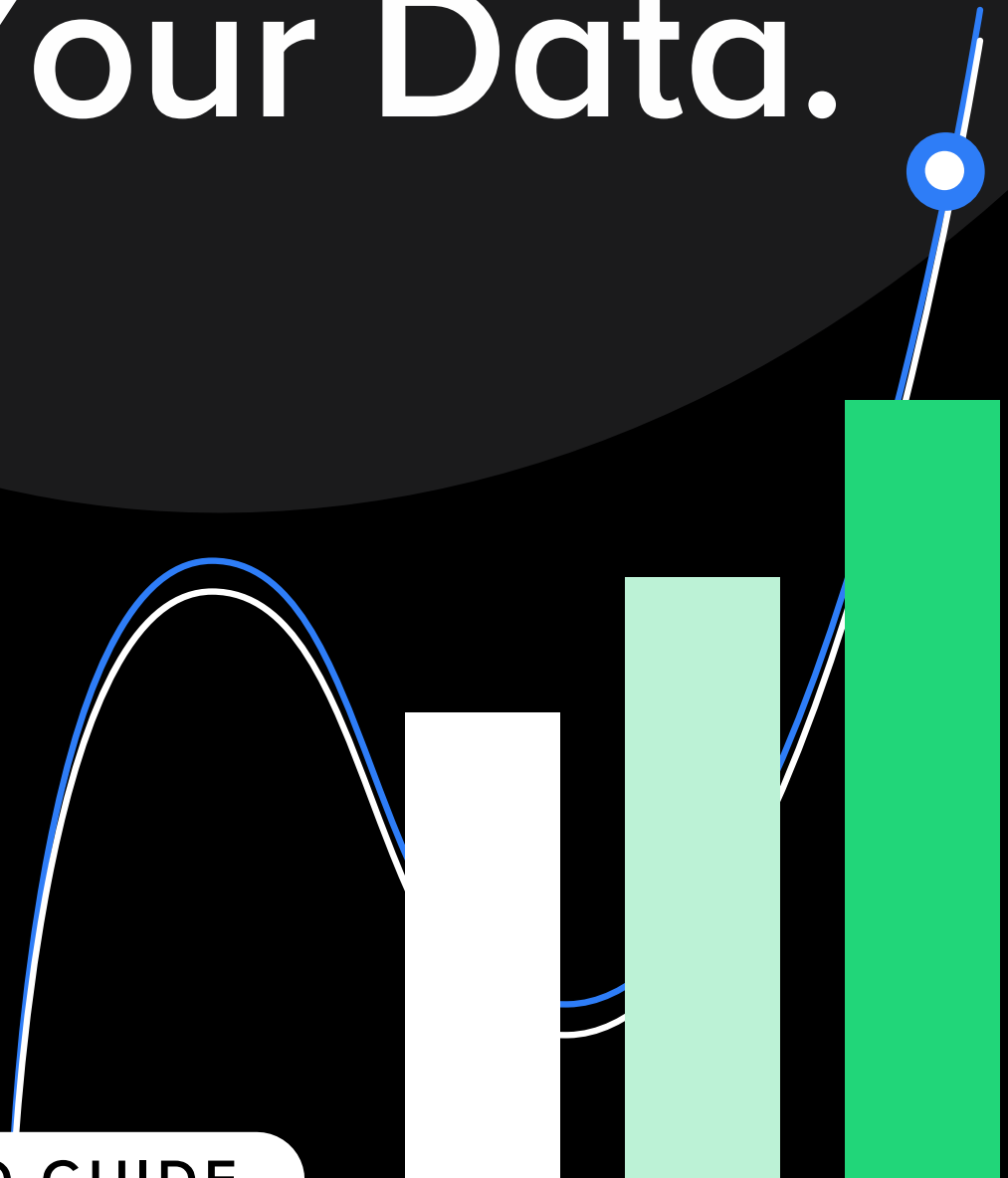# Take Control of Your Data.

HOW-TO GUIDE

Custom Reports & Dashboards

⚡ FROM SPARK BUSINESS WORKS

THE TECH LANDSCAPE IS CHANGING.

Firms have been adopting technology at a rapid pace to keep up, whether it's with the latest market demands, your customers, employees, or competitors.

But the cost of digitization is the notable increase in systems and data now used to operate the business.

