

The Hidden Cost of Operational Complexity

Complexity rarely appears on the balance sheet. But you pay for it every day.

By Mike Gallo

There is a peculiar thing about operational complexity.

Most organizations do not set out to create it. It simply happens.

A new system is introduced. A new product is added. A regulation changes. An acquisition brings another process. A department creates its own spreadsheet. A workaround becomes permanent. A decision that once took one person now requires three.

None of these decisions, by themselves, seems unreasonable.

Over time, however, they begin to connect.

The organization develops layers of processes, systems, approvals, reports, interfaces, spreadsheets, exceptions and workarounds.

Eventually, people stop asking why something is done a certain way. They simply learn how to get it done.

That is when complexity becomes expensive.

The Work Behind the Work

Every organization has processes that are visible to the customer.

A policy is quoted. A claim is reported. A payment is processed. A customer calls. A decision is made.

But behind each of those activities is another layer of work.

Someone reconciles the data. Someone checks the spreadsheet. Someone validates the output. Someone resolves an exception. Someone determines which system contains the correct answer. Someone sends an email because the system cannot do what the business needs.

That work is rarely measured. Yet it consumes time, people and money.

It is the work behind the work. And it is one of the hidden costs of operational complexity.

Complexity Is Not the Same as Scale

Large organizations are complex. That is unavoidable.

The problem is not complexity itself. The problem is unnecessary complexity.

A large insurance organization may have hundreds of products, thousands of employees, multiple distribution channels, dozens of applications and years of accumulated business rules. That is scale.

But when two departments define the same customer differently, that is complexity.

When three systems contain three different versions of the same data, that is complexity.

When a process requires a spreadsheet because the core application cannot accommodate an exception, that is complexity.

When employees need tribal knowledge to understand how a transaction moves through the organization, that is complexity.

Scale is something you manage. Unnecessary complexity is something you can remove.

The Technology Trap

When operational problems become visible, the first instinct is often to look at technology.

The system is too old. The application does not integrate. The data is difficult to access. The reporting platform is inadequate. We need a new system.

Sometimes that is true. But often, technology is simply where the problem becomes visible.

Consider an organization that spends hours reconciling information between two systems. The obvious answer might be integration. But before building the interface, ask a more fundamental question:

ASK THE HARDER QUESTION

Why are two systems maintaining the same information in the first place?

Or consider an organization that produces hundreds of reports. The natural response may be to implement a better reporting platform. But perhaps the real issue is that nobody has established which measures the business actually needs.

Technology can automate a bad process. It can also make a complicated process faster. Neither necessarily makes the process better.

The Exception Becomes the Process

One of the most reliable ways complexity grows is through exceptions.

A process is designed for the normal situation. Then something unusual happens. So, someone creates a workaround.

The workaround works. Then it happens again. A spreadsheet is created. Then another department needs the same information. A second spreadsheet appears.

Eventually, the exception is no longer exceptional. It has become part of the process.

This happens repeatedly in insurance.

A special product requires a special process. A state requirement creates a variation. A legacy system cannot handle a business rule. A customer requires something outside the standard workflow. A regulatory requirement introduces another control.

Each change may be justified. But the cumulative effect can be significant.

The organization gradually builds an operating model around exceptions. And the cost becomes difficult to see because no single exception appears expensive.

The Human Cost

Complexity has another cost that is rarely included in project business cases. It makes work harder.

Employees spend more time finding information. They spend more time checking other people's work. They spend more time explaining processes. They spend more time correcting errors. They spend more time navigating systems rather than serving customers.

Experienced employees become the organization's unofficial operating manual.

They know which report to use. They know which number is correct. They know which system to check. They know which exception requires a phone call. They know which process can be trusted, and which one cannot.

When those people leave, the organization discovers how much knowledge was never actually documented.

That is not simply a staffing problem. It is an operational risk.

Complexity Creates Its Own Data Problem

Complexity and data quality are closely related.

The more systems, processes and handoffs involved in a transaction, the more opportunities there are for data to become inconsistent.

A customer name changes in one system but not another. A policy status is interpreted differently by different departments. A business definition changes but the reports do not. A field means one thing to underwriting and something else to finance.

Eventually someone asks: Which number is right?

That question is often treated as a data problem. But the underlying issue may be operational.

The organization has allowed multiple processes and systems to create multiple versions of the truth.

Better reporting cannot solve that problem by itself. The business must first establish what the data means, who owns it, where it originates, how it changes and how it should be used.

That is governance. And governance is ultimately an operational discipline.

Complexity Slows the Organization Down

There is another hidden cost. Complex organizations move slowly.

Not because their people are slow. Because every change touches something else.

A seemingly simple business change requires analysis across multiple systems. A new product requires changes to several applications. A regulatory change requires updates to processes, reports and interfaces. A data definition change requires conversations among multiple departments.

The organization becomes cautious. Change becomes expensive.

Eventually, people begin asking: Can we afford to change this?

The more important question may be: Can we afford not to simplify it?

Finding the Complexity

Complexity is difficult to eliminate if you cannot see it.

