

Innovation Speed to Market Report

How Financial Sector Firms Manage Innovation Projects to Meet Timelines and Customer Needs

by Jim Van Dyke

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Presented by CIST COMPARE



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About the Author

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Jim has presented to venues including executive boards, vendors' client summits and agencies including the U.S. House of Representatives (Congress) and the Ways and Means Committee.

He has been widely cited in global media including Bloomberg, *Financial Times*, Fox News Live Television, National Public Radio (NPR), the front page of the New York Times and Wired magazine.

Learn more at www.futurion.digital

Introduction

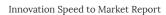
How do financial services and payments firms successfully innovate, to move nimbly from idea to full customer availability?

Interviews with leaders reveal many speedbumps, potholes and pitfalls amidst rare fast stretches of smooth pavement. Yet without finding a way to innovate quickly on the path toward fulfillment of customer, competitive and market opportunities, organizations will quickly become irrelevant. This research report asked 28 leaders the same three questions about their largest innovation processes:

How are projects structured?

How long do they take on average?

What has been learned about optimizing cycle-times and meeting customer needs?



Methodology

28 leaders of digital, customer experience, innovation, line-of-business (LOB) or technology functions contributed to this research report in September and October of 2017, via a combination of phone and in-person interviews that concluded at the Money2020 conference. All interviewees have had a leadership role in significant fintech innovation projects at organizations ranging from several top-four U.S. banks with over a trillion in assets, down to those with under \$200mm in assets. Late-adopting implementors are likely to be somewhat underrepresented in this report, both by intent and recruitment method. Interviewees, predominantly in the U.S. or Canada (and in four instances, worldwide), were selected from a variety of categories: Asset management; banking and credit union; insurance; investments; payments including card issuance, moneymovement and merchant terminals used by consumers; customer categories including retail, high net worth, commercial and merchant. No direct compensation was provided to interviewees.

Realizing that interviewees might be reticent to cite an optimistic project duration figure, respondents were first asked to describe the major stages for the typical digital innovation project, followed by average large-project duration. By intention, interviewees were asked to describe the stages in their own terms, in order to hear them articulate and emphasize parts of the innovation process that are most memorable, vital or otherwise unique to them.

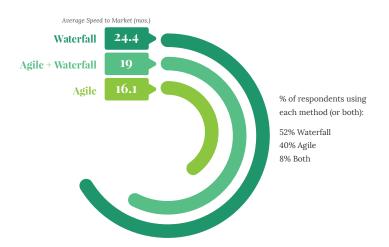


Executive Overview

- Project durations vary widely—ranging from six months to five years—with the typical project duration being 24 months and a mean average of 21.5 months. Throughout all interviews, it was apparent that innovation methodologies are the reason for such radically wide variations.
- Innovation practices at financial services firms appear to be significantly less mature and productive than those at software firms, representing risk that the latter will outmaneuver the former. Financial sector firms' project stages vary dramatically among all respondents and had very inconsistent mention of Lean¹ methodologies that organize work according to customer demand and business value (such as Portfolio Management or Value Engineering).
- Some traditional financial sector firms only allow innovation ideas to originate from top executives. At all such firms, demonstrated respondent confidence and morale was markedly lower.
- There was a strong observed (i.e. generally not explicitly stated) correlation between an organization's past ability to rapidly execute and a respondent's demonstrated morale and level of engagement. In turn, the author predicts that a likely by-product of the ability to rapidly innovate with high alignment to customer needs might be the benefit of a stronger ability to attract, motivate and retain top quality talent in the competitive fintech labor market.
- Many top innovations are viewed as neither

- discretionary nor of direct contribution to customer value, but are ultimately viewed as no less important than others. For example, many cited efforts to adopt an API framework or particular vendor relationships that only make future areas of direct customer value more possible. In addition, several smaller FI executives lamented actions on the part of their technology vendors that they viewed as standing in the way of their ability to release new innovations to market.
- Risk- or security-focused team members are unexpectedly incredibly valuable in ideation or problem-solving at several FI shops, possibly because they are required, on an ongoing basis, to creatively address formidable, dynamic problems.
- Innovation labs: Artifact or future? There's no consensus on value, so we simply present the conditions that most call for their existence.
- Just now going mobile-first? You might be a step behind the top innovators, who are currently developing in a *mobile-only* environment, where online is intentionally left as an afterthought.
- The fastest and most effective innovators acknowledge, embrace and thus master their complexity, with cross-functional teams hatched at the ideation stage. While the team formulation may vary significantly from one FI to another, within any one organization it is always the same, and stays intact. This helps them navigate projects all the way to general customer availability with greater speed and inclusion of all essential requirements.

