

# expoqa<sup>®</sup>26

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sqli

# From Fragile Sessions to Scalable Automation

Evaluating FlaUI as a Modern Successor to UFT

Virginia Caravaca & Krzysztof Gawrysiak

# Krzysztof – Who am I?

- Polish guy (almost) in Spain
- QA Technical Lead and Delivery Excellence at SQLI
- Married and two kids
- Role Playing Games enthusiast



# Virginia – Who am I?

- Telecom engineer by training, teacher at heart
- Test Data Management service Lead at SQLI
- Married but the dogs are the ones that run the house 🐶 🐶
- Chocolate & dog lover



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PAT enters the world.

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### 3. Chapter II — The Ecosystem

ERP at the center of a complex world.

### 4. Chapter III — The Limitations

UFT holds us back.

- VB Script Locked to VBScript
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Candidate tools:

- WinAppDriver
- FlaUI
- pywinauto
- Ranorex
- TestComplete
- Sikulix
- AutoIt

### 6. Chapter V — The PoC

Prove it in the real world.

Same flows

Same Citrix environment

citrix

Readiness checks

- Environment parity
- Access & permissions
- Stability baseline

Evaluate by KPIs

- Stability
- Speed
- Maintenance cost
- Onboarding
- Pipeline fit

### 7. Chapter VI — The Outcome

FlaUI wins.

- Better stability
- Faster automation
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Microsoft .NET

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From PoC to production-grade framework.

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Rollout across 43 markets

### 9. Chapter VIII — The Happy? End

A bittersweet ending, but a strong future.

The legacy remains

citrix → Old app still here

- Failures are explainable
- Framework is team-owned
- Coverage is moving forward


Legacy World → Modern World

### 10. Epilogue — The Lesson

What we learned will guide what's next.

- Understand the environment first.
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Everything was green.  
Nothing felt easy.

A practical migration story from UFT to FlaUI.

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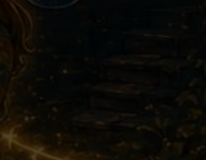


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# Prologue

## Meet PAT – Practical Automation Tester

- Automation tester at F.A.N.
- Legacy ERP through VDI / Citrix
- Old- school UFT and VBScript
- Business critical flows
- Growing pressure to have stable tests
- Need for speed up automation



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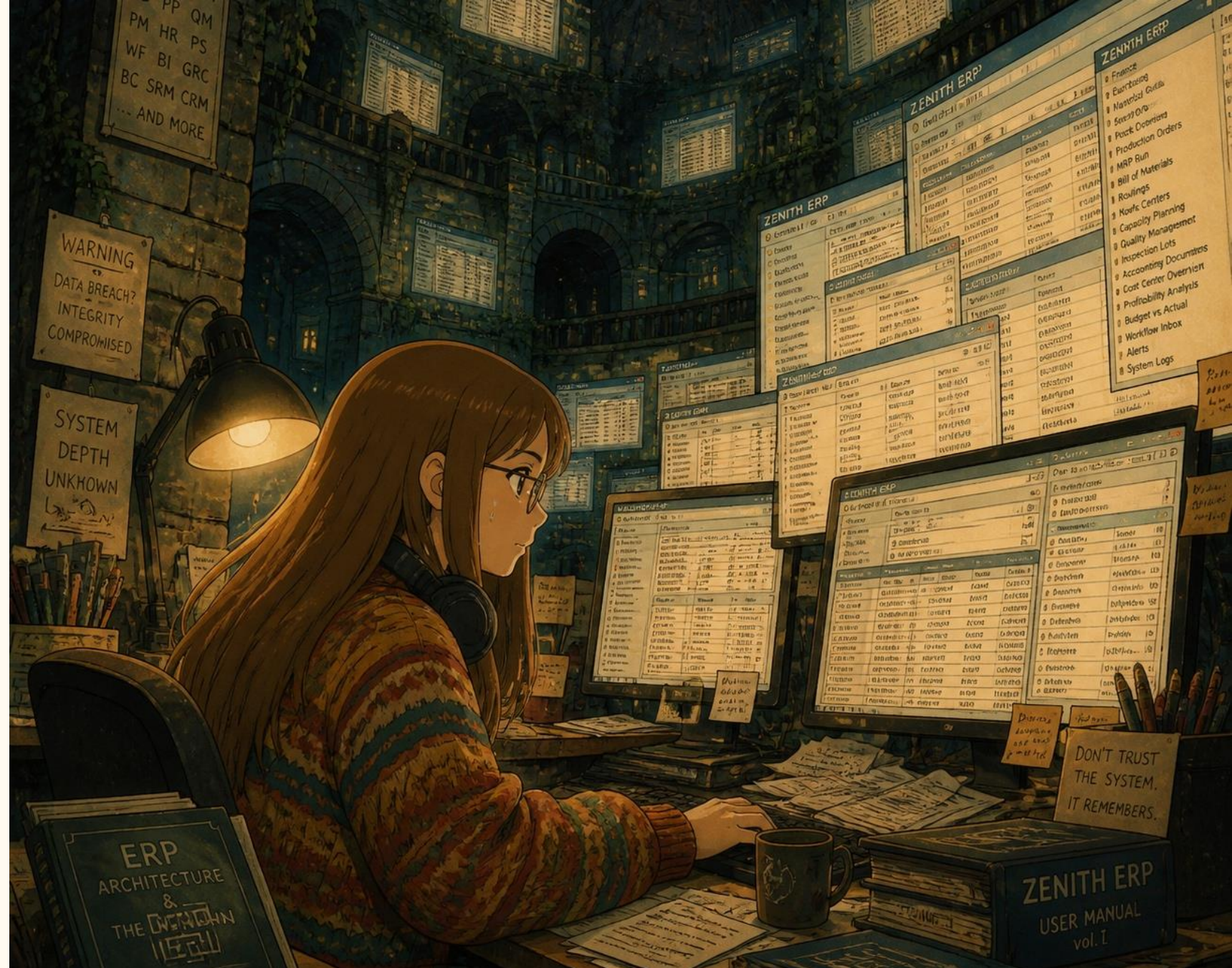
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# Chapter I – The Problem