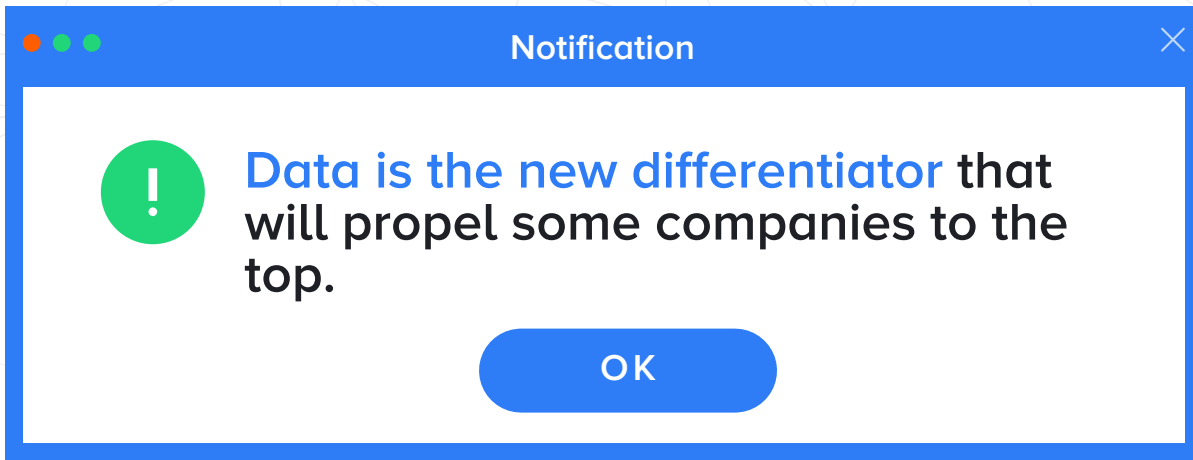**Today, on average, a company uses 22 separate software applications.** *

Yet few have unlocked quick wins from tech for their bottom line.

To be successful in 2022, it's not about how many applications you have. It's about using data to your advantage.

Use this guide to:

1 See the true cost of workarounds

2 Learn how to connect your systems in real time

3 Develop a plan for building custom reports and workflows

SPARK BUSINESS WORKS

* McAfee: Every Company is a Software Company

Notification

Data is the new differentiator that will propel some companies to the top.

OK

> But the reality is that data integration and reporting for any company is difficult.

You likely have a dozen (or more) different systems—both customer-facing and back office— keeping track of many moving people, processes, and information across your company.

## Problem: Siloed Data and Inefficient Workarounds

Your data often becomes isolated in these different systems as they don't have a sufficient way to "talk to each other," or pass data. The consequences? Firms try to overcome data silos with workarounds like:

- Duplicate data entry
- Spreadsheets
- Paper forms
- Manual reporting

(aka Digital Duct Tape)

Workarounds might have been enough in the past. But it isn't scalable to keep up with current demands. Managers don't have easy access to accurate data to make effective decisions. Every day, this impacts your operations, client experience, and revenue.

BAD RESULT = BAD DATA

- Inaccurate
- Incomplete
- Inconsistent
- Untimely
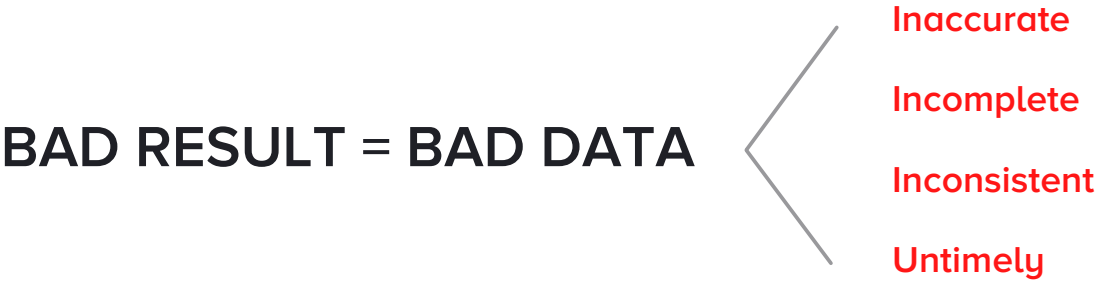
Every year, poor data quality costs organizations an average $12.9 million, according to Gartner research.

