



constellation
insights™

CUSTOMER CASE STUDY: INTUIT

Intuit's Bet on Data, AI, AWS Pays Off Ahead of Generative AI Transformation

BY LARRY DIGNAN, CONSTELLATION INSIGHTS

Intuit may be the best example of the need to have a data strategy before tackling generative AI. The company, which has had to adapt to technology and economic shifts for 40 years, realized five years ago that data and AI would be fundamental to its core mission.

The company's mission, to power prosperity around the world, is a bet that it can create a platform that can help you grow your business, run it, manage cash flow, and be compliant. Intuit's platform, which also serves as a gateway to human expertise, aims to conduct business with you and for you.

"To pull that off, we declared five years ago that data and AI was going to be fundamental," Intuit CEO Sasan Goodarzi said, speaking at a recent investor conference. "And everything starts with data. To create a future of done for you, you must have data. We have invested heavily in the last decade, but in the last five years, we really accelerated our investments in data and AI."

That decade period is also notable because Intuit's prescient bet on data

"Everything starts with data. To create a future of done for you, you must have data. We have invested heavily in the last decade, but in the last five years, we really accelerated our investments in data and AI."



*-Sasan Goodarzi,
Intuit CEO*

lined up with a transformational move to go all in on Amazon Web Services (AWS) for its infrastructure.

In 2013 Intuit decided to go all in on AWS and has been a core reference customer ever since. Intuit, which has built a strategy that revolves around AI, data touchpoints and signals, machine learning, and generative AI, is a key reference for AWS given the cloud race to host workloads.

Goodarzi said Intuit has 500,000 data points per small business. "We see all the money coming in, all of the money going out—all the transactions," he said. "We're not new to this game of AI, and particularly it was machine learning and knowledge engineering."



INTUIT

27

Now, with generative AI, Intuit has launched Intuit Assist, a horizontal assistant that will operate across the company's product portfolio. Intuit wants to enable small businesses, which can have 10 to 100 employees, and increasingly midsize businesses.

“We’re leveraging data and AI and now generative AI to really create a platform where we do the work with you and for you. You’re always in control. And human expertise is critical in what we do because we deal with people’s money, whether it’s a consumer or a small business,”

Goodarzi explained. **“We have also created on our platform a virtual expert platform where there’s always a gateway to human expertise, but that human is also AI-driven.”**

INTUIT’S GENERATIVE AI TURN

In September Intuit updated its plans and goals through 2030. Five years before, Intuit said data and AI would be critical.

“We stood here more than five years ago and shared with you that our belief was that AI was going to be as revolutionary as electricity and the internet. We believed then and we believe now that it will ignite global innovation in ways that we could never imagine possible across every single industry. Now it is time for Intuit to accelerate,” Goodarzi said.

“With the announcement of Intuit Assist, which is based on years of investment in data in AI and now particularly Gen AI. Intuit is about to paint its masterpiece for our customers and as we think about growth in the future,” he said.

Intuit’s 2025 goals are ambitious. It aims to double the household saving rate and improve the small-midsize business success rate by 10 points better than the industry average, grow to more than 200 million customers, and accelerate revenue growth. Half of SMBs fail. In 2030, Intuit hopes to make the SMB success rate 20 points better than the industry average.

The big bets for Intuit revolve around speed to benefit, connecting people to experts, unlocking smart money decisions, driving SMB growth, and disrupting the market.

Intuit estimates that its total addressable market tops \$300 billion. Today, Intuit has about 5% of that market. Goodarzi said Intuit can grow its

