

# SKYHIGH

Expert On-Demand Digital Product Development For Large Enterprise

case study

### **SKYHIGH NETWORKS**

a McAfee Company

# Expert, On-Demand Digital Product Development For Best-In-Class Enterprise Organizations

Case Study

# **Executive Summary**

The use of modern technology as a strategy driver has profoundly altered the enterprise landscape and organizations within every industry have been impacted in myriad transformational ways. It's no question that top performing companies in healthcare, hospitality, entertainment, food, manufacturing – seemingly every sector imaginable - now depend on information technology resources and digital solutions for strategic business functions, operations, product innovation, and increasingly critical security of systems and data.

The challenge for companies looking to stay cometitive in this ever-evolving climate is in finding high-performing technical resources that can sufficiently meet the needs of enterprise leaders while maintaing high delivery standards that are priced well enough to make the ROI a clear-cut advantage.

More often than not, organizations reluctantly choose between:

- Global gold standard consulting firms who quickly shift from rock star SME's in the presales stage of assessment to junior level resources during project delivery while charging top of market rates that make ROI murky at best,
- Boutique 3rd party vendors, who can be unproven, lack experience, depth of resources, or reply on siloed, external processes resulting in disjointed project delivery that introduces greater financial and security risks, or,
- Expensive in-house talent, who require fully-loaded costs and benefits, excessive team building/management, efficient scaling to match project need, and often find themselves bogged down by internal requests and competing priorities.

When Skyhigh Networks, the leading solutions provider for enterprise cloud security (acquired by McAfee in 2018), needed to find a solution for on-demand, best-in-class product development and support expertise, they turned to Tresbu Technologies in order to mitigate the outsourcing challenges referenced above in 2 important ways.

- 1) TIGER TEAM: By deploying a senior architect tiger team for conceiving, prototyping, and developing new product ideas, and
- 2) SUPPORT TEAM: By deploying scalable support teams to mirror the scale needs of the projects in development.

# 1) TIGER TEAM

# The Need: Rapid, Top-Tier Product Development

In today's digital world, information security threats have exponentially increased and continue to evolve due to borderless networks and serverless computing. Founded in 2011, Skyhigh Networks' mission and vision is "to make cloud the most secure environment for business." As the leader and premier provider in this space, Skyhigh offers products that meet the advanced cybersecurity needs of the Fortune 500.

At the forefront of this effort is Skyhigh Networks' Research & Development Lab — an agile "Tiger Team" of experts whose objective is to ideate, prototype, and present cutting-edge proofof-concepts and bespoke digital solutions, many of which become commercial product offerings. In this high stakes, fast pace environment, Skyhigh Networks depends on top-tier talent that can perform according to their processes and unforgiving quality standards.

Given the requirements of their enterprise clients, Skyhigh Networks needed an embedded, ondemand development team that could rapidly design and develop prototypes of the highest quality. This group serves a critical role as Skyhigh Labs' sole development resource and would make or break Skyhigh Networks' ability to innovate with novel solutions to meet their clients' exceedingly high expectations.

In addition, these individuals would be exposed to potential security risks and highly proprietary trade secrets of both Skyhigh and their customers. Skyhigh Networks' needed a provider they could trust in multiple ways.

# The Solution: Tresbu Team Integration

Skyhigh Networks partnered with Tresbu Technologies to fill their need for development expertise on their Labs tiger team. Although Skyhigh has extremely talented internal resources, they required a vendor that would offer continuous fresh perspective, and not be bogged down by superfluous internal priorities and could function as an extention of their internal teams. In addition, by working with an outside, on-demand resource, Skyhigh would be able to better control the high costs normally associated in retaining best-in-class developers.

In order to meet these needs, Tresbu Technologies worked with Skyhigh's leadership to select a small team of developers from amongst Tresbu's cultivated group that would be directly embedded into Skyhigh's R&D Tiger Team.

The Tresbu resources' specific expertise includes:

- Information SecurityFull-stack Web Development
- Mobile Software and Technology
- Agile Development

- User Interface Design
- Quality Assurance
- Expertise with Skyhigh's APIs

As part of their onboarding, Tresbu's experts were able to quickly and smoothly integrate into the working group, effectively adopting Skyhigh Networks' internal processes and standards. This would allow the Skyhigh Networks Lab to operate at peak efficiency, without unnecessary silos or extraneous processes.

