

Neeraj Garg

CTO/SVP ENGINEERING & PRODUCT → 10x-Effective Customer-Focused Tech Organization

eCommerce | AI Infrastructure | Platforms | Scale | Innovation

- ▶ A highly successful technology leader with over **24 years** of experience across engineering and product management at **Meta**, **Microsoft**, **Amazon**, and eBay.
- ▶ Over **ten years** of experience building **marketplaces and commerce platforms** with billions in revenue. Over **seven years** of experience **building consumer products at scale (100M+ users)** and **four years** of experience in **B2B and developer platforms**.
- ▶ **Delivered over a \$1 billion** gain on a \$XX billion revenue base and a **50%+ gain** on a \$XXX MM revenue base while improving performance, availability, and security. Launched **eight zero-to-one** products, with three achieving \$100MM in revenue.
- ▶ Proficient in developing **strategies that align business, product, and technology objectives**. Successfully influenced C-level executives across multiple companies, leading to significant strategic shifts and positive business outcomes. Known for **deft execution** with deep dives, tactical leadership, and scalable mechanisms.
- ▶ Successfully led **global teams of 200+ engineers** by establishing an outcome-driven, customer-focused, collaborative culture.
- ▶ **Technologically skilled** across the stack ranging from Big Data & AI, platform services to **multi-platform consumer-grade UX**. Well-versed with **cloud-native** architectures.
- ▶ Tech expert with B. Tech (CS, IIT Delhi), MS (CS, UT-Austin), and **15+ patents**.

Leadership Overview

Director of Engineering | Meta (Facebook), 2021 – Present

Ownership: Seller Experience

Building a worldwide B2B seller-side ecosystem for commerce across Instagram and Facebook.

- ▶ Supported and launched a new product in eight months enabling XXX million in revenue within six months of launch. It required cross-company CEO-level alignment and collaboration of 10+ internal teams. Tracking to multiple billions of revenues in 2023.
- ▶ Incubated another product to deliver XXX million in 2023 and multiple billions in 2024. Proposing an industry standard.
- ▶ Hired and promoted senior leaders, doubled the team, and improved employee engagement by ten points through multiple strategy pivots.

GM (Director of Product & Engineering) | AMAZON.COM, 2019 – 2021

Reported to VP, Amazon Search | Ownership: AI Platform for Amazon Search

We processed multi PB of clickstream data to train and refresh production ML algorithms, created billions of human judgments to evaluate thousands of experiments, spending XX million USD, and provided tooling for thousands of builders to train 100K+ models.

- ▶ **Hired five managers (including two Sr. managers), grew the team by 50%**, and set up my team in India during the pandemic.
- ▶ **Created mechanisms and coached the team to work backward from the customer value**, resulting in 80% of engineers in the team focusing on the top two initiatives, accomplishing 90%+ of the goals, and earning customer trust.
- ▶ **Decreased cost and time to measure an experiment's impact on Search Quality by ~90%**. Supported ten additional languages.
- ▶ **Reduced time to adapt ML models to customer behavior by 33%, data quality issues by 90%**, infrastructure cost by 20%, and operational engineering effort by 50% while capturing up to 100% more customer behavioral data.
- ▶ **Improved the number of ML models scientists train by 30x by automating model training**.
- ▶ **Launched an initiative to adapt ML systems to customer behavior within an hour instead of days by creating a near real-time data streaming platform**. Enabled experimentation with offline logic (e.g., attribution, spam).

"Neeraj's leadership is visionary, focused, and strives to improve the team and hold them accountable to their customers for every feature. He provides insights from business and engineering standpoints, which is rare in a leader" – Amazon Peer.

Vice President, Engineering | REALTOR.COM, 2016 –2019

The #2 home search website in the US with >65M users per month.

Reported to CTO | Reports: ~200 (6 direct) in the US, Canada, and India

Recruited by a past supervisor at eBay due to the ability to connect the dots between business and technology, transform the engineering and cross-functional organization into a high-performance, world-class organization by up-leveling engineering talent, and roll out entrepreneurial “own-the-outcome” engineering culture. Led a ~200-person engineering team with end-to-end responsibility for all consumer products, including the flagship Home Search product.

- ▶ **Increased revenue, audience, and user engagement by up to 70% over three years**, growing monthly active users (MAU) to more than 66M and catapulting the firm to the #2 position nationwide. Additional 10M+ MAU from SEO. 100% growth in Apps MAU.
- ▶ **Launched a new native brand advertising product driving 25% growth in the ad revenue.**
- ▶ **Evolved Home Search from a list of results to a guided experience** with personalized insights, recommendations, and nudges.
- ▶ In partnership with the CTO, convinced the company to **reduce ad revenue per page by 50% for a faster customer experience**. Delivered it with an increase in lead revenue more than compensating for the loss in Ad-revenue.
- ▶ **Transformed from an on-prem .Net monolithic architecture to AWS cloud-native architecture** leveraging ElasticSearch, microservices, and GraphQL. **Transformed web experience from Ruby to a React-based PWA.**
- ▶ **Fostered a culture of innovation** that generated five patents and launched market-leading innovations with augmented reality, computer vision, and NLP. Google featured these innovations establishing Realtor.com as a leader in the Google ecosystem.
- ▶ **Uplevelled engineering practices** to improve availability from 96% to 99.95%, cut page loading time by 50%, slash the cost to build multi-screen features by 40%, decrease production bugs by 90%, and reduce testing costs by 60%, and time to assess by 80%.
- ▶ **Grew my team from 120 to 200. Achieved less than 5% regretted attrition** while up-leveling engineering organization and leading engineering culture transformation from a “support function” to “empowered and accountable.”