Of the FIs surveyed, the typical project duration was 24 months, with a mean average of 21.5. Perhaps just as telling, average project duration figures vary significantly depending on whether the business described their process steps in stages that indicate use of Agile, Waterfall or a combination of both methodologies:



Financial Services Must *lean* to Become More Like Software Companies

The sentence above is not a typo. Rather, it reflects that the development processes described by this report's interviewees often reflect methodologies that are too slow, top-down, wasteful and ultimately out of step with what today's tech-forward customer demands. Indeed, an executive with a \$1T bank said, "We're more like a software developer than a bank ... and we have to be competitive," in summing up how his U.S. top-four diversified financial institution manages tens of thousands of global developers through advanced methodologies.

Marc Andreessen, in his essential six-year-old Wall Street Journal article² "Why Software is Eating the World," explains how leaders in traditional vertical industries embrace technology in a way that is often less central, strategic and ultimately effective than their counterparts in software firms. He notes, "We are in the middle of a dramatic and broad technological and economic shift in which software companies are poised to take over large swathes of the economy." Andreessen goes on to remove any rationale for traditional firms to not fully embrace the strategies and methodologies that are being successfully deployed by their techfirm counterparts: "...all of the technology required to transform industries through software finally works and can be widely delivered at global scale," concluding,

"Let's seek to understand how the new generation of technology companies is doing what they do and what the broader consequences are for businesses—the economy."

We all know that tech firms—from Alphabet to Amazon and every regulated or unregulated startup in between—are increasingly offering financial services to the same customers. Yet, with regard to how tech-sector companies bring new products to market, is the process essentially the same? As a result of the interviews conducted for this report, we must conclude that the typical financial services company is a giant step behind their software-sector counterparts in adoption of lean development methodologies. The evidence is sporadic development processes, with inconsistent usage of essential lean methods such as prototyping, journey mapping, team empowerment and clarity in problem solving.

Key Insights—from APIs to Zelle—on Increasing Innovation Speed to Market



Advocacy and communication are everything

Innovation leaders must allocate a great deal of their time to communicating with leaders, both inside and outside the enterprise. Said one fintech rising star, "To get things done in a complex organization, you must be constantly advocating, communicating that you're doing things differently, constantly making sure your business case is heard. It's human nature that many people would rather not change."

APIs are big to help large FIs be less core reliant



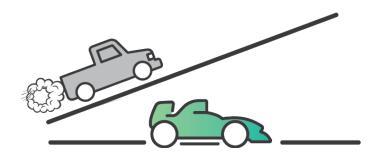
While APIs don't directly represent innovative features, they make them possible—and thus need to be an essential part of any FI's innovation strategy. With FIs still reliant on decades-old core-

technology, quickly adapting to dynamic customer needs and market opportunities is too complex. Several innovation leaders stated that they are building—and will publish—API structures that allow vendors and systems integrators to more effectively improve their ability to create new

innovations. These innovations are intended to improve project duration, cost, choice and the match with customer or market needs.

Referring to how APIs could transform banks' ability to rapidly create a myriad of dynamic innovations, Tina Giorgio, President & CEO at ICBA Bancard said, "The core will eventually become the check register—where you simply archive and store transactions—rather than the system of decision."

Some types of innovations will have an uphill battle, no matter what



A digital and technology executive at a top global card brand, referring to how any potential new innovation not related to rewards has a harder road to get approval, resignedly put it this way,

"For card issuers, a dollar spent on our premium-level cardmembers is a known equation with regard to ROI. To put investment in other areas that have a longer or not-so-clear return, funding is not so automatic."

Surprise! Your most risk-averse people could be innovation rockstars (if you let them)

Shockingly, several interviewees (three out of 28, and ranging across organizations of all shapes and sizes) found that an individual in their risk, fraud or cybercrime function had become an irreplaceable part of the team at ideating, shaping or building the most innovative

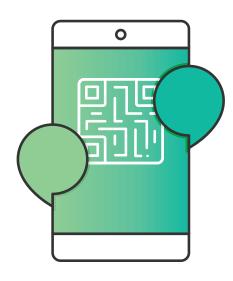
capabilities. This might reflect the creativity it takes to foil growing threats from ingenious bad actors, nevertheless all interviewees recalled their initial disbelief at seeing ideation and creative development capabilities come from the last source they expected.

FIs move faster when they must (so how can you make innovation a must?)

