Reducing IT Project Risk

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March 20, 2025

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Rhode Island Unified Health Infrastructure Project

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WPRI
NEWS
RI NPR

UHIP debacle: R.I. to extend contract, as Deloitte agrees to more concessions

Continuing UHIP debacle named R. I. Story of the Year

RI awards Deloitte $99 million contract to keep running UHIP

Childcare centers say R.I. computer glitches are costly

A single UHIP update kicked 5,500 Rhode Islanders off Medicaid

R.I. still unsure how much it will get from $50-million Deloitte settlement

Deloitte again in cross fire, this time in R.I.

EDITORIAL: Deloitte, That is All Raimondo

‘We are very sorry’: Deloitte apologizes to RI about UHIP

UHIP repair cost grows

State must pay an additional $30M to solve the computer system problems

U.S. fines R.I. $2 million over UHIP payment errors

ACLU sues Rhode Island over computer benefits system delays

Ransomware attack on Rhode Island health system exposes data of hundreds of thousands

Hackers have posted some RIBridges data on the dark web, McKee says

Rhode Island says personal information potentially stolen in RIBridges data breach

Deloitte hit with class action lawsuits following RIBridges cyberattack, state was warned

Ransomware gang leaks data stolen in Rhode Island's RIBridges Breach

A month later, Rhode Islanders still feel lingering effects of RIBridges cybersecurity attack

Approximately 650,000 Rhode Islanders — more than half the state's population — were potentially impacted by the breach.

Deloitte pays $5M in connection with breach of Rhode Island benefits site

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Of all government software development contracts over $6 million, only 11% are successful (cost, schedule, performance).

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Source: The Standish Group

46% of systems developed across $35 billion worth of DoD spending failed to meet real needs even though they met written, contractual specifications.

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Source: Joint Aerospace Weapons Systems Support, Sensors, and Simulation Symposium

One study of 400 projects found that only 10% of traditionally-developed code was ever actually deployed. Only 2% was ever used.

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Source: *IEEE Explore*

The average government IT project costs 310% of the originally estimated price.

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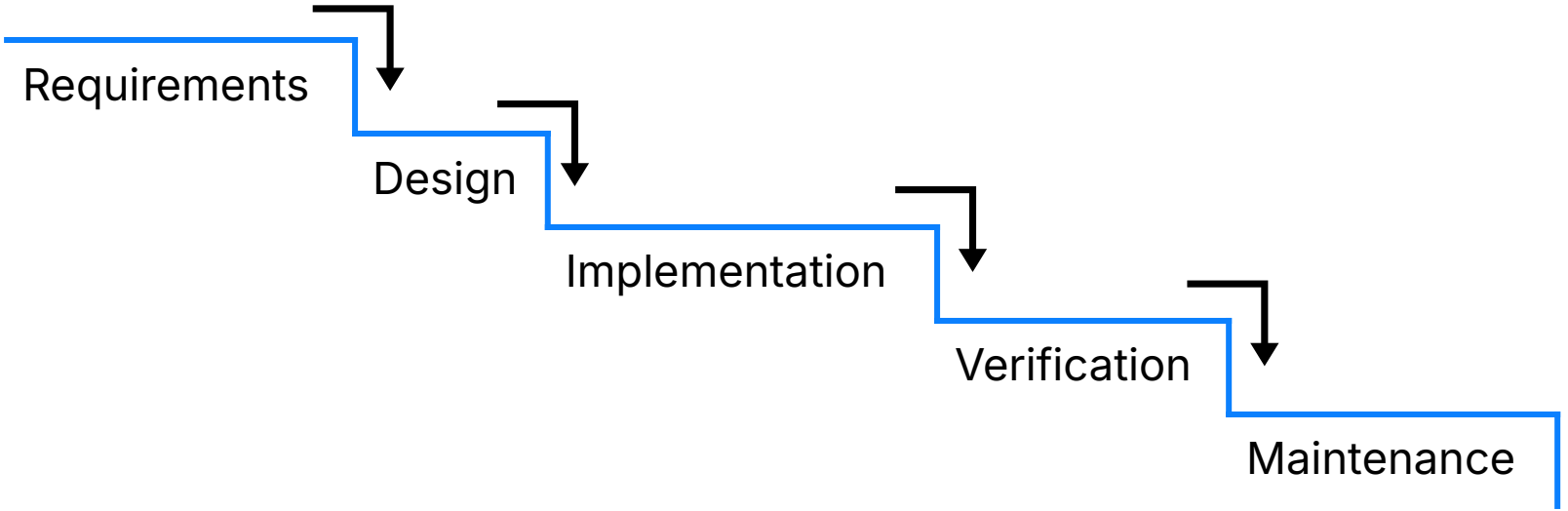
Source: “The Empirical Reality of IT Project Cost Overruns: Discovering A Power-Law Distribution,” by Flyvbjerg et al, 2022