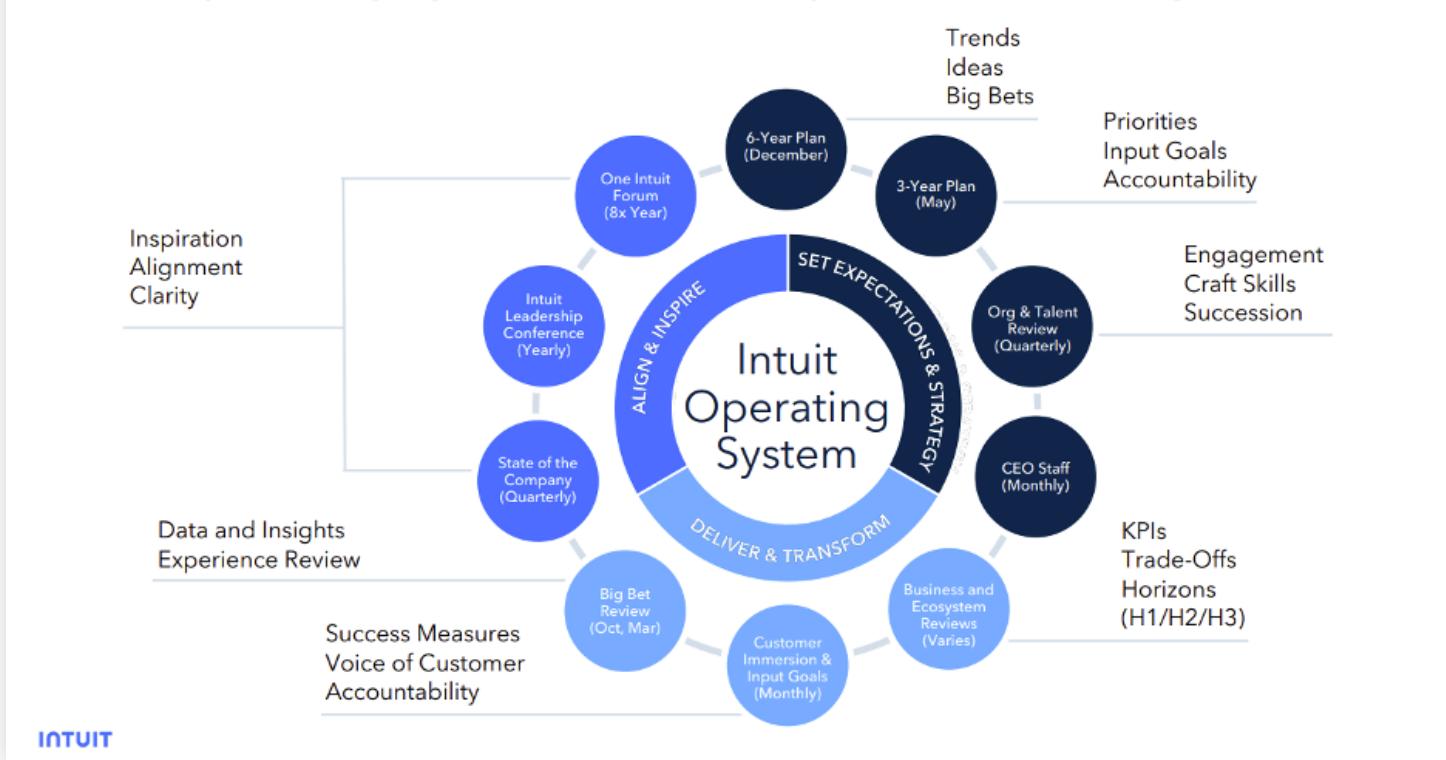
total market because it is not poaching customers from other vendors. SMB nonadoption—businesses using Google Sheets, paper, Microsoft Word, and shoeboxes of invoices—is Intuit’s biggest rival.

To get more of that market, Intuit Assist will need to play a big role. The horizontal generative AI assistant can drive customer growth, increase adoption of services, point customers to experts, and leverage Intuit’s data flywheel for new products.

Intuit Assist is powered by GenOS, Intuit’s generative operating system that enables the company to design, build, and deploy experiences. GenOS, which is designed to use multiple large language models (LLMs), is composed of the following parts:

- **GenStudio**, a developer environment to refine experiences, prompts, and code
- **GenRuntime**, an intelligent layer that can access the right data and platform capabilities and choose LLMs in real time to orchestrate and

Intuit Operating System is our competitive advantage



execute personalized action plans for customers

- **GenUX**, a library of consistent customer interfaces and flows for generative AI experiences

LMs are designed to run with Intuit's own financial LLMs that are tuned to solve tax, accounting, personal finance, and marketing issues.

Goodarzi noted that Intuit Assist's secret sauce isn't technology but data. "It sits on top of years of investment in data, years of investment in AI, and all the ecosystem of apps that we now have to provide us

the ability on behalf of our customers to do the work for them, to help them grow their business, to manage their cash flow, to manage their employees, to get their taxes done for them," he said.

Intuit CTO Alex Balazs, speaking at the company's September Investor Day, said the company's platform is anchored in what it calls the city map.

"Our city map reflects the common architecture shared by all of our products, and it drives our platform vision—it shows everything we're developing and plan to develop. It helps

us to clarify what do we have, and what do we need to have to achieve our strategy,” he said. “It helps to organize our teams and drive accountability—and we move faster, the more we consume the capabilities of our platform. It’s also important that it’s not just a technical point of view. It also reflects our business capabilities to our business architecture.”

