mendix

The **Digital Execution** Manual

VERSION

4.0

> *"No strategy is better than its execution."*

Frank Slootman
CEO, Snowflake | *Amp It Up*

Contents

Summary

Successful digital transformation starts with a willingness to change. In this manual, you'll learn how to leverage low-code and build a Low-Code Center of Excellence to foster that willingness and help make the changes your organization needs to achieve your goals.

Foreword

Ray Kok | CEO, Mendix

Mendix has twenty years of experience knowing what is required to deliver business-transforming enterprise software.

I've talked to Mendix customers all over the globe, with countless unique use cases. I've seen firsthand how they're using Mendix to achieve their strategic goals. It's nothing short of inspiring.

What stands out to me is that success with Mendix goes beyond our leading low-code platform's features and capabilities.

Our accompanying methodology enables organizations to achieve transformation success in nearly every area of their business.

Technology is only as good as how you use it. That is why this manual you're about to dive into is so vital.

We've indexed all of our experience helping companies execute their digital transformation strategies and have captured it within our Digital Execution Practice.

In the following pages, you'll see why low-code is the right tool to help you achieve

digital transformation success. You'll learn how to scale-up your low-code platform. We'll guide you through setting up a new way of working and strategizing. In short, you'll learn how to execute.

Mendix's founders created the spark we now know as modern low-code development. Helping our customers achieve their goals has and will always be our guiding light. Whether that's with a new feature, integrating with the latest and greatest technology, or developing a set of practices that you can use to help build out an execution function, we are always finding ways to help you succeed in this rapidly changing landscape.

That spark has since grown into a flame. As CEO, I'm proud to carry that torch and continue Mendix's mission, and I'm excited to present your Digital Execution Manual.

Ray

Why **Digital Execution** *Matters*

2.0

Why *(Digital)* Execution Matters

It's no secret.

The gap between organizations' capacity to strategize and ability to execute is nothing new.

Look at 20 years ago: Robert S. Kaplan and David P. Norton wrote, "95% of a company's employees are unaware of, or do not understand, its strategy."[i]

Just in 2023, Gartner put out research stating, "61% of corporate strategists say poor strategy execution is the primary reason that new growth initiatives fail. It's more of a problem than the strategy itself or the funding of that strategy, and it stems from a range of issues."[ii]

It's tough to tell which is longer, the length of time that organizations have struggled with executing strategies or the list of issues that cause the disconnect between the two.

Poor communication, a lack of governance, an inability to share a vision, ill-defined KPIs. The list goes on.

One of the biggest reasons for the gap between strategy and execution in our digital-driven world is another rift.

That's the one between business and IT.

Think about it: If a modern business means to successfully transform into a digital enterprise, then it needs to leverage the latest technology to meet market demands and customer needs as well as remain competitive.

Who controls, builds, and manages that technology that helps achieve digital transformation in an organization? IT.

Successful execution begins with a mindset of giving IT a seat at the table and treating it and the technology that it delivers as a forethought. Organizations need to allow IT to not just execute a strategy but help set it.

> *"61% of corporate strategists say **poor strategy execution** is the primary reason that new growth initiatives fail."*

This mindset is incredibly beneficial. According to Deloitte, high-performing organizations are "2.5 times more likely to make technology a top focus to advance organizational goals, and their IT functions are almost 3 times more likely to be viewed as ready and responsive to leverage the emerging technologies."[iii]

Digital transformation success is rare, with 70% of digital transformation projects failing.[iv] That failure begins with change management: 71% of organizations say that change management is the reason for digital transformation projects failing.[v]

How can IT help manage change? The Kotter model suggests that change—lasting, sustainable change—happens when you do follow their 8 steps[vi]

