HIDDEN RISK REVIEW

Could Your Software
Survive Success?

AcmeAI Customer Portal

Status: Growth Ready With Conditions

Survival Score: 4 / 10

Prepared for AcmeAI Leadership Team

June 2026

Making Software Greener

HIDDEN RISK REVIEW

See what you're no longer seeing.

AcmeAI Customer Portal

AI-Powered Customer Support Platform

Review Date: June 2026
Prepared By: Making Software Greener
Review Type: Comprehensive

OVERALL MATURITY
6.1 / 10
Moderate

SURVIVAL SCORE
4 / 10
Can it survive success?
Not Yet

HIDDEN RISK INDEX
3 / 10
High Risk

READINESS LEVEL
EMERGING
Level 1 of 4

REVIEW CONFIDENCE
MEDIUM
Evidence is adequate but not comprehensive

DOMAIN SCORECARD

7-10 Strong · 4-6 Moderate · 2-3 Weak · 0-1 Critical

COULD THIS SYSTEM SURVIVE SUCCESS?

CURRENT OPERATIONS — FUNCTIONAL
System appears capable of supporting current demand.

GROWTH READINESS — MODERATE RISK
Growth is likely to expose operational and cost-management weaknesses.

SCALE READINESS — NEEDS ATTENTION
Several architectural and operational improvements are recommended before significant growth.

LONG-TERM SUSTAINABILITY — MODERATE RISK
Resource efficiency and cost visibility should improve as the system evolves.

TOP 3 RISKS

1. **AI COST VISIBILITY IS LIMITED** — HIGH
   Growth may significantly increase operating expenses before trends become visible.
2. **MONITORING GAPS MAY DELAY INCIDENT DETECTION** — HIGH
   Failures may go unnoticed until customers report them.
3. **AUTHORIZATION LOGIC APPEARS DISTRIBUTED** — MEDIUM
   Future changes may increase the risk of inconsistent access control.

TOP 3 RECOMMENDED ACTIONS

1. **IMPLEMENT AI COST TRACKING**
   Track usage and costs by customer, feature, and workflow.
   EFFORT 1–2 DAYS · IMPACT HIGH
2. **IMPLEMENT MONITORING AND ALERTING**
   Centralized monitoring, error tracking, and proactive alerting.
   EFFORT 1–3 DAYS · IMPACT HIGH
3. **CENTRALIZE AUTHORIZATION DECISIONS**
   Ensure consistent and secure access control across the platform.
   EFFORT 1–2 DAYS · IMPACT MEDIUM

GROWTH FORECAST
IF CUSTOMER GROWTH INCREASES 10X

AI COSTS	HIGH RISK
OPERATIONAL MONITORING	HIGH RISK
DATABASE PERFORMANCE	HIGH RISK
TEAM SCALABILITY	MODERATE RISK

REVIEWER VERDICT

GROWTH READY WITH CONDITIONS

The system is capable of continued growth, but several improvements should be completed before significant expansion.

KEY TAKEAWAY
Address the top risks now to reduce future cost, complexity, and operational risk.

See what you're no longer seeing.

Waste is a bug.

Performance, Cost, and Carbon Are the Same Problem.

Build for today. Engineer for tomorrow. Sustain for always.

Executive Summary

Review Outcome

🟡 Growth Is Likely To Expose Operational And Cost Risks

AcmeAI demonstrates a solid technical foundation and appears capable of supporting current customer demand.

The application successfully integrates customer support workflows, AI-generated summaries, and automated response generation.

However, several issues are likely to become more visible as adoption grows.

The most significant concerns involve:

1. Limited visibility into AI costs
2. Operational monitoring gaps
3. Authorization complexity
4. Future scalability constraints

None of the identified findings appear existential.

Addressing the highest-priority recommendations before significant growth is likely to reduce future cost, risk, and operational burden.

Review Snapshot

Metric	Score
Overall Maturity	6.1 / 10
Survival Score	4 / 10
Hidden Risk Index	3
Readiness Level	Emerging
Confidence	Medium

Could This System Survive Success?