## The Dungeon Has Layers

- Layer one: the ERP
- Layer two: Citrix
- Layer three: Operational



# Chapter I – The Problem

## Before the First Assertion

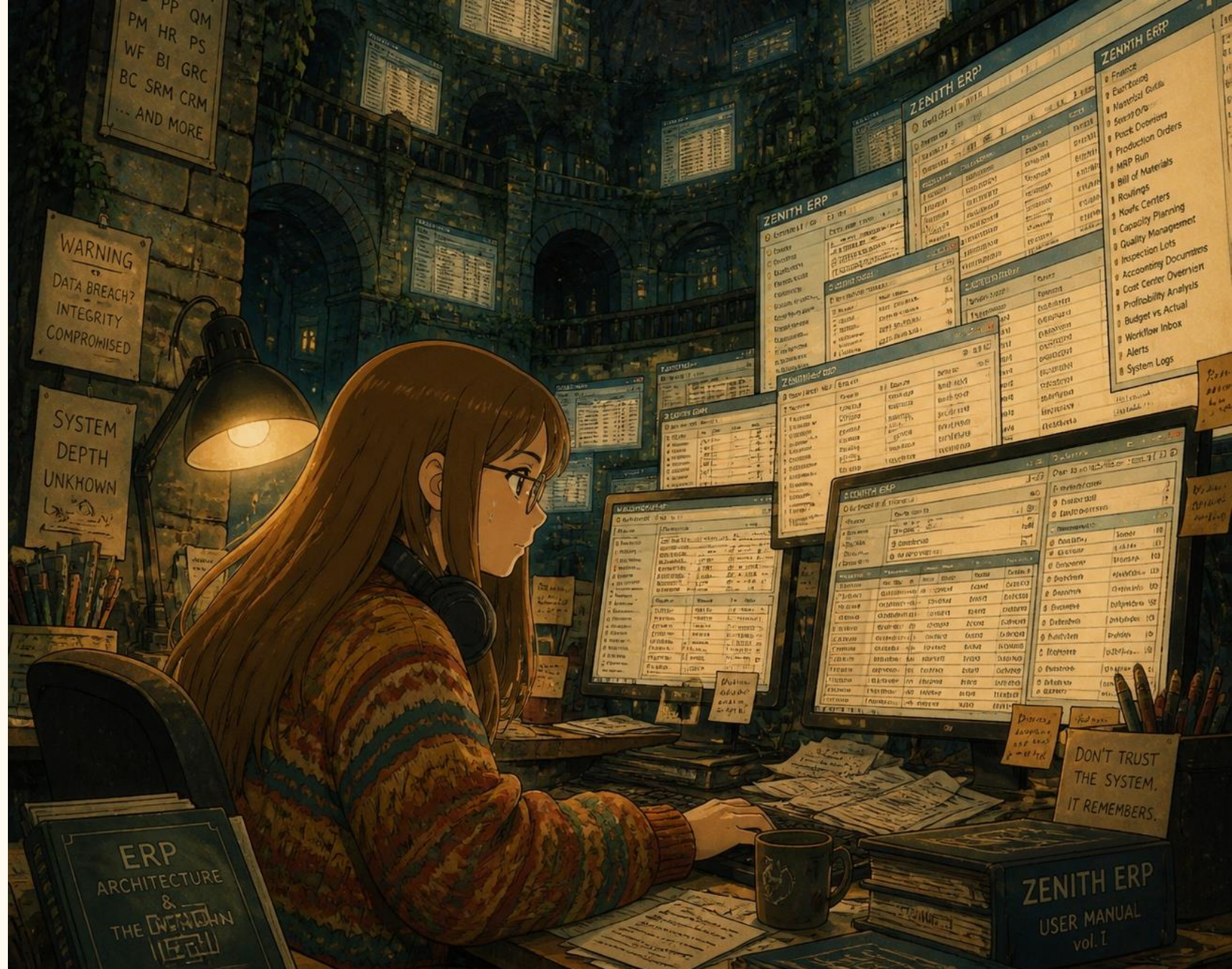
- VDI session – active
- UFT – installed
- Environment readiness – verified
- Different countries — different configurations



# Chapter I – The Problem

## Four Ways to Fail at Once

- Something broke — but which layer?
  - ERP logic?
  - Screen layout?
  - DPI?
  - Session drop?
- Country configuration not yet mapped?



