Tech Elevate

Three-Month Training Plan for Power Apps and Power Automate

Agenda

- Introduction
- Month 1: Foundations and Basics
- Week 1: Introduction and Getting Started
- Week 2: First Steps
- Week 3: Data Integration
- Week 4: Controls and Variables
- Month 2: Intermediate Concepts
- Week 5: User Interface and User Experience
- Week 6: Advanced Data Handling
- Week 7: Automation and Integration
- Week 8: Customization and Scripting
- Month 3: Advanced Topics and Best Practices

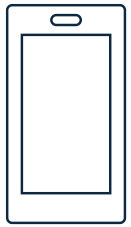
Introduction

- Combines Power Apps and Power Automate
  - Integrated approach for enhanced understanding
  - Practical application of concepts
- Three hours per week commitment

Month 1: Foundations and Basics

Month 1: Foundations and Basics

Power Apps: Introduction to Power Apps



Overview of Power Apps

Types of Power Apps

Canvas

Model-driven

Portals

Setting up your Power Apps environment

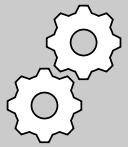
Power Automate: Introduction to Power Automate

- Overview of Power Automate
- Types of flows
  - Automated
  - Instant
  - Scheduled
  - Desktop
- Setting up your Power Automate environment

Power Apps: Creating Your First App

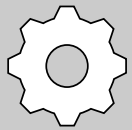
- Building a simple Canvas app from scratch
- Exploring the Power Apps Studio
- Basic controls and customization