One retail banking IT leader at a regional community bank said, "We move fastest when there are hard vendor-related deadlines that are necessary to hit (non-optional) timelines. For example, when we're moving from one vendor to another. (On the other hand...) if you don't have buyin from all the department heads, at least one of them runs a high risk of responding with a reason related to business operations why the agreed-upon deadline cannot be met." That certainly makes sense in day-to-day operations. But since FIs' outlook is dependent on how well they innovate in mobile, payments and other areas, innovators must somehow achieve the impossible: convincing

both executives and peers that there will be no bank if there's no innovation.

If you're trying to become mobile-first, you're now two full stages behind



While some FIs still struggle to ideate and test in a mobile-responsive, or even mobile-first, construct, one top FI now simply focuses on mobile-only ideation. "We don't really test anything in its online environment anymore; it's only mobile for us now. If we get that small form-factor right, the rest is easy and automatic."

Top-4 U.S. Banker

To keep customers and stakeholders satisfied, balance your roadmap

The VP of Product for a global payments firm stated, "We end up with lots of ideas that have gone through the ideation stage. Then, it's vital to balance out the roadmap on all these new areas of production with particular consideration of the pattern of benefits for each. This is key (for achieving success with customers and stakeholders). For example, you don't want a lot of 'must-do' or 'vanilla' capabilities coming through at the same time, which means no innovative capabilities are released at the same time." He added, "Most new things that we create are not truly innovations. Our typical roadmap looks like this, at any given time:

20%

must-do or vanilla projects 60%

new features 20%

truly innovative capabilities

The lean approach of Value Engineering helps to prioritize and organize programs on your roadmap based on value.

Metrics matter

Referring to how data can drive superior innovation processes, one super-regional said, "I have two full-time people on this, tracking 500–600 metrics which are rolled up into a thematic summary. Our geography is unique, with many adjoining states,

and it doesn't have the same technology adoption profile as the rest of the country."

Treat compliance as an essential element, not an afterthought



While this sounds obvious to most employees, leaders cautioned that vendors may not always be just as up to the task. One topten banker cautioned others to carefully assess the third-party firms' ability to comprehend (and thus factor in) complex topics that captive bank employees have to understand well. Regarding one design systems and integration firm, "With [name of company redacted], it would be the seventh inning of the ballgame, and only then they would consider the impact of compliance (such as KYC) or legal on innovation."

Don't leave security out of the plan and only view it as a way to minimize a potential worsened state

A super-regional digital leader, who was recently moved from digital to customer security, said, "Make security a selling point of your approach. The cloud has obvious vulnerabilities, but with third parties, security can and MUST be better!" The long-term trend of improving customer engagement and empowerment represents innovation opportunities that can cut customer fraud, by working together in areas such as two-factor authentication or account monitoring.

Zelle: A top innovation roadmap priority

The upcoming P2P payments bank partnership has been the focus of many innovation resources for bankers, who view it as a must-do for competitive parity and ownership of the customer wallet. Some referenced this capability as an opportunity to put their newly Agile methods to the test, with one stating that the effort is on track to be completed within nine months. Zelle is now a top priority on innovation roadmaps.



The Question: How Long Do Your Innovation Projects Take?

The process, revealed

So how long does the "typical" largest-scale innovation effort take?

To find out, we asked respondents a seemingly impossible question: "Thinking about your most complex digital innovations—from initial ideation to full customer availability—what is your expected average total duration?" Many respondents haltingly stated an approximate figure at first and then honed in on a final answer by giving, with qualifiers, maximum and minimum ranges. Based on the published BBVA model [3] this global bank uses a 3/6/9 formula, designed as an inspiration metric for the team members. Three days to set up teams, six weeks to define a prototype, nine months to build. A former head of retail for a top-10 U.S. bank with typical innovation duration times of 18-24 months, said, "Outside resources reduce cycle time by 25-33%."

After much consideration, the typical response was measured in months—an average of 21.5. Remarkably, outlier answers had a huge range—from nine months to five years! The organization citing the slowest duration acknowledged, "This includes our LOBs in areas that move slower than banking, such as investments and insurance." Commenting on other organizations, ones that measure innovation in years rather than months, one top FI's digital leader stated,

"Our typical duration is now down to nine months. If it took me two years to develop anything I'd be out of a job."

How BBVA Uses Design
Thinking and a Cross
Functional Team Approach
to Create Amazing Customer
Experiences



"We have a team of 150 designers around the world who we assign to each project we launch," explains Rob Brown, the Global Head of Design and Marketing for the BBVA group. "Design plays a critical role in the entire project."