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# Chapter II – The Ecosystem

## Bigger Than One Dungeon

- ERP at the centre
  - Web interfaces
  - Mobile touchpoints
- CI/CD Pipelines
- Source control



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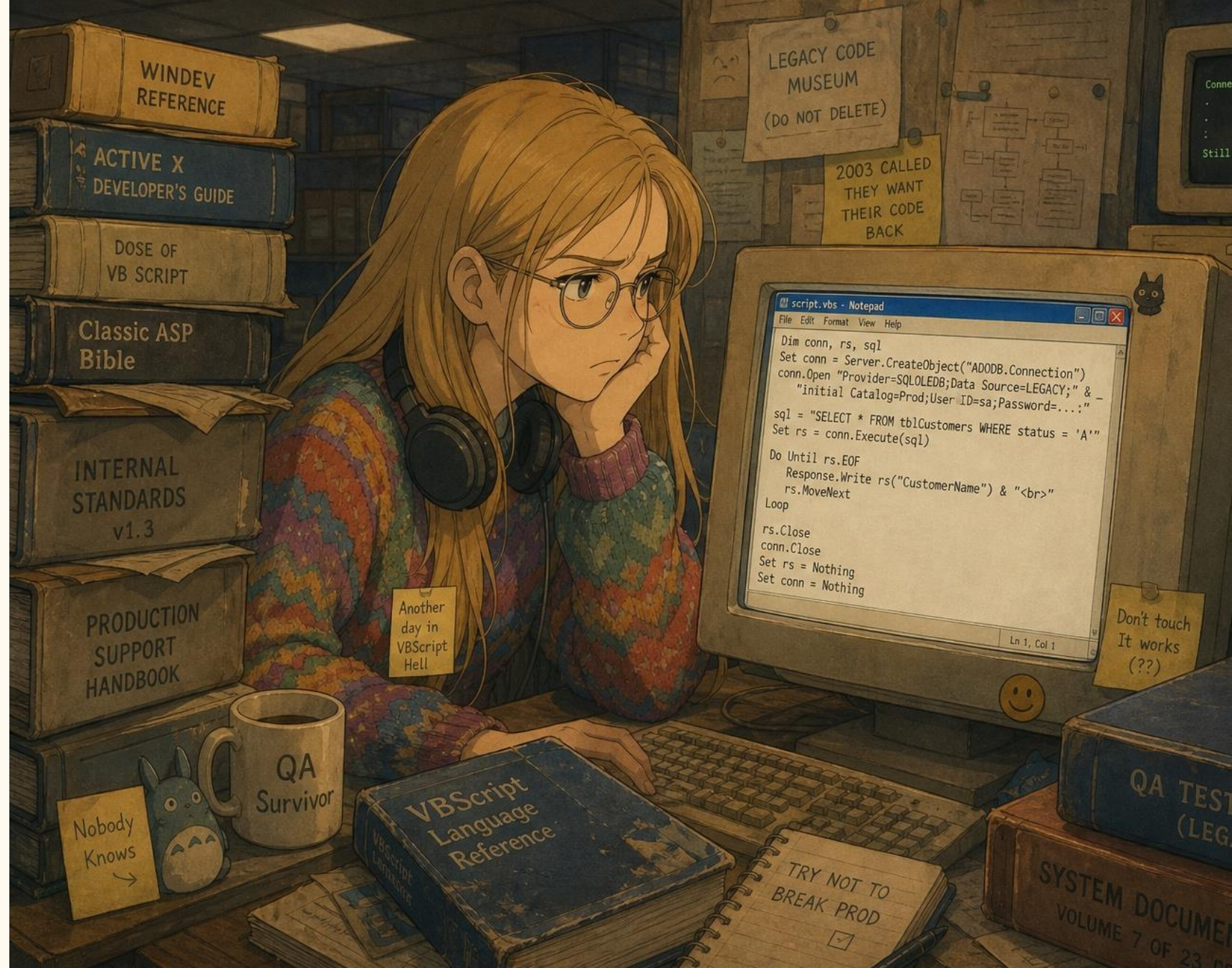
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# Chapter III – The Limitations