Kotter Method	How IT can help
Create a sense of urgency	Ideate and deliver software faster
Build a guiding coalition	Manage stakeholders effectively
Form a strategic vision	Ensure top-to-bottom buy-in of the strategy
Enlist the right people	Find and enable the right people to help deliver software
Enable by removing barriers	Provide good, value-driven governance
Generate short-term wins	Create, manage, and measure the success of a portfolio of strategically aligned software
Sustain acceleration	Develop a repeatable, sustainable software delivery model
Institute change	Promote the success of the software and the software delivery method

TLDR

IT that's aligned with the business is a necessity for successful execution. So how does that happen? **You need 3 things:**

⤡ **Low-code at scale**	🗐 **Digital execution framework**	🤲⭐ **Low-Code Center of Excellence**

Low-Code *at* Scale

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Low-Code at Scale

You achieve your goals by hitting objectives. For a strategically-aligned IT team, those objectives are met, oftentimes, with software solutions. IT needs the ability to execute quickly. This means it needs a new way of delivering software.
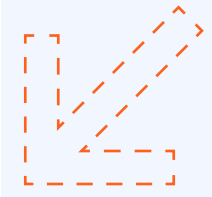
It starts with the right low-code development platform.

The right low-code platform allows organizations to increase the speed of the software delivery lifecycle. It lets you more easily integrate with your core systems and deploy to where it makes the most sense for your business. The right low-code platform opens channels of collaboration across the business and gives you the ability to leverage technologies like generative AI.

This is not news. The benefits and bonafides of low-code development have been experienced by organizations for a good while:

➜ *80% find low-code improves tech teams' productivity.*

➜ *79% report that low-code helps reduce operational costs.*

➜ *73% state that low-code is helping their businesses improve time to market.*

So much so that organizations are using multiple low-code development platforms. Nearly 70% of organizations are using 2 or more low-code platforms.[vii]

That's a lot options from which to choose. That's why the right low-code platform is one you can use at scale.

Why a low-code platform that scales?

With every strategy comes risk. Risk must be assumed, but it needs to be mitigated, and faster software delivery does that. The faster you can deliver individual components and test their impact, the sooner you can measure if they're working toward your goal or not.

The longer a project takes, the more risk and costs you assume.

Multi-year strategies that are set in stone are likely to fail.

Execution methods that require years, like traditional development and waterfall project management, prevent you from making necessary pivots.

When you use a low-code platform, you *could* use it to deliver a few applications here and there and do it faster than before. The sooner you test your idea, the sooner you get it to market, the sooner you know if you're going the right way or not.

A benefit of using low-code at scale is that you can get *more of* your strategically aligned applications to market more quickly and accurately. This means you produce strategic value more quickly.

Value compounds as you expand your application portfolio, which Mendix's platform and methodology allows you to do with speed. Our most successful customers build hundreds of applications on the Mendix platform.

BAE SYSTEMS

40+

Applications delivered
using Mendix

SCHAEFFLER

30+

Apps developed in
just 2 years

SCHWARZ

75%

Reduction in development time,
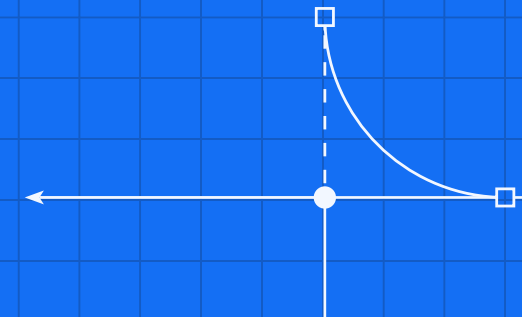delivering over 120 apps

SIEMENS

500

Apps produced with the realization
of their digitalization goals

Low-code platforms that scale with you give you the ability to modularize software. Modularity like microservices for example let you update, experiment, and maintain your applications without shutting down or breaking your product(s).

Of course, adopting low-code isn't just the answer. You need to apply it to cases that deliver measurable impact in your organization. Which is why Mendix developed the Digital Execution Framework.