Achieving speed at vastly different scales

Interviewees at some of the most advanced FIs cited success in getting even the most significant innovations from ideation to general customer availability in under a year. Their strategies were based on minimizing approval cycles, having approval cycles rapid enough to avoid falling into the following year's fiscal cycle and Agile development. Smaller FIs were often available to achieve similarly rapid development cycles by connecting executive stakeholders, including the CEO and board, with technical staff and vendors. They also relied on restricting their "choices" to a far more limited set of offerings, ones that are immediately available from specific vendors of offthe-shelf solutions. For the vast remaining middle, innovation duration periods are commonly at or above two years—and in extreme cases as high as five years. For our purposes, "fast" is a duration of less than one year.

A fintech veteran with experience at both a top-4 bank and a nationwide community FI technology cooperative, describes how innovation models and duration play out at credit unions and banks across the industry this way:

"FIs' innovation cycles are 2—3 or even 2—5 years, due to complexity. The challenge is research and requirements and then aligning various technologies and other groups. Everyone wants to go to Agile, but with old systems it's not easy."

The biggest banks and smallest credit unions are often achieving innovation times that are

50%

less than the average company and equally surprising for very different reasons.

Long duration cycles create even longer duration cycles (blame annual budgetary cycles)

Several leaders who have experienced relatively longer duration cycles stated, in the words of one top-20 digital banker,

"With the traditional process, too many projects are bleeding over into the following year."

This effect, which could be called an "annualization penalty," actually has even more negative impact than first appears. This impact can mean perhaps 15 months for smaller FIs who submit budgets in the fall or even 18 for the largest players, who must submit previously unanticipated budget requests for the following calendar year. As one regional bank leader stated,

"Strategic planning and budgeting must conclude in October of each year, to gain commitment to move forward in the next calendar year."

Said differently, if time-to-market starts to significantly exceed 12 months, there will be natural hesitancy to approve anything prior to the next year's calendar budgetary period—making the organization fall even further behind the competition.

How Development Stages Vary Across the Financial Services and Payments Industry

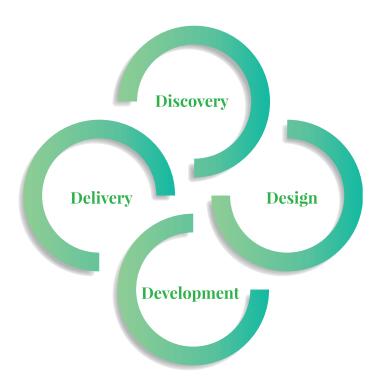
Remarkably, every person interviewed for this project described their innovation stages differently, on many levels. Major areas of differences included not just the presence of particular steps, but also the sequence and overall number of stages. The following is just an example of these differences, which are described in greater detail on the following page.



How It Really Works: Stages of Innovation Projects Around the Industry

When it comes to taking an idea to full customer availability, several organizations cited just three or four stages while one cited twelve, but that's not what really stood out.

- Allison Paine Landers, Customer Experience and Digital Executive with Prudential Financial, describes simply discovery, requirements and then the fully integrated process of project management that results in a successful launch under her watch. This organization is in the process of moving to Agile.
- CIO Kevin Landel of Patelco, a San Francisco
 Bay Area credit union, describes his memorable
 "4-D" structure: Discovery, Design, Development,
 Delivery.



• One digital executive from a top bank said, "Our ideation is all one large stage made up of prototyping, concept testing, customer testing and a limited rollout. Then prototyping uses a team that includes fraud, digital leaders, internal stakeholders and all the LOB people and then customer panels for each potential action. Actual customer testing comes after the rapid prototyping."

The research question that asked respondents to describe their stages was intentionally one of perception, designed to hear which stages are most significant to each organization's success (or lack thereof) at bringing new large innovations to market in a way that meets deadlines and customer needs. Setting aside today's frequently referenced development terms—such as Lean, Agile, Waterfall, Scrum or MVP (for a more in-depth discussion of Agile vs. Waterfall, please see the Appendix on page 28)—what was remarkable are the different ways each leader described the presence (or sequence) of particular innovation steps. For instance:

- Two representatives of lean-development shops stated that ideas can't come first, because they won't go anywhere unless they are preceded by a problem statement. Interestingly, even with this added step, these two shops are bringing new innovations to market at a combined average of 13 months—8 fewer than the average of all others in this study.
- One business, a relatively smaller FI in North America, has no ideation function at all. Instead they simply choose a vendor based on their current and projected ability to ideate. This organization has a total innovation development duration that is three months shorter than this report's average, and while this approach is not ideal, it is a unique

approach that may be simply the best for particularly resource-constrained small FIs.