Current State

The platform appears capable of supporting current usage levels.

Core functionality is implemented and operational.

No immediate indicators suggest the system is unsuitable for production use.

What Happens At 10x Growth?

The following areas are most likely to experience stress:

AI Costs

Usage costs may increase faster than customer growth.

Database Performance

Current query patterns may become increasingly expensive as ticket volume grows.

Operational Visibility

The team may struggle to identify failures quickly without improved monitoring.

Team Scalability

Knowledge appears concentrated among a small number of contributors.

Reviewer Assessment

Today

🟢 Functional

Growth

🟡 Moderate Risk

Scale

🟠 Requires Attention

Long-Term Sustainability

🟡 Moderate Risk

System Overview

What The System Does

AcmeAI helps customer support teams process incoming support requests using artificial intelligence.

Users can:

- Upload support tickets
- Generate AI summaries
- Generate draft responses
- Review recommendations
- Export reports

Primary Inputs

- Customer support tickets
- User uploads
- Administrative actions
- API requests
- Authentication requests

Primary Outputs

- AI-generated summaries
- AI-generated draft responses
- Reports
- Notifications
- Audit records

External Dependencies

Service	Purpose
OpenAI	AI summaries and response generation
PostgreSQL	Primary data store
AWS S3	File storage
Stripe	Billing
SendGrid	Email delivery

Service	Purpose
GitHub Actions	CI/CD

Top Risks

#1 AI Cost Visibility Is Limited

Risk Level

🟠 High

What's Happening

The platform sends requests to AI services but currently provides limited visibility into which customers, workflows, or features generate those costs.

Why This Matters

AI expenses can grow faster than user growth.

Without visibility, the team may not recognize cost trends until profitability is affected.

Example Scenario

A large customer uploads significantly more tickets than expected.

Monthly AI expenses increase substantially without corresponding alerts or reporting.

Recommended Next Step

Implement AI usage tracking by:

- Customer
- Feature
- Workflow
- Model

Confidence

High

#2 Monitoring Gaps May Delay Incident Detection

Risk Level

🟠 High

What's Happening

Application logging exists, but evidence of centralized monitoring and alerting was not observed.

Why This Matters

Failures may remain undetected until customers report them.

This increases outage duration and operational burden.

Example Scenario

Background processing stops functioning overnight.

The team learns about the issue from customer complaints the following morning.

Recommended Next Step

Implement:

- Centralized monitoring
- Error tracking
- Alerting
- Health checks

Confidence

Medium

#3 Authorization Logic Appears Distributed

Risk Level

🟡 Medium

What's Happening

Authorization checks appear throughout multiple parts of the application.

Why This Matters

Distributed authorization logic increases the likelihood of inconsistent access control.

Example Scenario

A future feature accidentally exposes another customer's information.

Recommended Next Step

Centralize authorization decisions.

Confidence

Medium

Temporal Architecture Review

What Changes If The System Succeeds?

Many reviews focus on how a system behaves today.

This section focuses on what changes as the system grows.

User Growth

Current State

The platform appears capable of supporting current customer demand.

No obvious architectural constraints were identified for near-term growth.

Future Risk

As customer adoption increases:

- Database volume will grow
- AI requests will increase
- Reporting workloads will become more expensive
- Background processing requirements will increase

Assessment

🟡 Moderate Risk

Growth appears achievable, but visibility and capacity planning should improve before significant expansion.

Data Growth

Current State

Ticket history, AI summaries, generated responses, and uploaded documents are stored for future reference.

Future Risk

Support data typically grows faster than expected.

Without lifecycle management, storage costs and query complexity may increase over time.

Assessment

🟡 Moderate Risk

A data retention strategy is recommended.

AI Growth

Current State

AI services provide significant customer value.

The current architecture assumes AI requests remain affordable.

Future Risk

AI costs often scale faster than infrastructure costs.

Growth may create:

- Higher operating expenses
- Longer response times
- Increased dependence on third-party providers

Assessment

🟠 High Risk

Cost visibility and governance should be established early.

Team Growth

Current State

Evidence suggests important system knowledge is concentrated among a small number of contributors.