Digital Execution *Framework*
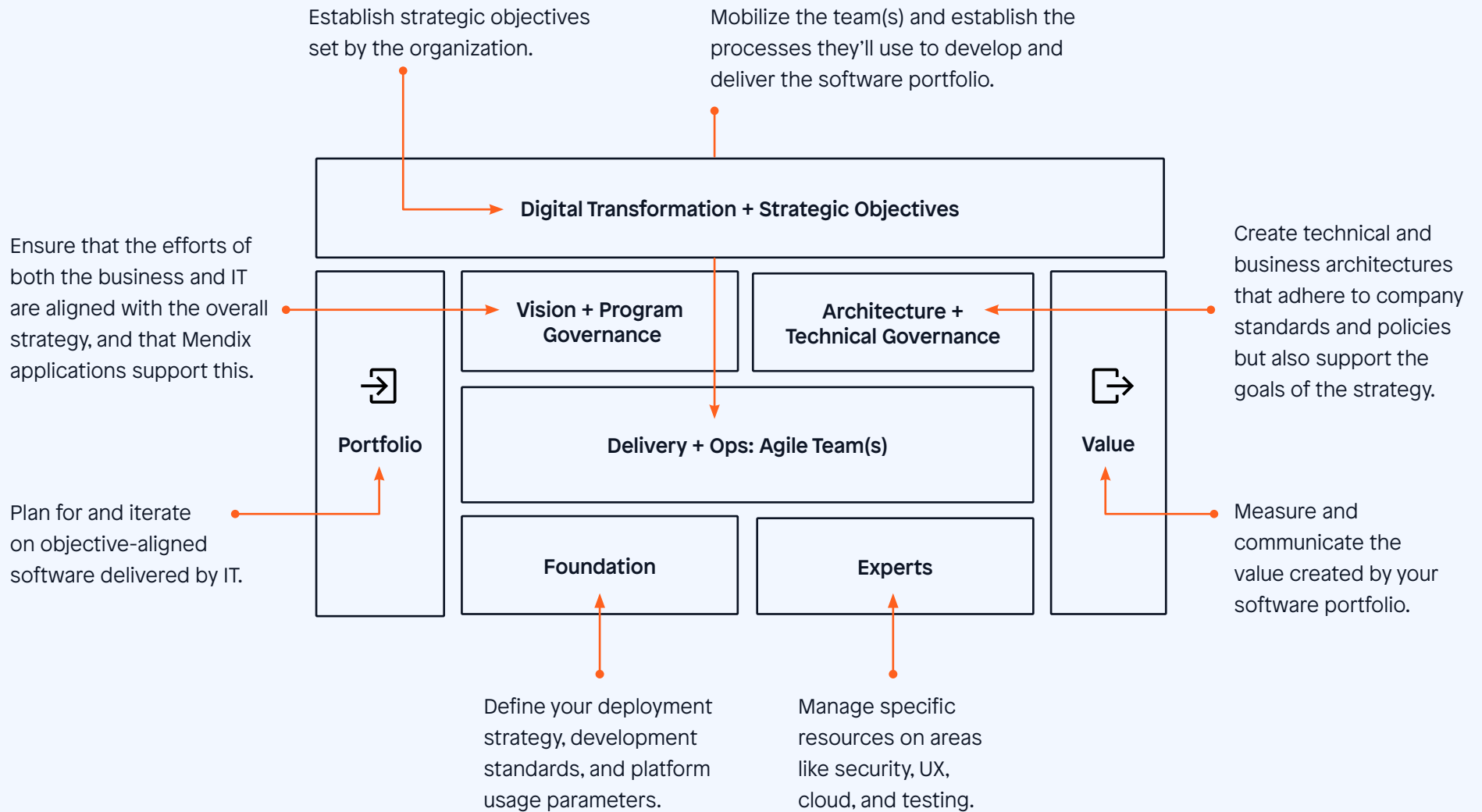
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Digital Execution *Framework*

Gartner suggests that the primary reason for failure of digital transformation initiatives is "the inability to bridge enterprise execution gaps for change."[viii]

Mendix's Digital Execution Framework is our proven, adaptable methodology for helping companies close those execution gaps. It's designed to connect IT's methods and strategy to the rest of the organization's strategic objectives.