- One out of six companies called prototyping out as a separate production stage (with one specifying prototyping being done at two separate stages). There was no noteworthy difference in outcome observed by these organizations.
- Three companies called customer research out as two separate stages in their development process. While two have average total project duration times, the third has an average project duration of 36 months.
- One company, a top-50 U.S. bank, chooses vendors before obtaining internal budgetary approval of the project. This particular organization is struggling in multiple areas, including slower development processes (at 30 months) and an inability to bring out competitive new offerings.

Lean? Agile? Waterfall? First, everyone get on the same page

Most interviewees immediately brought up Agile vs. Waterfall in response to our questions, naturally discussing how their choice of approach determines their duration, process steps and so much of everything else related to managing big innovation processes. While several commented that their shop has partially completed the process of moving to Agile, others noted that internal confusion about which process they are actually using temporarily hurt productivity.

One high-net-worth FI digital and operations leader said, "To drive our digital banking [replacement] forward, we created a charter, including formal documentation to manage the

large scale, and then realized that various team members were taking one of two approaches. We were talking Waterfall, thinking the goal included documenting current versus future state. They were talking Agile." Naturally, this hampered productivity until they realigned language and process. "We wanted to be super-inclusive of both employees and clients, yet it now becomes about the loudest shouter, and very emotional when getting to requirements and such. So we broke consumer migration into multiple waves, from simplest to most complex use cases."

Many FIs are using both Agile and Waterfall, but for different reasons

While most FIs are using, or have moved to, Agile, a few use a combination of both processes. At several larger banks, this is due to a migration process that is fully underway. Still others choose one process or another depending on what they feel is most appropriate. One leader of payments and digital for a commercial bank described their stages and innovation methodology as follows: "Our stages are:

- 1. Focus on the key issue or opportunity
- 2. Conduct internal research
- 3. Deploy external research, which includes reaching out to clients
- 4. Scope development, and at this point we may choose the MVP Agile approach with rapid iterations or instead build a full offering like many larger FIs typically do."

Moving to agile—one story

One super-regional recently moved from Waterfall to Agile to cut cycle times, which is vital now that they are experiencing an explosion in mobile adoption. "We were using a Waterfall method and it took several years and was too much work. We had

significant scope-creep and, as a result, trained hundreds of people on Agile.

Now mobile is exploding with 10% yearover-year growth, while online is flat and we'll be happy to stay even with last year.

Adoption of services such as P2P, mobile check deposit and bill pay is what's growing the fastest. We just create it and people adopt on mobile, with an example being PopMoney. Branch conversion is also significant and everywhere we just watch the needle move."



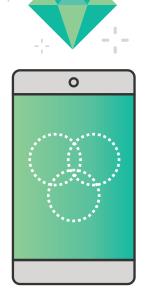
Passion: The unexpected benefit of Agile

Kristy Brandon, SVP, eBanking at Comerica Bank, is heavily invested in her organization's transition from a lengthy Waterfall process to Agile, which is being implemented in phases. "The key overriding difference in approach, beside team structure, is that the proposal and approval need only apply to a fraction of the prior scope, thus enabling faster decision-making while allowing for future project definition that is updated to the latest and nextstage of customer needs. Breaking the cycle of project timelines so long that the product has had significant evolution before we get even the initial offering put in place. It's been a great success so far. Notably, the level of passion for any project is much higher, which has been cool to see. The MVP projects also differ in having daily stand-up meetings, which are less about status and more about updating

others and creatively brainstorming on how to most effectively build workarounds to obstacles."

So, you're Agile. But are you lean?

One digital executive described how her regional bank—not known for digital leadership or rapid time to market—is moving to a more agile innovation process. The transition



she described was impressive, starting with digital efforts and then moving elsewhere after, but it was clear that it's not all smooth sailing ahead. In the process described, this traditional bank kept the requirement for repeated executive approvals at every turn, which is likely (by this researcher's estimation) to hobble both creativity and time-to-market. Executives seeking a lean process need to let go and trust their teams to make decisions based on current circumstances or risk not actually realizing the key benefits of a Lean approach.

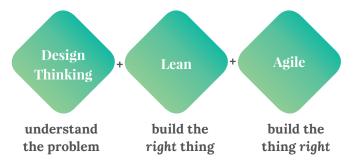
MVP: How minimal can a truly viable product be?

A VP of Product for a global payments company was among those cautioning innovation leaders to avoid deluding themselves by building an MVP that isn't truly viable. "People often use the notion of MVP ... without knowing what it means. I ask them, 'Would you buy a car that had seats made up of a frame and metal springs, but no seat coverings?' You wouldn't, so why would you expect a consumer to? You need a minimal delight factor to effectively gauge response.

Think of a small apple vs. a large one, both tasting sweet (and fully ready for consumption); even your smaller offering must work."

