

The IT Consultant's Automation Handbook

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Chapter 1

Introduction: The New Era of IT Consulting

1.1 The Changing Landscape

The IT consulting world is undergoing a seismic shift. According to Deloitte's recent report, "Unleashing value from digital transformation: Paths and pitfalls," the days of strategy-only consulting are numbered. Clients now demand execution, and technology is at the heart of it all.

Important

Consider this: 30 years ago, classic strategy work made up 60-70% of consulting engagements. Today? It's down to a mere 20%. The message is clear: consultants who can't deliver tangible, tech-driven results will be left behind.

However, this shift presents an exciting opportunity for small firms. With the right tools and knowledge, you can deliver outcomes that rival the big players, at a fraction of the cost.

1.2 The Power of Automation

Automation is not just a buzzword; it's your ticket to:

- Boosting productivity by eliminating time-consuming manual tasks
- Consistently meeting (and exceeding) client deadlines
- Taking on more projects without burning out
- Positioning yourself as an innovation leader
- Finally achieving that elusive work-life balance

1.3 What You'll Learn

This book is your practical guide to leveraging no-code automation tools to revolutionize your IT consulting practice. We'll focus on three powerful platforms:

1. **n8n**: A powerful workflow automation tool

2. **NoCoDB**: An open-source Airtable alternative
3. **Budibase**: A low-code platform for building business apps

By the time you finish this book, you'll know how to:

1. Automate repetitive tasks to free up your time for high-value work
2. Deliver unprecedented value to clients (and find new ways to monetize your automation skills)
3. Scale your practice without working 80-hour weeks
4. Integrate cutting-edge technologies like generative AI and cloud computing into your solutions

1.4 How to Use This Book

Whether you're a complete newcomer to automation or you've dabbled a bit, this book is designed to meet you where you are. Each chapter builds on the last, providing a mix of theory, practical examples, and hands-on exercises.

1.4.1 Quick Wins and Advanced Strategies

We'll start with quick wins you can implement today, then progress to more advanced strategies. By the end, you'll have a comprehensive 90-day plan to transform your practice.

1.4.2 Hands-On Approach

Don't just read passively. The real magic happens when you apply these concepts to your own business. So grab your laptop, roll up your sleeves, and get ready to join the ranks of innovative, future-proof IT consultants.

Warning

Remember, the examples in this book are meant to be starting points. Always consider the specific needs of your clients and adjust the automations accordingly.

1.5 A Practical Example: AI-Powered Email Classification

Let's start with a common pain point: the overflowing inbox. We'll create an automation that reviews and classifies emails based on their content, helping you prioritize and respond more efficiently.

1.5.1 The Impact

Imagine starting your day with a perfectly organized inbox, where emails are automatically sorted into categories like:

- Urgent client issues
 - Project updates
 - New business inquiries
-

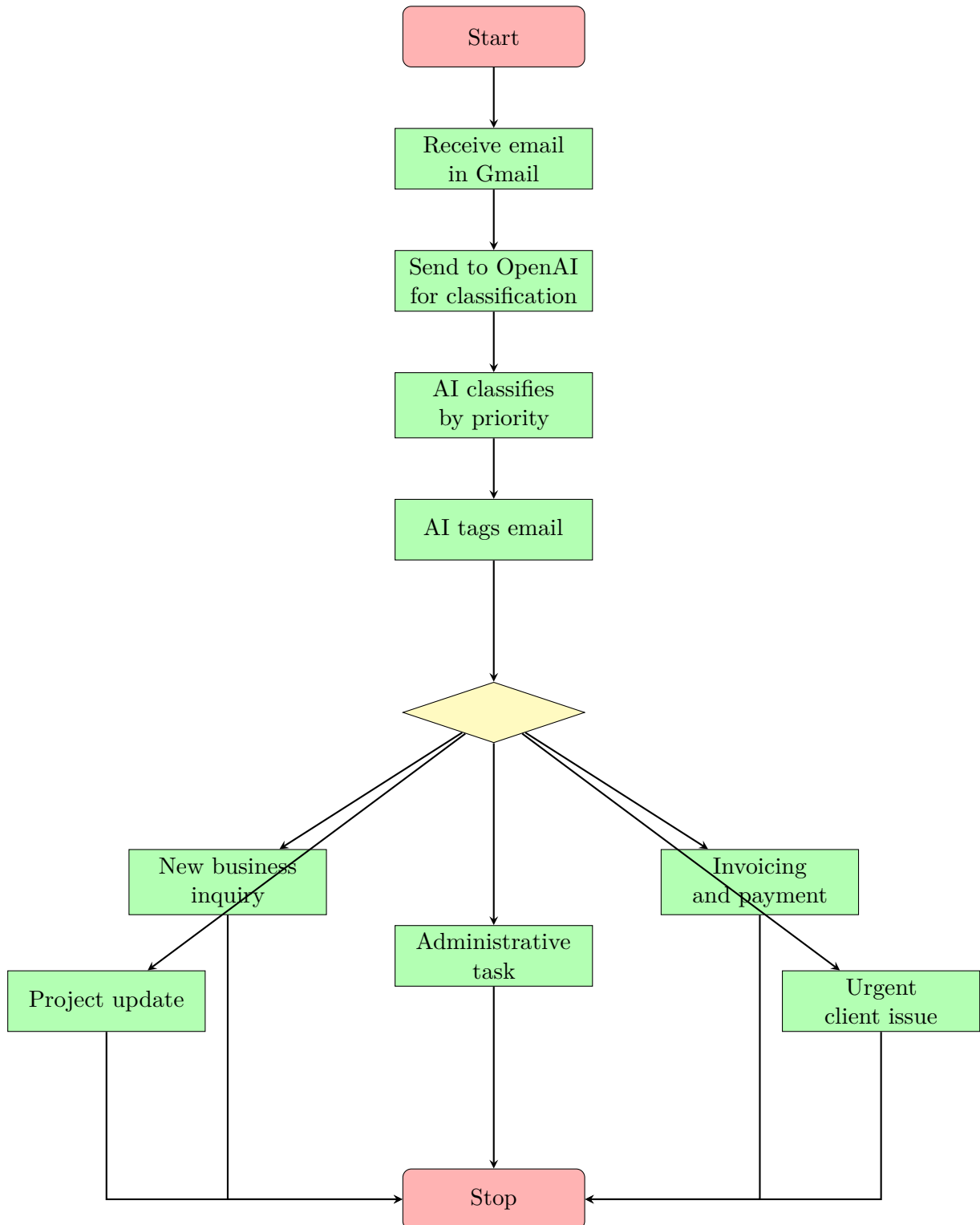
- Invoicing and payments
- Administrative tasks

This automation will allow you to:

- Respond to critical issues faster
- Prioritize your workday more effectively
- Ensure no important client communication slips through the cracks

1.5.2 The Workflow

Here's an overview of our email classification workflow:



In the following chapters, we'll dive deep into implementing this workflow and many others, step by step.

1.6 Join Our Community

As you embark on this journey, remember that you're not alone. Join our vibrant community of IT consultants and automation enthusiasts on Discord:

Business Automators Community

<https://discord.gg/P6txNctp>

In our community, you can:

- Get help troubleshooting your automations
- Share your own automation success stories
- Network with other forward-thinking IT consultants
- Get direct access to the author for personalized advice

Important

Remember, automation is a journey, not a destination. Start with the email classification workflow we'll build in the next chapter, then explore how you can automate other aspects of your consulting practice.

Ready to stop drowning in busywork and start leading the pack? Let's dive in!

Chapter 2

No-Code Tools Every IT Consultant Should Master

2.1 Introduction

In today's fast-paced tech landscape, the ability to rapidly prototype and deploy solutions is invaluable. No-code platforms are revolutionizing how IT consultants work, allowing you to create powerful applications and automations without writing a single line of code. Let's dive into the top tools you need in your arsenal and explore real-world applications that can transform your consulting practice.

2.2 Top 3 No-Code Platforms for IT Consulting

2.2.1 n8n (self-hostable)

n8n is a powerful, flexible workflow automation tool that's perfect for IT consultants looking to build complex, customized solutions.

Pros:

- Advanced capabilities for complex workflows
- Self-hostable for enhanced security and control
- Excellent for rapid prototyping and idea validation
- Can function as a low-code business ideas maker
- Ability to build entire backend software services

Cons:

- Steeper learning curve compared to some alternatives
- GUI can become challenging to manage with very complex workflows
- Less polished UI compared to some competitors

Real-World Use Case: Automated Incident Response System

One of our clients, a medium-sized managed service provider, used n8n to create an automated incident response system. Here's how it works:

1. The system monitors their ticketing system (Zendesk) for new high-priority tickets.
2. When a critical ticket is created, n8n triggers a workflow that:
 - Sends an alert to the appropriate team in Slack
 - Creates a video call link in Zoom for immediate team collaboration
 - Starts a timer to track response time
 - Pulls relevant documentation from their knowledge base
 - Updates the ticket with the collected information
3. If the ticket isn't addressed within 15 minutes, it escalates the alert to senior management.

