

Time to Adoption: A Framework for Faster User Adoption

Oishik Das

Associate Manager-Exotel, Bengaluru, Karnataka, India.

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Abstract: Product adoption is commonly evaluated through measures such as adoption rate, active users, feature utilization, retention and usage frequency. These measures provide important information about the extent of adoption, but they often obscure a critical dimension of the adoption problem: how long it takes users or organizations to move from initial exposure to sustained adoption.

This paper introduces Time to Adoption (TTA) as a practitioner-oriented construct for examining the temporal dimension of product adoption. The paper argues that adoption should not be treated solely as a binary or percentage-based outcome. Two products may achieve identical adoption rates while imposing substantially different periods of learning, implementation, behavioural change and organizational adjustment. Consequently, adoption rate alone may conceal meaningful differences in customer experience, implementation effort, time-to-value and commercial risk.

Building on established perspectives including Diffusion of Innovations, technology acceptance research and information-systems success research, this paper proposes a conceptual adoption journey consisting of six stages: Awareness, Understanding, First Use, Successful Use, Repeated Use and Sustained Adoption. Time to Adoption is conceptualized as the elapsed time required for a defined user population to progress from an agreed starting point to a predefined state of sustained, value-generating usage.

The paper further proposes an Adoption Friction Framework consisting of five major friction domains: perceived value friction, product friction, workflow friction, implementation friction and organizational friction. These domains provide practitioners with a diagnostic approach for explaining why adoption takes longer than expected.

The paper concludes by proposing a measurement framework, management dashboard and set of research propositions for future empirical validation. The central proposition is that reducing Time to Adoption may represent a distinct source of competitive advantage because faster adoption compresses the period between product introduction and realized value while reducing the opportunity for workarounds, resistance and disengagement to become embedded in customer behaviour.

Keywords: Time to Adoption, Product Adoption, Technology Adoption, SaaS, Product Management, Customer Success, Time to Value, Implementation, Adoption Friction, Technology Diffusion.

1. Introduction

Technology companies spend enormous amounts of time asking whether customers adopt their products. A more consequential question may be:

How long does adoption take?

This distinction is easy to overlook.

Consider two enterprise products that eventually reach an adoption rate of 70 percent among their target users. The first reaches 70 percent adoption within 30 days.

The second reaches 70 percent adoption within 180 days.

If adoption rate is the primary metric, the two products appear equally successful. Operationally, they are not.

The second product requires users to spend considerably longer navigating learning curves, implementation dependencies, workflow changes, uncertainty and behavioural resistance before reaching the same adoption outcome.

This creates an important managerial problem.

Traditional adoption metrics tend to describe **the state of adoption**. They do not necessarily describe **the speed of adoption**.

That distinction becomes particularly important in SaaS and enterprise technology environments, where customers frequently purchase a product before the organization has developed the capability, confidence or behavioural routines necessary to use it effectively.

A product can therefore be:

- purchased but not implemented;
- implemented but not activated;
- activated but not meaningfully used;
- used but not repeatedly used;
- repeatedly used but not embedded in the workflow;
- embedded in the workflow but not producing measurable business value.

Consequently, adoption is better understood as a process rather than a single event.

Classical diffusion research already recognizes the importance of time in the spread of innovations. Rogers' diffusion framework explicitly conceptualizes diffusion as a process occurring over time among members of a social system. Technology acceptance research, meanwhile, has examined determinants of intention and actual use, including perceived usefulness, perceived ease of use, social influence and facilitating conditions.

However, from a practitioner perspective, there remains a useful management question:

Can the time required to move through the adoption journey be explicitly measured, diagnosed and managed?

This paper proposes that it can.

This paper looks at Time to Adoption (TTA) as a way to understand how long it actually takes users to move from first exposure to sustained use. It also examines what tends to slow that journey down.

2. The Problem With Measuring Adoption Alone

Suppose an organization reports:

"Feature adoption increased from 45% to 75%." This sounds positive.

But there are several questions that remain unanswered. How long did it take to achieve that result?

How many users tried the feature before becoming regular users? How many required training?

How many required customer-success intervention? How many users continued using legacy workflows?

How long did it take for the new capability to become part of the customer's normal operating process?

Looking at the adoption rate alone can hide what is actually happening on the ground. Two products can reach the same adoption level, while one takes weeks to get there and the other takes months. The experience for the customer, and the effort required from the teams supporting that customer, can be very different.