Power Automate: Building Your First Flow



Creating a simple automated flow

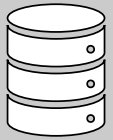
Exploring the Power Automate interface



Connecting to common services

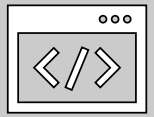
- Office 365
- OneDrive

Power Apps: Understanding Data Sources

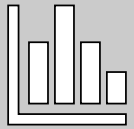


Connecting to different data sources

SharePoint, SQL Server, Excel

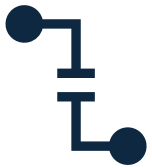


Using galleries and forms to display data



Customizing data views and forms

Power Automate: Connecting to Data Sources



Setting up connections in Power Automate

Using triggers and actions

Common data operations

Get items

Create item

Power Apps: Advanced Controls

Using advanced controls

Drop-downs

Date pickers

Introduction to formulas

Managing variables and collections

Power Automate: Input and Output Parameters

UNDERSTANDING INPUT AND OUTPUT PARAMETERS

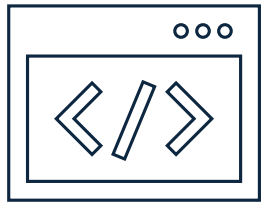
USING VARIABLES AND CONDITIONS

HANDLING DIFFERENT DATA TYPES

Month 2: Intermediate Concepts

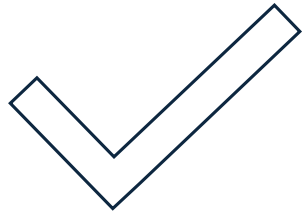
Month 2: Intermediate Concepts

Power Apps: UI Design and Customization



Designing a user-friendly interface

Customizing themes and templates



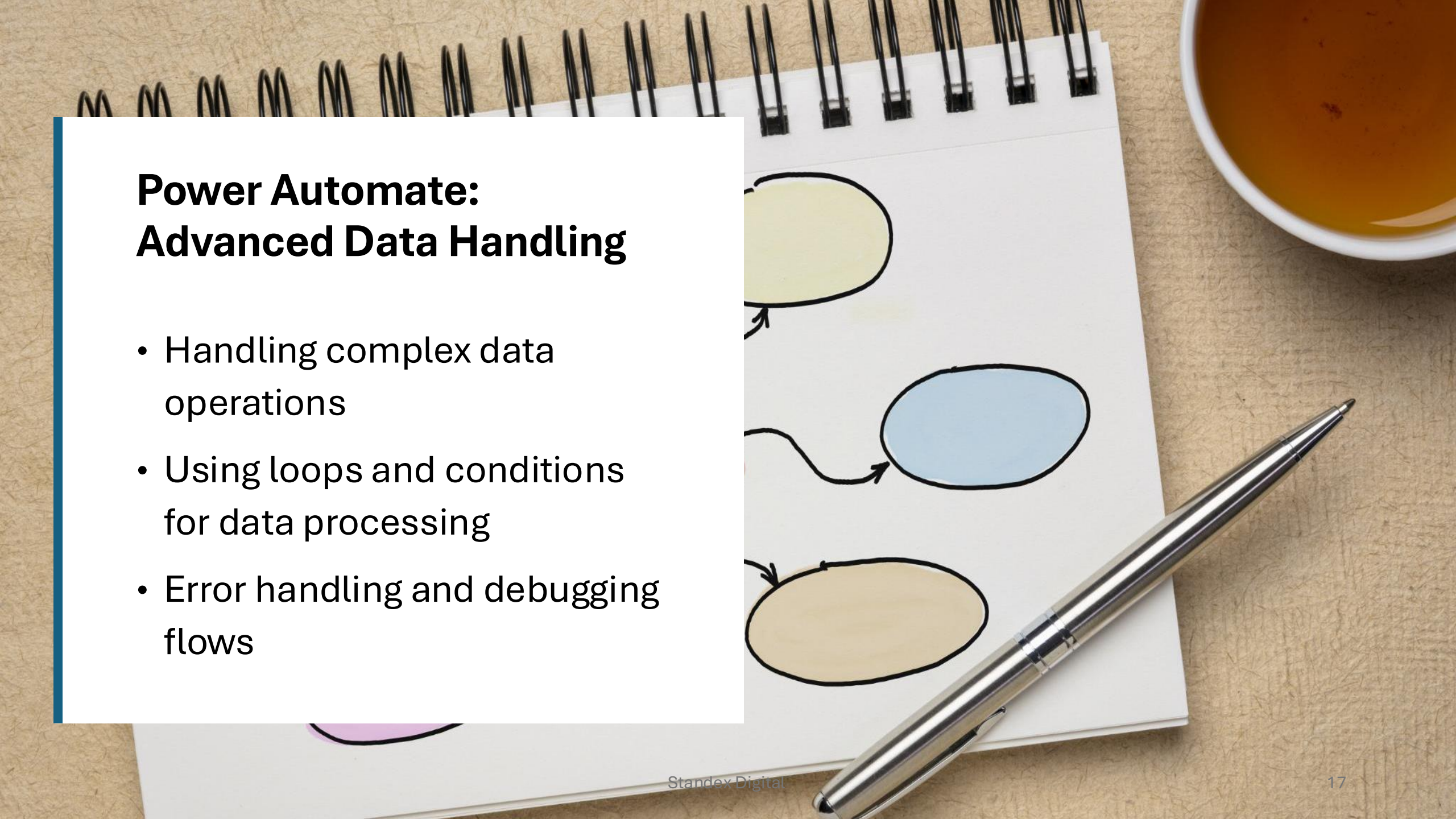
Responsive design principles

Power Automate: User Interaction in Flows

- Using approvals and notifications
  - Allows for user input and decision making within flows
- Creating custom notifications
  - Provides flexibility in how users are notified
- Integrating with Teams for user interaction
  - Enables seamless collaboration and communication within the flow

Power Apps: Data Manipulation and Storage

- Advanced data manipulation techniques
- Using collections for temporary data storage
- Handling large datasets efficiently



Power Automate: Advanced Data Handling

- Handling complex data operations
- Using loops and conditions for data processing
- Error handling and debugging flows