There is a better way.

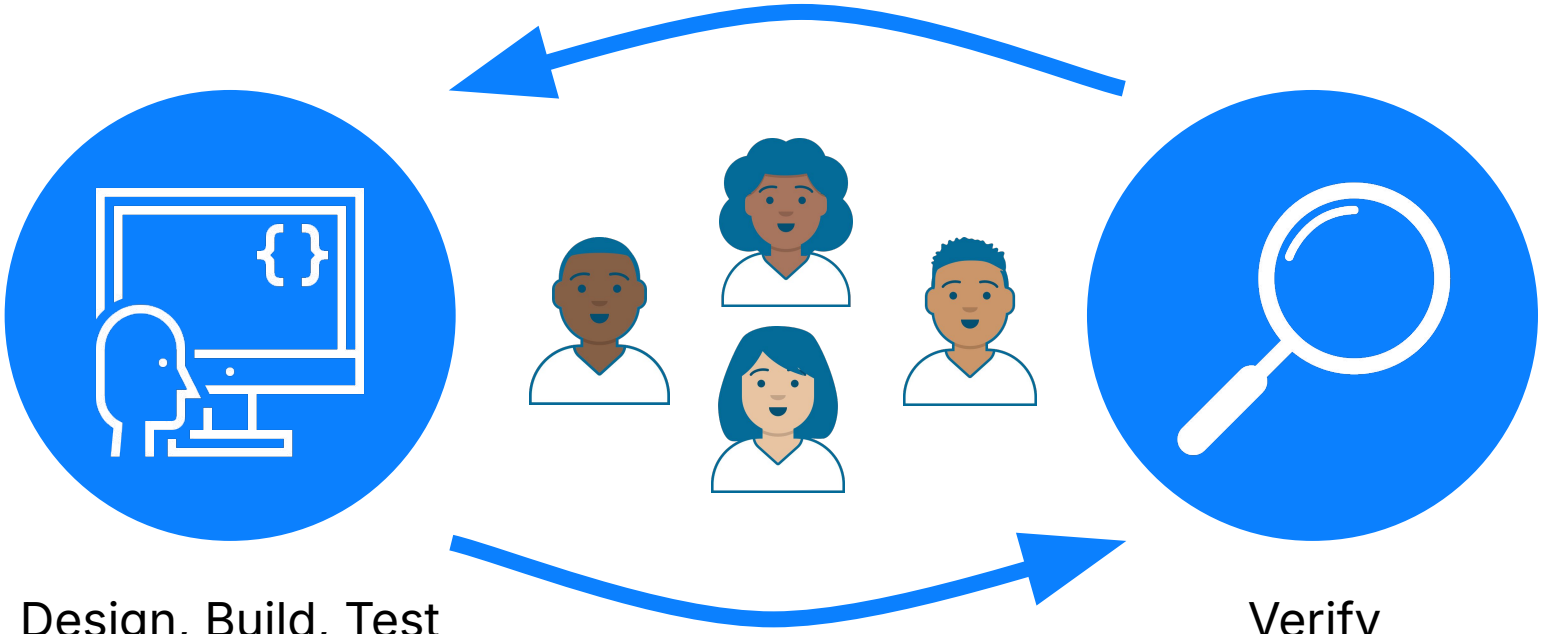
Agile software development

Building software with less risk

Waterfall development model



The premise of Agile



Design, Build, Test

Verify

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