

Innovation Decisions: Using the Gartner Hype Cycle

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Introduction

The 21st century library has already faced an abundance of innovations, and it is not going to end. How is your library going to make decisions about adoption of up and coming innovations? Should you adopt them, and if so, when? Using the Gartner Hype Cycle can help you make informed decisions while managing your organization's tolerance for risk.

The Hype Cycle Defined

The Gartner Hype Cycle is named for the IT research and advisory firm, Gartner, Inc. According to their Web site:

Hype Cycles provide a graphic representation of the maturity and adoption of technologies and applications, and how they are potentially relevant to solving real business problems and exploiting new opportunities. Gartner Hype Cycle methodology gives you a view of how a technology or application will evolve over time, providing a sound source of insight to manage its deployment within the context of your specific business goals.¹

Jackie Fenn, the originator of the Hype Cycle and co-author of the 2008 book *Mastering the Hype Cycle* says the pattern,

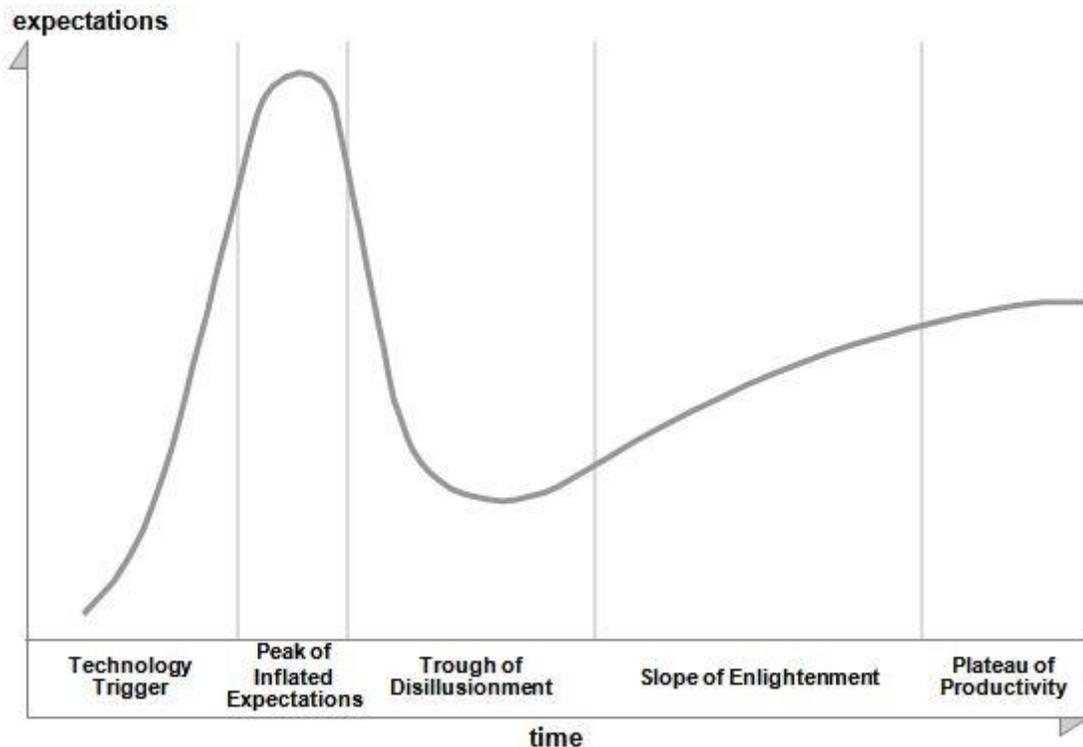
...happens over and over and over—so much that you must wonder how capable companies, adopting highly touted innovations, so often fail to understand what is happening. Why do so many organizations seem to rush lemminglike to an innovation, only to abandon it when it falls short of initial expectations?²

The pattern Fenn discusses happens so frequently it has been named the Hype Cycle because initial enthusiasm and excitement is based almost exclusively on hype. The Hype Cycle can be used in analyzing any innovation, for example, shopper incentive programs, popular management practices, or technologies that are much discussed by librarians.

Hype Cycle Phases

There are five phases in the Hype Cycle, according to Fenn's co-authored book.³ The first phase, *Innovation Trigger*, begins when the general public becomes aware of the initial hype of

an innovation. This could be a new product on the market, a scientific breakthrough, or similar event that causes great excitement and hope. Here, people begin talking about the innovation and word spreads quickly.



During the second phase, *Peak of Inflated Expectations*, innovators and early adopters begin using and trialing the new innovation while others worry about being left behind. Press and media coverage is highly optimistic.

