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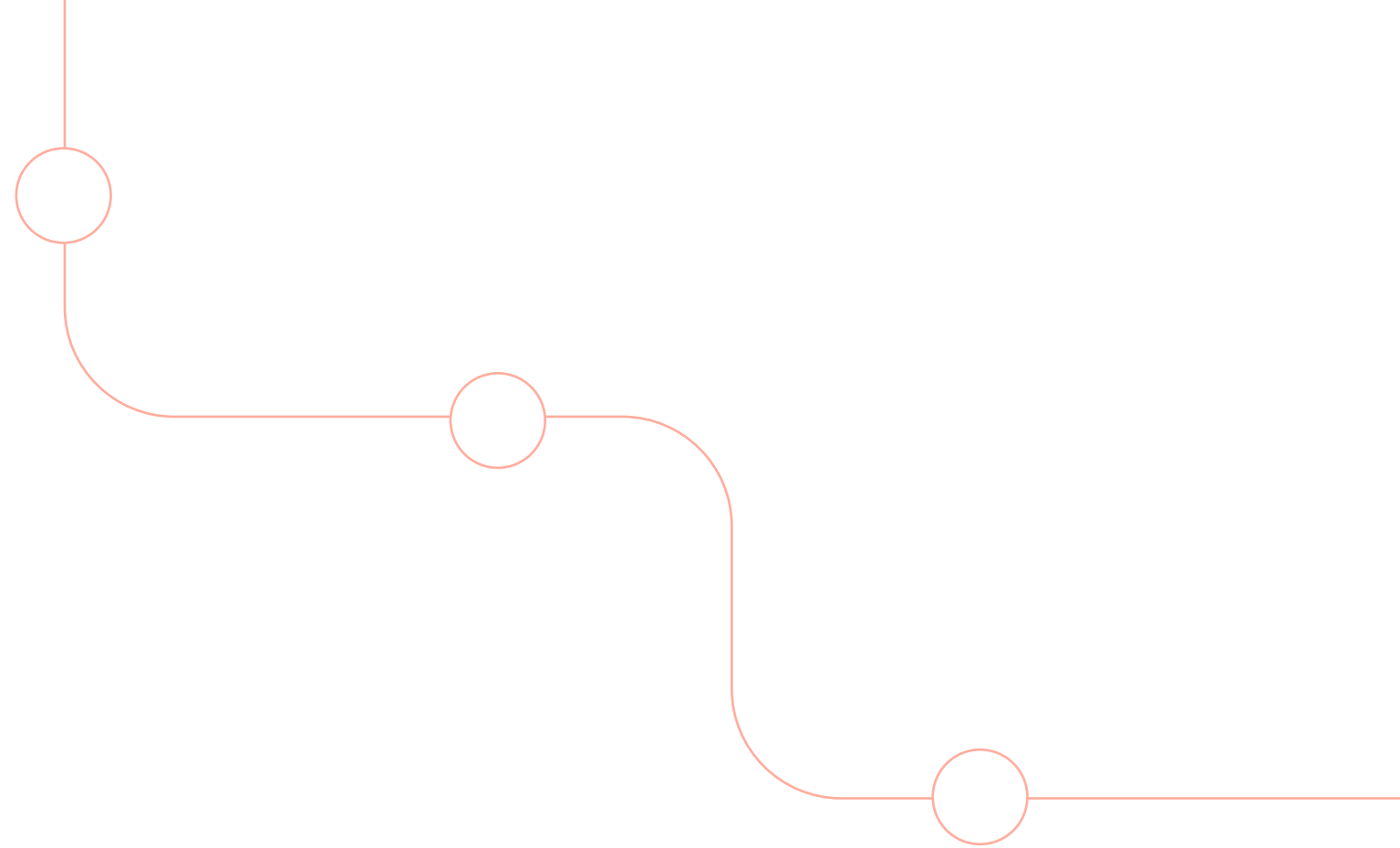
The Foundational Steps for Digital Transformation

A framework and step-by-step guide for designing and implementing digital transformation projects

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Our four-step implementation framework is a combination roadmap and checklist to help you design a digital transformation journey that makes everyone happy with the results.