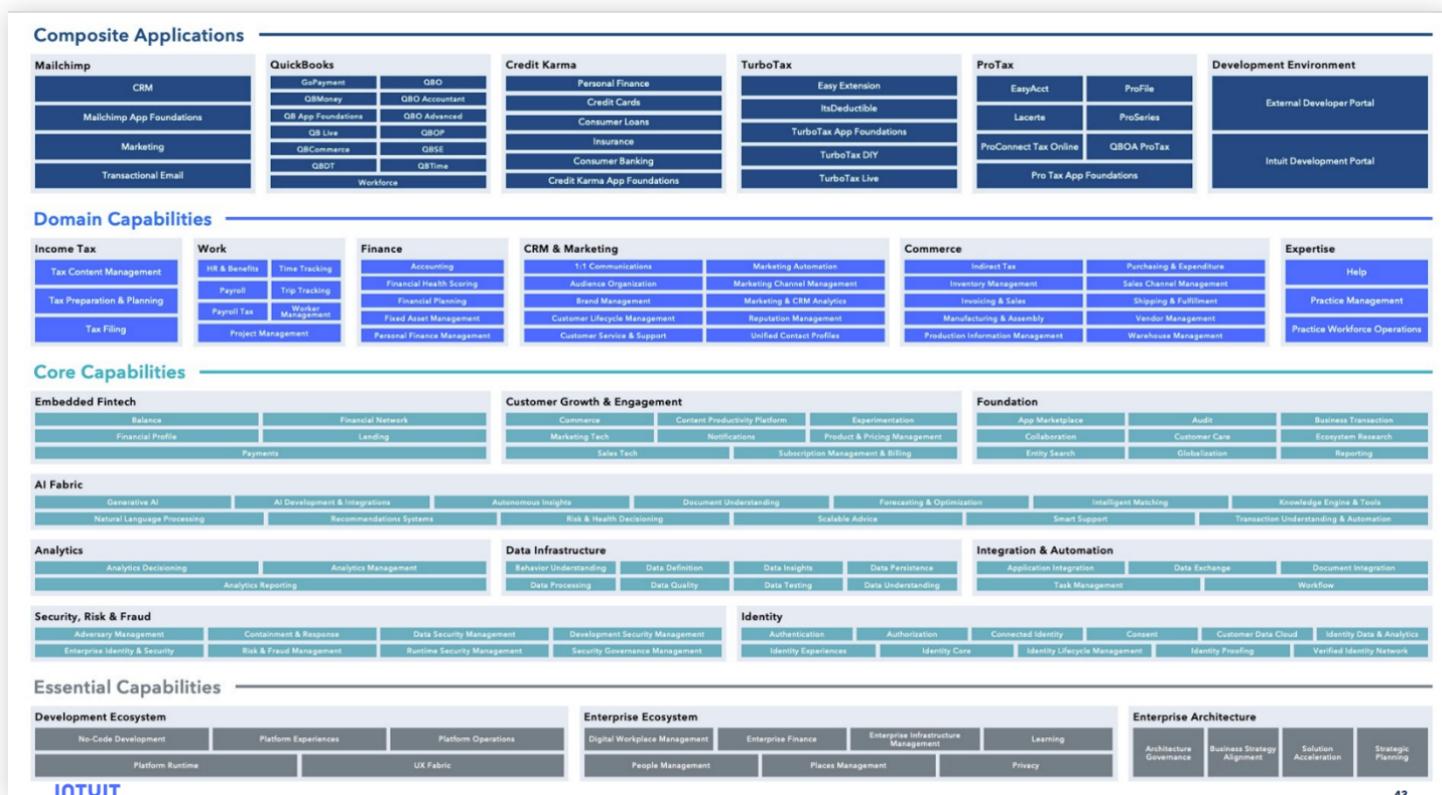
For instance, Intuit recently elevated identity as a category as well as data integration and embedding fintech. This city map approach keeps Intuit’s technology team on track and delivering experiences quickly.

“The city map evolves based on what Intuit needs to meet customer needs.”

-Alex Balazs, Intuit CFO



“We’ve supercharged our platform at GenOS to rapidly create solutions for our customers’ most important financial needs, powered by AI and generative AI,” he said. “We create a differentiated value for our customers with both scale and speed.”



THE INFRASTRUCTURE BEHIND INTUIT'S TRANSFORMATION

Nhung Ho, vice president of AI at Intuit, spoke during AWS re:Invent to outline the company's latest moves on the cloud provider.