After the excitement peaks, the *Trough of Disillusionment* begins. This phase of the Hype Cycle sees waning interest in the innovation as consumers look beyond the initial excitement and hype. This is the time period when many adopters, including companies and entire industries, abandon a new technology, believing that negative public opinion indicates the life of the technology has come to an end. In fact it is possible the innovation simply has not yet hit the next stage in the Hype Cycle, the *Slope of Enlightenment*.

During the *Slope of Enlightenment*, early adopters experience benefits of adoption and more fully understand where the innovation can be used effectively.

The final phase, the *Plateau of Productivity*, happens when the long-term benefits of an innovation take hold and are integrated into regular activities and work flows, making adoption a significantly less risky proposition.

Tolerance for Risk: Identify your Enterprise Personality

According to *Mastering the Hype Cycle*, making good decisions based on the Hype Cycle requires your organization to balance three variables: 1) The potential value of the innovation to your organization; 2) The maturity of the innovation; 3) Your organization's tolerance for risk.⁴ Not all innovations, or tools, are valuable to every institution.⁵ The value of an innovation should be weighed against the maturity of the innovation and where your library wants to enter the cycle may depend on several factors including your institutional personality. As in anything, adoption decisions come down to evaluating the need of your institution and your stakeholders.

Beyond considering the value and maturity of the innovation, libraries should also consider their risk tolerance. In *Mastering the Hype Cycle* the authors discuss enterprise personalities and how identifying your organization's personality can help in managing your tolerance for risk:⁶

Type A	Organizational Pioneers - Consciously adopt high-risk/high-reward strategies to gain high-potential rewards and competitive advantage
Type B	Willing to support moderate risk in the adoption of innovation and have the skills and culture to support new initiatives
Type C	Organizations are cautious adopters and are unable or unwilling institutionally to handle high levels of risk

Most organizations have dominant traits and it is important to know what those are in the decision making process. Type C organizations tend to allow others to take the risks, waiting to adopt during the *Plateau of Productivity*, whereas type B organizations try to hit the middle of the hype cycle, learning from A's, but not wanting to wait until they are far behind the curve.

The authors of this article would identify their library, Oregon State University Libraries and Press, as sitting somewhere between Type A and Type B. OSU Libraries' administration supports innovation, and provides opportunities for exploration and research, but risks must be calculated and well thought out. Calling administration selectively aggressive in decision-making would not be incorrect; at times the library does pursue innovations that are in the first two phases of the Hype Cycle, the *Technology Trigger* and the *Peak of Inflated Expectations*. And, like most institutions, sometimes administration and staff fall prey to a number of potential pitfalls and traps, which can lead to adopting too early, giving up too soon, adopting too late, or hanging on too long.

Avoiding Hype Cycle Traps

According to Fenn and Raskino, the most common trap associated with the hype cycle is the tendency to adopt an innovation too early, when the hype is peaking but the value of the innovation is not yet predictable.⁷

Trap 1: Adopting Too Early

At Oregon State University Libraries & Press (OSULP), administrators and staff pursue innovations that are useful for patrons, primarily students and faculty, while simultaneously trying to avoid the hype. As stated earlier, OSULP might be considered an A or B personality; therefore, falling for the hype is a possibility. It is sometimes difficult to avoid jumping “lemminglike” on the newest and coolest thing; however, it is part of the strategic plan to be an innovative library.

Trap 2: Giving Up Too Soon

It can be difficult to stay the course when your library has decided to adopt a technology and the hype begins turning negatively. Libraries are presented with two different pathways: one is to drop the work and walk away - which Seth Godin, in *The Dip: A Little Book that Teaches You When to Quit (and When to Stick)* refers to as “strategic quitting,” and the other is to put your head down and keep working at it.⁸

Both paths require significant consideration, and making the best choice for a library requires deliberate assessment of the options. The reason for abandonment should not be solely based on what peer libraries are doing. A library should use the same rigorous decision-making criteria used during the initial decision-making process by assessing the potential value of the innovation, and the time and resources it will take to achieve the goals. As with all decisions, planning regular evaluation and assessment of the innovation is essential to work through the *Trough of Disillusionment*. This evaluation process should be part of the initial plan, rather than a gut reaction to what can feel like a crisis. Most innovative ideas deliver positive outcomes, as long as adopters are willing to learn, iterate, and change to get them right.

Trap 3: Adopting Too Late

Librarians are faced with making decisions about various kinds of innovation hype all the time, leading many to wonder where they should be focusing their attention. When librarians avoid all but the loudest innovations, they find themselves limited to two points on the hype cycle: The *Peak of Inflated Expectations* and the *Plateau of Productivity*. However, opportunities can be missed during the *Innovation Trigger* and *Trough of Disillusionment*.