## VBScript Lock-In

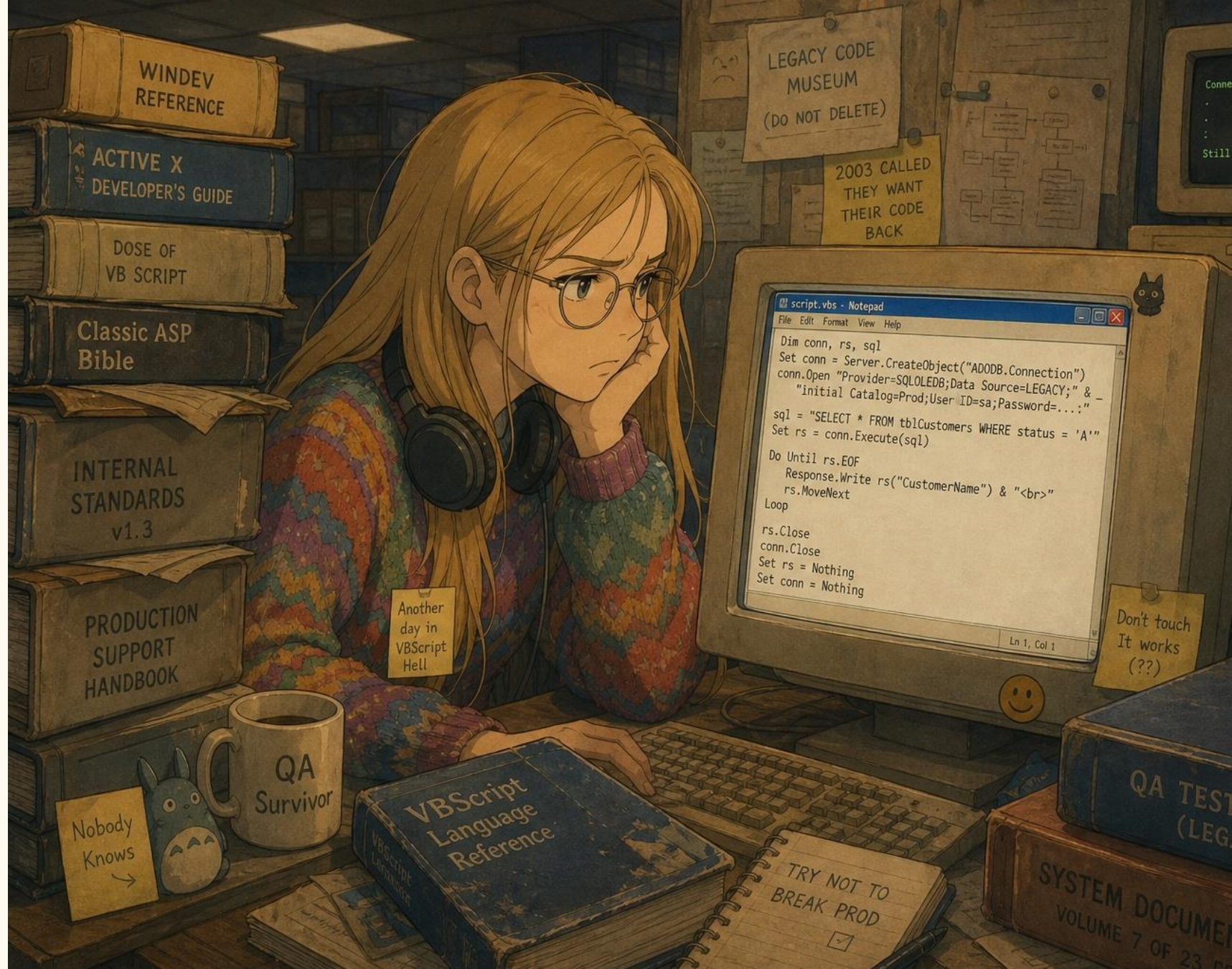
- UFT is tied to VBScript
- VBScript is being phased out
- Hiring gets harder
- Licensing stays expensive
- Flexibility stays low



# Chapter III – The Limitations

## The Numbers Don't Lie

- ERP regression coverage: 44%
- Target: 70%
- Measured every month



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# Chapter IV – The Decision

## PAT Had Enough

- Too much effort to keep tests alive
- Too little value from the work
- The model no longer fits
- It was time to change



# Chapter IV – The Decision

## But Which Tool?

- Many options
- Different strengths
- Different trade-offs
- No clear winner yet



# Chapter IV – The Decision

## How Should PAT Decide?

- Real UI controls
- Modern engineering fit
- VDI / Citrix resilience
- Cost



# Chapter IV – The Decision

## The Shortlist

- UFT — baseline, current reality
- TestComplete — commercial alternative
- WebdriverIO + Appium — modern stack extended to desktop
- FlaUI — Windows-native, .NET, Microsoft UI Automation



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# Chapter V – The PoC

## The Rules of the Trial

- Entry condition: can the tool verify environment readiness?
- Same flows. Same screens. Same Citrix.
- No vendor demos. No cherry-picked scenarios.
- Five KPIs agreed before any results



# Chapter V – The PoC

## Five KPIs

- Stability: predictable failures
- Speed: time to automate
- Maintenance: cost after a screen change
- Onboarding: time to first productive test
- Pipeline fit: no special handling needed