Digital Transformation + Strategic Objectives				
Portfolio	Vision + Program Governance	Architecture + Technical Governance		**Value**
	Delivery + Ops: Agile Team(s)			
	Foundation	Experts		

*"The inability to bridge enterprise execution gaps" leads to **digital transformation failure.***[viii]

Digital Execution Framework

Establish strategic objectives set by the organization.

Mobilize the team(s) and establish the processes they'll use to develop and deliver the software portfolio.

Digital Transformation + Strategic Objectives

Ensure that the efforts of both the business and IT are aligned with the overall strategy, and that Mendix applications support this.

Vision + Program Governance

Architecture + Technical Governance

Create technical and business architectures that adhere to company standards and policies but also support the goals of the strategy.

Portfolio

Delivery + Ops: Agile Team(s)

Value

Plan for and iterate on objective-aligned software delivered by IT.

Foundation

Experts

Measure and communicate the value created by your software portfolio.

Define your deployment strategy, development standards, and platform usage parameters.

Manage specific resources on areas like security, UX, cloud, and testing.

The 5 Ps

Promotion
Share the successes you've garnered with your portfolio and communicate the changes you've made to your software delivery motion. This gives a shared understanding around the IT and business strategies.

People
Find the right people with a diverse range of skills who come from different departments in your organization to drive the initiative and deliver your strategy and continue well into the future. Upskill and put them in the right environment to work in with key results to help measure against goals.

Portfolio
An effectively managed software portfolio that's aligned with your business strategy helps ensure you're meeting your goals and continuously delivering value.

Process
Embrace a new way of rapidly delivering software. If you can deliver your software faster then you can market test it faster. This means you can iterate more quickly.
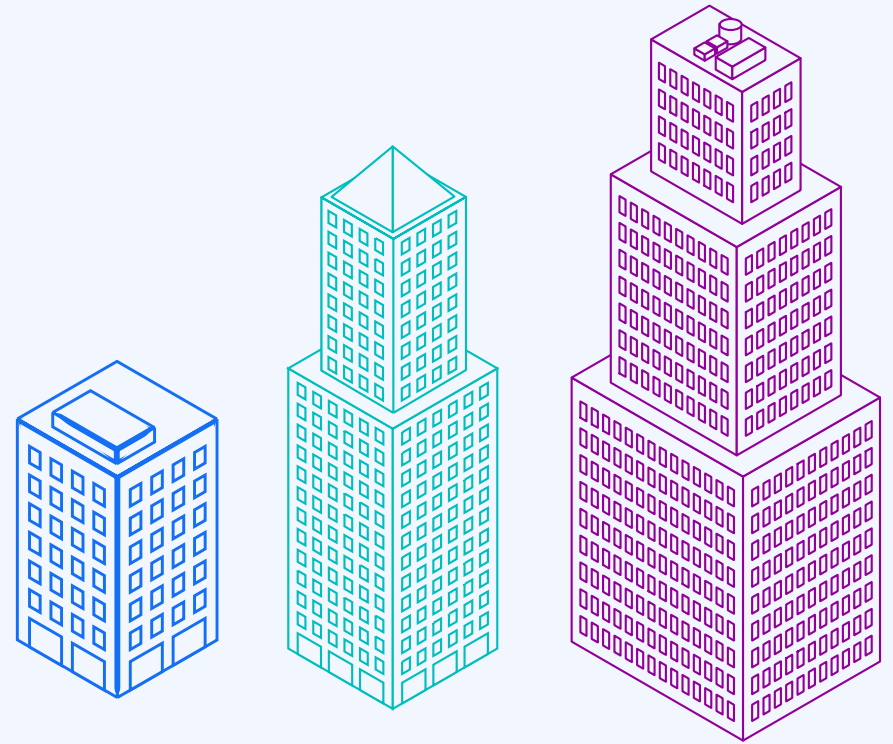
Platform
Select a platform that scales with you, limits your technical debt, and helps you leverage technologies like GenAI is vital to success.