01

The Digital Transformation Dilemma

You're always looking for ways to improve your business operations. Maybe it's implementing an interface so mechanics on a manufacturing shop floor can record data for product quality control. Or perhaps it's a big lift around upgrading an enterprise resource planning (ERP) system, product lifecycle management (PLM) system, or manufacturing execution system (MES).

Regardless of the project's scope, the goal is always the same. Operate smarter, move faster and more efficiently, and stay one step ahead of the competition. You do that by replacing or augmenting outdated systems with technology's latest and greatest – such as automation, artificial intelligence (AI), and more.

That's digital transformation.

The Gartner Glossary defines it:

"Digital transformation can refer to anything from IT modernization (for example, cloud computing), to digital optimization, to the invention of new digital business models. The term is widely used in public-sector organizations to refer to modest initiatives such as putting services online or legacy modernization. Thus, the term is more like "digitization" than "digital business transformation.""

It doesn't matter if your business is building the next generation of planes or retail products. Digital transformation ensures you're ready for the future by eliminating slow, error-prone manual processes, getting rid of paper documents, and using modern technologies like automation and integration to connect digital systems to work together seamlessly. That way, you get the total value from your most valuable asset – data.

Digital transformation isn't easy. The Harvard Business Review notes that while most large companies invest substantial cash into digital transformation, it's often done "without seeing clear benefits or ROI. Although these failures have multiple causes, they are generally the result of underestimating the various steps or stages required to successfully execute a transformation agenda."

Perhaps the most complicated element of digital transformation isn't even the technology. It's the humans.

Change is hard.

People are skeptical of anything new and different. That's why the best way to encourage a culture that embraces adoption and transformation is to get your new product, process, or system right from the beginning so everyone sees the immediate value without long, painful learning curves.

We're here to help. Our four-step implementation framework is a combination roadmap and checklist to help you design a digital transformation journey that makes everyone happy with the results. Think of it as scaffolding as you begin building out your project.
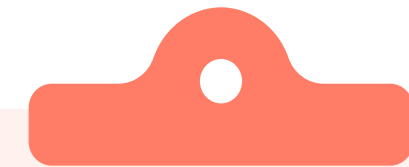
Questions to consider:

☑ Where is your starting point?

☑ Who should be involved?

☑ Do you need a business case?

☑ How do you get to the solution?

☑ How do you introduce it?

02

Digital Transformation Implementation Framework

It's important to think about your digital transformation initiative holistically to have a full understanding of all the considerations and steps needed for a successful implementation.

Our framework comprises four key sections: Business process, data mapping, the solution, and training. These are meant to take place in chronological order, but it's also important to understand how all four of these sections work together as you develop your implementation.

IMPLEMENTATION FRAMEWORK

Step 1
Business Process

- Stakeholders
- Customers
- Build the team
- Map the business processes
- Identify waste
- Use case documentation
- Who and why, not how
- Business case requirements

Step 2
Data Mapping

- Bring business and IT together
- Document current system architecture
- Identify where the data is
- Identify data gaps
- As-is vs. to-be
- Document future system architecture

Step 3
Solution

- Educate the vendor
- Listen to the vendor
- Check in with SMEs
- Be open to change
- Have a migration plan
- Find the 80%
- Document test scripts
- Quality over speed

Step 4
Training

- Communication is key
- Identify the early adopters
- Bring customers in early
- Train the trainer
- Create ownership
- Have a feedback loop
- Leave no employee behind

Step 1
Business Process

Figure out who's who in the zoo (so to speak) to identify the key players, understand what's entailed in the project, and clearly define the objectives.

Key Players

STAKEHOLDERS

Every project is different, whether you want to automate a process, create a continuous improvement project, replace an ERP, etc. But what they all have in common is people. Begin with understanding the stakeholders. Who is the executive sponsor? Determine the leadership roles that will determine the project's scope, timelines, objectives, and more.

CUSTOMERS

These are the people using the tools. For example, they can be employees who click into the applications to do their jobs or external customers such as suppliers using an ordering system. Their feedback will be instrumental. When implementing something new, people tend to dig in their heels if they feel excluded. Understanding who they are and soliciting their opinions early in the process is crucial.

