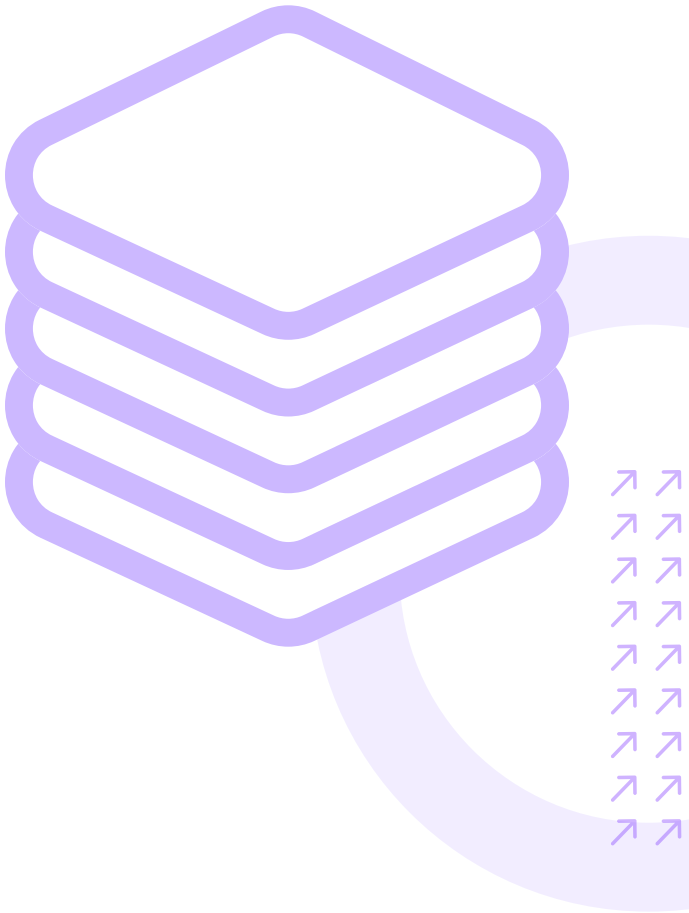
to Go Composable

INTRODUCTION

Preparing for the best outcome

The idea of transforming your company's IT infrastructure isn't one to take lightly. Convincing your CTO or VP of IT to adopt composable architecture can seem like an uphill battle and will take some planning, especially given the perceived complexity of migration and maintenance. This e-book aims to guide you through the five-step process of turning this perceived hurdle into a viable, attractive solution. We'll show you how to confidently advocate for a shift to a composable infrastructure, address concerns, explain benefits, tackle challenges, present alternatives and — most importantly — build a compelling business case.

Upgrading your technology stacks and breaking down monolithic structures while offering task-specific capabilities is crucial. To future-proof your tech stack, adopting a composable digital experience platform (DXP) is recommended. This allows for modular and adaptable user experiences, leading to time and resource savings, risk minimization and faster deployment of digital initiatives for cost savings. Your task is to convince your CTO of the significance of transitioning to a composable architecture promptly. By doing so, you become a catalyst for the transformation that could determine your company's future direction.



STEP 1:
Learn about your CTO's concerns

While you may feel you already know most of the issues, you'll gain valuable insight by talking to your CTO and team members. Hear the challenges they're currently facing with the existing architecture. Understand what they like about the current system and what they believe could be improved. Ask about their apprehensions related to migrating to a new system. Their concerns may include scalability, technical debt or costs. Keep an open mind and ensure any recommendation you make considers their perspective.

While composable architecture can have a significant impact on all of these concerns, your aim is not to counter these concerns immediately but to genuinely understand them. This understanding will form the foundation of your persuasive strategy.

During this discovery phase of your advocacy, you may learn, for example, that tech leaders in your organization are concerned about upfront costs, having the proper knowledge and expertise, or the complexities of integration and change management.

With a **collaborative approach** and a focus on addressing concerns, you can **build trust** and achieve your goals more effectively.

STEP 2:
Introduce the composable concept and its benefits

Once you've understood your CTO's concerns, and depending on their level of understanding about this technology, it's time to introduce the relevant concepts inherent in a composable infrastructure. Explain how it can address their concerns and add value to the organization, taking care not to patronize or oversimplify.