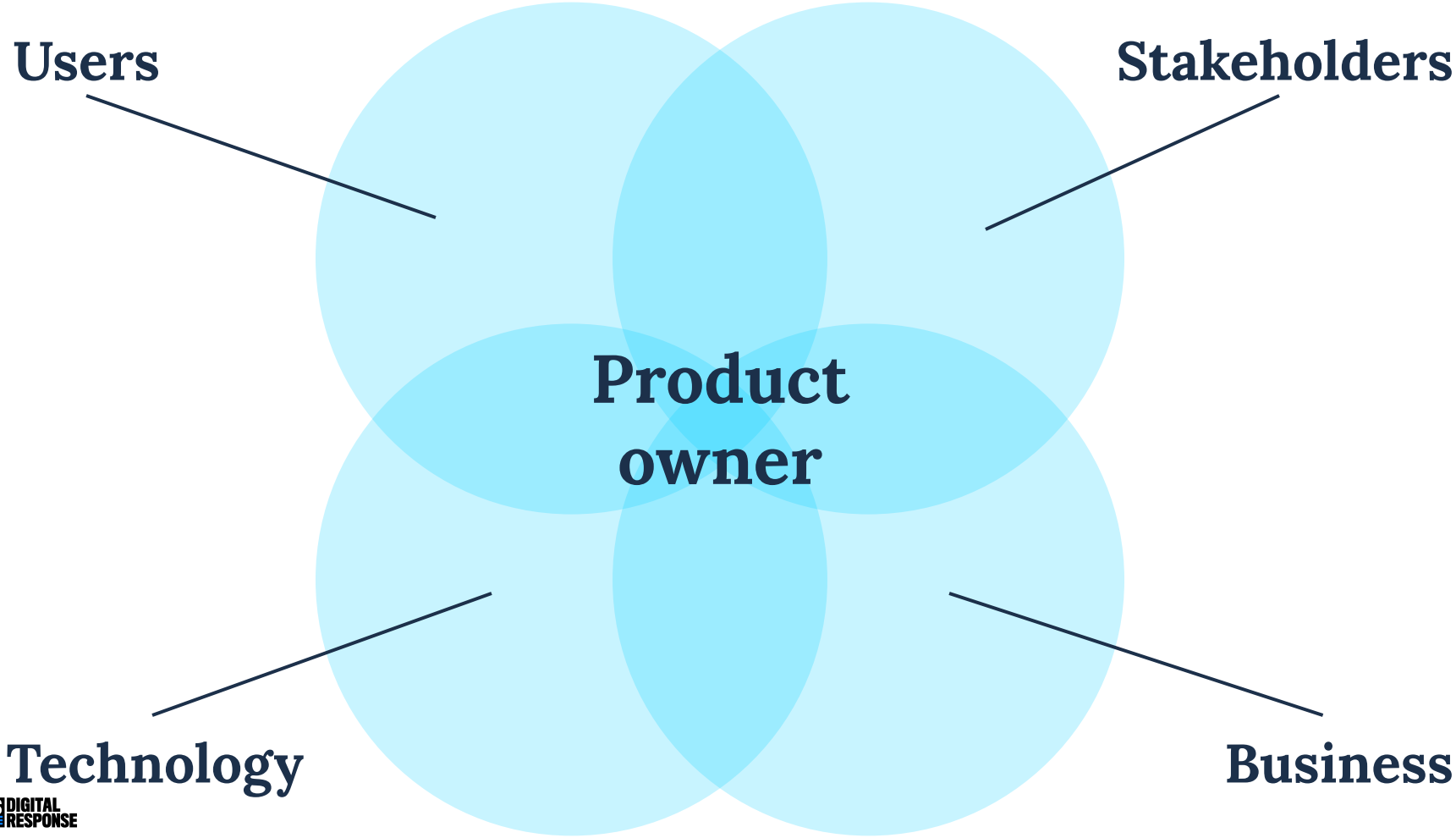
The Take-Away

Agile facilitates *extraordinarily* tight contract oversight of vendor activities and ensures that you're getting your money's worth. It's how the whole software industry works.