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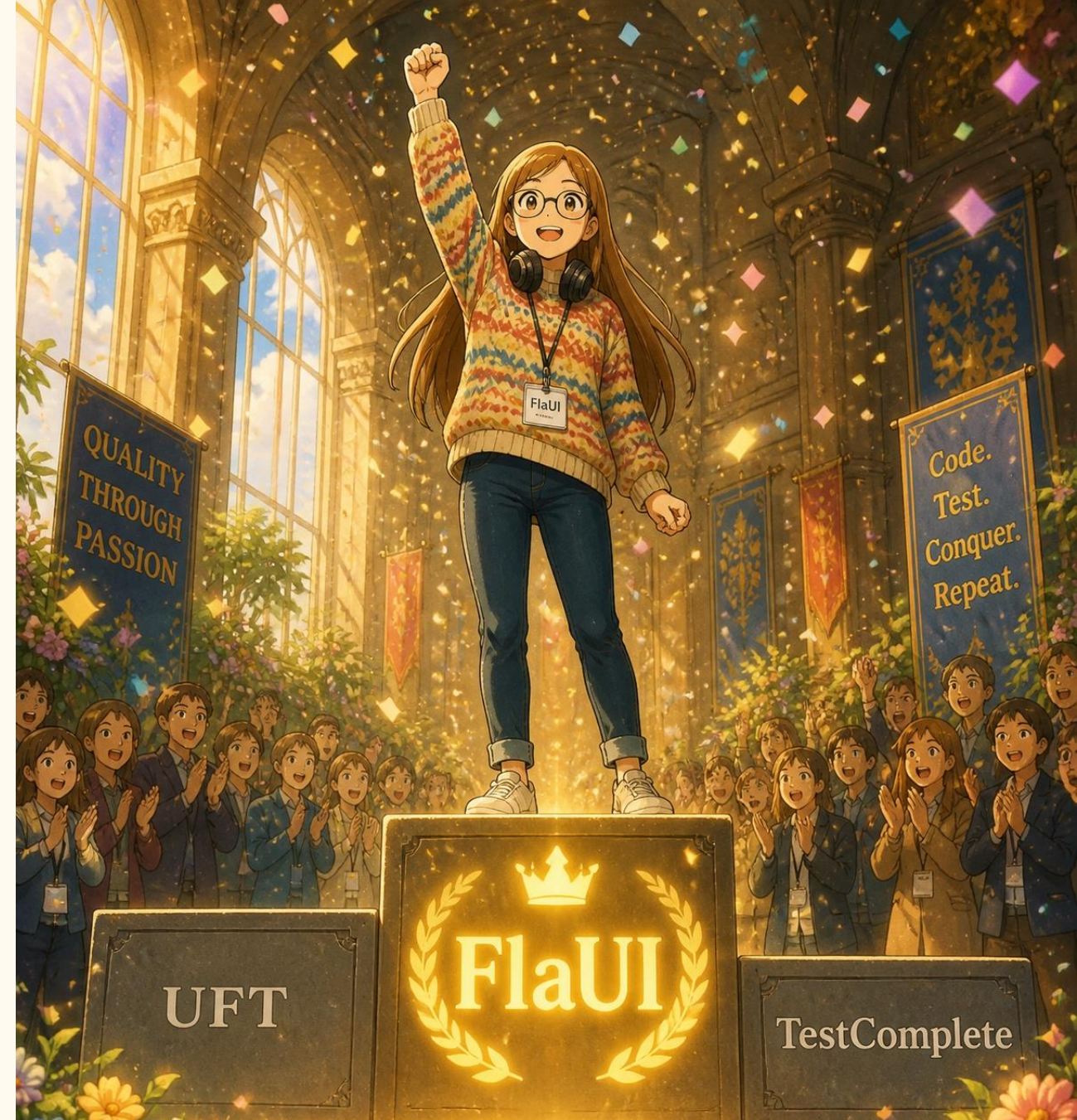
- Best fit for the real problem
- Windows-focused by design
- Better fit for modern engineering
- More control, less friction



# Chapter VI – The Outcome

## Stability & Speed

- No "passed locally, failed in VDI" surprises
- Faster failure analysis
- Patterns established → new tests faster
- Code reuse replaces rewriting
- Add a case, not write a script



# Chapter VI – The Outcome

## Maintenance, Onboarding & Pipeline

- Screen change → one localised fix
- Not scattered across independent scripts
- C# faster to adopt than VBScript
- Code review as standard practice
- CI/CD integration with no extra layers