In a recent article in Forrester, Joe Cicman stated, "Customer-obsessed brands with a future-fit technology strategy compose their own DXP using parts from multiple vendors, selected to deliver their distinct digital strategy." While supporting the move to composable, he pointed out that respondents to his survey "were loud and clear that composing an enterprise DXP is both the biggest trend in the space and the biggest challenge." This underscores the need to choose a composable solution that provides a level of support needed to overcome some of these challenges without putting a burden on the organization.

Discuss how a composable approach, such as a composable DXP, represents the progressive advancement in content management systems (CMSes) beyond headless CMS and presents numerous advantages. Comprising API-driven components, a composable architecture allows for flexibility and limitless integrations, scalability, replaceability and continual enhancements. The key idea behind this approach is to break down a system into smaller, modular components that can be updated, modified or replaced independently of one another. This decoupling allows businesses to respond more quickly to changing demands, whether introducing new features, pivoting their business model or meeting their customers where they are.

The credibility of a company is determined by 75% of consumers solely based on their interaction with the company's website[1]. Moreover, 25% of visitors will leave a website if it takes more than four seconds to load[2].

When talking about the benefits of composable architecture, highlight the benefits realized by a reduced dependency on developers, promoting innovation and creativity, extended functionality, and reducing technical debt.

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OF COMPANY'S CREDIBILITY IS BASED ON CONSUMERS' INTERACTION WITH THEIR WEBSITE

25%

OF VISITORS WILL LEAVE A WEBSITE IF IT TAKES MORE THAN 4 SECONDS TO LOAD

[1] Stanford Persuasive Technology Lab, "Credibility.Stanford.Edu/Guidelines/Index.Html," Stanford Guidelines for Web Credibility, June 2002, credibility.stanford.edu/guidelines/index.html.
[2] "A Beginner's Guide to Website Speed Optimization," Kinsta, June 15, 2023, https://kinsta.com/learn/page-speed/.

Reduce developer dependency

Adopting a composable approach significantly reduces developer dependency, which results in substantial cost savings. The savings come from empowering business users to have more control over content management tasks within the CMS. Because components are designed to be reused and rearranged, non-technical users can manage and manipulate content easily and independently. This, in turn, eliminates the need for a continuous cycle of ticket submission, streamlining the overall process and reducing operational costs.

Promote innovation and creativity

Free from constant content management requests, developers can allocate their time and skills to more strategic, value-adding projects. They can focus on developing innovative features, enhancing system performance, or integrating new technologies that drive business growth and competitiveness. Thus, while offering the advantage of cost savings, the composable approach also ensures the most effective use of the organization's technical resources. Studies show a headless CMS platform, such as Contentstack, can reduce content developer time by 80%, reduce publishing time by 90% and provide a 295% ROI. Read more here.

Studies show a headless CMS platform, such as Contentstack, results in

80%	Reduction in development time
90%	Reduction in time to publish
295%	Return on investment (ROI)

Read more here

Extend functionality

A composable architecture offers a significant advantage when it comes to extending the functionality of your company's CMS. With a composable approach, your CMS is no longer a rigid monolith but a flexible, adaptable tool that can evolve with your needs. This modularity allows you to plug in different services or applications, enhancing functionality as your business requirements change. Whether it's integrating a new e-commerce platform, a social media scheduler, or a data analytics tool, a composable DXP makes it possible. This approach allows you to incorporate automation that streamlines processes with no-code business logic.

Reduce technical debt

CTOs are highly motivated to discover cost-saving measures now and to avoid technical debt—the future cost of maintaining their technology choices. They understand that taking shortcuts to save time or money now can cost more in the long run.

Gartner defines technical debt as 'accrued' work that is 'owed' to an IT system, and it is a normal and unavoidable side effect of software engineering. Teams 'borrow' against quality by making sacrifices, taking shortcuts, or using workarounds to meet delivery deadlines. These sacrifices eventually cause the software to deviate from its prescribed nonfunctional requirements, and in the long-term, they can impact performance, scalability, resilience or similar characteristics of the system[3].”