"Intuit has built on AWS, first from moving our applications onto the cloud, to AI and machine learning with SageMaker, and now in the era of generative AI with Bedrock," Ho said. "In 2019, we declared that we were going to be an AI-driven expert platform."

"And by combining cutting-edge AI with tax and human expertise, we're delivering unparalleled experiences for our customers. Today, we've been able to achieve incredible scale of AWS, running all of our data capabilities as well as our data lake on AWS."

Ho said the AWS infrastructure enables Intuit to make more than 65 billion machine learning predictions per day and analyze more than half a million data points for small-business customers. Intuit also sees more than 810 million customer-backed AI interactions each day.

History of self-disruption and reimagination



Because of those previous moves to AWS, Intuit has ensured it has good data governance and clean data. As numerous technology executives have said, there is no AI strategy without a data strategy.

For Intuit, the AWS infrastructure has enabled it to focus on applications, build prototypes, and build out its generative AI operating system.

Ho said that Intuit must anchor its generative AI strategy to accuracy, latency, and cost. “The ability to use smaller, faster models allows us to realize significant latency gains and we’re able to host these models on

SageMaker,” Ho said. “We also use third-party algorithms because the thing you have to really optimize for is the customer experience. Bedrock gives us the optionality with a wide range of models.”

We also use third-party algorithms because the thing you have to really optimize for is the customer experience. Bedrock gives us the optionality with a wide range of models.”

-Nhung Ho, Intuit VP of AI



A composite image. On the left, a woman is speaking on a stage. On the right, a screenshot of the Intuit AI interface is displayed. The interface shows a tax summary for 2022, a sidebar with navigation options like 'My Info', 'Federal', 'Wages & Income', 'Deductions & Credits', 'Other Tax Situations', 'Federal Review', 'State Taxes', 'Review', 'File', 'Marketplace', 'Upgrade', 'Tax Tools', 'Intuit Account', 'Contact a rep', and 'Sign Out'. The main content area displays a summary of deductions, tax payments, and a balance due. A sidebar on the right provides tips for owing less next year, including increasing withholding, making estimated tax payments, claiming deductions, getting a part-time job, investing in tax-advantaged accounts, setting aside money for taxes, getting organized, and filing on time. It also includes a 'Read more here' link, 'Is this helpful?' buttons for 'Yes' and 'No', and a 'Type or ask something' input field.

Scaling with small businesses into the mid-market

Intuit Assist will help growing teams address their increasingly complex needs with our E2E ecosystem of scalable solutions

The screenshot shows a user interface for Intuit Assist. At the top, there are four user profiles with their names: "Help me qualify new leads in our sales pipeline", "Show me our cash flow forecast for the quarter", "Help me prepare for our tax filing deadline", and "Help me design a marketing campaign for our new product launch". Below these are two more profiles: "What other benefits can we offer employees?" and "I suggest an omnichannel campaign across email, SMS, and social. To start, would you like help generating email content and audience segments?". The interface is organized into several sections:

- GET CUSTOMERS**: Marketing (Speaker icon), Website & Scheduling (Calendar icon), CRM (Database icon).
- GET PAID**: Invoicing (Invoice icon), Bill Pay (Envelope icon), AP Automation (Gear icon).
- GET CAPITAL**: Banking¹ (Bank icon), In-Person (Person icon), QB Business Network (Network icon).
- PAY WORKERS**: Term Loan² (Bank icon), Get Paid Upfront³ (Bank icon), Marketplace (Market icon).
- ACCESS ADVICE**: Payroll (Person icon), Time Tracking (Clock icon), HR Information System (Database icon), Benefits³ (Person icon).
- BE COMPLIANT**: QB Live Bookkeeping (LIVE icon), QB Live Business Tax (LIVE icon), Find a ProAdvisor (Person icon), Live Setup (Phone icon), Mailchimp Live (LIVE icon), Intuit Assist (AI icon), QBO (Monitor icon), QBO Advanced (Monitor icon), Business Tax (Calendar icon), QB Money¹ (Piggy bank icon).

Footnotes at the bottom left:

1. Intuit is a technology company, not a bank. Banking services provided by our partner, Green Dot Bank, Member FDIC.
2. QuickBooks Term Loan and Get Paid Upfront loans are issued by WebBank.
3. Benefits provided through partners.