BUILD OUT THE TEAM

Technology projects require a mix of IT and business users. Identify a gets-stuff-done program manager with experience in these kinds of large-scale initiatives to coordinate the pieces for an effective rollout. A blend of technical and analytical skills is essential. But an often-overlooked component of team-building is diverse personality types. Look for a mix of introverts and extroverts. You need at least some people who are comfortable speaking their minds in front of others and drawing out others for a healthy exchange of ideas.

What's Entailed

MAP THE BUSINESS PROCESSES

Scope out your project. It doesn't matter if you do it on a management tool or sticky notes. From a business perspective, the documentation explains how you want a process to start and end – and everything in between. Think of it as a SIPOC (suppliers, inputs, processes, outputs, customers) activity where you understand the steps throughout the process in sequence. For example, what's required to automatically pull up reports, document data, create an approval process, etc. What should the process look like?

IDENTIFY WASTE

Typically, you're replacing processes with considerable waste. (Time, effort, resources.) Think about why you've been doing something. Is it a requirement for the business going forward, or were you

doing it because there was a limitation in the technology? You might be able to automate processes with new technology that weeds out some of those steps.

USE CASE DOCUMENTATION

Make sure you document the required process. For instance, "Our mechanics need to record data collection using QR codes instead of manual entry to improve speed and reduce errors." This is a granular, down-to-brass-tacks explanation of the different capabilities the system needs to support. The best documentation about what the end user needs comes when members from business and IT brainstorm together.

Define Objectives

THE WHO AND WHY, NOT HOW

Don't put the cart before the horse. Technology can accomplish some really cool, innovative things. But it's important to make sure you define your business

needs first, before embarking on a path that doesn't lead to your ultimate goals. Once you've determined your needs, talk to vendors about how their technology will materially help you accomplish those goals.

BUSINESS CASE REQUIREMENTS

Every company has unique business requirements for project approval. Is it a dollar cost? What is the headcount involved in the project? Is there another metric? Understand the governance process and what you need to submit for project approval. There ought to be a checklist of requirements that any initiative must meet — and if one doesn't exist, you should create one. That will require you to clearly define the steps in your project to match those guidelines. Vendors can help you create an accurate budget analysis to help you avoid unfortunate financial surprises.

IMPLEMENTATION FRAMEWORK
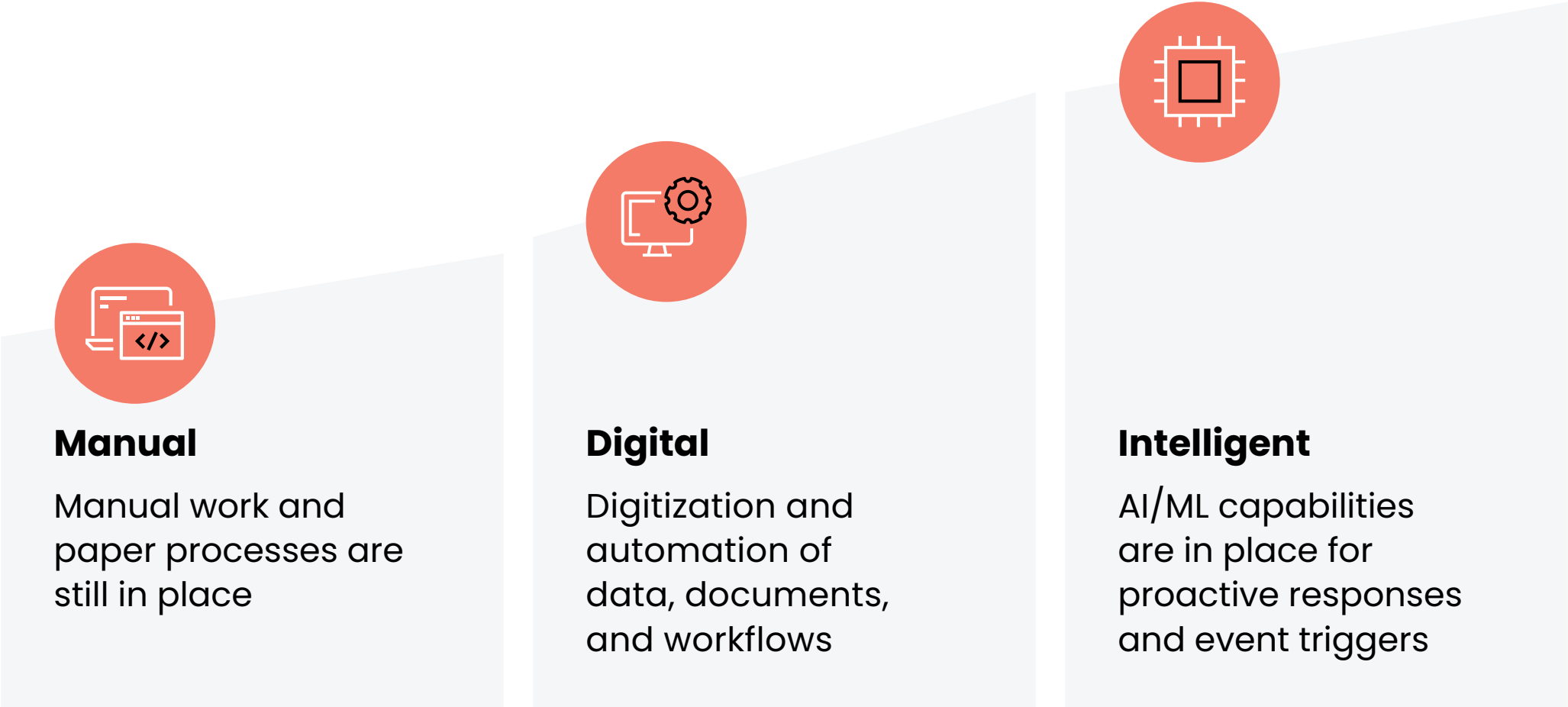
Manual
Manual work and paper processes are still in place