Help your CTO see how a composable architecture reduces technical debt by breaking down your applications into independent, interchangeable modules, each serving a specific function. This means that any outdated module can be easily replaced without affecting the rest, making it easier to maintain and update the overall system. This approach effectively reduces the likelihood of creating and adding to technical debt, which can significantly burden your organization's resources and productivity.

THE BENEFITS INCLUDE:

- A reduced dependency on developers
- Reducing technical debt
- Promoting greater innovation and creativity

[3] “Definition of Technical Debt - Gartner Information Technology Glossary,” Gartner, accessed July 7, 2023, https://www.gartner.com/en/information-technology/glossary/technical-debt.

STEP 3:
Be candid about the challenges

While it's important to highlight the benefits, it's equally crucial to be upfront about the potential challenges involved in moving to a composable architecture. Address the concerns your CTO has raised and discuss possible ways to overcome these challenges.

The aim here isn't to convince your CTO that there won't be any challenges. It's to show them that **the challenges are manageable and that the benefits of moving to a composable architecture far outweigh them.**

HERE ARE SOME POSSIBLE CHALLENGES AND STRATEGIES TO OVERCOME THEM

1. High Initial Cost: The upfront costs associated with transitioning to a composable infrastructure can be substantial, as it may involve purchasing new hardware, software, and perhaps even hiring new staff with the required skill sets.

Solution: One way to tackle this challenge is to approach the transition in stages, beginning with non-critical systems and gradually moving on to more critical ones. This phased approach allows an organization to spread out costs over time. Carefully review billing methodology from vendors to avoid hidden surprises as you scale.

2. Integration Challenges: A composable architecture implies the integration of multiple different components. This might lead to complexities in terms of compatibility and interoperability.

Solution: The use of open standards and APIs can help overcome integration issues. The organization should also consider partnering with vendors who provide good technical support and have a proven track record of successful integrations.

3. Skills Gap: The shift to a composable architecture might create a skills gap, as it requires knowledge and expertise in areas like automation and software-defined infrastructure, which may not be present in the existing team.

Solution: While the organization can invest in training programs to upskill existing staff or consider bringing in external experts, look for a platform that offers robust onboarding and resources, responsive support from engineers and ongoing skills development to shorten the learning curve. As the team becomes more comfortable with the new system, they'll be able to manage it more efficiently.

4. Change Management: As with any significant technological change, transitioning to a composable infrastructure might face resistance from staff who are comfortable with the existing systems.

Solution: Effective change management is essential. Involve your team in the transition process from the beginning, explaining the benefits of the new system and how it will make their work easier in the long run. Providing ample training and support can also help alleviate fears and resistance.

Overall, while the transition to a composable architecture can present challenges, with **strategic planning** and **effective management,** these can be successfully overcome, paving the way for a more flexible and scalable IT infrastructure.

STEP 4:
Build a business case for investing in composable architecture

Building a strong business case is perhaps the most crucial step in convincing your CTO to transition to composable architecture. Your case should demonstrate how the switch will impact the business positively.

To build your case, gather data about your existing infrastructure's performance and cost. Then compare this with projections for the composable infrastructure. Use case studies or examples from other organizations that have successfully made the switch. According to Gartner, 60% of finance organizations will be actively pursuing composable finance applications in their new technology investments by 2024[4].

Highlight significant cost savings due to reduced reliance on developers and lower operational costs. Discuss potential improvements in customer satisfaction or employee productivity due to faster and more reliable systems. Essentially, your business case should illustrate that the investment in composable architecture will result in substantial ROI.

One potential obstacle is the lack of precise data, such as specific compensation figures for existing staff or professionals skilled in composable architecture and headless CMS. Don't fret; there are ways to navigate this. Leverage public data available on platforms like Glassdoor for ballpark figures. Acknowledge the data's approximation and enlist your CTO's help to fine-tune the figures, which in turn encourages engagement.

You can also quantify the benefits discussed in Step 2.

For instance, show how improved scalability and speed can help the company **respond more quickly to market changes**, leading to a competitive advantage.

TO SEE MORE ON HOW THIS IS DONE, SEE CALCULATIONS IN APPENDIX.