This automation reduced their average response time for critical incidents from 45 minutes to under 10 minutes, significantly improving their service level agreements (SLAs) and client satisfaction.

2.2.2 NoCoDB (self-hostable)

NoCoDB is an open-source Airtable alternative that provides a powerful, flexible database solution.

Pros:

- Can import data from various sources, including Airtable
- Supports multiple database types (MySQL, Postgres, SQLite, SQL Server)
- Multilingual support
- Open-source and self-hostable

Cons:

- Learning curve can be steep for non-technical users
- Lacks built-in cloud backup system

Real-World Use Case: Centralized Client Management System

A boutique IT consulting firm used NoCoDB to create a centralized client management system. They set up tables for:

- Clients (with contact information, project history, and preferences)
- Projects (linked to clients, with timelines, budgets, and status updates)
- Resources (team members, equipment, and their availability)
- Invoices (linked to projects and clients, with payment status)

They then created views that allowed them to:

- See all active projects and their status at a glance
- Track billable hours and project profitability
- Manage resource allocation across projects
- Generate custom reports for clients and internal stakeholders

This system replaced their previous combination of spreadsheets and a CRM, providing a more flexible and integrated solution that scaled with their business. They estimated it saved them 15-20 hours per week in administrative tasks.

2.2.3 BudiBase (self-hostable)

BudiBase is a low-code platform for creating web applications quickly and efficiently.

Pros:

- Can connect to REST APIs
- Supports user role definition
- Open-source and self-hostable
- Features useful components like the repeater field

Cons:

- Building complex UIs can be challenging
- Limited ability to use JavaScript for data manipulation in all components
- Less dynamic compared to some alternatives like Appsmith

Real-World Use Case: Custom Client Portal

An IT consultant specializing in data analytics used BudiBase to create a custom client portal for a large e-commerce client. The portal included:

- A dashboard showing real-time sales data, inventory levels, and customer analytics
- A tool for generating custom reports based on user-selected parameters
- An interface for managing product listings across multiple platforms (Amazon, Shopify, eBay)
- A ticketing system for the client to request changes or report issues

The consultant connected BudiBase to the client's existing databases and APIs, creating a unified interface that pulled data from multiple sources. This portal replaced several disconnected tools the client was using, streamlining their operations and providing more actionable insights.

The consultant was able to deliver this solution in just three weeks, a fraction of the time it would have taken to develop a custom application from scratch. The client was so impressed with the result that they referred the consultant to two other businesses, leading to significant growth in the consultant's practice.

2.3 Build Your First No-Code App in 30 Minutes

Let's put theory into practice by building a client onboarding automation using n8n and NoCoDB. This practical example will demonstrate how quickly you can create valuable solutions for your consulting business.

2.3.1 Setting Up Your Environment

1. Ensure you have n8n and NoCoDB installed and running on your system. 2. Set up a Google Workspace account for integrations.

2.3.2 Creating the NoCoDB Database

Create a new table in NoCoDB with the following fields:

- Client Name
- Company
- Email
- Phone
- Project Type
- Start Date
- Assigned Team Members
- Initial Meeting Date
- Document Status
- Project Folder Link

Now, let's create our n8n workflow:

1. **Trigger: New Form Submission** Set up a Webhook node to receive new client data.
2. **Create NoCoDB Record** Use the NoCoDB node to create a new record with the received data.
3. **Create Google Drive Folder** Utilize the Google Drive node to create a new folder for the client.
4. **Send Welcome Email** Configure the Gmail node to send a personalized welcome email.
5. **Create Calendar Event** Use the Google Calendar node to schedule the initial meeting.
6. **Update NoCoDB Record** Finally, update the NoCoDB record with the folder link and meeting details.

2.3.3 Testing and Activating Your Workflow

Once you've connected all the nodes, it's time to test your workflow:

1. Use the n8n testing feature to simulate a new client submission.
2. Check each step of the workflow to ensure data is flowing correctly.
3. Verify that the NoCoDB database is updated, the Google Drive folder is created, the welcome email is sent, and the calendar event is scheduled.

Congratulations! You've just created a powerful client onboarding automation in under 30 minutes. This workflow will save you hours of manual work for each new client, allowing you to focus on delivering value rather than managing administrative tasks.

2.4 Security and Compliance Considerations

When working with no-code tools, especially in IT consulting where you're handling sensitive client data, security and compliance should be top priorities. Here are some key considerations:

1. **Data Privacy:** Ensure that your no-code platforms are compliant with relevant data protection regulations (e.g., GDPR, CCPA).
2. **Access Control:** Implement strict user access controls, especially when using self-hosted solutions.
3. **Data Encryption:** Use encryption for data at rest and in transit.
4. **Regular Audits:** Conduct regular security audits of your no-code setups.
5. **Backup and Recovery:** Implement robust backup solutions, especially for self-hosted platforms.
6. **Third-Party Integrations:** Carefully vet any third-party services you integrate with your no-code tools.