Data

Accuracy

Timeliness
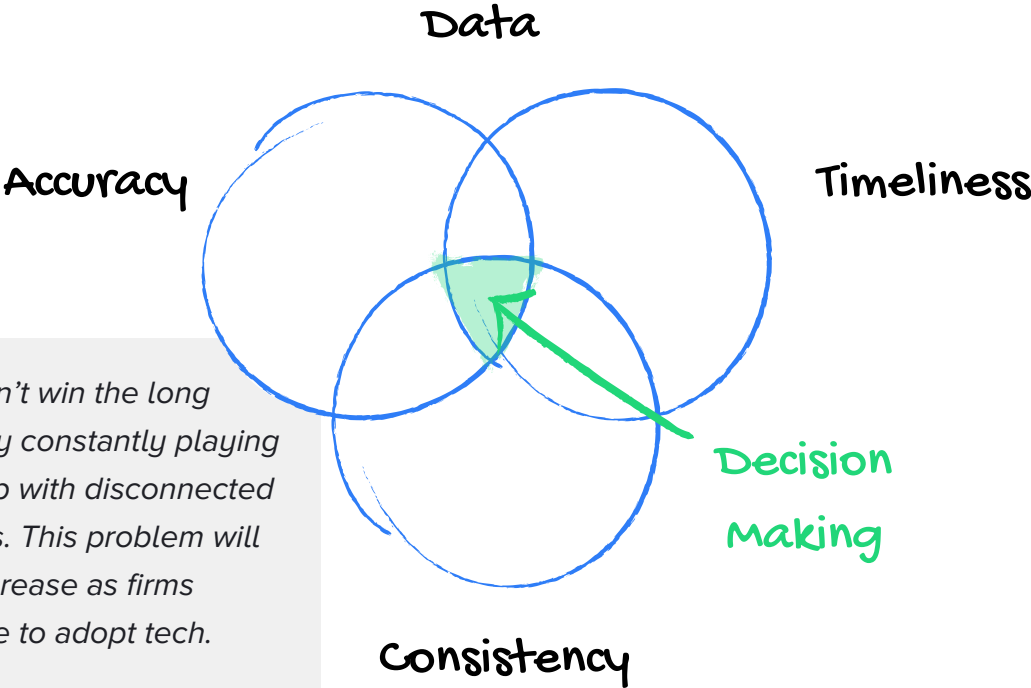
You won't win the long game by constantly playing catch-up with disconnected systems. This problem will only increase as firms continue to adopt tech.

Decision Making

Consistency

One of the best ways to improve decision making is to use real-time data sharing. Let's start with leveling up your reporting.

Notification

!

**You need
a better way
to connect your
systems
and report on
your data.**

OK
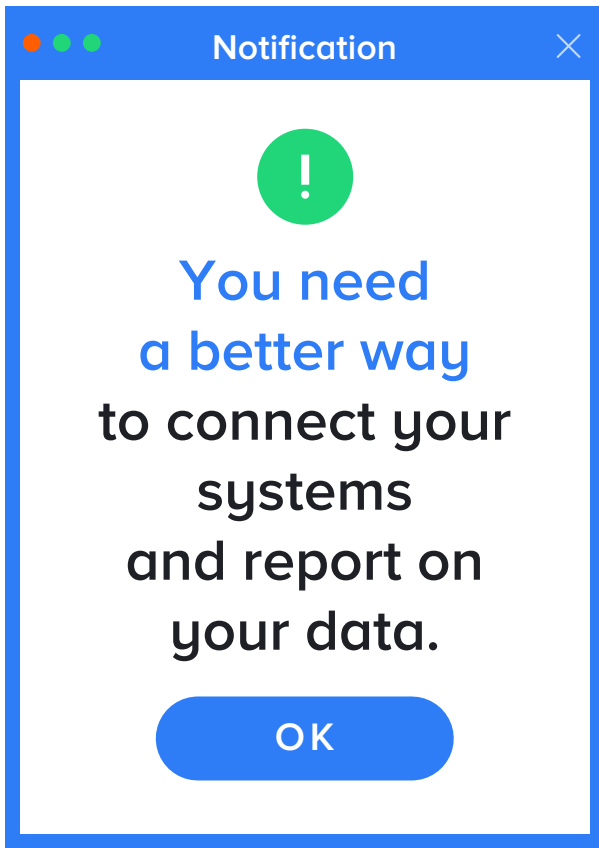
We'll be honest with you. "Real-time" is easier said than done. Data integration by nature is technically complex— which is why it's hard to get right.