A more complete way to think about adoption is to look at four things together:

$$\text{Adoption Outcome} = \text{Adoption Rate} \times \text{Adoption Speed} \times \text{Adoption Depth} \times \text{Adoption Persistence}$$

This is not intended as a statistical model. It is simply a way to look beyond the percentage of users who adopted and consider how quickly they got there, how deeply the product became part of their workflow, and whether that behaviour continued over time.

The purpose is to emphasize that adoption has multiple dimensions.

Adoption Rate

How many target users adopt?

Adoption Speed

How quickly do they adopt?

Adoption Depth

How deeply does the product become embedded in their workflows?

Adoption Persistence

But there is another question worth asking: does that usage actually stick?

A user trying a feature once does not necessarily mean the product has been adopted. What matters is whether the behaviour continues and eventually becomes part of the user's normal way of working.

Consider two products that both reach 80% adoption.

One gets there in 30 days. The other takes 240 days.

On paper, both report the same adoption rate. In practice, they are very different products to manage. The first has helped customers reach the desired behaviour much faster, while the second has spent eight times as long getting to the same point. The percentage is identical. The adoption journey is not.

3. From Adoption as an Outcome to Adoption as a Journey

This paper proposes six stages.

Stage 1: Awareness

The user becomes aware that the product or capability exists.

The user may know that a solution exists without understanding why it matters.

Typical measurement:

Percentage of target users exposed to the capability.

Stage 2: Understanding

The user understands what the capability does, why it matters and how it relates to their work. This is where perceived usefulness and perceived relevance become important.

A technically excellent product can stall here if the value proposition is unclear.

Stage 3: First Use

The user performs the intended behaviour for the first time.

First use is an important transition because awareness has now become observable behaviour.

However, first use should not automatically be considered adoption.

A user can try something once and never return.

Stage 4: Successful use

At this stage, the user is not just using the feature. They are actually completing the task it was meant to help with and getting the expected result.

That distinction matters.

Using a feature does not automatically mean getting value from it.

Someone can click through a feature, explore it, or use it once without actually completing the job they needed to get done.

Stage 5: Repeated Use

The behaviour occurs repeatedly.

At this point, adoption begins moving from experimentation toward behavioural reinforcement.

Repeated use is particularly important because it indicates that the user has found sufficient value to overcome the cost of changing behavior.

Stage 6: Sustained Adoption

The capability becomes embedded in the user's normal workflow.

The user no longer needs extraordinary intervention to continue using it. At this stage, the behaviour becomes operational rather than experimental.

This is the point at which the paper proposes measuring **Time to Adoption**.

4. Defining Time to Adoption

A practical definition is:

Time to Adoption is the elapsed time between a defined adoption starting point and the point at which a predefined user population reaches sustained, value-generating usage of a product, feature or workflow.

The definition comes down to three things that need to be clearly defined.

4.1 Starting Point

Organizations must define when the clock starts. Possible starting points include:

- contract signature;

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- implementation kickoff;
- user invitation;
- product activation;
- first exposure;
- feature release;
- training completion.

There is no universally correct starting point.

The starting point should reflect the business question.

The starting point can also depend on what you are trying to measure.

For an implementation team, it may make sense to measure the journey from **contract signing to sustained adoption**.

For a product team launching a new feature, the more relevant starting point may be **first exposure to sustained adoption**. The starting point will not always be the same. It depends on what part of the adoption journey you want to look at.

4.2 Adoption Threshold

Before measuring adoption, a team first needs to agree on what adoption actually looks like. For example:

“A user is considered adopted when they complete workflow X successfully at least three times within a 14-day period without assisted intervention.”

The definition will look different for different products and user behaviours. What counts as adoption for a daily workflow may not make sense for a feature that users only need once a month.

The important thing is to set the definition first. Otherwise, the adoption number itself becomes difficult to interpret.

4.3 Population

There is another decision to make: whose adoption are we actually measuring?

It could be an individual user, a team, an entire department, an account, a customer, an administrator, or a particular user persona.

This matters because adoption can look very different at each level. A feature might be widely used by a few power users while most of the customer base barely touches it. Looking only at the overall number could make the situation look better than it really is.

5. A Practical Formula

The calculation which I should use is itself quite straightforward:

TTA = T(Sustained Adoption) – T(Adoption Start) For a group of customers, I would use the median TTA: **Median TTA = Median(TTA₁, TTA₂, ... TTA_n)**

Take these five customers:

- A: 12 days
- B: 18 days
- C: 21 days
- D: 25 days
- E: 140 days

The average is 43.2 days. But looking at the numbers, that does not feel like the right description of this group. Four customers got there in less than 26 days. One customer took 140 days.

