

Consumer adoption: How to predict the tipping point

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“Predicting when consumers will adopt a new product en masse is incredibly difficult. It’s not enough to build something new, or cool. To reach a tipping point, the new product must be definitively better than existing choices but also fit with consumers’ perceptions about what switching should cost” says Imperial College professor Mark Kennedy

How long has it taken various innovations to reach the 50-million-user mark? According to [one study by Oxford University and Citi](#), it took the telephone 75 years and the radio 38 years. It was down to 13 years for the TV and just four for the web. People marvelled when *Angry Birds Space* hit the milestone in only 35 days – until *Pokémon Go* did it in 10.

Forget about how long the tipping point takes - it’s hype. For most businesses, and most innovations, the process is complex and multi-stage. And according to Dr Mark Kennedy, associate professor at Imperial College London, it’s also much more of a grind.

“You have to get past the entrepreneur’s own certainty that what they’ve created is just so much better than everything else,” he says. “It really comes down to the world’s collective assessment of whether that’s true or not.”

And that means not only creating something that is definitively, unarguably better than what’s currently in the market – it means packaging it in such a way that consumers overcome the cost they feel is involved in switching from their current choice.

“Unless the combination of those two things is compelling, people just stick with what they know.”

Curve balls

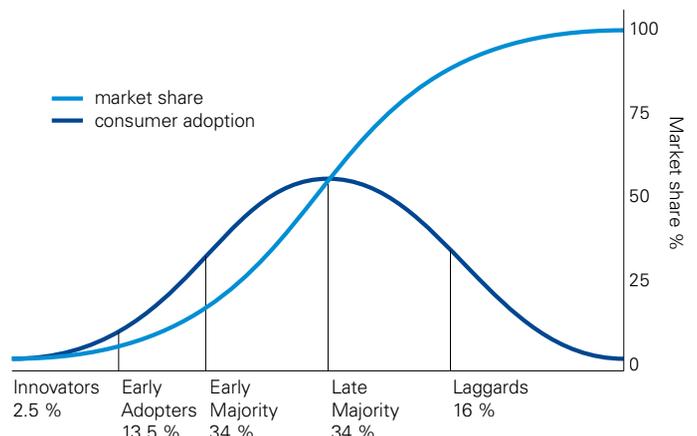
Kennedy studies the emergence of new markets and industries. The field isn’t short of academic models for new technology adoption – take your pick from Bass; Generalized Bass (Price); Bass model variant; Simple

Logistic; Gompertz and the FLOG Box & Cox model. For those outside academia, he admits, much of the theoretical work is pretty dry. But there are two curve balls – or more precisely two curves – that all business people need to know.

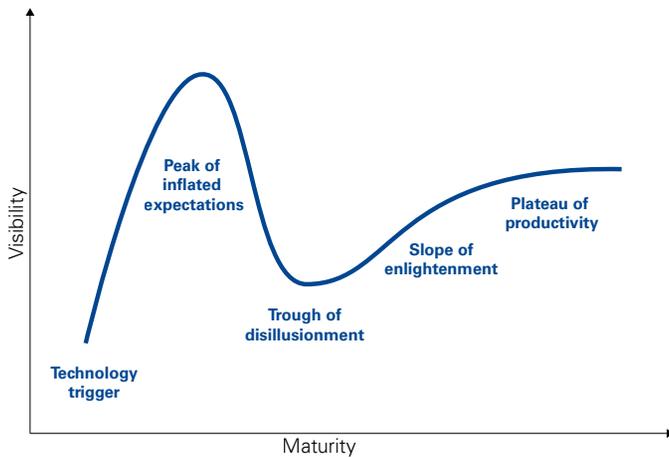
The first is the S-curve – the adoption model that shows a small group of early adopters giving an innovation its slow start; the rapid uptake when the message gets through to the mass market; and the slow final section of the S where the more risk-averse consumers finally come aboard.

“We’ve known about this curve for a long time, but you can tweak it,” says Kennedy. “At the peak, for example, adding an incremental innovation can keep uptake accelerating. But on the downside, you have to be aware that other innovations can come along and completely mess up your situation.”

S-curve adoption model



Hype cycle



The other curve that's important is the hype cycle – first developed by Gartner. It charts innovations through five stages.

1. Technology Trigger is the theoretical or research breakthrough. People start to get excited.
2. The Peak of Inflated Expectations is the point at which public discussion gets most excitable. But almost no one has a proven product; no one is really buying.
3. The Trough of Disillusionment follows – usually accompanied by the failure of businesses too early into the field. The survivors will be those who delight early adopters.
4. The Slope of Enlightenment is the point – like the ramp-up in the S-curve – when products with a clear practical benefit emerge. Customers overcome the inertia Kennedy described around the cost of switching.
5. The Plateau of Productivity is when mass adoption really beds in and it's much easier for customers to commit to the new tech.

In either model, says Kennedy, “a small band of hardy individuals at the start are willing to take the risk. But what's misleading about the hype cycle is that you sometimes get the S-curve of adoption without all the hype. Technology can go stealth mode until it blows up hugely.”

Pick any winners?

He cites the smartphone as a great example – the period of time when it was thought of as hype was remarkably short. In many ways the influence of the devices continues to astound. By contrast, nanotechnology has had all the hype and barely any applications. Artificial intelligence? Hugely hyped, and perhaps only now is it close to delivering.

“That's what we're trying to understand with our new approaches to analytics,” Kennedy says.

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“It's less about predicting what's going to take off based on the substance of the technology, and more about what people are saying about innovations. Using text mining, for example, we can start to build models that show us the momentum for changes in attitude towards innovation.”

Time your run to catch the wave

So what does that mean for decision-makers trying to time their investments in new products or services? “You need options,” he says. “Think of your business’s innovations as a portfolio to be traded. Using the kind of analytics we’re working on, you can start to identify which are seeing changes in momentum and the highest potential impact – and therefore deserve capital investment.”

In other words, looking for a tech “tipping point” is a fool’s errand. The aim is to chart the rate at which things are spreading and time your run to catch the wave.

And, he warns, don’t be seduced by first-mover advantage. “Look at Apple,” Kennedy concludes. “They’re almost never first to a market. They wait and watch and figure out when demand is there to support a product that’s clearly superior – and then they deliver it.”



- **On your reading list:** [Platforms, Markets and Innovation](#) by Professor. Annabelle Gawer. This 2009 book has been updated and remains a definitive guide to how industrial innovation has changed in the 21st century.
- **On your board agenda:** Do we have a sufficiently broad portfolio of innovative developments to adopt an efficient “innovation trading” approach to riding new product waves?
- **Anticipate tomorrow...:** Cycles of adoption continue to accelerate, but the sophistication of many genuinely innovative technologies will demand more, and more sophisticated, co-ordination through the supply chain and horizontally (even among rivals). Are you capable of working that way?
- **...deliver today:** Look for incremental innovation to build on existing products. It’s a way of prolonging their life and creating a more defensible position against external innovation by raising consumers’ perception of the cost of leaving your product.



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