3 Common Emerging Tech Myths

August 21, 2020

Mark Campbell
Chief Innovation Officer

At EVOTEK Labs we focus solely on introducing emerging technology solutions to our customers, so we consistently hear several recurring "suburban" IT legends. These are the three most pervasive emerging tech myths we encounter:

1. Most emerging tech comes from large tech firms

Despite the ubiquitous influence of upper-right quadrants, this is not the case, due to two related but distinct classifications:

Enabling Technologies: The underlying discoveries that enable today's technologies primarily germinate and grow in academia and the open source community, not in large industrial R&D labs. This century's most disruptive innovations, such as blockchain, application containers, deep neural networks, Hadoop, the Internet of Things, voice and facial recognition, 3D printing, augmented reality, and CRISPR illustrate this clearly. There are exceptions from big corporations, like Intel's Optane or IBM's and Google's quantum computers, but breakthroughs from large commercial R&D labs are a 20th-century, not a 21st-century phenomenon.

Wait, don't big firms file the most patents?! Because of weak intellectual property law enforcement and nation-state invention theft, patents are becoming more archaic than effective. Patents in the 21st century, are more of a pseudo-marketing bragging point (like switching to eco-friendly paper straws in the breakroom).

Emerging Technology Solutions: Emerging tech solutions are products built on enabling technologies. You'd think that large tech firms with lavish R&D budgets would churn out new solutions based on the constant stream of enabling technologies. You'd be wrong. To prove this point, look no further than any large tech firm's product line card where you'll be hard-pressed to find an emerging tech solution developed in-house. Clayton Christensen's "Innovator's Dilemma" is even truer now as almost all large tech firms fund their own corporate venture arm to find and fund startups to fill the innovation gap. The vast majority of new products at major tech companies come through acquisition.

Of course, start-ups can grow into incumbents. But their ability to invent and introduce new products diminishes as they age. The Google Kubernetes, Amazon EC2 & S3 and Tesla Autopilot are greatly outnumbered by the Apple Siri, Google's YouTube, and Facebook Oculus, WhatsApp, and Instagram.

Frankly, "out-ovation" is cheaper than "in-novation."

2. Emerging tech is all hype

There's certainly an unseemly amount of flash and sizzle in the emerging tech market, but a glitzy promotional veneer often covers a truly remarkable solution. There are, however, many start-ups whose marketing department outpaces their product engineering teams. Developing an emerging tech solution is extremely difficult. New tech start-ups try to create something novel by leveraging enabling technologies still in their infancy. Unless you mimic an existing solution, the creative process never proceeds in a straight line. Product development is a minefield of dead-end experiments and technical pivots that can wreak havoc on schedules and budgets.

it's your future ... go create it

Despite unpredictable development, start-ups only have so much venture capital oxygen in the tank. This provides a strong temptation to fudge the numbers, bump performance claims, and inflate the functionality of underdeveloped features. It's much easier to whip out a snazzy tagline than a neural network to perform heart surgery over the internet. This phenomenon is so common, Gartner developed their Hype Cycle to trace the predictable path of unmet expectations that enabling technologies unerringly follow. Emerging technology companies built on these enabling technologies follow a parallel path.

Fortunately, there are legions of legitimate start-ups to keep the whole innovation engine running. And even over-hyped start-ups sometimes catch up with the promises on their website. But how do you machete your way through the forest of meaningless buzzwords? You can painstakingly interview each potential solution company, or you can partner with someone who already has, like EVOTEK Labs. Regardless, you will still want to prove each solution to ensure it not only works as advertised but works in your environment to your defined needs.

3.   Picking a successful emerging tech solution is a coin toss
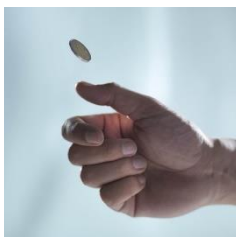
Actually, your odds are much **worse** than a coin toss because of the high infant mortality rate among start-ups. Statistically, a random start-up is hundreds of times more likely to go bankrupt than turn into a billion-dollar unicorn. Many companies unfortunately select emerging tech solutions via a serendipitous lottery driven by phrases like "I have a buddy who just joined…"; "I read an article about…"; or "They came up first on Google." But there are much more objective methods with infinitely better odds.

The best way to find an emerging tech solution is not to focus on the solution. The more important *problem* is the *problem*. By thoroughly identifying, defining, and analyzing a business problem, you can spot the opportunity that lies beyond. You can only begin the search for a solution after you have a complete grasp of the challenge, constraints, assumptions (true and false), lessons from past attempts, and quantified the rewards success could bring. Sadly, upon identifying a problem, many organizations immediately start their solution search and miss the chance to transform their problem into an opportunity.

You've defined an opportunity and determined the weapons in your arsenal can't exploit it. You now must sift through thousands of emerging tech solutions to find a handful of possible candidates. Online tools and services can help greatly, but you'll only spot a fraction of the market's viable solutions. Dancing through the buzzwords and catchy slogans is daunting and tedious. Once you've identified a good-looking emerging tech solution, how can you tell if it works, scales, is secure, or if the company will even be around in six months?

A company's investment source and recent funding rounds is revealing. If a top-tier venture firm has invested in them, you know the start-up swam through the industry's most grueling shark tank and survived. While this is certainly no guarantee of success, it does boost your odds astronomically. Other factors like the backgrounds of the founders, valuation trends, total addressable market, market validation, and the enabling technologies they leverage, will further tilt probability in your favor.

This is an onerous task. However, you can bypass all this legwork by partnering with a tech-agnostic emerging tech research firm, like EVOTEK Labs, who analyzes problem trends across hundreds of IT organizations and has an analysis repository of thousands of start-ups to maximize your chance of a successful outcomes.

We can help

Although these are only three of the most common myths we hear, they are representative of the misconceptions that lead to unsuccessful deployments, unmet expectations, and failed technical transformation initiatives. At EVOTEK Labs, we believe each of these pitfalls can be avoided. We would love to come alongside your team and help create your future.

it's your future ... go create it