In some cases, you might have already tried (and been underwhelmed) from the reports that come from your off-the-shelf software. They didn't quite give you the ability to customize your data or fit with your workflows.

But... good news:

Solution: Connected Data

You CAN integrate your existing systems and data (accounting, safety, field data, scheduling, job costing, and more) to create:

Custom Reports → Automated to show up at the right time with the right data (to the right people)

Custom Dashboards → Interactive display of KPIs and flagged data exceptions to take action on

**Custom Workflows** → Integrated with your core systems to trigger alerts and tasks based on logic

Next, we'll show you HOW to lay the groundwork for custom tools that can actually get your company to a state of connected data.
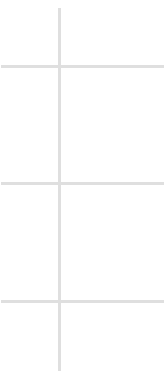
These steps will help you document a solid strategy based on YOUR business problems and goals for custom reports/dashboards. You'll develop a plan to hand off to technical experts that can make it happen.

NOTE: Do you have software developers in-house? Many firms do not. That's OK. You can get help from experts.

So, "Automated," "Interactive," and "Integrated"— they all sound nice, right? But is it possible? Yes. Many software products have something called an API.

REPORTING

CUSTOM

DASHBOARDS ← **API** → **WORKFLOWS**

EXISTING SYSTEMS
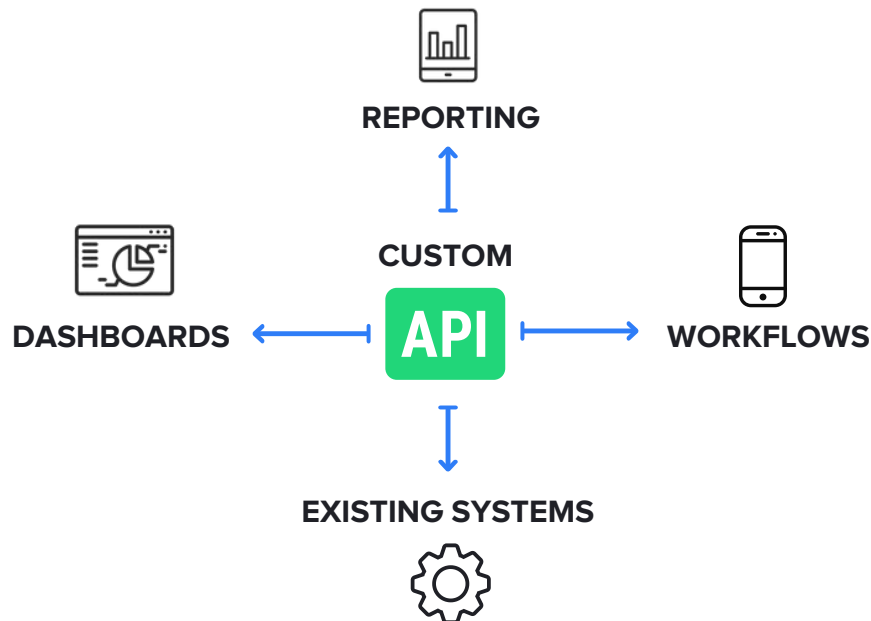
> ⓘ *APIs are a part of the code structure that allows software to communicate (or pass data) for additional functionality.*

With APIs, a software developer can use a small (or large) amount of data to program a digital intervention. You can ditch the workarounds and aggregate your most important data into a central location to use for custom reports, dashboards, and workflows.
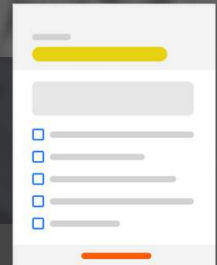
Examples)

Custom Business Tools
Powered by Connected Data

REPORTS

- Low technical complexity
- Some digital design

Example: Incident Report PDF that automatically sends out weekly to leaders with the status of follow-up tasks

DASHBOARDS

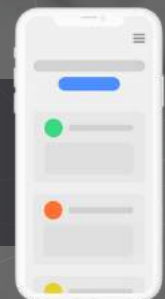- Medium technical complexity
- UX/UI design required

Example: Interactive screen displays key metrics in real time with custom filters

WORKFLOWS

- High technical complexity
- UX/UI design required

Example: A negative change in a key metric trigger san alert and task goes out to a teammate to resolve

Build Your Own
Custom Reports and Dashboards

If you had a custom report powered by connected data, what would it do? What would you include? Who would you share it with?