The 3 Ss

There are different stages to consider as you adopt the platform, adjust your processes, rearrange your people, and reprioritize your portfolio. Each stage helps you establish your Low-Code Center of Excellence.

Start

Quick wins and quick learnings are the big takeaways for Start. This stage is where you establish your low-code vision, identify your first team, and deliver your first solution.

Structure

Repeatable success is the name of the game for this stage. Structure is where you take the successes of Start and turn them into processes that best fit your business. In this stage, you welcome more people into the process, document best practices, and increase your portfolio by quantity and complexity.

Scale

Sustainable impact is a key quality of the Scale stage. At this point, you are working to make sure that your CoE steers your low-code capability through appropriate governance. You're deploying applications at scale and implementing automated testing. Finally, you're ensuring low-code is appropriately being used across the broader organization.

Low-Code Center *of* Excellence

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Low-Code Center *of* Excellence

In the next few pages, you'll see how a Low-Code Center of Excellence could look. However, the first thing you should know is that no two Low-Code CoEs look the same. The methods in building one up are generally the same, but ultimately, a good Low-Code CoE matches your organization's needs and structure.

Why a CoE?

When you adopt a low-code platform, it's helpful to know how you're going to use it at the onset and how you're going to use it in the future. You need a platform that grows with you and also enables growth.
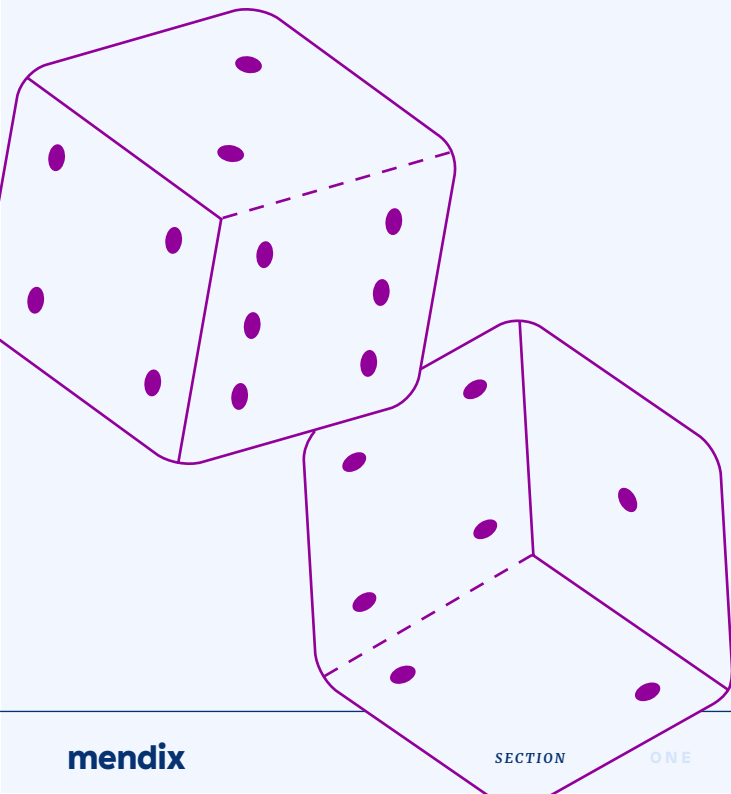
Adopting any technology is like playing a board game. Read the instructions and figure out how to play it with others, and you're bound to have a good time. Open it up and start putting pieces together without knowing where they go, well, you could luck into success, but chances are you'll end up quitting the game early.

Because low-code comes with such huge, business-changing implications, it requires you to put the right pieces in place to realize its full potential.