Digital
Digitization and automation of data, documents, and workflows

Intelligent
AI/ML capabilities are in place for proactive responses and event triggers

Intelligent
System of systems architecture
System to predict and react

Digital
Integration of systems
Digital process flows
System to connect

Manual
Disparate systems
Paper documentation
People to connect

Pro Tip: There's a crawl, walk, run aspect to process and technology maturity when your business is not 100% digital. Often, trying to launch straight into automated processes if you have a file-based system might not be the best idea. Just having your data in a digitized form might be a good start. From there, you can create automated workflows and data collection. When you have a foundation of readily available data, you can begin implementing AI and machine learning (ML). But remember, if you don't have the proper connectivity to feed your AI, you can't get value from all your data.

Step 2

Data Mapping

What must the business accomplish, and what data is available to make that happen?

BRINGING BUSINESS AND IT TOGETHER

Getting IT and lines of business to talk in a similar language is one of the hardest things. But their collaboration will determine your success. The business team will need to explain the data and why it's needed, and then IT can better understand how to map out the required data flow. This will help you identify where data resides today (one of the other key steps), and where you want it to live going forward.

DOCUMENT CURRENT SYSTEM ARCHITECTURE

Take a holistic view to catalog your digital architecture. What systems are you currently using? Understand their capabilities. Are some slated for retirement? Understand if they're going away and you need something to replace them. Does everyone have a firm understanding of what "shadow IT" might be used within the business that falls outside the control of the technical team?

IDENTIFY WHERE THE DATA IS

In addition to knowing what systems are in use, what data do they produce and contain? Is it shareable with other systems? If so, which ones? Is data synchronized and standardized throughout all systems? Do you even know where it is? If not, that leads to our next point.