Use these steps to kick off planning for your own custom report or dashboard. (Workflows can come out of that.)

A little thought and preparation before you start building will go a long way toward leading a successful project.

START

1 **Define Your Why**
Your long-term strategy or "why" should guide your entire project. Be sure to have clarity around the reason you want to create new (or replace existing) reporting.

Write it down

We believe this report/dashboard will help us:

How will this project be measured?
What key results will make your new project
a worthwhile investment?

ⓘ *SPARK Tip: Include key stakeholders from different departments early in the planning process to understand their wants and needs. It will help you get buy-in, which is critical for adoption.*

*Article + Survey Tool: How to Collect Team Input*

2 Prioritize Your Pain Points

As you plan, you'll likely end up with a 'laundry list' of ideas for new reporting or workflows. You might be tempted to tackle it all at once.

But we don't recommend doing that. Instead, start small– prioritize your ideas that can be low effort, but have a big impact.

You can use a simple matrix that compares Effort vs Impact for your current pain points. Those that fall on the low effort/high impact quadrant should be addressed first.
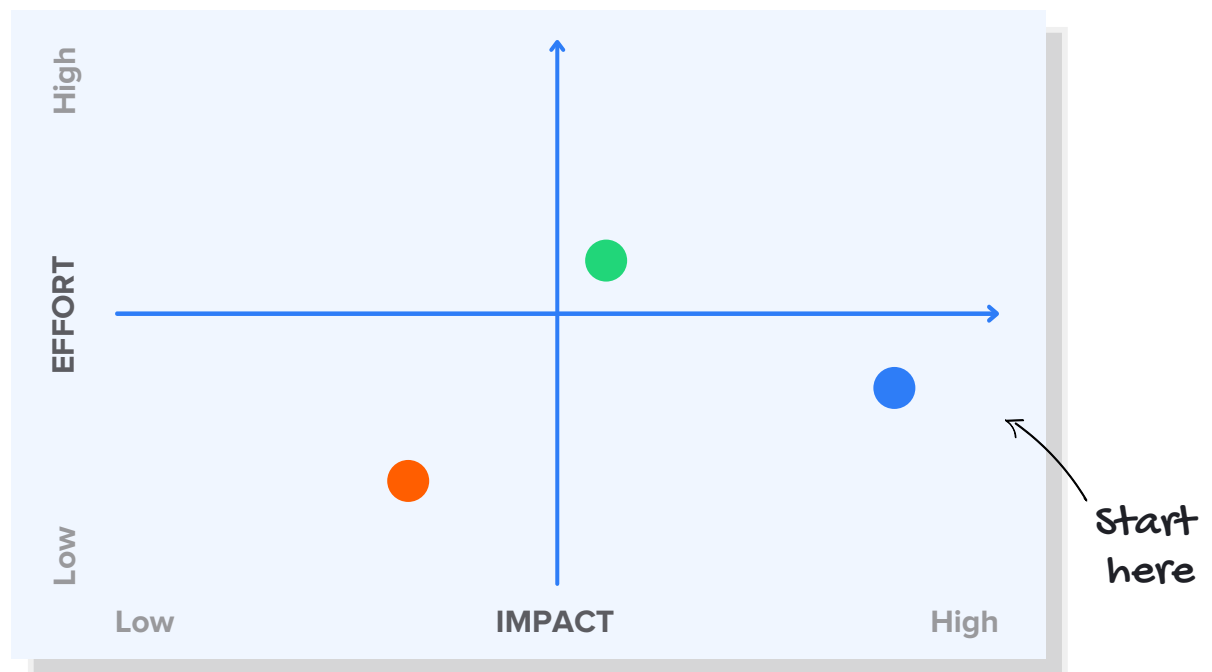
COMMON EFFORT VARIABLES

- Number of processes that will need to change
- Number of people or roles the tool will be adopted by
- Number and complexity of existing systems involved

COMMON IMPACT VARIABLES

- Weight of decisions made based on the data
- Speed to ROI based on efficiency gained
- Amount of new opportunity/ momentum created

ℹ️ *SPARK Tip: Building in small phases will increase adoption by your teams, while keeping you in control over spend and ROI.*

Article + Worksheet: How To Calculate ROI

③ Perform a Data Audit

Before you can start moving and changing data, you should assess the current state of your systems.