The median is 21 days.

So I would report **21 days as the median TTA**, and then investigate the 140-day case separately. It is too different from the others to ignore, and it may tell us something about where adoption is getting stuck.

6. The Adoption Friction Framework

Once we can measure how long adoption takes, the next thing to figure out is why some customers take much longer than others.

In practice, the reasons usually fall into five areas:

6.1 Value Friction

Sometimes the user simply does not see why the product matters.

They may understand what it does, but that does not mean they see a good reason to start using it. This usually shows up when:

1. the value is not clear;
2. the benefit feels too far away;
3. the product does not connect clearly to the work they do;
4. there is no strong reason to change the current process.

The product may solve the right problem, but if the user does not see the benefit of changing how they work today, adoption is likely to take longer.

6.2 Product Friction

Sometimes the product is the problem.

There are too many steps. The user cannot find what they need. The setup takes too long. The default settings are wrong.

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Or the workflow simply feels harder than the old way of doing things.

None of these issues may look serious on their own. Together, they can be enough to stop adoption. The more effort it takes to use a product, the harder it is to get people to change their existing habits.

6.3 Workflow Friction

The product conflicts with the existing ways of working. This is particularly important in enterprise environments. Users may already have:

- spreadsheets;
- manual processes;
- legacy tools;
- informal workarounds;
- established approval processes;
- organizational habits.

A new product therefore competes not only with other software. It competes with **existing behavior**.

6.4 Implementation Friction

A lot of the delay can happen outside the product.

The integration is not ready. Data still needs to be moved. Someone is waiting for access. Training has not happened. Testing is pending. Or the person who needs to make a decision is simply not available.

None of these are really product usability issues. But they can still keep the customer from using the product. So even a product that is easy to use can take weeks to get adopted.

6.5 Organizational Friction

Adoption can also get stuck inside the customer organisation.

There may be no clear owner. Teams may have other priorities. Leadership may not be pushing the change. One department may not agree with another. The people expected to drive adoption may not have enough influence to do it. There can also be concerns around risk, internal targets or who will ultimately be accountable for the outcome. These issues have little to do with the product itself. But they can have a direct impact on how quickly it gets adopted.

7. The Adoption Friction Equation

There are five friction areas that can be used to look at TTA:

Time to Adoption $\approx$ Value Friction + Product Friction + Workflow Friction + Implementation Friction + Organizational Friction

This is not meant to be a mathematical equation. It is a way of breaking down where adoption time is being lost.

It is a diagnostic model.

The value of the equation is that it forces teams to ask:

Which friction is actually consuming the time?

A common failure mode is treating every adoption problem as a product problem. A customer may not adopt a feature because:

- the feature is difficult to use; or because:
- nobody knows who owns the process; or because:
- the required integration is incomplete; or because:
- users do not believe the benefit justifies changing their existing workflow.

These are fundamentally different problems.

8. Time to Adoption vs. Time to Value

Time to Adoption should not be confused with Time to Value. They are related but distinct.

Time to Value

How long does it take to achieve a meaningful outcome?

Time to Adoption

How long does it take for the intended behaviour to become sustained? A customer can experience value before achieving broad adoption.

Conversely, a customer can adopt a product without achieving meaningful value. For example:

A team may use an analytics dashboard every day. That represents strong behavioural adoption.

But if nobody changes a decision based on the information, business value may remain low. Therefore:

Usage $\neq$ Adoption $\neq$ Value

A mature product organization should understand all three.

9. The Adoption Velocity Concept

A second measure is **Adoption Velocity**:

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$$\text{Adoption Velocity} = \text{Change in Sustained Adoption} / \text{Time}$$

I treat this just like a management measure and not a validated scientific construct. Now compare two cohorts.

Cohort A

Day 0: 0%
Day 30: 30%
Day 60: 65%
Day 90: 80%

Cohort B

Day 0: 0%
Day 30: 10%
Day 60: 20%
Day 90: 80%

The end result is the same: 80%. The path is not.

Cohort A was already seeing strong adoption by Day 30. Cohort B was still at 20% by Day 60 and then made up the difference.

If we only report adoption at Day 90, we miss this completely. The trajectory tells us more.

10. Why the First Successful Use Matters

The first login tells us very little about whether onboarding is actually working and we should not decipher multiple things from it.