Product ownership

Taking control of procurement



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The Take-Away

The product owner is the fulcrum on which the success of the project hinges, the keeper of all system knowledge, the person who knows in exhausting detail exactly what the vendor is doing.

User-centered design

Helping us understand where to go and why

“Design is deciding how a thing should be.”

—William Van Hecke

User-centered design helps us design for actual humans who will use what we're making.

The Take-Away

User research ensures that the vendor is doing the right work and that the system will do what you need it to do.

Building with loosely coupled parts

Creating big systems out of small pieces

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Terminal de Contêineres de Paranaguá
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CSAV

In software, we call interoperability standards Application Programming Interfaces (APIs).

APIs expose simplicity and hide complexity.

Your new system will eventually be your old system.

The Take-Away

Multiple teams or multiple vendors can work simultaneously on a system with a minimum of coordination. There's no technical need to award a single contract for a large project.

Agile acquisition

Structuring contracting to support development

Modular contracting

A way to create loosely coupled outsourcing arrangements through methods that mirror modern coding practices developed in an Agile way.

There are **two principles** to enforce to get better outcomes.

1

Keep your contract increments **under $10 million**.

Cost *millions*	< $0.5	$0.5-3	$3-6	$6-10	> $10
Success	61%	24%	12%	11%	6%

The more you spend, the greater your odds of failure.

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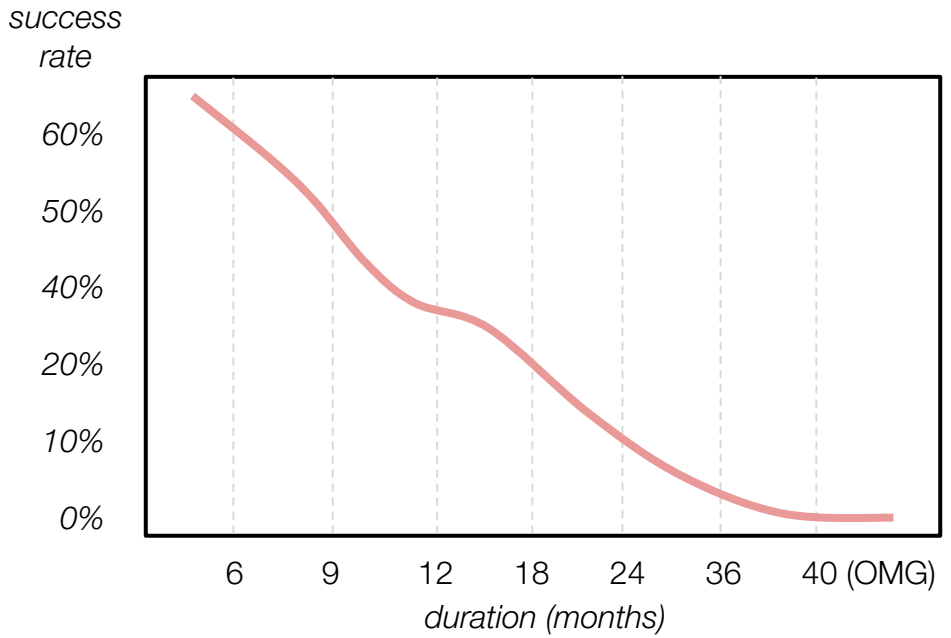
Source: “CHAOS Report 2015,” Standish Group

2

Keep periods of performance short.

No longer than **3 calendar years** (including options).



Standish Group Study of 23,000 projects comparing project success versus duration.

