

THE **ENTERPRISERS** PROJECT

CIO tips: Investing in long-term innovation

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In the age of digital business, most company leaders believe that they must innovate or die. But how do you keep innovation going over the long haul?

In part one of a two-part interview, [Jenny Peng](#), CTO of enterprise software company [Aptean](#), explains how she keeps innovation going strong at her company, and how you can too.



Q&A

The Enterprisers Project (TEP): Every company today strives to be more innovative and create successful new products. What's your secret?

Peng: Fostering innovation is a core value for us at Aptean. To really live that value, there are two things I think have to happen to keep innovation going.

First, you have to find top talent with high potential and high intellectual curiosity and build teams around those people. Those are the people who will challenge the status quo and are always looking for opportunities to do things differently and continually improve processes.

The second way to keep innovation going is to place a high value on it. You can do that by establishing a formal program, with executive sponsorship, to find creative ideas and promote innovation. You should set aside a discrete budget to fund innovation projects and research labs.

Driving a culture that fosters innovation is only sustainable when sharing, harnessing, and collaborating on creative ideas is a part of your company's DNA and the DNA of all employees. Giving employees the ability to be disruptive and take risks to challenge the status quo creates an environment where innovation flourishes.

TEP: How do you know when to invest in R&D? Early in the process of product creation?

Peng: In my opinion, investing in R&D, especially with new product creation, should always follow an agile and incremental approach. When evaluating a product idea, look for sufficient evidence for urgency in the market, along with a pervasiveness and willingness to pay. It's best not to wait to put product ideas forward when they are fully baked, especially given today's speed of technology innovations. If you maintain agility and an incremental approach, R&D can quickly learn what works and what doesn't work, perform a market success review, and then apply course corrections to adapt to changing conditions. You need to accept that there will be failures along the way, and you might have limited information at the start of a project. Use those instances to continuously learn and improve.

Also, since technology is changing so rapidly, it is key to keep the needs of your customers in mind. Incremental innovation is often in the best interest of the customer. Giving them the right amount of new functionality at the right pace for consumption is important.

TEP: How should R&D investment compare with market research investment?

Peng: My approach to R&D investment is to look at it as three distinct horizons based on its future impact. With this approach, a company can decide the percentage of investment allocation for each of the horizons and then align its business strategy to the expected results in the short term, near future, and long term timeline for growth.

"Horizon one" are investments with approximately zero to two-year growth impact. This is typically the current set of roadmap projects and sustenance engineering work, including bug fixes, enhancements, and roadmap commitments.

"Horizon two" are those initiatives that will drive revenue growth in the two-to-five-year horizon. It's what will help the company to gain a stronger position relative to its competitors, and invest in emerging opportunities that are likely to generate substantial profit for future growth.

Lastly, "horizon three" are ideas that will seed future opportunities and are mostly embryonic. These ideas tend to have five to 10-year horizons in terms of growth impact.

TEP: How do you know when it's time to stop investing in R&D for a potential product or feature – that it's time to pull the plug?

Peng: This is a good question. Our company survives on keeping products alive for a long time, so the basic answer on when to stop investing in a product is when the market conditions shift to not support the investment. That means there are not any customers or prospects willing to fund R&D through license sales or ongoing maintenance.

There is a balance between sunsetting a product too early or too late. If we stop investing too soon, we miss out on supporting our existing customers who still get value from our product, and we are putting at risk future revenues that are possibly highly profitable. If we continue to invest in a product that offers no long-term strategic value,

we are spending time, money, and mindshare that should be spent in areas where we should be investing for the future for our customers.

TEP: What advice would you offer other CIOs and CTOs about investing in R&D?

Peng: I would tell other CIOs and CTOs when investing in R&D, don't lose sight of the next horizon or ignore those horizon three opportunities. Striking a balance between the horizons is an important component to your business strategy. R&D doesn't happen overnight. To be successful you have to have a pipeline and foster creativity to allow ideas to flourish.

Be agile and dynamic across platforms and don't operate in a silo or a vacuum. Cross-train your employees to create an agile resource pool. This lets you invest in opportunities that can be applied to multiple products across the portfolio, making your R&D dollars go further.