I would look at the first time the user actually gets something done. A typical onboarding flow might look like:

Signup → Tutorial → Product Tour → Feature Discovery

But the more useful question is:

How quickly can the user complete the job they came to the product to solve?

That changes how onboarding should be designed.

The goal is not to teach the user everything about the product.

It is to help them get their first useful outcome with as little friction as possible.

This also fits with earlier technology acceptance research, where perceived usefulness and perceived ease of use have been shown to influence whether people accept and use a technology.

11. Why Enterprise Adoption Is Different

Consumer products can sometimes solve adoption problems through the product itself. Enterprise adoption is usually more complicated.

There may be an executive sponsor, business users, admins, IT, security, finance, procurement, compliance and implementation teams involved in the same rollout.

Each one can become a dependency. For example, a feature might need:

1. Configuration
 2. Integration
 3. Security approval
 4. Training
 5. A change to the existing workflow
- Now imagine security approval takes six weeks.

It does not matter that the feature is easy to use. The customer is still waiting. That is the idea behind the **Adoption Bottleneck**:

Adoption Bottleneck = The dependency that is holding up adoption the most.

In enterprise products, the adoption problem is often bigger than the product itself.

12. The Adoption Bottleneck Map

Practitioners can map each adoption journey across five dimensions:

Dimension	Diagnostic Question
Value	Does the user understand why this matters?
Product	Is the product easy to use?
Workflow	Does it fit the existing way of working?
Implementation	Can the customer operationalize it quickly?
Organization	Does the organization support the behavioural change?

The goal is not to identify the largest number of problems.

The goal is to identify the **constraint that is disproportionately extending TTA**. This is a critical shift.

Instead of asking:

"What can we improve?"

Ask:

"What is currently preventing adoption from moving?"

13.A Proposed Time to Adoption Dashboard

A product or customer success team can track the adoption journey using a few basic measures:

Core metrics

Median Time to Adoption

Median number of days to reach sustained adoption.

P75 Time to Adoption

Number of days by which 75% of the cohort has reached adoption.

Time to First Successful Use

Time from the starting point to the first successful outcome.

Time to Repeated Use

Time until the user starts doing the same successful behaviour repeatedly.

Adoption Conversion

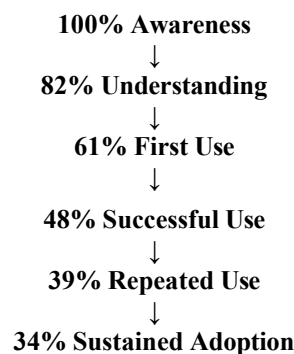
The share of users who move from first use to sustained adoption.

Adoption Drop-off

The share of users who stop progressing between stages.

14. The TTA Funnel

A practical adoption funnel could look like this:



34% is the end result. It does not tell us what happened along the way. The useful questions are:

Where did adoption slow down?

Where did people drop out?

They can be two different places.

15. Five Strategic Levers to Reduce Time to Adoption

Lever 1: Reduce Time to First Value

Move the first meaningful outcome closer to the beginning of the journey.

Lever 2: Remove Non-Essential Decisions

Every additional configuration choice can create hesitation. Use intelligent defaults wherever possible.

Lever 3: Design Around Existing Workflows

Do not assume users will redesign their behaviour simply because the product is better. Meet them where the workflow already exists.

Lever 4: Identify the Adoption Bottleneck

Do not optimize every part of the journey simultaneously. Identify the constraint responsible for the largest delay.

Lever 5: Instrument the Journey

If the team cannot see where adoption is getting stuck, they end up relying on what people say is happening. That usually means anecdotes, individual customer stories and opinions.

Good instrumentation gives the team something concrete to work with.

16. Managerial Implications

The concept of Time to Adoption has implications across multiple functions.

Product

Product teams can look beyond expected feature usage and ask a simpler question: **will this make adoption easier or harder?**

A feature that removes three steps from an important workflow may be more valuable than one that gets a lot of clicks.

Customer Success

Customer Success teams can watch how quickly different customers are moving through adoption.

If one customer is moving much more slowly than the others, that is a reason to look into it early rather than waiting until the account becomes a churn problem.

Implementation

Implementation teams can identify recurring dependencies responsible for delayed customer activation and sustained usage.

Sales

Sales teams can set more realistic expectations around the time required to achieve meaningful adoption.

Leadership

Executives can distinguish between:

Revenue sold and Value realized.

That distinction becomes increasingly important in recurring-revenue business models.