Don't confuse Design Thinking, Lean and Agile

If you build faster, but don't confirm you're building the right thing, you're no better off if you end up with an innovation that doesn't meet a worthwhile customer or business goal. Many respondents to this research study focused on the efficiency-focused differences of Agile vs. Waterfall methodologies. Yet few talked about Design Thinking and Lean methodologies, which are primarily concerned with understanding the problem and building the right thing. While Agile's MVP "fail fast" approach certainly brings a trialand-error approach to focusing on customer needs, used alone it may be too reactive to make sure that scarce organizational resource investments (time and money) give the strongest return.



Design thinking is a mindset and toolbox that helps an organization empathize with the customer and define the right problem to solve. It is focused on the needs and experiences of real people and helps create innovative solutions that satisfy the customer needs as well as business needs.

There's much room for the typical financial

institution to improve in Lean practice methods as well. Interviewees highlighted surprisingly diverse approaches to innovation development stages [See table on page 12], indicating that many banking industry leaders are well behind their counterparts in other industries in "building the right thing," which is the very definition of Lean practices.



What We Learned: Best and Worst Practices

Create a standard process to help people navigate your complexity (and save up to six months)

A digital executive for a global bank discussed, "the triangle" [See page 11] which he describes as "the first step in each project. It represents the connection among the teams that will work on the project, involving those in charge of the business, user experience (designers and data experts) as well as technology directors and software engineers. They all have the same weight in an equilateral triangle."

Several FIs—including ones known for having advanced digital capabilities—described processes designed to effectively manage the conservative and complex nature of regulated financial institutions. One financial institution serving high-net-worth clients also uses a three-legged, innovation-centric team, but with different elements. The three focal areas, and how they related to innovation stages, at this firm are ideation (in which they include vendor selection), governance (including board approval, after which the project is managed via Agile means), involving a product steering committee and finally moving forward as a formal project. This final, over-arching formal project stage spans feedback, specifications and creation/integration and launch, where everything is launched. Said the digital leader, "If you have a department or leader who is new or conservative, you can burn many months on research and defense (of your proposal, approach or elements). If you're experienced ... you can cut six months from this process."

Several innovation or development leaders described the difficulty of getting all essential team members—from functions like line-of-business or customer care—to put forth innovation ideas with enough business context for them to receive a fair hearing. Without this hearing, parties end up viewing an idea that might be a breakthrough from opposite sides of a barrier to assessment, which only creates conflict and frustration.

"Sometimes when a company's development process is too long, you don't even launch what you first built... you just scrap it before you finish it"

Allison Paine Landers, Customer Experience & Digital Executive **Prudential Financial**

An executive at an asset management firm who had also been the digital leader for a regional bank described it this way: "Members of our team sometimes don't yet understand how to put a proposed project through our assessment process. On big innovations, we often don't think about how we work with customers. For example, if we're proposing a sophisticated iOS app for futures contracts, but not considering how it fits into an existing sales cycle, it's like a home contractor or designer adding a room without thinking about how the entire house's flow will be affected. In such cases, some people might say 'this (proposal) is innovation, we have to do it!' Or, if I respond to their proposal with 'let's talk more about this before proceeding' they might assume 'you're just adding 90 days to my process!""

Process: Too much or not enough?

A innovation executive at a community fintech cooperative sees the processes used across the industry this way: "In larger organizations, you have defined processes that sometimes instill too much process and people don't realize how they only need part of it to get the job done. In smaller organizations some could be more effective if they followed MORE process. It comes with formal training. At my company it's a pragmatic marketing framework, focused on the outside in, to see what customers want.... we try to incorporate the answer to 'what problem are you trying to solve?', because if there's no problem, there's no need to develop a solution..."



Research: What you don't know can hurt you (but if you stop getting insights, stop researching)

To cut cycle time, skip unnecessary steps—but never at the risk of missing customer needs. A Chief Digital Officer with experience at multiple regional banks put it this way: "I'm always asking 'how can unnecessary steps be skipped?,' yet you can go too far. Customer journey-mapping is ideally important, but in a prior innovation (that didn't succeed) this wasn't followed, because people felt

that the requirements were 'motherhood and apple pie' (obvious and standard) so we don't need focus groups, choice-selection methods to choose features and other customer- or market-focused research processes to guide us. We also try to crowdsource as much information as we can and then advance our ideas to where we can put them in front of customers using Agile and rapid prototyping. 'Does what we envisioned actually do what we expected? Is it truly faster?' We are trying to gauge customers, quickly pivoting from ideas into functions that you wished to develop. And, all the while, we are trying to create a platform that has enough openness in the infrastructure so that it's not as difficult to make future changes. The new view is to create a service environment that 'makes the elephant dance,' outside of a vendor's typical two-year roadmap."