Remember, while no-code platforms can significantly speed up development, they don't absolve you of responsibility for the security and compliance of your solutions. Always approach these tools with a security-first mindset.

2.5 Conclusion

No-code tools like n8n, NoCoDB, and BudiBase are revolutionizing how IT consultants work. By mastering these platforms, you can deliver solutions faster, take on more complex projects, and provide greater value to your clients. The client onboarding automation we built and the real-world examples we explored are just the beginning – the possibilities are truly endless.

These tools allow you to:

- Rapidly prototype and deploy solutions, reducing time-to-market
- Create custom, scalable applications without extensive coding knowledge
- Integrate disparate systems and data sources more easily
- Offer more competitive pricing by reducing development time
- Expand your service offerings to include areas previously out of reach

In the next chapter, we'll explore how to transform your core services using these no-code tools, opening up new revenue streams and enhancing your existing offerings.

Important

Remember, the key to success with no-code tools is to start small, experiment often, and continuously build on your successes. Each project you complete will expand your capabilities and open up new opportunities for your consulting practice.

Action Items:

1. Take the workflow we built in this chapter and customize it for your own business. What other steps could you add to make your client onboarding even more efficient?

2. Choose one of the real-world use cases we discussed and brainstorm how you could implement a similar solution for one of your clients.
3. Sign up for free accounts on n8n, NoCoDB, and BudiBase (if you haven't already) and spend an hour exploring each platform.

By taking these steps, you'll be well on your way to mastering the no-code tools that can transform your IT consulting practice. In the next chapter, we'll dive deeper into how to leverage these tools to enhance your core services and create new revenue streams.

Chapter 3

Transforming Your Core Services

3.1 Introduction

As an IT consultant, your ability to efficiently gather requirements, prototype solutions, and present data can set you apart from the competition. In this chapter, we'll explore how to leverage no-code tools to revolutionize these core services, making your consulting practice more efficient and effective.

3.2 Automating Requirements Gathering

One of the most time-consuming aspects of IT consulting is gathering and documenting client requirements. Let's explore how we can streamline this process using our no-code toolkit.

3.2.1 The Traditional vs. Automated Approach

3.2.2 Setting Up an Automated Requirements Workflow

Let's create a comprehensive requirements gathering system using n8n, NoCoDB, and BudiBase:

1. **Initial Questionnaire:** Use n8n to create a webhook that receives responses from a Google Form.
2. **Data Storage:** Configure NoCoDB to store and categorize the received requirements.
3. **Stakeholder Notifications:** Set up a n8n workflow to notify relevant team members about new requirements.
4. **Requirements Dashboard:** Create a BudiBase app to visualize and manage requirements.
5. **Automated Follow-ups:** Use n8n to schedule and send follow-up questions based on initial responses.

3.2.3 Implementing the Triplet Questioning Technique

The Triplet Questioning technique is a powerful method for eliciting detailed requirements. Let's automate this process:

1. Set up a series of n8n workflows to ask the three key questions: - "What is your requirement?" - "What does that give you of value?" - "Which value is most important?"
2. Use NoCoDB to store and analyze the responses.
3. Create a BudiBase app for stakeholders to review and prioritize the gathered requirements.