17. Research Propositions

The framework produces several propositions that can be empirically tested.

Proposition 1

Lower Time to First Successful Use is associated with lower overall Time to Adoption.

The sooner a user gets a successful outcome, the sooner they may start using the product regularly.

Proposition 2

Higher perceived usefulness is associated with lower Time to Adoption.

When the value is clear to the user, there is less reason to delay adoption. This follows the direction of earlier technology acceptance research.

Proposition 3

Greater workflow disruption is positively associated with Time to Adoption.

The larger the behavioural change required, the greater the expected adoption friction.

Proposition 4

Higher implementation complexity is positively associated with Time to Adoption in enterprise software environments.

Technical and organizational dependencies can delay sustained usage even when product usability is strong.

Proposition 5

Adoption velocity is negatively associated with early-stage customer risk.

Customers that move rapidly from first use to sustained usage may experience stronger early product engagement. This proposition requires empirical testing rather than being treated as established fact.

Proposition 6

Organizations that explicitly manage Time to Adoption will identify different intervention priorities from organizations that manage adoption rate alone.

This proposition represents one of the central empirical questions generated by this framework.

18. A Research Agenda

The next step is to test this framework with real customer data.

A longitudinal study could track, at the customer or user level:

- customer
- persona
- product
- feature
- implementation start
- first exposure
- first use
- successful use
- repeated use
- sustained adoption
- time to value
- support interactions
- implementation complexity
- workflow changes
- organizational factors

Since TTA is measured in time, survival analysis could be useful here. Instead of looking only at whether a customer eventually adopted, the analysis could look at the **probability of adoption by time t**.

Customers could then be grouped by TTA:

- low TTA
- medium TTA
- high TTA

The next question would be whether these differences are related to outcomes such as:

- retention
- expansion
- support effort
- customer satisfaction
- realized value
- renewal

That would give us a way to test whether TTA is actually useful as a management measure, rather than leaving it as a practitioner idea.

19. Discussion

The central argument of this paper is deliberately simple:

Adoption should be measured not only by how many people adopt, but by how long adoption takes.

This does not mean that existing adoption metrics are inadequate. Adoption rate remains important.

Usage remains important. Retention remains important.

Time to value remains important.

The argument is that these metrics answer different questions.

Adoption rate asks: How many? Usage asks: How often?

Adoption depth asks: How deeply? Retention asks: How long?

Time to value asks: How quickly is value realized?

Time to Adoption asks: How quickly does intended behaviour become sustained? As a whole, these consolidated metrics provide a richer picture of the product health. The deeper implication is that adoption is partly a problem of **time compression**.

Every unnecessary day between product introduction and sustained adoption represents additional time during which:

1. old habits can persist;
2. workarounds can become institutionalized;
3. champions can lose momentum;
4. stakeholders can disengage;
5. competing priorities can emerge;
6. implementation costs can accumulate;
7. expected value can remain unrealized.

Therefore, reducing TTA may create value even when the ultimate adoption percentage remains unchanged.

20. Conclusion

The technology industry has become exceptionally good at measuring whether customers use products.

It may need to become better at measuring **how quickly they become capable, confident and consistent users**. Time to Adoption offers a practical lens for doing so.

The proposed framework moves adoption through six stages:

Awareness → Understanding → First Use → Successful Use → Repeated Use → Sustained Adoption

It then moves on and identifies five sources of friction:

Value → Product → Workflow → Implementation → Organization

The resulting managerial question becomes significantly more precise:

Where, exactly, is time being lost in the journey from product introduction to sustained adoption?

That question changes the nature of product adoption management.

Instead of treating adoption as a campaign, dashboard number or post-sales responsibility, organizations can begin treating it as an **end-to-end system of behavioural change**.

The most mature organizations may therefore move beyond asking:

"What percentage of customers adopted?"

and begin asking:

"What is our Time to Adoption, what is causing it, and what can we systematically remove?"

The competitive advantage may not belong to the company whose customers eventually adopt the most. It may belong to the company whose customers **reach meaningful, sustained adoption fastest**.

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Author Note

Oishik Das is a technology and SaaS practitioner with approximately five years of professional experience spanning project management, product delivery, enterprise software implementation and consulting. His professional interests include product adoption, technology diffusion, customer value realization, implementation strategy and operational excellence.

This paper is presented as a **conceptual practitioner research paper**. The proposed Time to Adoption framework and associated propositions are intended to provide a basis for empirical validation rather than to claim that the proposed relationships have already been statistically established