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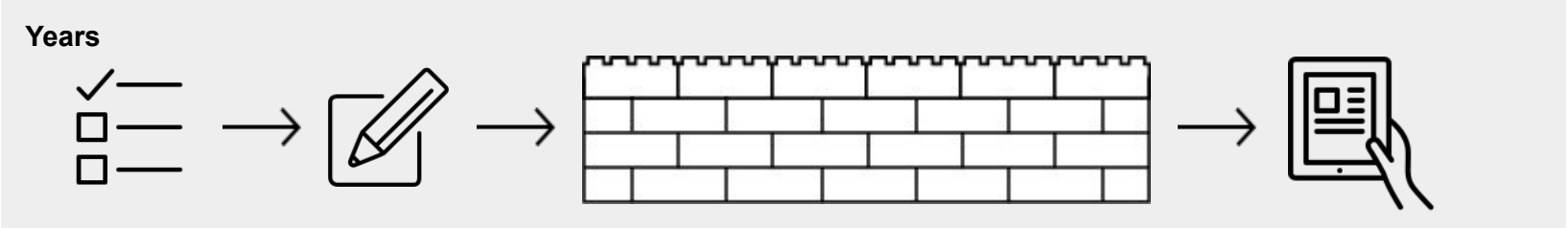
Strategy

The traditional way of approaching procurements



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Traditional contracting

ATTRIBUTES

Expensive

Prescriptive

Time consuming

Waterfall development

OUTCOMES

Risky

No user value for a long time

Contract mods are common

All knowledge is with the vendor

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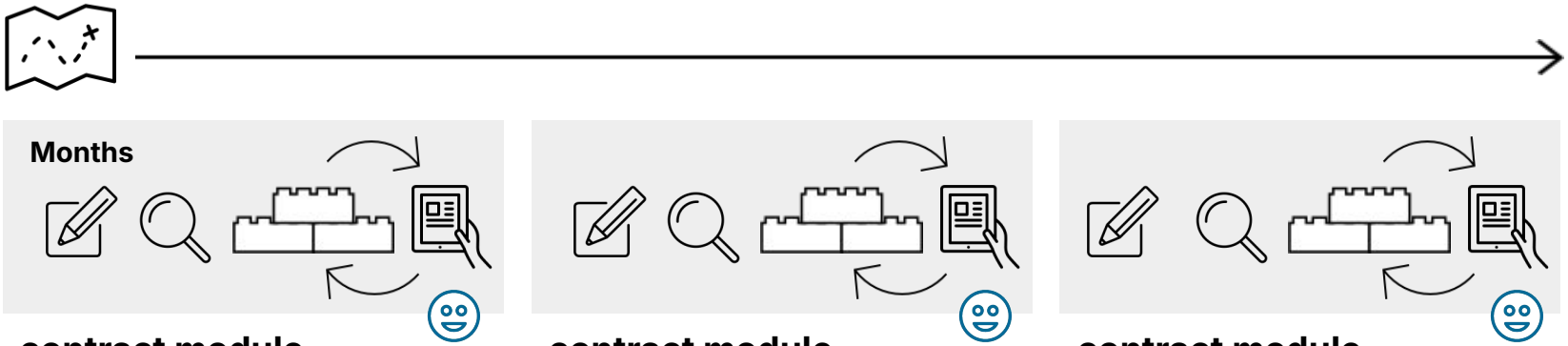
Agile acquisition



Agile acquisition

ATTRIBUTES

Less expensive

Flexible

Descriptive

Quick acquisitions

Agile development

OUTCOMES

Less risky

Frequent delivery of value to users

Fewer / no mods

Gov isn't dependent on a given vendor

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What you can do

Legislative actions to improve the status quo

How to Fail at Software Projects

- Don’t conduct user research
- Define lots of requirements up front
- Sign a $10M+ contract with a single vendor
- Conduct oversight via reports, not live software demos
- Punish projects that fail fast

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Executive actions

1. Require demos, not memos
2. Limit contracts to $10 million and three years
3. Require user research for $1M+ projects
4. Require a named, empowered product owner for all projects

Legislative actions

1. Require twice-monthly demos to legislative staff
2. Create a state digital service
3. Allocate funding operationally

In conclusion

If the technology fails, the legislation fails. So don’t let the technology fail.