By establishing a Low-Code Center of Excellence, you put into place a coordinated effort to introduce low-code development into your organization and begin repeatable, sustainable value realization by way of software delivery.
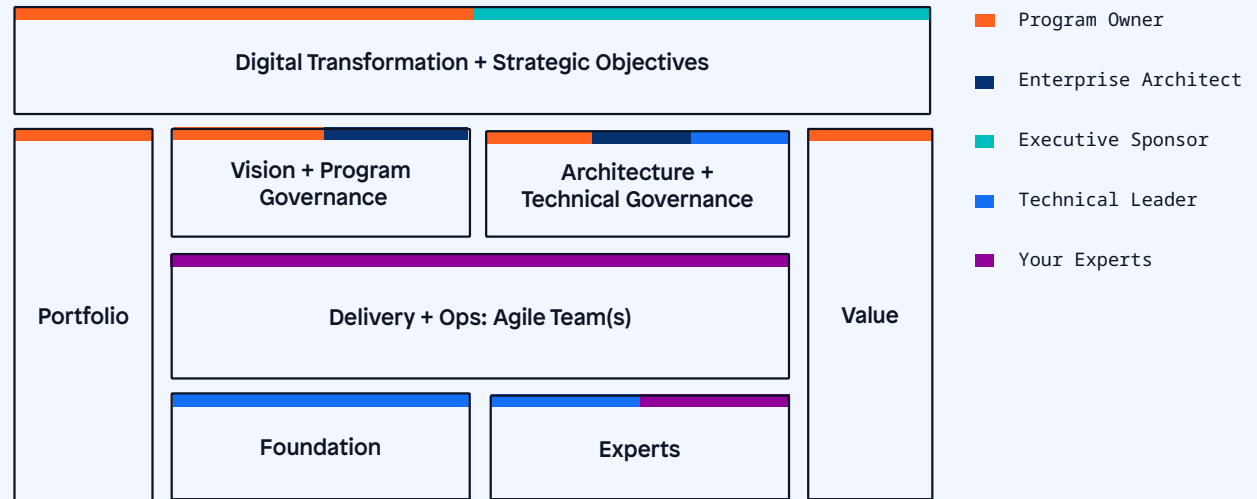
A Low-Code Center of Excellence helps you activate and maintain:

➜ *Change management and adoption*
➜ *Awareness and visibility*
➜ *Architectural and technical governance*
➜ *Vision and program governance.*
➜ *Specific expertise*

Low-Code CoE Who's Who

The central roles you'll find in a Low-Code Center of Excellence are the Program Owner, Enterprise Architect, Executive Sponsor, and Technical Lead. There could be multiple people in these roles depending on your organization's size.

Program Owner — Legend:
- Program Owner
- Enterprise Architect
- Executive Sponsor
- Technical Leader
- Your Experts

Diagram boxes:
- Digital Transformation + Strategic Objectives
- Portfolio
- Vision + Program Governance
- Architecture + Technical Governance
- Value
- Delivery + Ops: Agile Team(s)
- Foundation
- Experts

Program Owner

This person orchestrates the adoption and enablement of the Mendix platform. They serve as a bridge between leadership, stakeholders, and the delivery team. Key responsibilities include:

➜ *Establish and manage the CoE*

➜ *Provide program governance and delivery management*

➜ *Provide portfolio governance*

➜ *Manage stakeholders*

➜ *Manage resources and budget*

➜ *Capture program and app value*

➜ *Build awareness of the center of excellence and the value its driving*

(Digital transformation + Strategic objectives, Vision + Program Governance, Architecture + Technical Governance, Portfolio, Value)

Enterprise Architect

Ensures Mendix is integrated into the tech stack and aligns with the organization's strategic organization. Key responsibilities include:

➜ *Position Mendix in the tech stack*

➜ *Provide architectural governance*

➜ *Define cloud and integration strategy for low-code*

➜ *Support technical leads*

➜ *Build awareness of Mendix + the value its helping to drive*

(Vision + Program Governance, Architectures + Technical Governance)