Leaders don't skip essential customer research. One digital leader, currently at a super-regional not known for being first to market, described four overarching steps for their innovation process:

- Customer research
- Creating prototypes
- Gaining customer feedback and funding approval (intertwined with the previous step)
- The build process, which may consist of vendor selection, compliance checks, marketing, fraud risk, IT and other risk controls

Yet despite this structure, "...This (customer research) is often skipped and we design based on OUR experience."

Leaders use research to go faster and inform their strategy and prioritization, while never letting it slow them down. One business banking payments and digital leader (who is also experienced in consumer offerings) said, "There's a fine line on customer

feedback, in terms of how much to get and how much to weave into the process. It's possible to get too much and clog the output."

Ideation: Are you a top-down or bottom-up shop?

Regardless of the size of the bank, when it comes to where innovation originates, there was a marked contrast between two types of organizations. At several banks, ranging from top-10 to community organizations with \$5B in assets, culture and structure dictates that ideas can only come from the top.

The author observed three dangerous conditions at the "top-down" ideation banks:

 Placing worse than their peers in releasing and building adoption for innovative offerings.

In other words, the interviewees who most identified with "top-down" ideation were also observed to be known for lagging in digital capability.

 Lower morale or engagement (in the innovation process).

Not surprisingly, individuals demonstrated a lower amount of energy about how digital innovations can produce a meaningful advantage to their organization's overall success. If left unaddressed by senior management, this can lead to higher turnover.

 Much higher duration periods for bringing innovations to market, which in turn point to lower ROI from innovation spend.

Because senior executives don't have a monopoly on inspiration and creativity, they must conduct an unflinchingly honest assessment of where their current ideas are predominantly coming from. Efforts to just ask their team

members which approach dominates may not work. Recommendation: Identify ten noteworthy innovations and then poll team members to identify

their sources. If few ideas originated from those who actually work with customers, products or technology, your answer-and problem—will be apparent. In the end, you're looking for a structure with a shared culture of ownership that relishes

innovation-wherever it comes from.

To future-proof your organization, welcome ideas from everywhere

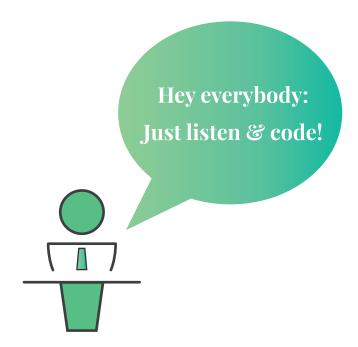
One top-four digital banker observed, "Our innovation process responds to both spoken and unspoken customer needs. Perhaps it's something futuristic that seems obvious, like AI or voice banking. Or perhaps it's digital mortgage or simply reducing friction." The point is that everyone is empowered to be on the lookout for needs.

The struggle for really creatively productive talent is palpable, exacerbated by rapid shifts in technology and consumer behavior. Traditional legacy systems and organizational behavior structures need to modernize in order to attract the kind of talent that can best ideate and create the new generation of product requirements. Financial institutions must realign talent and capital acquisition and work effectively with fintech partners to synchronize with emerging business priorities and opportunities.

Hey everybody: Just listen and code!

One innovation-minded leader at a digital-forward bank summed up how his organization enables ideas from all directions and then quickly moves into production:

"We give everybody two rules for innovation: Code & listen to customers."



• In platform-wide innovations, expect the unexpected. One high-net-worth digital leader offered this lesson learned from transitioning their digital banking platform to a new vendor: "With our old platform, we managed the SSO (single sign on), and when we went to the new provider (in order to achieve more advanced capabilities), we took all that (SSO) on. This opened up a huge new unexpected challenge, with APIs, authentication and so much more."

The message is innovation—even if its focus is on bringing more benefit to customers—can force banks to devote significant unexpected resources to enabling capabilities that don't directly translate to customer or market value—and that

also jeopardize overall project success.

Risk-averse culture and inflexible structure hurt innovation

In the struggle to transform the banking industry, certain barriers to innovation have proven more intractable than others. Chief among these are a conservative culture prone to risk aversion, an inflexible, siloed structure and a mismatch between existing and emerging talent requirements.

To meet quickly changing consumer demands and gather revenue in the future, banks need to innovate, but the current risk-averse environment impedes innovation. A healthy banking culture requires a careful balancing act between avoiding and embracing risk.

Financial institutions typically operate in heavily siloed organizations with little cross-functional communication, while innovation missions often call for connecting the dots across lines of business. The innovation team must not operate as an appendage. Rather, the innovation process must encourage employees to collaborate across silos and titles, giving everyone the autonomy and shared purpose to constantly advocate on behalf of the customer.