# Chapter VI – The Outcome

## Measurably Better

- Business flows implemented: **3**
- Execution runs: **10**



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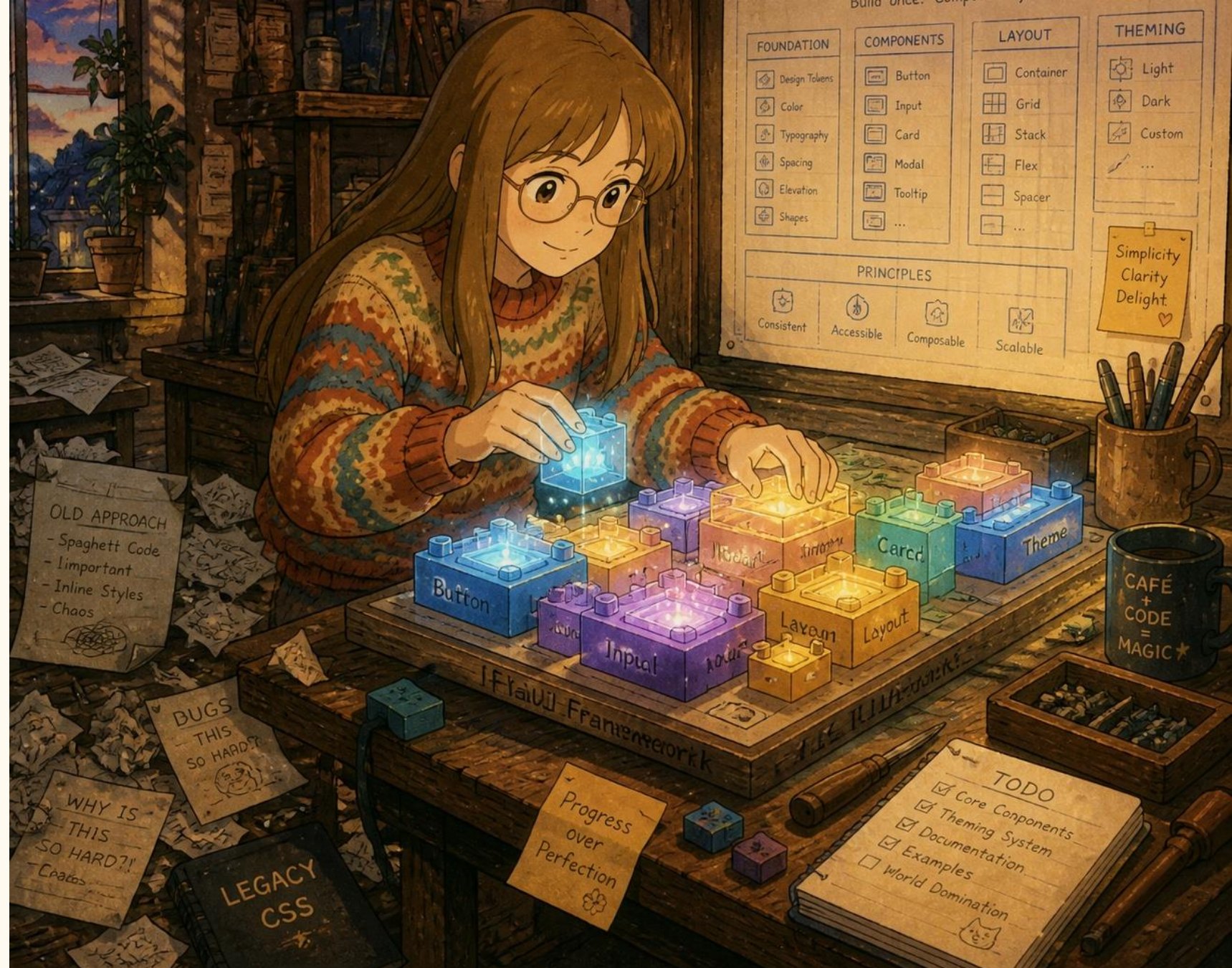
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# Chapter VII – The Deployment

## From Choice to Build

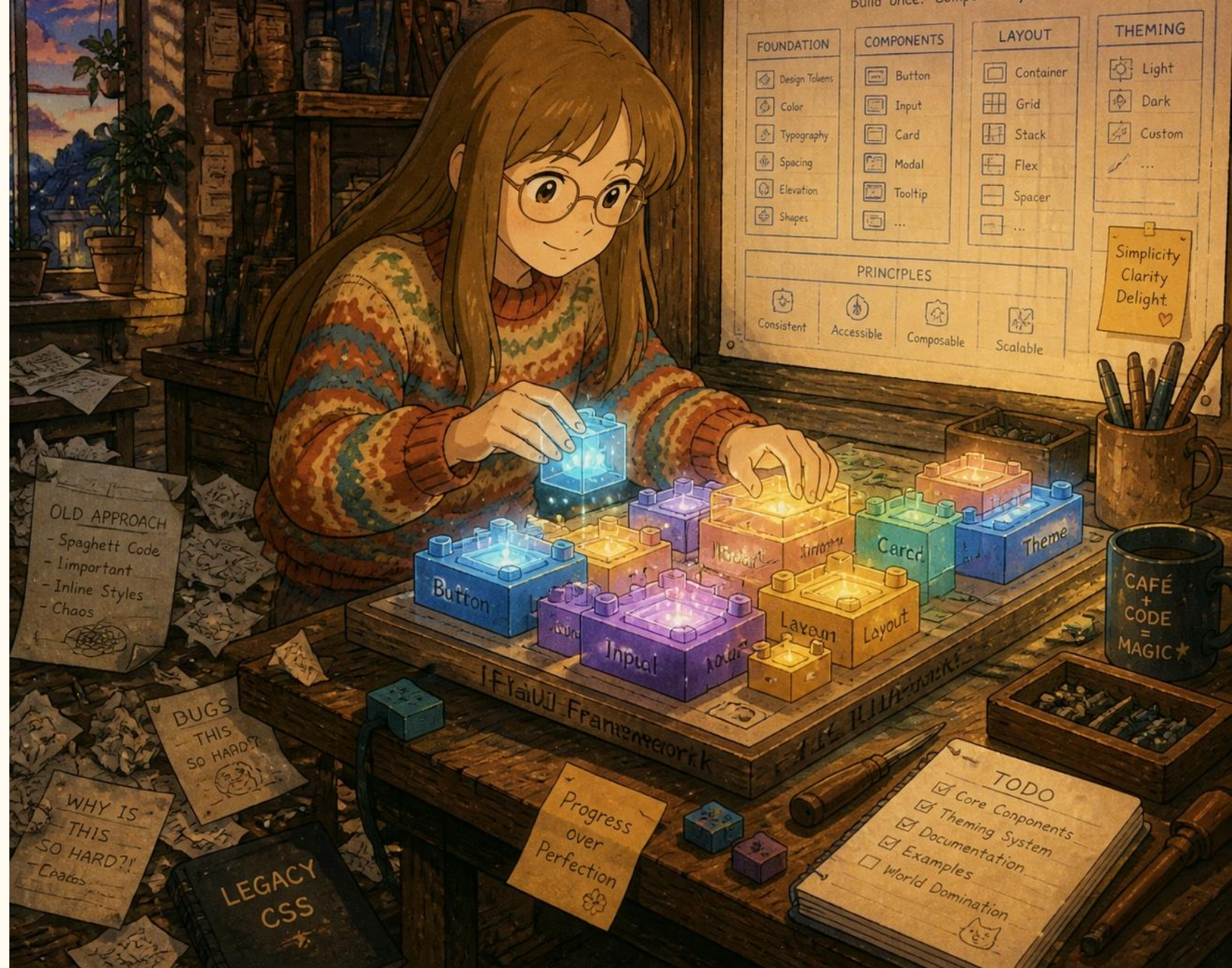
- FlaUI became a framework, not a prototype
- Shared components replaced isolated scripts
- C# patterns made the suite easier to grow and maintain
- The team started building for reuse