Power Apps: Integrating with Power Automate

- Triggering flows from Power Apps
- Using Power Automate to process data
- Case study: Automating approvals within a Power App

Power Automate: Integrating with Power Apps

- Creating flows that interact with Power Apps
  - Use dynamic content from Power Apps to trigger flows
- Using dynamic content from Power Apps
  - Pass data between Power Apps and Power Automate
- Case study: Sending notifications based on Power Apps input
  - See how Power Automate can be used to send notifications based on user input in Power Apps

Power Apps: Custom Components and Controls

- Creating and using custom components
- Introduction to PowerApps Component Framework (PCF)
- Using scripts for advanced customization

Power Automate: Scripting and Custom Actions

Using expressions and advanced formulas

Creating custom connectors

Case study: Automating complex business processes

Month 3: Advanced Topics and Best Practices

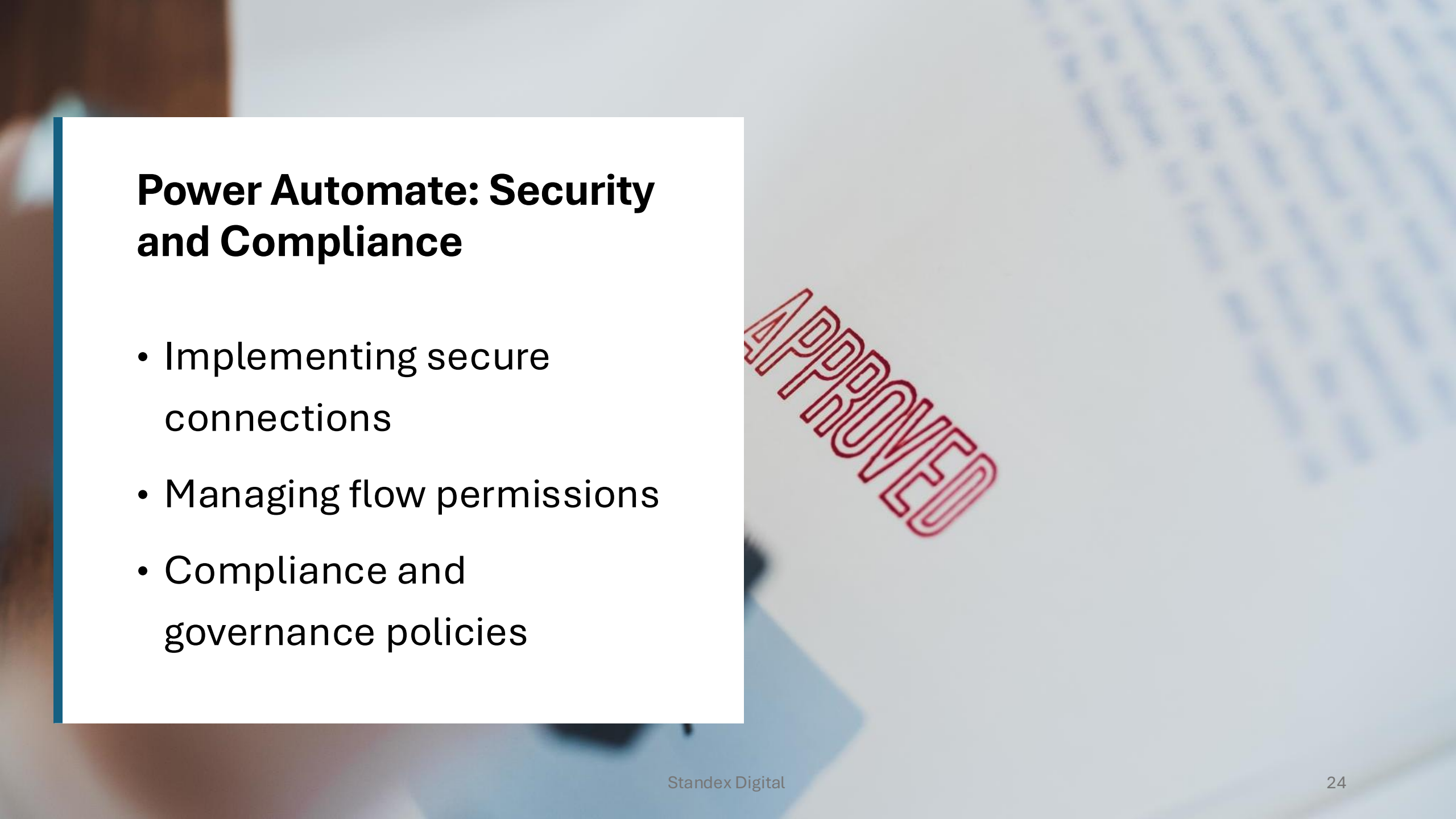
Month 3: Advanced Topics and Best Practices