Trap 4: Hanging On Too Long

Sometimes organizations make decisions based on sound research, but the output is not as expected. Abandoning or continuing the project should be based on an assessment of the goals, rather than intentions, fears, or previous psychological investments.

Applying the Hype Cycle to OSU Libraries and Press

The following section describes how the Hype Cycle might be applied to two innovations adopted at the Oregon State University Libraries and Press.

Example 1: eReaders

In August of 2011 the authors of this article, along with two additional co-researchers, began a yearlong longitudinal qualitative study of eReader use and adoption by 30 librarian and press colleagues.⁹ Each participant was given one of four e-ink eReaders (Nook, Kindle, Kobo, Sony) and was interviewed four times over the course of the year. During the first interviews, participants' excitement was palpable as they eagerly looked forward to using their free eReaders. However, immediately upon launch of the study participants quickly transitioned from feelings of excitement to frustration. When the study ended twelve months later, the majority of participants had abandoned use of their eReaders.

Approximately halfway through the yearlong study the authors first encountered the Gartner Hype Cycle for Emerging Technologies. At the conclusion of the study, the Hype Cycle for Emerging Technologies was used by the authors to illustrate and explain eReader adoption by library faculty and staff for a 2013 ACRL Virtual Conference presentation.¹⁰ In the presentation the authors showed the 2012 Hype Cycle for Emerging Technologies graph, which did not show eReaders but did show tablets. What happened to the eReader, which was on the 2011 cycle? When asked via email, a Gartner sales representative stated, "From what I see and hear, the eReader market is collapsing as most consumers don't want a device that does only one thing."¹¹

In *Mastering the Hype Cycle*, Fenn and Raskino indicate there are many reasons innovations may fall off the hype cycle before reaching the *Plateau of Productivity*, "...specific protocols, operating systems, products, and devices may be supplanted by alternatives."¹² Many participants in the eReader study indicated that although they would not be continuing to use their e-ink eReader, they would be reading electronic books and other e-materials on their iPhones, iPads, or other tablets. Of course, some participants also said they would be adding their eReaders to their lengthy list of reading devices.

At the conclusion of the eReader study, OSU Libraries decided to implement a Samsung tablet-lending program. Using the Gartner Hype Cycle of Emerging Technologies, 2012, would have led to the same outcome.

Example 2: 3-D Printers

Oregon State University has an annual call for proposals from university departments and staff relating to technology innovations benefitting the student population. The funds for these projects are allocated from the technology resource fee (TRF) students pay each term. In February 2013, the OSULP submitted a proposal to the TRF committee for the implementation of a publicly available 3-D printer. The proposal coincided with media hype around 3-D printing; in the 2012 Gartner Hype Cycle of Emerging Technologies 3-D printing had moved from *Technology Trigger* into the *Peak of Inflated Expectations*. Ultimately, the library was not awarded TRF funding, but the proposal merited further consideration by the library, even though 3-D printing remained at the Peak of Inflated Expectations in the 2013 cycle. The 3-D printer

was identified and purchased using library gift funds. A team was convened including faculty from the College of Engineering, a graduate student from the College of Education who is involved with free-choice learning, marketing personnel, and students. If your library is considering implementing 3-D printing, and you are willing to take a risk, as a Type A institution, now may be the time if 3-D printing fits with the goals of your library. However, if your institution is a Type C, you should wait at least another year or two, and move toward implementing 3-D printing once it has hit the *Slope of Enlightenment*, and other libraries have clearly communicated the usefulness and application of 3-D printers in libraries.

Conclusion

The Gartner Hype Cycle is often used in popular media and press to discuss emerging technologies and other innovations. Library administrators can use the book, *Mastering the Hype Cycle*, to identify their enterprise personality. Then, administrators can use any of the published Gartner Hype Cycles, or create their own, to assist in decision-making related to innovation adoption.

Obtaining the Hype Cycle Graph or Report

Gartner, Inc. publishes numerous Hype Cycle reports every year and in 2013 they evaluated “the maturity of over 2,000 technologies and trends in 102 areas.”¹³ To view all of the Gartner Hype Cycles, your library must have a subscription to the Gartner Research Portal. If your library cannot afford this luxury, you can find the oft-cited annual Hype Cycle for Emerging Technologies graph through a simple Google image search. Gartner research is also freely available on their blog, <http://blogs.gartner.com>, and via analyst webinars, www.gartner.com/webinars, which are archived for approximately six months.¹⁴

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Published: August 2014

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