IDENTIFY DATA GAPS

Once you know what data is and isn't available, where are the holes? The data may be somewhere, but it could be trapped in silos – reducing its value for critical business functions. If you've followed the initial steps, you should now have a better understanding of the gaps that the solution will fill to enable you to record all of your data in future.
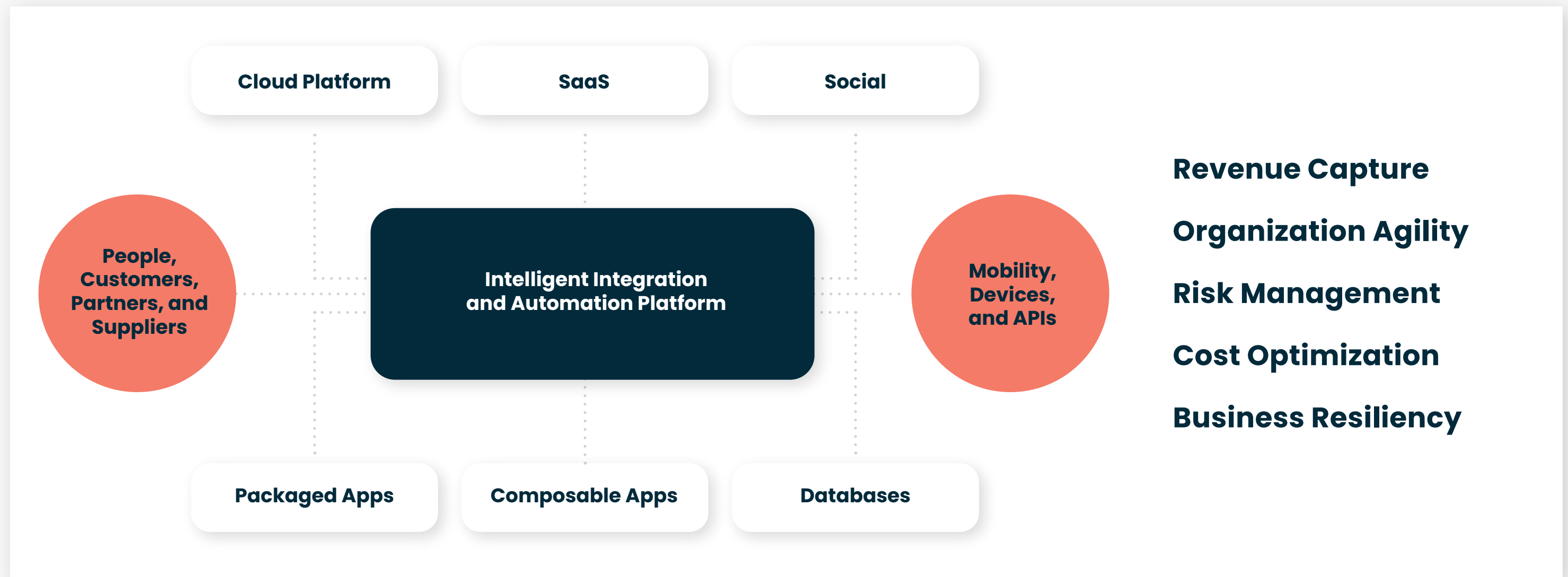
AS-IS AND TO-BE ARCHITECTURE

Great, you've gotten your arms around the current state of your ecosystem. What will it look like going forward? Are you exploring a new ERP system or an upgrade of the existing processes? Are you implementing an advanced AI or reporting system and need to understand how it fits in the holistic architecture? Integrating your entire ecosystem will save you from constant rework later. It's essential to avoid point-to-point integrations because they won't align with the long-term picture of your overall architecture.

Pro Tip: Consider creating buckets for the different systems throughout your digital architecture. Categorize those processes. What do you have for reporting systems, monitoring, tool inventory, and more? This exercise will help you narrow down the solution needed to accomplish your goals and help you simplify your IT architecture.

The Solution - Connected Business

Cloud Platform

SaaS

Social

People, Customers, Partners, and Suppliers

Intelligent Integration and Automation Platform

Mobility, Devices, and APIs

Packaged Apps

Composable Apps

Databases

Revenue Capture

Organization Agility

Risk Management

Cost Optimization

Business Resiliency

Step 3

Solution

Now that you've established where you want to end up, it's time to select a technology partner to help you achieve your goals.

EDUCATE THE VENDOR

It's a mistake to say, "Vendor, show me what you got!" It can be overwhelming when a vendor comes in and shows you everything. Instead, walk them through your objectives, business processes, and the documentation you've created. This way, vendors have the appropriate context and can come back with a proposal specific to your business. This also gets everyone on the same page with terminology and project scope while identifying what you need.

LISTEN TO THE VENDOR

Yes, you know your business. But you're talking to vendors because (presumably) they have the expertise you require for this project. They may even have experience working with customers at the leading edge of their industries and specialize in bringing new perspectives on accomplishing your goals. Your team needs to be open to new ideas. After all, that's why you're looking at cutting-edge technology. What you've done in the past probably won't be what you do in the future. Don't be surprised if vendors deliver that message.