Power Apps: Security Best Practices

- Setting up user roles and permissions
  - Ensure that users have the appropriate level of access to data and functionality
- Managing app sharing and environments
  - Control who can access and edit apps, and manage different versions of the app
- Data security and compliance considerations
  - Ensure that data is stored and processed securely, and that the app complies with relevant regulations

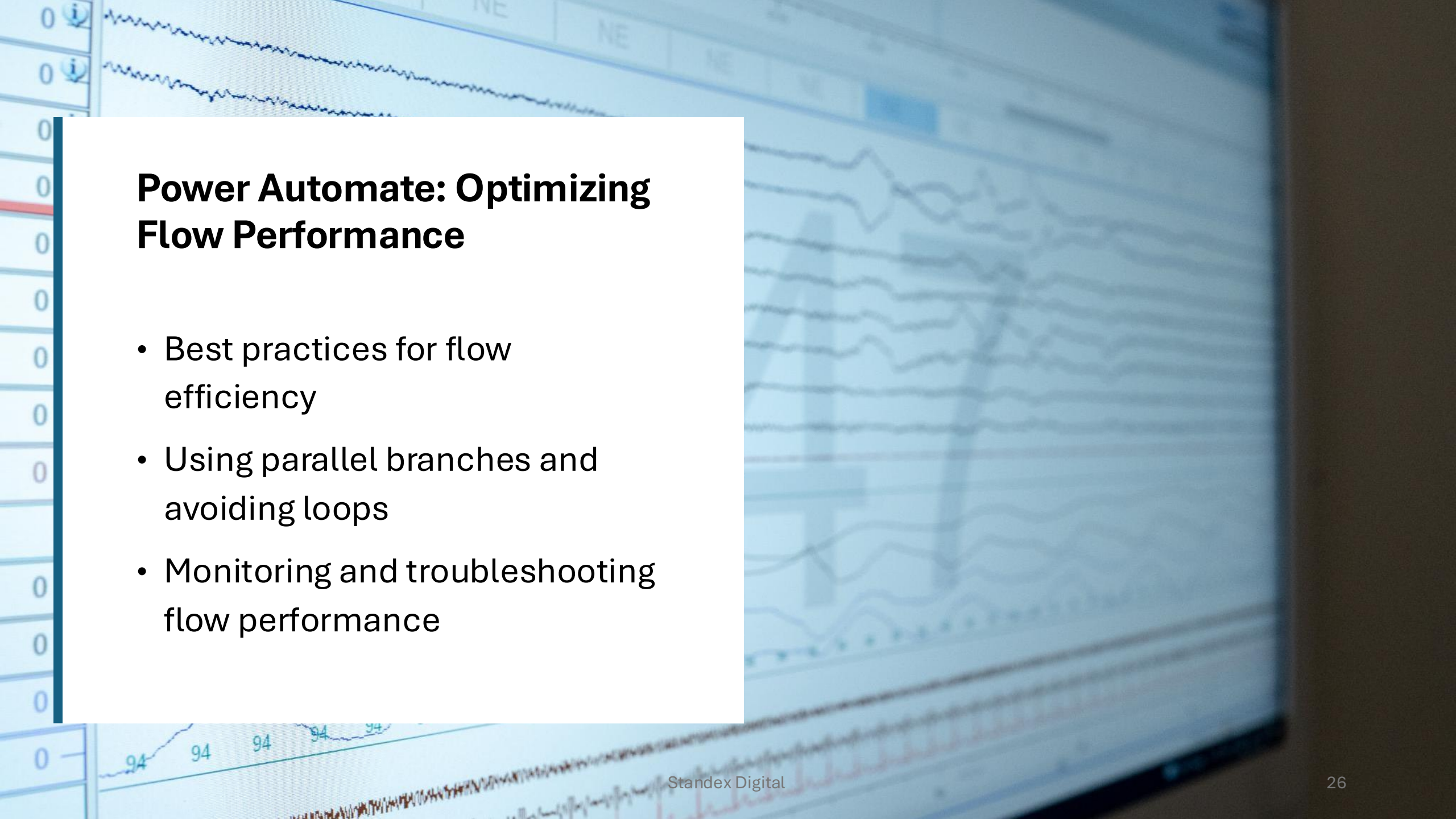
Power Automate: Security and Compliance

- Implementing secure connections
- Managing flow permissions
- Compliance and governance policies



Power Apps: Optimizing App Performance

- Techniques for improving app load times
- Efficient data handling strategies
- Monitoring and troubleshooting performance issues



Power Automate: Optimizing Flow Performance

- Best practices for flow efficiency
- Using parallel branches and avoiding loops
- Monitoring and troubleshooting flow performance

Power Apps: Integrating with External Services

- Using APIs and custom connectors
- Integrating with other Microsoft services
  - Power BI
  - Dynamics 365
- Case study: Creating a comprehensive business solution

Power Automate: Advanced Integrations

- Creating flows that interact with external APIs
- Using HTTP actions and managing authentication
- Case study: Automating data exchange between services