The first step is not necessarily a new system. It is understanding how work actually gets done.

Not how the organization chart says it gets done. Not how the procedure manual says it gets done. But how it gets done on Tuesday afternoon when a real customer, transaction or problem enters the process.

Follow the work. Follow the data. Follow the decisions. Look for:

- Multiple handoffs
- Duplicate data entry
- Manual reconciliations
- Shadow spreadsheets
- Repeated approvals
- Conflicting business rules
- Unclear ownership
- Duplicate systems
- Unnecessary reports
- Exceptions and workarounds
- Tribal knowledge
- Rework and defect correction

These are the fingerprints of operational complexity.

Simplification Is a Business Strategy

Simplification is sometimes treated as an IT initiative. It should not be.

A technology team can consolidate applications. It can modernize infrastructure. It can automate workflows. But only the business can determine whether the underlying work is necessary.

The goal is not simply fewer systems.

The goal is fewer unnecessary steps. Fewer handoffs. Fewer duplicate decisions. Fewer versions of the truth. Fewer exceptions. Fewer manual reconciliations. Fewer reports that nobody uses. Fewer processes that depend on one person knowing how things really work.

The objective is not to make the organization simpler for the sake of simplicity.

The objective is to make the organization easier to operate, easier to change and easier to manage.

The Question Worth Asking

When an organization encounters an operational problem, the conversation often begins with:

THE QUESTION

"What technology do we need?"

A better conversation may begin with:

THE BETTER QUESTION

"Why is the work so difficult in the first place?"

That question changes the discussion.

It moves the focus from applications to outcomes. From systems to processes. From data to decisions. From technology investment to business performance.

And sometimes it reveals something important:

The organization does not have a technology problem. It has a complexity problem.

Complexity Has a Price

The cost of operational complexity is rarely captured in a single line item. It is distributed across the organization.

Time — employees spending hours doing work that should not be necessary — surveys show workers lose nearly a full workday each week to complexity-related friction.

People — highly capable employees performing repetitive administrative work; low-complexity organizations often operate with significantly fewer staff in support functions.

Errors — more handoffs creating more opportunities for mistakes.

Data — multiple systems producing inconsistent information.

Technology — applications becoming increasingly difficult and expensive to maintain. High technology complexity is associated with substantially higher G&A and IT operating costs.

Change — business initiatives taking longer and costing more than expected.

Customers — slower responses, inconsistent experiences and unnecessary friction.

Risk — processes that depend on undocumented knowledge and manual intervention.

WHAT THE RESEARCH SHOWS

- The Hackett Group benchmarking found finance costs as a percent of revenue nearly 60% lower in low-complexity organizations, with 66% fewer staff and 30% less technology spend. (The Hackett Group, finance complexity benchmarking)
- McKinsey estimated complexity costs U.S. food-and-beverage manufacturers as much as \$50 billion in gross profit annually; large insurers with high complexity often show cost ratios far above top-quartile peers despite similar scale. (McKinsey & Company analyses on complexity in consumer goods and insurance)
- Surveys indicate organizational complexity can drain roughly 7% of annual revenue; employees lose nearly seven hours per week to related friction. Documented complexity-management programs have delivered 10–35% cost reductions. (Freshworks Global Cost of Complexity survey; Bain & Company complexity management results)

The AIA Perspective

At AIA, we believe technology should enable the business—not define it.

That means looking beyond the application, the database or the reporting platform. We look at the entire operating environment:

PEOPLE • PROCESSES • TECHNOLOGY • ORGANIZATION

Because those four elements are connected. Change one without understanding the others and complexity often moves rather than disappears.

A new system may replace an old system without eliminating the underlying process. A new data platform may provide faster access to inconsistent data. A new report may answer a question nobody should have to ask. A new workflow may automate unnecessary work.

The objective is different. Understand the business problem first. Then determine what needs to change.

Sometimes the answer is technology. Sometimes it is process. Sometimes it is governance. Sometimes it is organization.

And sometimes the most valuable technology investment is the one you no longer need to make because you eliminated the complexity that created the problem.

The Opportunity

Every organization has complexity. The question is whether that complexity creates value or simply creates work.

The organizations that perform best are not necessarily those with the most sophisticated technology. They are often the organizations that understand how their business works—and continually remove the friction that prevents it from working better.

The opportunity is not simply modernization. It is simplification.

Because when unnecessary complexity is removed, something important happens.

People have more time. Data becomes more useful. Technology becomes easier to manage. Decisions become clearer. Change becomes faster.

And the organization becomes better equipped to focus on what actually matters:

The business.

AIA PERSPECTIVE

The first step is not always to change the technology. Sometimes it is to understand the work.

AIA INSIGHT

The Hidden Cost of Operational Complexity

The most expensive process in an organization may be the one everyone has learned to accept.

Agile Insurance Analytics helps insurance organizations understand the relationship between people, processes, technology and organization—and identify where complexity is limiting performance.



Mike is a veteran insurance data and analytics leader with five decades of experience helping organizations turn data into actionable business insights. His background includes leadership roles in data architecture, business intelligence, reporting, and information management.