Tresbu's experts would also provide ongoing support to Skyhigh's internal teams for the improvement and maintenance of products they'd help to create. As embedded talent, this group would endeavor to uphold the continued effectiveness of their work.

#### Tresbu Technologies Results: Solutions Rolled Out

Since beginning their partnership with Skyhigh, Tresbu Technologies has helped to develop twelve proof-of-concept prototypes, three of which have become commercial product offerings:

#### McAfee Skyhigh Security Cloud for Amazon Web Services and Azure

These two products allow Skyhigh Networks' clients to protect their AWS infrastructure from outside security threats and any compliance risks via comprehensive monitoring, auditing, and remediation.

#### McAfee Skyhigh Security Cloud for Custom Applications

This product extends security controls to clients' internally developed applications deployed in IaaS platforms, all without additional coding or development.



# GhostWriter: MITM Exposure In Cloud Storage Services

Additionally, as a part of their effort to continuously support Skyhigh, the Tresbu team was responsible for discovering "GhostWriter", a security issue whereby data owners (Skyhigh Networks' customers) incorrectly configure their Amazon S3 Buckets, allowing public writes, thus making it possible for malicious entities to launch man-in-the-middle (MITM) attacks.

The identification of this issue and the associated strategies to manage it would upend industry-held cloud security assumptions and help to mitigate previously unknown multi-million dollar enterprise risks.



# Organizational Impact

Tresbu Technologies has been Skyhigh Networks' development resource of choice for over six years. As the sole development resource on their SkyhHigh Labs tiger team Tresbu's technical expertise continues to play an integral role in Skyhigh Networks' ability to rapidly produce enterprise-level solutions in a highly competitive cybersecurity marketplace.

Of the three prototypes produced by Tresbu as a part of Skyhigh Networks' R&D lab that would later became commercial products for Skyhigh Networks, "Security Cloud for Amazon Web Services" and "Security Cloud for Azure" continue to act as significant growth drivers for Skyhigh Networks, positively impacting both topline and bottomline performance.

Finally, Tresbu's GhostWriter discovery has served to increase Skyhigh Networks' brand authority and continued standing as an information security industry leader.

Tresbu's support has enabled Skyhigh Networks to continue developing best-in-class solutions for their enterprise customers rapidly, cost-effectively, and without sacrificing quality.

# 2) SUPPORT TEAM

# The Need: Top-to-bottom Monitoring, Support, & Maintenance

In addition to the highly talented Labs tiger team, Skyhigh also needed a broad range of junior to mid-level support competencies to help achieve scale and accelerate the release schedule to stay on plan without absorbing an out of plan bugetary impact.

# The Solution: Tresbu Contingent Workflow Outsourcing

After spending considerable time with Skyhigh managent, a resource plan was developed that included a maleable team that could quickly expand and contract depending on project need with low impact to the existing team and low friction management requirements from Skyhigh leadership.

The size and scope of this mostly junior to mid-level team should be more of a tactical ops set of decisions that are throttled only on an as-needed basis with minimum impact to the overall project milestones and timelines of the organization.

Here again, Tresbu was selected at the ONLY outsouring partner and for the past 6+ years has managed this team from as few as 14 resources to as many as 75.

- Basic on-going support
- Technical and functional resources
- Junior-level admin
- Mid-level development

- Scalable with < 1 week ramps
- Streamlined On-boarding
- 10-100 resources on plan

# **Organizational Impact**

As Skyhigh Networks' continguent support workforce over the past six years, Tresbu has developed a shorthand and trust with Skyhigh leadership for quickly ramping up and down resources, adding new competencies and processes, and aligning shifting strategy and policies with specific resource requirements in an efficient, low touch fashion.

Having these low criticality needs reliably managed from an outcourcing partner, Skyhigh Networks is able to allow its most precious resources to focus more time and attention on more strategic, high ROI initiatives that help the organization meet big picture goals and drive value growth in a competitive market.

# Tresbu Technologies

#### Your Partner For On-Demand Digital Product Development & Support

We exist to help our clients harness the disruption in technology that challenges the status quo. Today, the customer is in the driver's seat – and the available solutions have the potential to erase the gap between what customers want and what companies can provide.

Our unique blend of technical expertise, product development experience, contingent workforce management, and passion for solving business challenges allow us to provide innovative services and creative digital solutions for our clients.

www.tresbu.com