- What system(s) will you need to pull from or share data with?
- What type(s) of data is stored in them?
- How accurate is the data currently?
- Who has access to these system(s)?
- How is data typically shared now? (manual, automated, APIs, etc)
- How much data is there? (Hundreds or tens of thousands)

Performing a data audit is an essential, yet often overlooked step. Before any code is written, you should know what's technically feasible or not. An audit can help you proactively check for any technical roadblocks or requirements like:

- What data structures might lead to development challenges?
- Do you need to upgrade any systems for this to work?

Doing these data checks before committing to a solution or particular scope can save headache and disappointment later.
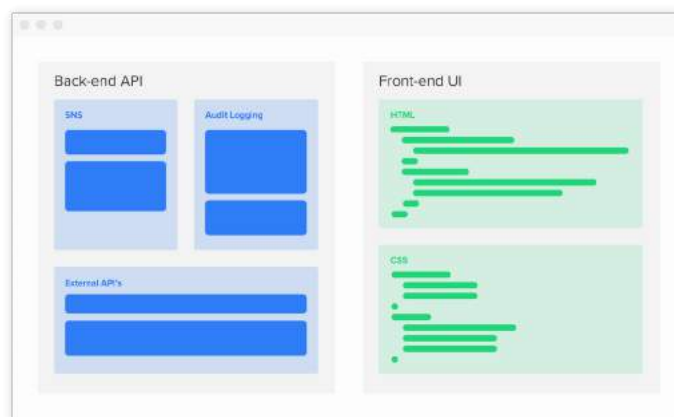
ℹ️ *Refer to a software expert for a technical deep dive into your systems. At SPARK, we can work with you to assess your data and build a software roadmap that fits your budget and timeline. Learn more about our custom software development process.*

Visualize the Solution

When building custom software, the same screen or features can be built in a lot of different ways.

Do you want to build an automated report that goes out every Monday? Or do you need an interactive dashboard that multiple teams can access?

Your turn!

It can help to sketch your ideas on paper first, no matter how rudimentary. Visualization can help clarify vague ideas for yourself and others. Use these best practices to see how your custom tools could 'look and feel.'

Blueprint of Your Custom Report

Who should receive the report? How frequently? When?

Pick a limited set of data points to measure so you can compare progress over time.

What is the UNIQUE way you need to display the data?

Use strong visuals that can communicate important data at a glance.

> *Carefully considering HOW your end-users should interact with the data is just as important as the technical infrastructure for collecting it.*

Blueprint of Your Custom Dashboard

Who should have access to the dashboard? Who should be alerted of changes in trends?

Use strong visuals like tables, charts, and graphs that make complex data easy to digest.

Choose your top 5 to 10 KPIs to display in a single screen. You don't want to overwhelm users with data.

Make it interactive by using custom filters, drop down menus, and more. You can update data right on the screen.

Designing Workflows

As you develop your reports and dashboards, you'll likely see ideas for workflows, or triggers that result in certain actions.

To design workflows, a simple exercise is to write If - Then Statements.

If [this happens] then [that will happen].

Ex: If a status is marked complete, send notification to x.

Final step

5 Build the Solution & Plan the Rollout

You can lead the adoption of successful custom tools without being super technical. As the expert of your business, your most important job is to set the vision for the project, communicate the plan, and champion the rollout.

You will need to work with the right software development team—whether in-house or external— to guide you through the process.
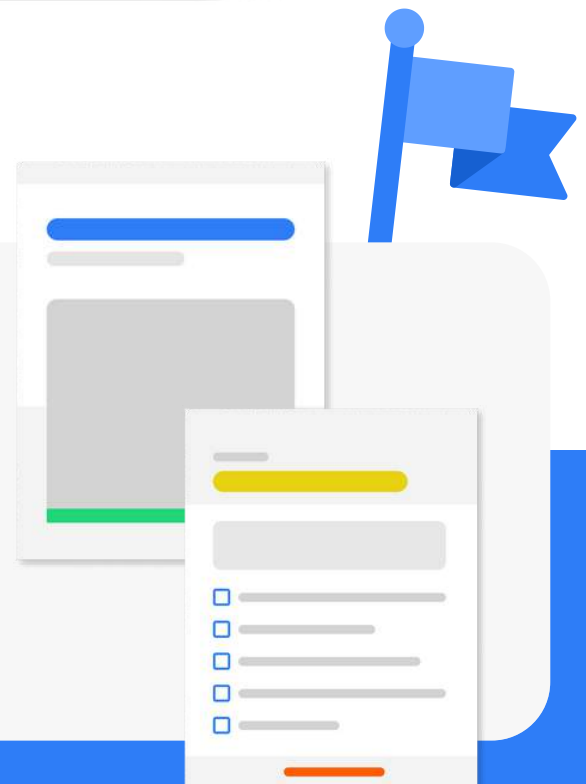
Take control with the right software development partner.