INTUIT

Intuit's inference infrastructure runs on AWS VPC so it can keep customer data separated, secure, and private, Ho said. Intuit Assist is embedded across Intuit platforms ranging from TurboTax to QuickBooks to Mailchimp and can tap into the data and knowledgebase to answer questions and create experiences.

"You have to really invest in your underlying data because it's going to be the differentiator for every experience you build," Ho said. "You also need to build in horizontal solutions from day one. There is also no one-size-fits-all LLM, so optionality is incredibly important."

CAN INTUIT MOVE UPSTREAM?

Intuit is known for its base of consumer and SMB customers, and Goodarzi noted that the midmarket isn't out of reach.

"We have defined midmarket as 10 to 100 employees; I want to be clear that our stopping point is not 100. In fact, most companies don't even define 10 to 100 employees as midmarket. It's far greater than that. Our stopping point in the near term was 100. But our goal is to be able to serve midmarket customers that are in the thousands because this is

a massive opportunity for the company,” Goodarzi said.

The midmarket bet is that Intuit has a platform that can assist every customer’s job. The biggest difference between a company with 100 employees and 1,000 is scale.

“We don’t want to serve enterprises, but we have a platform that’s easy to use and we can be very disruptive on price,” Goodarzi said. “We have a big opportunity to be disruptive and we have pricing power in the midmarket. It’s the same service, the same capabilities, just building them at scale.”

Intuit has already been seeing progress in the midmarket, said Goodarzi, who noted there’s a lot of white space in the market.

He said:

“What makes us very excited about this space is, there’s an enormous gap in those that are between sort of 10 employees and 1,000 employees because in the past there’s been players like us that can serve the low end. There have been big players, right, like the Oracles; the SAP can then serve enterprise, and this group in the middle, which is a massive market, has always had to make a choice. Do I pay a ton of money and use something that I don’t really need, or do I keep screaming at Intuit to hurry up and create a platform that I can use?”

INTUIT



AUTHOR BIO

Larry Dignan

Editor in Chief, Constellation Insights



Dignan was most recently Celonis Media's Editor in Chief where he sat at the intersection of media and marketing. He is the former Editor in Chief of ZDNet and has covered the technology industry and transformation trends for more than two decades, publishing articles in CNET, Knowledge @Wharton, WallStreetWeek.com, Interactive Week, The New York Times, and Financial Planning magazine.

He is also an Adjunct Professor at Temple University and on the Advisory Board for The Fox Business School's Institute of Business and Information Technology.

ABOUT CONSTELLATION INSIGHTS

Constellation Insights is the news and insights arm of Constellation Research, underwritten to deliver the latest in enterprise technology. Constellation Insights is led by Larry Dignan, previously Editor in Chief of Celonis Media and ZDNet with decades of enterprise technology experience.

Constellation Insights responsibilities:

- Covers the buy and sell side of enterprise technology.
- Provides a neutral lens into enterprise technology developments.
- Amplifies the Constellation Research analyst and CXO thought leaders.
- Tells real-world, human customer stories.
- Gives voice to enterprise vendors that have been drowned out of B2B media



www.ConstellationR.com/constellation-insights



[@ConstellationR](https://twitter.com/ConstellationR)



larry@ConstellationR.com



sales@ConstellationR.com

Unauthorized reproduction or distribution in whole or in part in any form, including photocopying, faxing, image scanning, e-mailing, digitization, or making available for electronic downloading is prohibited without written permission from Constellation Research Inc. Prior to photocopying, scanning, and digitizing items for internal or personal use, please contact Constellation Research Inc. All trade names, trademarks, or registered trademarks are trade names, trademarks, or registered trademarks of their respective owners.

Information contained in this publication has been compiled from sources believed to be reliable, but the accuracy of this information is not guaranteed. Constellation Research Inc. disclaims all warranties and conditions with regard to the content, express or implied, including warranties of merchantability and fitness for a particular purpose, nor assumes any legal liability for the accuracy, completeness, or usefulness of any information contained herein. Any reference to a commercial product, process, or service does not imply or constitute an endorsement of the same by Constellation Research Inc.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold or distributed with the understanding that Constellation Research Inc. is not engaged in rendering legal, accounting, or other professional services. If legal advice or other expert assistance is required, the services of a competent professional person should be sought. Constellation Research Inc. assumes no liability for how this information is used or applied nor makes any express warranties on outcomes. (Modified from the Declaration of Principles jointly adopted by the American Bar Association and a committee of publishers and associations.)

Your trust is important to us, and as such, we believe in being open and transparent about our financial relationships. With our clients' permission, we publish their names on our website.