INCLUDE SUBJECT MATTER EXPERTS

As vendors show their products, your SMEs should be there asking questions. They are your experts and should be part of the process from the start. Your project manager should actively pull them into the discussions. "Who didn't see a business process they require?" "What questions didn't get answered? Speak up!" Often, the post-demo conversations are more insightful than the product demonstrations themselves.

FIND THE 80 PERCENT

Here's the reality: You won't ever find a product that accomplishes everything you want. Establish what your business requires from a vendor to meet most of your operations needs (80%) and determine what you can do internally with other systems or workarounds to cover the rest (the other 20%).

QUALITY OVER SPEED

There's always a deadline. But over-emphasizing speed and tight schedules can be a mistake. Encourage leadership to allow extra time to ensure you deliver a quality process/solution, or it won't be well-received. Remember that first impressions can create trust and encourage acceptance.

DOCUMENT REALIZED VALUE

It's easy to forget to record the benefits you're actually seeing. Start by creating a baseline, then return later with the results. Make sure to track that delta – the overall benefit of the project – to show measurable value. That will help you get buy-in as you move on to other projects.

Pro Tip: Once you're working with a vendor and have started implementing a solution, conduct rigorous testing scripts – and document those results. This ensures the process operates as intended. If you roll out a poor-quality product filled with bugs, employees won't use it. Your subject matter experts should own this quality-check process. They can verify that people use the processes and benefit from them, and identify what can be tweaked to support better execution.

Step 4

Training

You've put in the groundwork. You collaborated closely with a vendor and maybe a consultant, too. You've fine-tuned your new system/processes. Now, it's go time!

COMMUNICATION IS KEY

Getting your end users acclimated with the new product is everything. Even before it's introduced, ask them what would help them get up to speed faster. Listen to the feedback and use it to produce educational content. This might include videos, Q&As, technical documentation, FAQs, explainers on how to write support tickets, contact information for who is available to help, etc. Remember, people have different learning styles. Diversify your training to accommodate how everyone processes information.

IDENTIFY EARLY ADOPTERS

Some people catch on very quickly. As you prepare to roll out your project, who could help you train others? These colleagues are vital to the implementation and can also be cheerleaders. ("This is going to be great for our team!") Others will be more open to something new and be eager to jump in when they hear glowing endorsements from those they trust.

CREATE OWNERSHIP

If people feel like something is truly theirs and are part of the creation process, they will be much more open to using it. Yes, we're a broken record here, but bring your customers into the process early and never stop listening to them.

HAVE A FEEDBACK LOOP

When there are issues, document them and show everyone how they're addressed. Make the error resolution process clearly understood. You may even want to keep a running count of all the tickets you've completed. The worst thing you can do is ask people to identify problems and then ignore their feedback. Showing people that you're listening to them — and that you value their input — will encourage a culture of innovation.

LEAVE NO EMPLOYEE BEHIND

Make sure everyone is on board. It's hard to get 100% participation in anything, but do everything possible to encourage active use. Schedule meet-ups to give people a chance to ask questions. Search out the quiet employees who are uncomfortable speaking up but still might have challenges.

Pro Tip: Think about how you can "train the trainer." People are more likely to listen to colleagues when learning new systems and processes than from somebody they don't know. Vendors can come in and teach. But you'll have better success if they can teach your internal experts and early adopters. Then, they can train the rest of the team. It can be a significant differentiator in driving adoption.

03

Best Practices:
The Do Nots

DO NOT IMPLEMENT MAJOR SYSTEMS AT THE SAME TIME

Revamping foundational systems like ERPs, PLMs, or MESes simultaneously is nearly impossible. It's challenging for resources and difficult to understand the impact each change has on all the other systems. Yes, you can have a bigger picture for digital transformation. But tackle one project at a time.

DO NOT FORGET TO DOCUMENT KNOWLEDGE AND STEPS

Things change. People move on. Always document subject matter experts' knowledge and ensure everyone can access it. "Just in case" is always a good business practice.

DO NOT LEAVE OUT THE CUSTOMER

Make sure the end users feel like they have a voice. That's the most significant piece to creating a culture that accepts change. It goes a long way toward your project's ultimate success or failure.