# Chapter VII – The Deployment

## From Framework to Scale

- GitHub Actions supported execution flow
- Xray connected tests to reporting
- The approach scaled across 43 markets
- Implementation turned choice into momentum



# From Fragile Sessions to Scalable Automation

## 1. Prologue — The World

PAT enters the Nespresso world.

NESPRESSO.



- N** Nessoft desktop ERP
- NC2** NC2 commerce platform
- citrix** Citrix / VDI environment
- UFT** UFT inherited testing tool

1

## 2. Chapter I — The Problem

A layered dungeon of constraints.



- Thick-client ERP with huge tables and overlapping windows
- Citrix rendered surface
- DPI and resolution instability
- Unlocked interactive Windows session requirement
- Multiple country variants

2

## 3. Chapter II — The Ecosystem

ERP at the center of a complex world.



3

## 4. Chapter III — The Limitations

UFT holds us back.

- Locked to VBScript
- Deprecated technology
- Vendor-controlled workflow
- Licensing cost
- Maintenance burden
- Coverage gap

4

## 5. Chapter IV — The Decision

Choose the right foundation.

- Four questions guide us:
- Real Windows UI access?
  - Team ownership with modern engineering practices?
  - Survival in live Citrix environment?
  - Justified total cost?



Narrowing down the candidates...

5

## 6. Chapter V — The PoC

Prove it in the real world.

- Same flows
- Same Citrix environment
- Readiness checks
- Evaluate by KPIs
- Stability
- Speed
- Maintenance cost
- Onboarding
- Pipeline fit



6

## 7. Chapter V — The Outcome

FlaUI wins.



- Better stability
- Faster automation
- Localized maintenance
- Easier onboarding in C#
- Stronger pipeline fit in the .NET ecosystem



7

## 8. Chapter VII — The Deployment

From POC to production-grade framework.

- FlaUI Framework
- Shared Components & Utilities
- Reusable C# Patterns
- GitHub Actions Execution Flow
- Xray Reporting Integration
- Rollout across 43 markets

8

## 9. Chapter VIII — The Happy? End

A bittersweet ending, but a strong future.

The legacy remains

citrix →

- Old app is still here
- Citrix is still here

But we've changed

- Failures are explainable
- Framework is team-owned
- Coverage is moving forward



9

## 10. Epilogue — The Lesson

What we learned will guide what's next.

- Understand the environment first.
- Define criteria before comparison.
- Treat implementation as seriously as the decision.



10

A journey of learning, experimentation and empowered automation.

Better decisions. Better automation. A better future.

The journey continues. Curious. Empowered. Ready for what's next.

# Chapter VIII – The Happy? End

## A Happy End?

- The legacy app did not disappear
- VDI did not become magically easy
- Complexity did not vanish



# Chapter VIII – The Happy? End

## Better, Not Finished

- Tests became easier to build
- Change became easier to absorb
- The framework became easier to trust
- The journey became repeatable



# From Fragile Sessions to Scalable Automation

**1. Prologue — The World**  
PAT enters the world.

**2. Chapter I — The Problem**  
A layered dungeon of constraints.

**3. Chapter II — The Ecosystem**  
ERP at the center of a complex world.

**4. Chapter III — The Limitations**  
UFT holds us back.

**5. Chapter IV — The Decision**  
Choose the right foundation.

Four questions guide us:

- 1 Real Windows UI access?
- 2 Team ownership with modern engineering practices?
- 3 Survival in live Citrix environment?
- 4 Justified total cost?