Power Apps: Building a Comprehensive Application

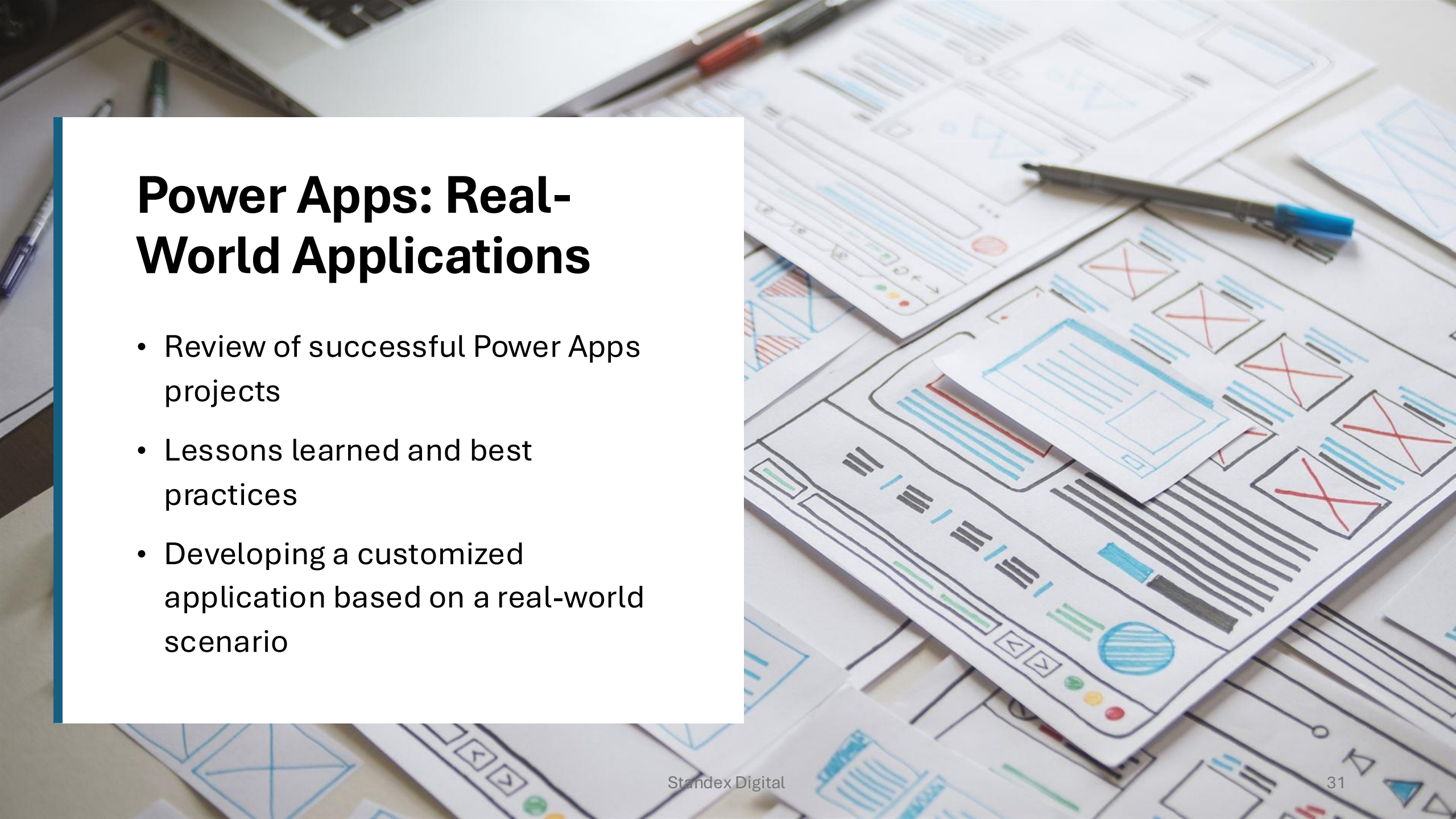
- Designing and implementing a complete business application
- Incorporating best practices from previous weeks
- Testing and deploying the application

Power Automate: Developing a Comprehensive Automation Flow

- Designing and implementing a complex automation flow
- Incorporating best practices from previous weeks
- Testing and deploying the flow

Power Apps: Real-World Applications

- Review of successful Power Apps projects
- Lessons learned and best practices
- Developing a customized application based on a real-world scenario