Executive Sponsor

Senior leader in charge of advocating for the adoption and use of Mendix's low-code platform. Generally at the C-level. Key responsibilities include:

➜ *Provide guidance on strategy/vision*

➜ *Ensure strategic alignment at executive level*

➜ *Manage stakeholders*

➜ *Advocate for support at C-level*

➜ *Allocate budget and resources*

➜ *Support awareness and visibility*

(Digital transformation + Strategic objectives)

Technical Leader

Generally a solution architect or lead developer depending on your org, this person leads the people building applications. Key responsibilities include:

➜ *Provide guidance on technical requirements*

➜ *Establish software development methodology*

➜ *Change management for developers*

➜ *Define development team set up*

➜ *Establish low-code development standards*

➜ *Assist in hiring technical positions the value its helping to drive*

`(Architecture + Technical Governance, Foundation, Experts)`

Your Experts

Depending on your organization and your developers' expertise, you may require experts to help deliverin these areas:

➜ *Security*

➜ *UI/UX*

➜ *Cloud*

➜ *Integration & Data*

➜ *Testing & QA*

`(Experts, Delivery)`

Building up Your Low-Code CoE

Getting low-code to scale means building up your Low-Code Center of Excellence bit by bit. You can go at your own pace, but there are certain steps you must take through the Start, Structure, Scale stages to ensure you're scaling properly.

Not all parts of your CoE will be fully activated when you start.

At Start, you're focusing on building your team and creating an operating rhythm so you can build the foundation for future stages. You may only use a few fly-in experts and are just getting your feet wet with the Mendix platform.

At Structure, you begin to do more with the platform, which means bringing in more experts and establishing governance around your program and technology.

At Scale, you're firing on all cylinders. Your portfolio is aligned with your digital transformation and strategic objectives. Your delivery teams are operating with program and technical governance, and are producing software that drives value. They're using the full capabilities of Mendix's low-code platform to do this.

Let's dive deeper into what your CoE will look like at each stage.

Start

At the Start stage, your goal is to deploy your first applications. To do that, you need a small team in place, a roadmap of where you want to go, and a plan for enablement around using low-code development.

Vision + Program Governance

- [ ] Establish who your executive sponsors are
- [ ] Hire or appoint your program owner
- [ ] Create a transformation roadmap
- [ ] Identify a sourcing strategy

Architecture + Technical Governance

- [ ] Get your enterprise architect involved
- [ ] Identify a Mendix solution architect
- [ ] Establish high-level positioning of Mendix in the IT landscape
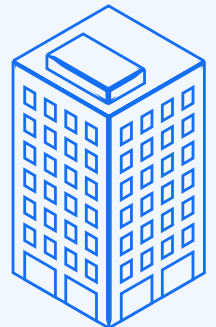- [ ] Determine your architecture strategy

Delivery + Operations

- [ ] Enable your first software delivery team
- [ ] Begin Agile and DevOps way of working
- [ ] Create a talent pool of potential contributors

Portfolio + Value

- [ ] Choose your first application, one with few integrations
- [ ] Ensure first application can deliver immediate, noticeable value
- [ ] Celebrate and promote first application to go-live
- [ ] Run value assessment on your first application

Foundation

- [ ] Build your starter app template
- [ ] Initiate a design system
- [ ] Define your deployment strategy- private, public, on-premises?
- [ ] Create a training + enablement plan
- [ ] Establish development standards

Experts

- [ ] Identify the experts needed for your first app

Structure

What worked in Start? What didn't? When you enter the Structure stage, it's time to take your learnings and turn the successes into processes and best practices. This helps you build out your team, create more teams, and begin to expand your portfolio into different use cases.