**6. Chapter V — The PoC**  
Prove it in the real world.

Same flows

Same Citrix environment

Readiness checks

- ✓ Environment parity
- ✓ Access & permissions
- ✓ Stability baseline

Evaluate by KPIs

- ✓ Stability
- ⌚ Speed
- ⚙️ Maintenance cost
- 👤 Onboarding
- 🔄 Pipeline fit

**7. Chapter VI — The Outcome**  
FlaUI wins.

- ✓ Better stability
- ✓ Faster automation
- ✓ Localized maintenance
- ✓ Easier onboarding in C#
- ✓ Stronger pipeline fit in the .NET ecosystem

**8. Chapter VII — The Deployment**  
From PoC to production-grade framework.

- FlaUI Framework
- Shared Components & Utilities
- C# Reusable C# Patterns
- GitHub Actions Execution Flow
- Code Push
- Build & Test
- Run FlaUI Tests
- Publish Results
- Xray Reporting Integration

43 Rollout across 43 markets

**9. Chapter VIII — The Happy? End**  
A bittersweet ending, but a strong future.

The legacy remains

citrix → Old app still here

- Failures are explainable
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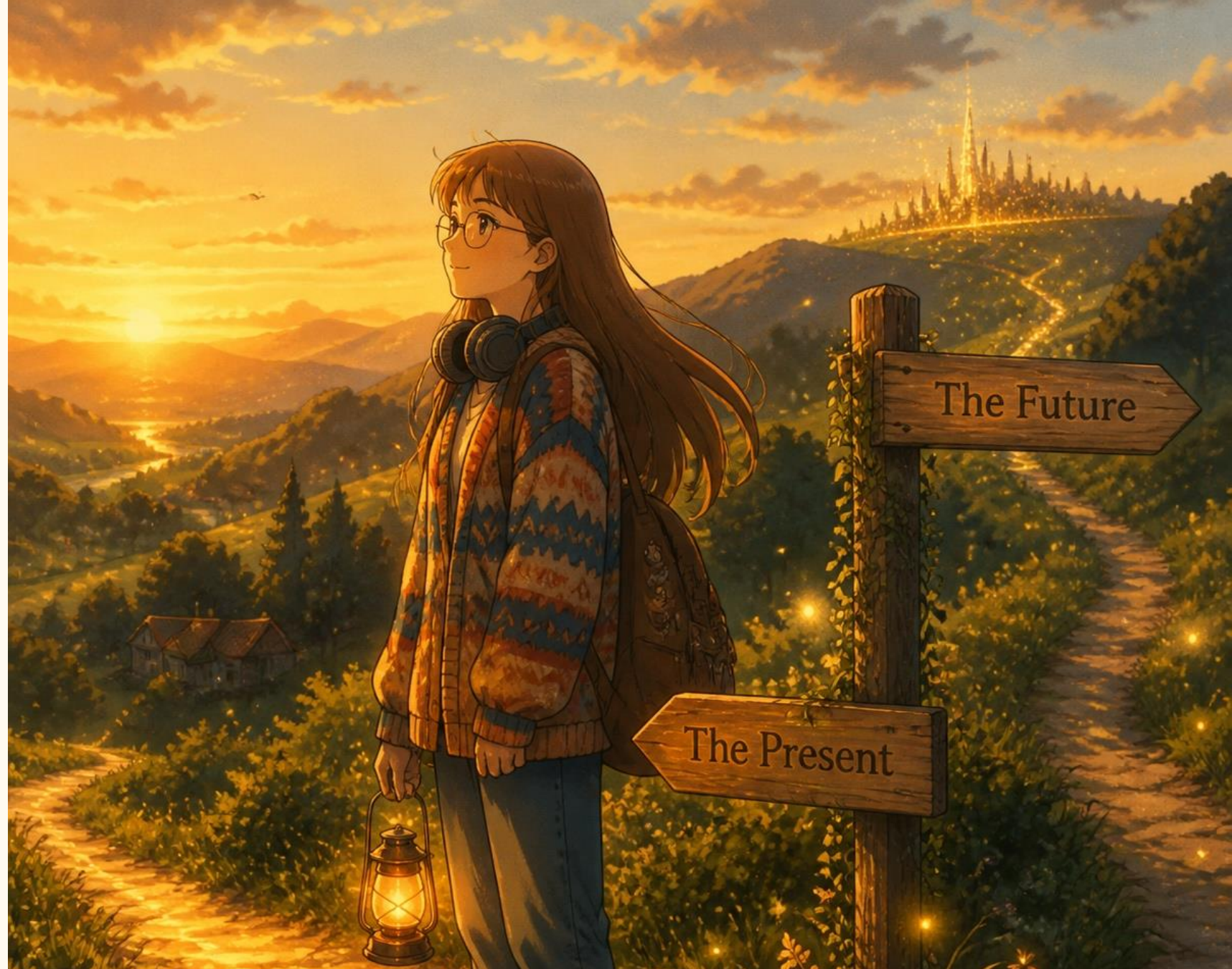
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♥ Better decisions. Better automation. A better future. ♥

# Epilogue

PAT did not win by chasing the future. PAT won by choosing what truly fit the present.



# Questions?

PAT did not win by chasing the future. PAT won by choosing what truly fit the present.



Thank you all!



# expoqa<sup>®</sup>26

MADRID 26th, 27th & 28th May

Thank you for attending

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