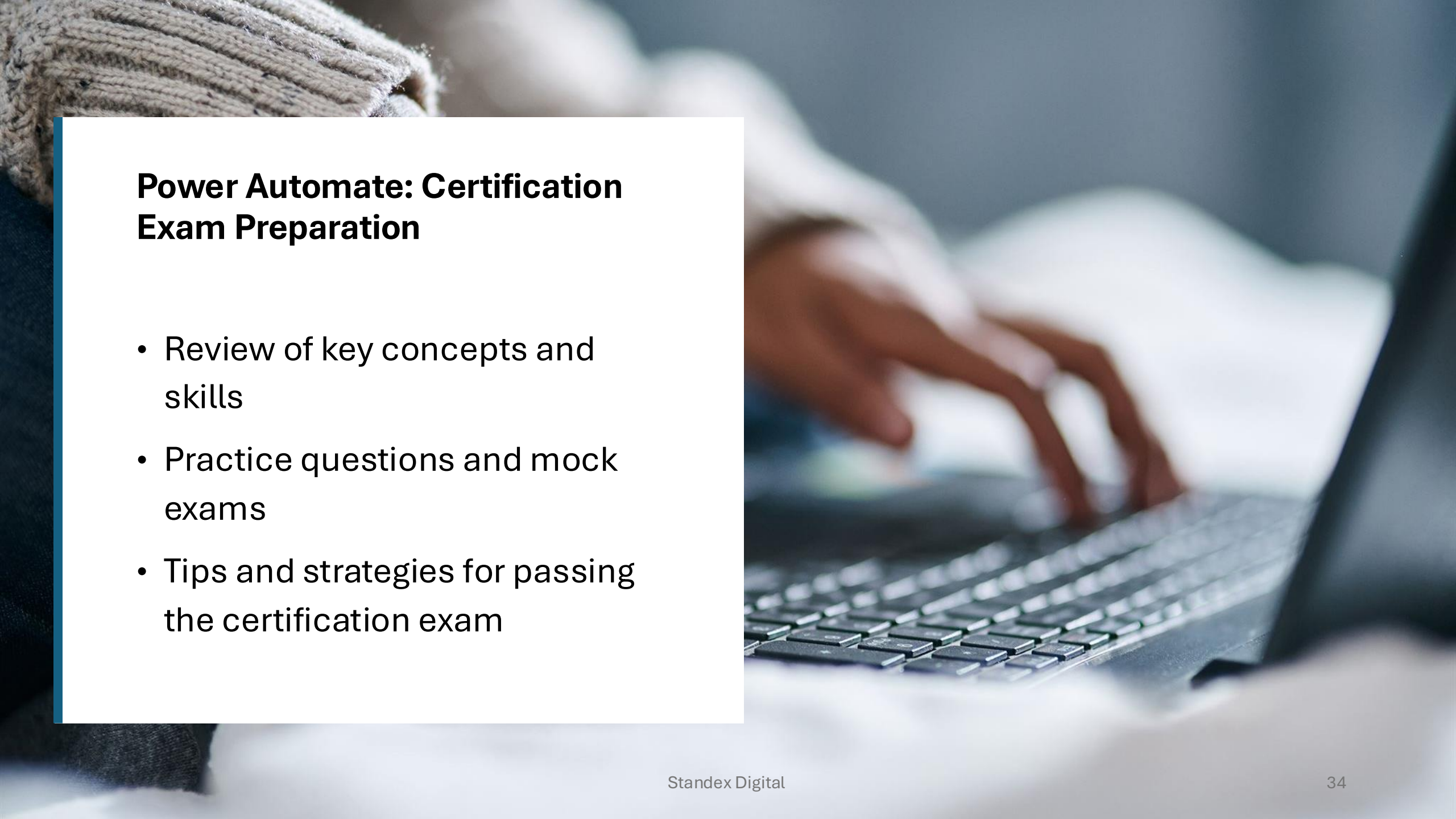


Power Automate: Real-World Automations

- Review of successful Power Automate projects
- Lessons learned and best practices
- Developing a customized flow based on a real-world scenario

Power Apps: Certification Exam Preparation

- Review of key concepts and skills
- Practice questions and mock exams
- Tips and strategies for passing the certification exam



Power Automate: Certification Exam Preparation

- Review of key concepts and skills
- Practice questions and mock exams
- Tips and strategies for passing the certification exam