Vision + Program Governance

- [ ] Identify and develop a business unit sponsor
- [ ] Define a team growth strategy
- [ ] Define financial models and budget structure

Architecture + Technical Governance

- [ ] Create a platform decision framework
- [ ] Establish an architecture review board
- [ ] Begin microservices architecture approach

Delivery + Operations

- [ ] Join and/or establish an active Mendix community
- [ ] Formalize BizDevOps way of working
- [ ] Expand training and enablement

Portfolio + Value

- [ ] Choose apps with opportunities that align with strategic initiatives
- [ ] Track benefits via a value framework
- [ ] Organize showcases to promote successes and welcome new ideas
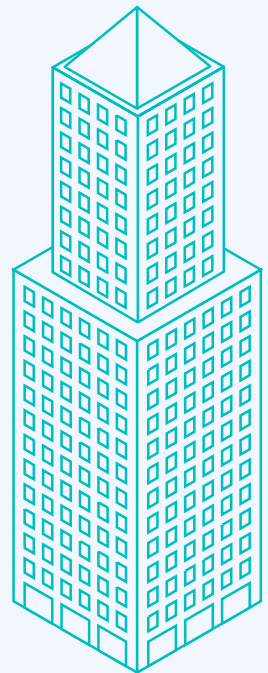
Foundation

- [ ] Define reusable component strategy
- [ ] Create integration strategy
- [ ] Determine which connectors to use and how
- [ ] Define approach for quality assurance and test automation

Experts

- [ ] Have experts do deep dives on their specific topics (e.g., integration, mobile, AI, etc.)

Scale

At Scale, your Center of Excellence has a footprint in most if not all business units in your organization and your portfolio of applications reflect that. You may even have multiple CoEs. The software you deliver will have composable foundations, meaning you don't start from scratch with every project. Most things are self-sustaining with a train-the-trainer program to keep enablement going, and an automated CI/CD pipeline.

Vision + Program Governance

- ☐ Establish a footprint in all business units or departments of your organization, where appropriate
- ☐ Determine if those business units or departments need their own Low-Code CoE
- ☐ Define a strategy for business developers
- ☐ Put a continuous improvement process in place

Architecture + Technical Governance

- ☐ Cement a microservices landscape to create a composable enterprise

Delivery + Operations

- ☐ Foster fusion teams to support software development across the business and IT
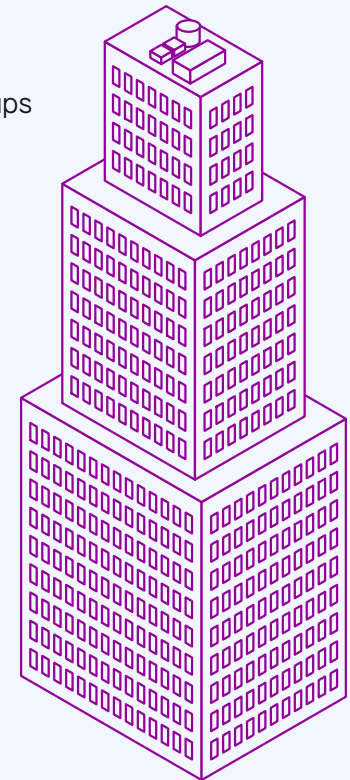
Foundation

- ☐ Automate your CI/CD pipeline
- ☐ Uplevel your training program to train-the-trainer
- ☐ Automate QA and testing

Portfolio + Value

- ☐ Institute a regular value report
- ☐ Create an application gallery
- ☐ Organize frequent community events like hackathons and meetups

Experts

- ☐ Ensure experts are still dedicated to their areas of expertise, especially with multiple CoEs

Bridging *the* Gap

You might know where you want to go. You might have a vision of the destination. But if you don't know how to get there, you'll never make it. To bridge the gap between strategy and execution and sure that the bridge is structurally sound and efficient, you need more than technology.

The Mendix platform provides the technological means to get you there.

With it comes a methodology for making the small changes you need to make every day. It comes replete with a roadmap for adoption, a plan for scale, and a framework for execution.

Mendix is primed to help you turn your strategic ideas into tangible outcomes.

End Notes

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