Future Risk

As additional developers join:

- Onboarding time increases
- Changes become slower
- Institutional knowledge becomes fragmented

Assessment

🟡 Moderate Risk

Documentation and architectural decision records should be expanded.

Operational Growth

Current State

Operational processes appear lightweight and founder-driven.

Future Risk

The practices that work for a small team often fail under larger operational demands.

Areas likely to experience pressure:

- Monitoring
- Incident response
- Release management
- Support workflows

Assessment

🟠 High Risk

Operational maturity should increase alongside customer growth.

Cost and Sustainability Observations

Observation #1

Repeated AI Processing

Several workflows appear capable of generating summaries for content that has already been processed.

Impact

Potential effects include:

- Increased AI costs
- Additional latency
- Higher compute consumption

Recommendation

Consider caching or reusing existing summaries where appropriate.

Observation #2

Storage Growth

Uploaded content appears to be retained indefinitely.

Impact

Potential effects include:

- Increased storage costs
- Larger backups
- Longer recovery times

Recommendation

Establish retention and archival policies.

Observation #3

Limited Cost Visibility

Cloud and AI costs appear disconnected from business workflows.

Impact

The team may struggle to identify which features are driving operational expenses.

Recommendation

Associate costs with:

- Features
- Customers
- Workflows
- Business capabilities

Prioritized Roadmap

Immediate (Next 30 Days)

1. Implement AI Cost Tracking

Priority: High

Expected Effort: 1–2 Days

Success Criteria:

Ability to view AI usage and costs by customer and workflow.

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2. Implement Monitoring and Alerting

Priority: High

Expected Effort: 1–3 Days

Success Criteria:

Operational failures generate actionable alerts.

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3. Review Authorization Model

Priority: High

Expected Effort: 1–2 Days

Success Criteria:

Authorization logic is centralized and consistently applied.

Near-Term (30–90 Days)

4. Document Deployment and Recovery Procedures

Priority: Medium

Expected Effort: 1 Day

Success Criteria:

A new team member can perform deployment and recovery activities using documented procedures.

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5. Establish Cost Reporting

Priority: Medium

Expected Effort: 1–2 Days

Success Criteria:

Monthly cloud and AI costs are visible by business function.

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6. Create Data Retention Policies

Priority: Medium

Expected Effort: 1 Day

Success Criteria:

Retention requirements are documented and automated.

Longer-Term (90–180 Days)

7. Scalability Testing

Priority: Medium

Expected Effort: 2–5 Days

Success Criteria:

System performance is understood at 5x and 10x expected load.

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8. Architecture Review

Priority: Medium

Expected Effort: 2–3 Days

Success Criteria:

Key architectural decisions are documented and reviewed.

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9. Knowledge Distribution

Priority: Medium

Expected Effort: Ongoing

Success Criteria:

No critical system area depends on a single contributor.

Final Assessment

Strengths

✓ Clear business purpose

✓ Strong product foundation

✓ Effective use of AI capabilities

✓ Modern technology stack

✓ Growth potential

Areas Requiring Attention

⚠️ AI cost visibility

⚠️ Operational monitoring

⚠️ Authorization consistency

⚠️ Team scalability

⚠️ Long-term operational maturity

Overall Reviewer Assessment

AcmeAI appears capable of supporting current operations and near-term customer growth.

The primary risks are not technical failures.

They are visibility, operational readiness, and cost management risks that become more important as adoption increases.

None of the identified findings appear existential.

However, addressing the highest-priority recommendations before rapid growth is likely to reduce future cost, risk, complexity, and operational burden.

Final Readiness Assessment

Overall Maturity: 6.1 / 10

Survival Score: 4 / 10

Hidden Risk Index: 3

Readiness Level: Emerging

About The Hidden Risk Review

The Hidden Risk Review evaluates software systems through multiple lenses:

- Architecture
- Security
- Operations
- AI Systems
- Cost
- Sustainability
- Scalability
- Temporal Risk

The goal is simple:

To help teams see what they're no longer seeing.

Because many software failures begin with:

"The system worked fine until..."

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