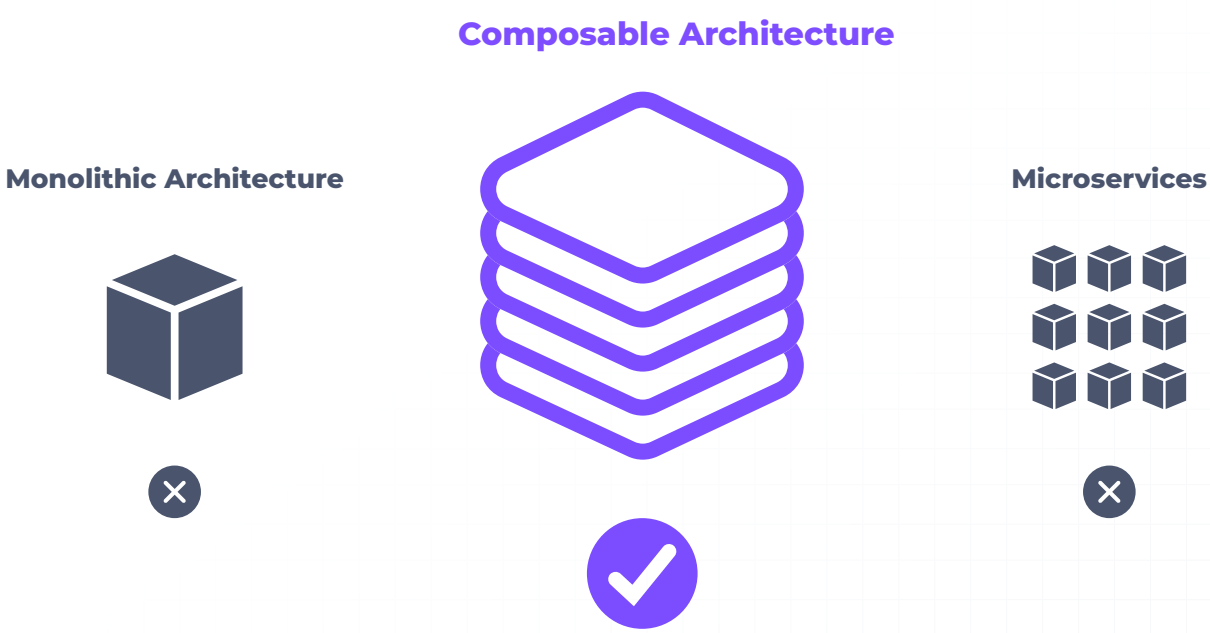
[4] Gartner. "Gartner Says by 2024 60% of Finance Organizations Will Seek Composable Finance Applications in New Technology Investments." Gartner press release, December 8, 2022. On the Gartner website. https://www.gartner.com/en/newsroom/press-releases/2022-12-08-gartner-says-by-2024-60-percent-of-finance-organizations-will-seek-composable-finance-applications-in-new-technology-investments.

STEP 5:
Present alternatives

Even with a strong business case, it's crucial to present alternatives to your CTO. This shows that you have considered all possible options and that composable architecture still stands out as the best choice.

Discuss other popular architectures, such as monolithic or microservices, and explain why they don't address your organization's needs, as well as composable architecture. For instance, you could point out that while monolithic architecture might be simpler to implement, it lacks the flexibility and scalability that a composable approach offers. On the other hand, microservices might offer flexibility but can be challenging to manage without the right resources.

Presenting these alternatives helps strengthen your case for composable architecture by showing that it's not just a random choice but a well-considered decision.



While monolithic architecture might be simpler to implement, it lacks the **flexibility** and **scalability** that a **composable approach offers**.

CONCLUSION:
It's time to go composable

Composable architecture is not just another industry buzzword. It's an evolution in IT infrastructure management that can bring significant benefits to organizations willing to adopt it. But, like any change, it requires careful thought, planning and communication.

Understanding your CTO's concerns, clearly explaining the benefits, addressing potential challenges, building a compelling business case and presenting alternatives are your five steps toward convincing your CTO to adopt a composable architecture. It's not an overnight process, and it requires patience, perseverance and consistent effort. But the payoff, in terms of scalability, flexibility, cost efficiency and business agility, can make this one of the most rewarding transformations your organization will undertake.