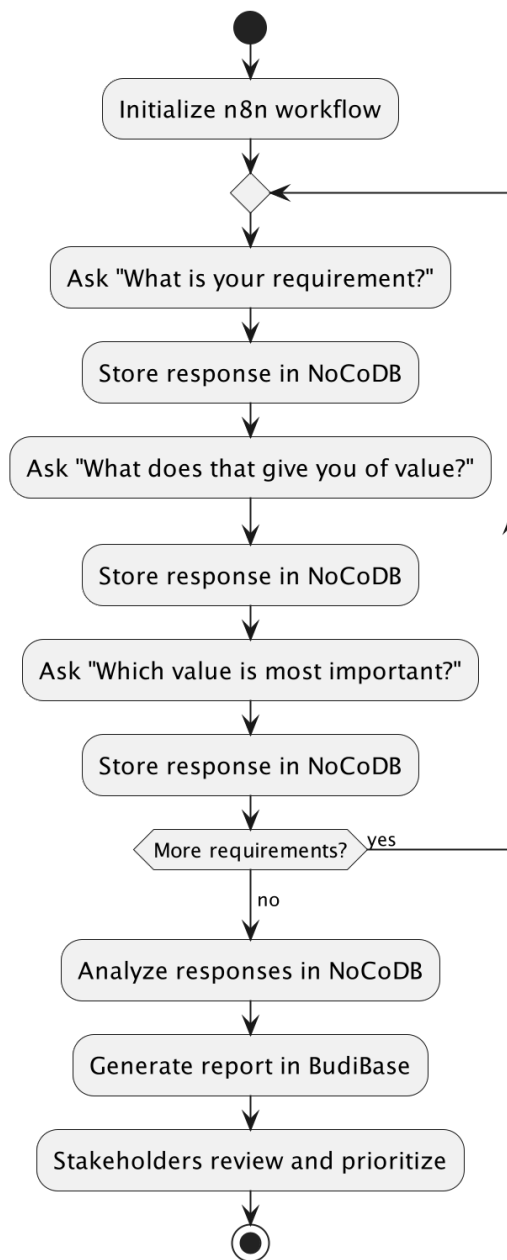


Figure 3.1: Flowchart of the automated Triplet Questioning process

3.3 Rapid Prototyping Techniques That Wow Clients

Once you've gathered requirements, the next step is creating a prototype to validate ideas and get client feedback. No-code tools excel at rapid prototyping, allowing you to create impressive demos quickly.

3.3.1 Using BudiBase for Quick UI Prototypes

1. Create a basic dashboard layout in BudiBase.
2. Add dynamic components that pull data from NoCoDB.
3. Implement user interactions and navigation.

3.3.2 Creating Interactive Workflows with n8n

1. Set up an n8n workflow that simulates backend processes.
2. Connect the n8n workflow to your BudiBase prototype.
3. Create a "wizard" interface in BudiBase that guides users through a process, with each step triggering actions in n8n.

3.3.3 Prototype Presentation Best Practices

1. Use screen recording tools to create short demo videos of your prototype in action.
2. Prepare a slide deck that outlines the problem, solution, and benefits.
3. Set up a live environment where clients can interact with the prototype themselves.

3.4 Dynamic Data Visualization and Reporting

Presenting data effectively is crucial for demonstrating the value of your solutions. Let's explore how to create dynamic, interactive reports using our no-code toolkit.

3.4.1 Building Interactive Dashboards with BudiBase

1. Connect BudiBase to your client's data sources (or NoCoDB).
2. Create charts, graphs, and KPI displays.
3. Implement filters and date range selectors for user interactivity.

3.4.2 Automated Report Generation with n8n

1. Set up an n8n workflow to pull data from various sources.
2. Use n8n nodes to process and format the data.
3. Generate PDF reports using the n8n PDF creation nodes.
4. Automatically email reports to stakeholders on a schedule.

3.4.3 Creating a Self-Service Reporting Tool

Combine BudiBase and n8n to create a tool that allows clients to generate their own reports:

1. Build a BudiBase interface for report configuration.
 2. Use n8n to process report requests and generate reports based on user input.
 3. Deliver the generated reports back to the BudiBase interface for download.
-

3.5 Case Study: Transforming a Traditional IT Consultancy

Let's look at how implementing these automated processes transformed a traditional IT consultancy:

- Requirements gathering time reduced by 60
- Prototype delivery time cut from weeks to days
- Client satisfaction scores increased by 35
- Consultants able to handle 3x more projects simultaneously

3.6 Overcoming Common Challenges

- Resistance to change from team members
- Integrating new processes with existing systems
- Ensuring data accuracy across multiple tools
- Maintaining a personal touch in automated processes

3.7 Conclusion

By leveraging no-code tools to automate requirements gathering, streamline prototyping, and create dynamic dashboards, you can transform your core IT consulting services. These techniques not only save you time but also impress clients with your efficiency and professionalism.

In the next chapter, we'll explore how to scale your practice using these automated solutions, allowing you to take on more clients without proportionally increasing your workload.

Action Item: Take one of your current projects and implement the automated requirements gathering workflow we discussed. Note how it impacts your efficiency and client satisfaction.

About the Author

Dele Tosh is the Founder and Director of Protomated.com, an agency that specializes in designing and building custom business process automation solutions. With over 15 years of experience in the field, Dele has helped numerous businesses streamline their operations and boost productivity through innovative automation strategies.



Dele Tosh

As a thank you for getting this book, I'm offering exclusive bonus content to help you further your automation journey:

- **Automation Project Templates:** Download ready-to-use templates for common automation projects.
- **Video Tutorials:** Access a series of in-depth video tutorials covering advanced topics not included in the book.
- **Cheat Sheets:** Quick reference guides for n8n, NoCoDB, and BudiBase.
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