Power Apps: Project Presentation

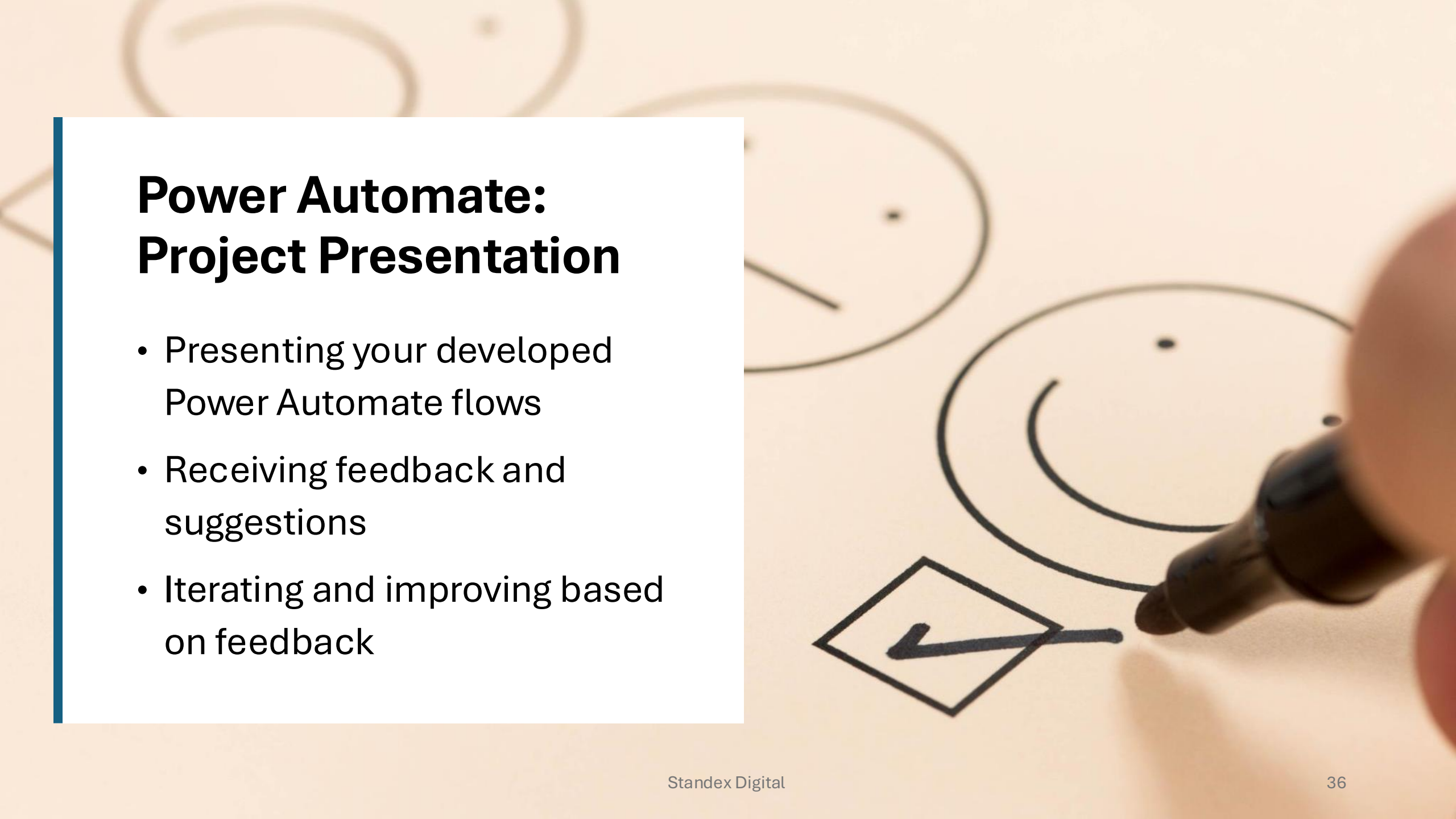
PRESENTING YOUR DEVELOPED POWER APPS PROJECTS

RECEIVING FEEDBACK AND SUGGESTIONS

ITERATING AND IMPROVING BASED ON FEEDBACK

Power Automate: Project Presentation

- Presenting your developed Power Automate flows
- Receiving feedback and suggestions
- Iterating and improving based on feedback



Power Apps: Exploring Advanced Features

- Delving into advanced features and capabilities
- Introduction to AI Builder and Power Virtual Agents
- Planning for future learning and development

Power Automate: Exploring Advanced Features

- Delving into advanced features and capabilities
- Introduction to RPA (Robotic Process Automation) with Power Automate
- Planning for future learning and development

Conclusion

- Comprehensive training plan for Power Apps and Power Automate
  - Gain knowledge and skills to proficiently use both tools
  - Integrate them effectively to create powerful business solutions