Embarking on this journey requires you to take up the role of a change agent. Remember, your job is not just to convince your CTO to adopt a new technology, but also to guide your organization through the transition and ensure that everyone reaps the benefits of this new architecture. Stay focused and patient, and the rewards will follow.

APPENDIX
Delve into the calculations

THE FOLLOWING TERMS AND FORMULAS CAN BE USED TO EVALUATE THE NET BENEFIT OF ADOPTING A NEW TECHNOLOGY

Present Operating Cost (POC):

The total cost of the current solution involves two factors: personnel salaries and licensing costs for the existing technology tools. While exact salaries might be elusive, you can use market averages. Licensing costs, if unknown, these can usually be obtained directly from the provider. These expenses constitute your operational expenditure (OPEX).

Development Efficiency (DE)

This metric represents the volume of features your team can deliver using the technology. Industry-standard story points available in tools like Jira can be a beneficial metric here. In software development, story points are used to measure the level of effort required to complete a task in relation to other tasks in a given time period. This metric is not based on time, but rather the amount of work involved. For instance, a small task that can be completed quickly by one person may only be worth one story point, while a task that requires significant effort and time from the entire team may be valued at all available story points for that period.

Proposed Solution Cost (PSC):

Collect the same data for the new technology. This research is crucial as it forms one of your main argument points for change. The difference between POC and PSC is your future OPEX, and ideally, this should be lower than the present operating cost.

Migration Expenditure (ME):

Switching technologies won't occur overnight. The transition phase incurs costs, representing capital expenditure (CAPEX) — a one-off cost. Having a timeline for migration can help in converting these time-bound costs into monetary figures.

Potential Opportunities (PO):

Attempt to gauge the revenue prospects from new products developed with the proposed technology and much faster time to market. While it's challenging to make accurate estimates, the endeavor to do so demonstrates initiative and foresight.

Risk Assessment (RA):

This is a vital component where you assess the potential costs of risks associated with the new technology. Start by listing out possible risks, such as a shortage of developers skilled in the new technology or a lack of required tools or libraries. Next, devise mitigation strategies and assign a cost to each. You may not know if a risk will materialize, so assign a probability to each risk. Multiply the probability by the mitigation cost to get a risk exposure. You can then calculate the total risk cost.

The formula (POC-PSC)+(DE+PO)-(ME+RA)>0 is essentially an equation to assess the net benefit of adopting a new technology, where each component represents different factors contributing to or detracting from the overall benefit. Here is how it works:

NET BENEFIT OF ADOPTING A NEW TECHNOLOGY:

(POC-PSC)+(DE+PO)-(ME+RA)>0

POC-PSC:

This segment subtracts the Proposed Solution Cost (PSC) from the Present Operating Cost (POC). It quantifies the savings you can potentially achieve in terms of operational costs when you transition to the new technology. The higher the value of (POC-PSC), the greater your cost savings.

DE+PO:

This part of the formula adds Development Efficiency (DE) and Potential Opportunities (PO). DE refers to the increased productivity or efficiency gains from using the new technology, while PO represents the potential revenue that could be generated from new products or services made possible by the new technology. This sum represents the additional benefits of the new technology.

ME+RA:

This segment sums up the Migration Expenditure (ME) and Risk Assessment (RA). ME denotes the one-off costs of transitioning to the new technology, while RA is the potential cost of risks associated with the new technology. This sum reflects the potential negative impact on the overall benefit.

- The formula then subtracts (ME+RA) from (POC-PSC)+(DE+PO). In simple terms, it subtracts the potential downsides from the potential upsides of adopting the new technology.
- If the result is greater than 0 [(POC-PSC)+(DE+PO)-(ME+RA)>0], it indicates that the potential benefits of adopting the new technology (cost savings and additional benefits) outweigh the potential downsides (transition costs and risks). This suggests that transitioning to the new technology would be a beneficial move for your organization.
- On the other hand, if the result is less than or equal to 0, it suggests that the potential downsides outweigh the benefits. In such a case, your organization might need to reconsider the decision or explore ways to increase the benefits or reduce the downsides.
- This formula provides a structured approach to evaluating the net benefit of adopting a new technology, taking into account all relevant factors, both positive and negative.