DO NOT TAKE IT ALL ON YOURSELF

Companies often have top-notch IT teams. But they're not software vendors or consultants with specific expertise. That's why bringing in the right vendor and partner to help with implementation might make sense. If you build something that's 100% customized, you're entirely responsible for that product, including a long-term plan for maintenance and the associated resources.

DO NOT ASSUME VENDORS KNOW YOUR PROCESS

Every company does things differently. Teaching vendors about your process will shrink their learning curve and encourage a great working relationship. Be clear about your scope and use cases with vendors.

DO NOT MAKE A BAD FIRST IMPRESSION

Having your employees accept a new product or technology requires putting your best foot forward. A smooth rollout can change skeptical attitudes quickly.

04

Best Practices: The Dos

DO HAVE AN OWNER

Every good team needs a leader who can manage the project from start to finish. It should be someone who gets stuff done, has the interpersonal skills to communicate effectively, can clearly articulate tasks, and brings everyone together – from IT, the business, and the end users.

DO IDENTIFY AND BUILD THE RIGHT CORE TEAM

Your team will make or break the project. Everyone needs to work well together and listen to each other. You need different skill sets – beyond representatives from IT and business. You'll want people who push each other forward, not hold one another back.

DO TAKE THE TIME TO GET ORGANIZED

Make sure to thoroughly scope out the project up front. Get the business people to agree on what they want and IT to agree on what's required to deliver on what's requested. That's much better than moving the goalposts in the middle of the project once a vendor is involved. Also, make sure to begin documenting your processes at the start.

DO BE OPEN TO HYBRID SOLUTIONS

Not every system must be in the cloud. And not everything has to be on premises. That's especially true for businesses in regulated industries where data requires highly secure environments. New technologies support hybrid architectures where connected systems are in different locations.

DO PLAN FOR THE FUTURE

Look at your system architecture holistically. Does this align with where you want to go in the future? If you do something now, will it break something later when you upgrade? Is it part of a modular strategy where it's easier to have a plug-and-play approach for certain technologies?

DO HAVE A PLAN FOR WHEN SOMETHING GOES WRONG

There's always a hiccup or two in any project. How do you intend to handle any problems? Who will be available 24x7? Risk management is essential with big, foundational projects. You need to be able to react quickly to handle any situation.

05
The Boomi Advantage

When you examine your company's systems and processes, does it look like spaghetti? Do you know where everything is in your digital architecture, or are there too many systems to count? Can they all talk to each other or send data back and forth to support your business processes and execute tasks for employees?