When you start using data as a differentiator, you'll be able to make long-term and strategic tech decisions that result in practical innovation.

More insights:

GUIDE - USING DASHBOARDS TO IMPROVE KPI'S

Summary

When you're stuck trying to connect things with digital duct tape, it kills your company's productivity— and your margins. But your data problem is specific to your existing systems and way of operating. It's time to level up.

WORKAROUNDS

Manual reporting

Wrangling spreadsheets

Files on a server

Duplicate entry

VS

Better Way

Get the real story without all the struggle

Break down data silos and take back control

Leverage tech to your advantage

1 It IS possible to connect your data. APIs and custom programming can do the automagic— as long as you bring the right business requirements to the table.

2 To get adoption and ROI with connected data, you need to translate complex business requirements into simple, user-friendly tools. Take a phased, iterative approach.

3 Business-savvy software and design experts can help you. They will leverage a proven process (measured by business results) for a successful custom report, dashboard, or workflow.

Take the first steps to **conquer your data**.

Practical innovation needs a process (and the right team).

Start with an Assessment

- Legacy system strategy
- Understand API capabilities
- Audit all instances of data

- Technical plan, timeline, budget
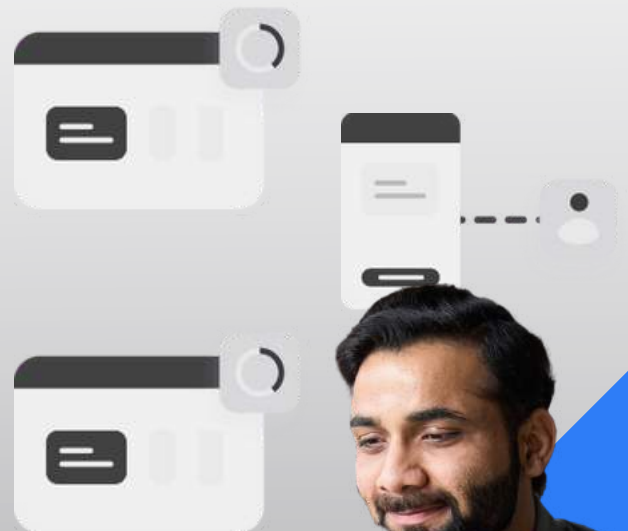- Design and architecture strategy

DELIVERABLE:

Detailed project scope, design plan, and development roadmap

CHAT WITH SPARK →

Take Control.

Technical? Let's talk APIs, databases, and tech stack.

Non-technical business leader? You too can be a data badass.

LEARN MORE ABOUT US AND OUR CLIENTS

SPARK BUSINESS WORKS

There's A **Better** Way

Custom Software and Data Integration Experts

Element78, a private equity investment form, needed a way to dynamically track their portfolio companies' productivity, goals, and growth in real-time.

The SPARK team designed and built a workflow using APIs to pull data from their clients' databases into an elegant dashboard.

E78 now differentiates their services through automated email reporting to stakeholders, financial performance visualization, and more.

"SPARK simply does tremendous quality work! Very creative and thoughtful on perspective and ideas with clients."

Inc. 5000
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BBB ACCREDITED BUSINESS

CIO 20 MOST PROMISING **CONSTRUCTION TECH SOLUTION PROVIDERS**

MICHIGAN 50 **COMPANIES TO WATCH** 2021 AWARD WINNER

5-Star Rated on Google
★ ★ ★ ★ ★

★ ★ ★ ★ ★
Ken, Partner Manager and Managing Director

SPARK BUSINESS WORKS

Learn more about the **SPARK** Way

VIEW CASE STUDIES →

"

Our competitors
talk about their products.
We talk about **your business**,
thats's why it's in our name.

Robert Armbrister, CEO
SPARK Business Works

WORK WITH SPARK

A business-first team to design and build
your custom digital solution.

SparkBusinessWorks.com