Director, Engineering | EBAY INC., 2013 – 2016, Sr Manager 2012-2013

A Fortune 500 eCommerce marketplace worth \$10B in annual revenue with 25M sellers and 170M+ active buyers globally.

Reported to Senior Director Engineering | Reports: 60 (5 direct) | Ownership: Mission-critical buyer experience.

Promoted, in recognition of the ability to drive business through technical innovation and cross-functional leadership, to deliver 300M+ annual revenue growth via improvement in search and product experience, plus drive new user acquisition via SEO.

- ▶ **Responsible for the buyer journey**, including SEO, Home Page personalization, Search experience, Product experience, Auctions, Social Commerce, and My eBay.
- ▶ **Key influencer for the company’s transition to the Structured Data Initiative**, transforming eBay from a classified-based to a product catalog-based experience.
- ▶ **Led team to invent a mechanism to boost Structured Data by 66%** by focusing on buyers’ needs. Related innovations yielded two patents and two conference papers.
- ▶ **Delivered >\$500M in revenue growth during tenure.**
- ▶ **Led development of the Collections product**, which was the foundation of the site’s redevelopment in node.js and 2013 relaunch as eBay 3.0.
- ▶ **Delivered \$100M of incremental revenue, transforming the MyEbay portal from a cost center to a profit center in nine months.**
- ▶ **Transformed the core transaction platform responsible for conducting 100% of sales on eBay into SOA architecture.**

Structured Data Initiative:

Identified gaps in structured data worth 40% (~\$400M annually) growth in SEO channel revenue.

Filed Patent US20170344622A1 (Identifying missing browse nodes).

Influenced eBay to prioritize a 5-year transformation into a product catalog-based experience.

Senior PM – Technical | AMAZON WEB SERVICES, 2010 – 2012

Part of Amazon, AWS’s portfolio of 90 cloud services, is worth \$45B in annual revenue.

Reported to VP of Engineering | Ownership: AWS Billing Platform

Brought on board in recognition of strong technical skills and customer focus and asked to enhance the AWS B2B billing platform with diverse billing models (e.g., usage, auction, subscription, prepaid) to keep pace with AWS’s explosive business growth.

Product Management | MICROSOFT, 2001 – 2010

A leading Fortune 500 software and hardware firm worth \$700B and employs more than 60K globally.

In multiple progressive roles, delivered core components of Commerce Platform supporting all Microsoft B2C business, PC maintenance pillar for security industry-disrupting Windows Live One Care, and music+gaming for Windows Phone.

- ▶ **Developed the commerce platform** powering multi-billion Microsoft B2C businesses (e.g., MSN, Xbox Live) worldwide. Led product management for billing models (e.g., subscriptions, usage, micropayments, prepay), payment methods (e.g., prepaid, credit card, direct debit, telco), B2B partnerships (e.g., acquisition, co-branded bundles, service providers), customer retention, and financial reporting components.
- ▶ **Created strategy and delivered v1 & v2 of SaaS product (WL OneCare) to manage the health and performance of consumer PCs from the cloud.**
- ▶ **Authored a paper leveraged in migrating Yahoo! search business to Microsoft** years later.
- ▶ **Co-invented a new protocol** to grant Xbox achievements to players without proprietary hardware.

Commerce Platform:

Key driver for the B2C billing platform that is now used throughout Microsoft.

Commerce platform enabled Microsoft to transition its software sales model from packaged software sold in stores to an online Software as a Service (SaaS) model.

Filed 7 patents benefiting this platform.

Senior Software Engineer | **BLUE MARTINI**, 2000 – 2001, **INTEL INC.**, 1999 – 2000

An eCommerce startup, Blue Martini, was worth \$5 Billion at its peak.

- ▶ **Improved data mining suite's throughput 5X** via tuning, multithreading, and inventing a proprietary DB data access mechanism.
- ▶ Created an AI agent to tune software and **funding for a 5-person team** by creating patented technology at Intel.

Education

Master of Science in Computer Science | **THE UNIVERSITY OF TEXAS AT AUSTIN**

Microelectronics and Computer Development (MCD) Fellowship Recipient

B. Tech in Computer Science and Engineering | **INDIAN INSTITUTE OF TECHNOLOGY, DELHI**

Areas of Expertise

● **Customer Focus** ● **Commerce** ● **SEO** ● **Billing & Payments** ● **Big Data** ● **Search** ● **Mobile** ● **Complex Problem Solving** ● **Cross-Functional Collaboration** ● **Metrics-Driven Performance** ● **Stakeholder Relations** ● **Strategic Partnerships** ● **Strategic Thinking** ● **Engineering & Technical Leadership** ● **Technical Guidance & Innovation** ● **Full-Stack Development** ● **System Design** ● **Organizational Design** ● **Team Development** ● **Recruitment & Retention** ● **Roadmap Management** ● **Communication**

Patents

1. US7016809B1: Method and system for automatically interpreting computer system performance measurements.
2. US7457791B1: Using invariants to validate applications states.
3. US7484096B1: Data validation using signatures and sampling.
4. US7949575B1: Account-related task processing
5. US7505962B2: Rating and settlements engine
6. US7565366B2: Variable rate sampling for sequence analysis
7. US9070086B2: Data-driven component reputation
8. US20080301779A1: Configuring security mechanisms utilizing a trust system.
9. US20090327502A1: Software-based aliasing for accessing multiple shared resources on a single remote host.
10. US20120047253A1: Network topology detection using a server.
11. US20120046069A1: Selective update of the core mobile device user interface through the application marketplace
12. US20120108320A1: Gaming notifications aggregator
13. US20170212957A1: Context identification for content generation
14. US20170344622A1: Identifying missing browse nodes¹
15. US20180336595A1: Method, apparatus, and computer program product for data transmission based on location proximity¹

¹ Pending