If this confusion sounds familiar, you're not alone. But there is a solution.
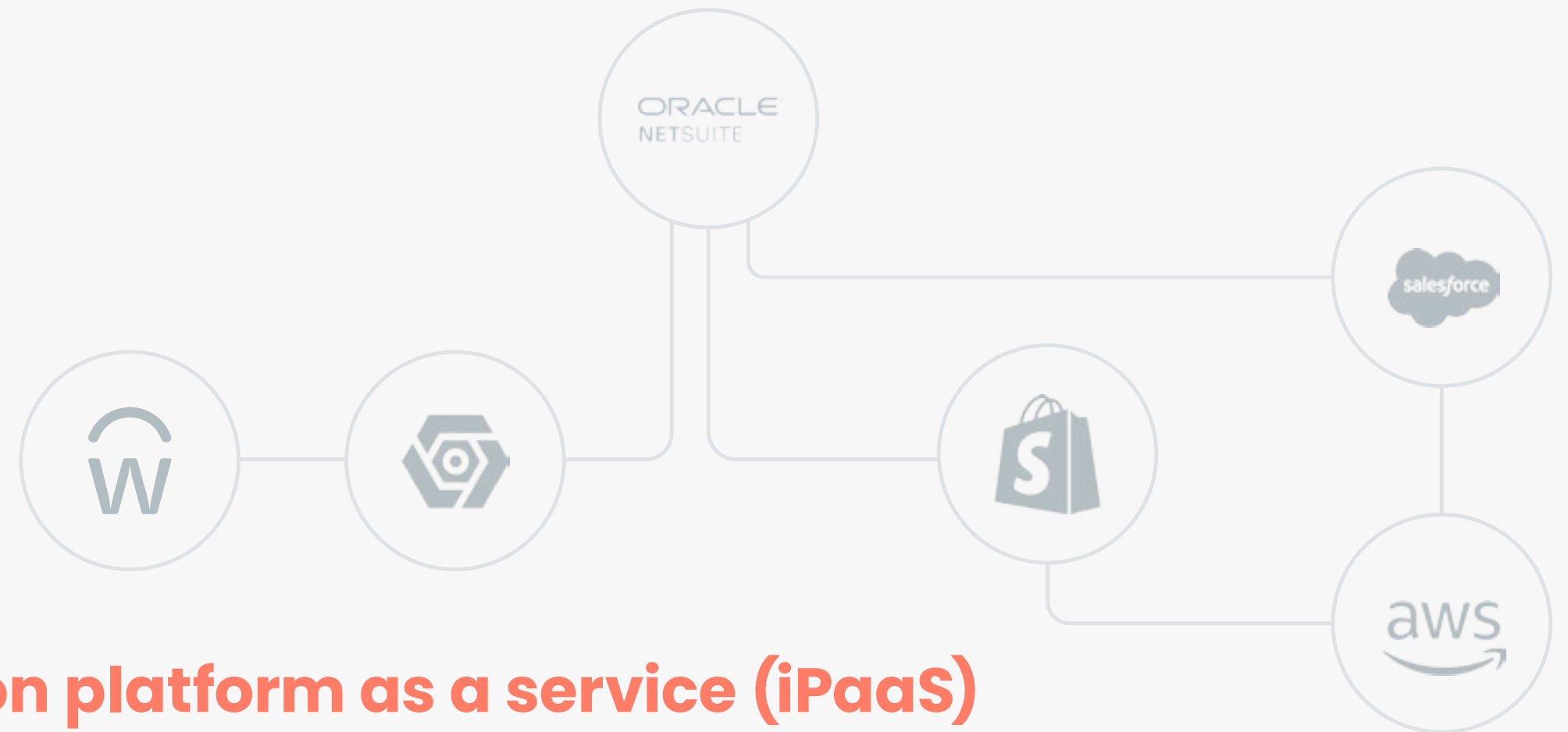
Boomi, the integration platform as a service (iPaaS) market leader, ensures digital transformation success by eliminating the complexity and limitations of legacy systems and fragmented architectures. We help you connect everyone to everything. With Boomi as the essential connectivity piece for enterprise-grade projects, businesses can modernize and automate critical processes to achieve business outcomes faster.

Why Boomi?

⊕ System-Agnostic

An independent platform connects all systems and handles data flow regardless of what technology you use, providing the flexibility to run your operations as you choose.

⊕ Connectivity Layer

Replace point-to-point "spaghetti" integrations with a streamlined process where data is sent through one common middleware layer and is available to share between applications.

⊕ Hybrid Deployment

A single-instance, multi-tenant architecture ensures systems stay connected and synchronized wherever they are – on premises or in the cloud.

⊕ A Single Platform Experience

The Boomi platform is a one-stop shop for comprehensive services to control, move, and scale processes. This eliminates the time and expense of multiple tools and allows for consistent user experiences. Boomi helps you:

Enrich and synchronize data →

Securely scale and manage APIs →

Design, build, and simplify endpoint integrations →

Manage EDI partner networks →

Automate workflows and build applications →

And more! →

⊕ Implement Faster

Forrester's research found Boomi reduces development time by 65% with configuration-based integrations, pre-built connectors, and crowd-sourced mappings based on the knowledge of developers performing similar integrations.

⊕ Transparency

Centralized control reduces risks associated with digital transformation through visibility into monitoring, logging, and deployment, so you'll always know what's happening with your systems and data integrations.

⊕ A Trusted Advisor

Boomi has a proven track record of helping companies worldwide – of all sizes and industries – make the best business decisions.

boomi

ABOUT BOOMI

Boomi aims to make the world a better place by connecting everyone to everything, anywhere. The pioneer of cloud-based integration platform as a service (iPaaS), and now a category-leading, global software as a service (SaaS) company, Boomi touts the largest customer base among integration platform vendors and a worldwide network of approximately 800 partners – including Accenture, Capgemini, Deloitte, SAP, and Snowflake. Global organizations turn to Boomi's award-winning platform to discover, manage, and orchestrate data while connecting applications, processes, and people for better, faster outcomes. For more information, visit www.boomi.com.