Some banks—definitely including a handful represented in this report—appear to have fully given up hope of achieving competitive innovation parity. Apparently, some executives have decided there is ample opportunity to profit by cutting innovation costs. Instead, they plan to focus solely on traditional interaction channels including branches, call centers, ATMs and relationship managers for commercial. This author's observation, based on observing the low morale that results: You'd better have an employee retention strategy that carries you through until you become acquired.

Innovation labs: Artifact or way of the future?



What's happened to all the budding innovation specialists, teams or labs?

While brand-new innovation labs were often in the news in the faddish fintech industry 5-10 years ago, some companies have reintegrated their stand-alone innovation roles or functions back into the line-of-business, digital or development teams. One digital leader we spoke with works at a top digitally-focused bank and has the word "innovation" in his title—but not for long. He referenced industry-wide innovation-only departments in saying, "... This was important five years ago and also helped with talent acquisition, but we're moving on. The problem with innovation groups is that they lack a sense of urgency, or 'the fight for survival." One tenured digital banking executive summed up this view as follows: "Innovation teams are often solutions looking for a problem. We don't have one and I'm not sold on the value. The better way is to get the people in the business groups listening to the customers and getting things done."

Yet even among the largest banks today, some

providers (such as Wells Fargo) continue to use stand-alone innovation roles and functions. Nav Bubber, Vice President, Innovation Executive at Canadian Meridian Credit Union, is among those who find benefit in stand-alone idea-incubation. The Ontario FI has set up a mobile lab as their multidisciplined innovation capability, "...Which includes a partner panel made up of ten internal managers." This innovation executive deliberately "...chose participants who are not every day executives wanting people who are "in the weeds every day" (with customers or issues), to act as a sounding board. In 2019, this panel will be expanded to include external individuals, including vendors."

Just as five years ago it might have been unhelpfully extreme for a vast majority of FIs to create specialty functions, it may be equally reactionary to consider eliminating them in all organizations today. Rather, executives considering keeping—or even adding—a dedicated innovation role today may wish to consider them as a way to:

- Pivot an entire organization to become more innovation-minded. As an example of this, one mid-market FI provided impressive examples of how this is helping a traditional organization focus more effectively on both emerging customer needs and technology opportunities.
- Attract, redeploy or retain particularly talented innovators (in other words, as a personcentric strategy only). This may work particularly well in companies that need to refocus after decades of just recruiting individuals who are best at implementing the ideas of others. In any event, many organizations select (or can recruit) individuals who have earned the respect of their peers for their ability to identify, champion,

present, navigate and launch highly disruptive new offerings that lead to measurable gains.

Are there too many innovators and initiative-leaders in the kitchen?

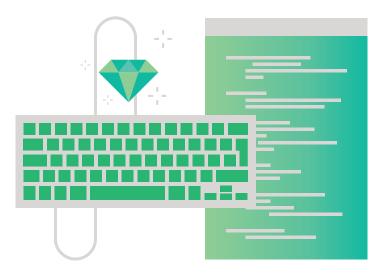
One particular U.S. regional FI was referenced by interviewees at multiple mid-market institutions as evidence of a possible past cultural problem. According to a competing CEO, their digital services platform conversion is "off the rails," with the CEO and another new C-level project manager trying to rescue a project that had "too many EVPs tripping over one another." The CEO continued, "Cultural issues may be the hardest to solve; very insidious and difficult to change ... to avoid the same situation [we have] ... a point person on this who is not a tech person, but instead focused mainly on customer experience." (Author's update: The challenged CEO has indeed appointed a single representative to lead the charge to get the innovation back on track.)

The touchy subject of vendor relationships

When it came to innovation processes, timelines and best practices, interviewees spent much of their time discussing vendor relationships, including many horror stories of delayed or unfulfilled "commitments" and finger-pointing.

Interestingly, the shortest project durations came from FIs who found entirely opposite ways to tame uncertainty. One large FI becomes crystal-clear on streamlined MVP requirements, then makes a rapid build-or-buy decision.

Two other small FIs simply choose the vendor they trust to deliver on both today's capabilities and tomorrow's roadmap. Using Lean principles, we may see an emergence of design-forward partners



working with FIs from ideation all the way through integration and delivery. It is clear that vendor relationship issues often bog down innovation projects, so we can't continue trying the same approaches.

Among this project's interviewees at mainstream banks or credit unions—ranging in assets from US \$200mm to over \$2 trillion—there were four primary segments of fintech vendor relationships that often significantly impact innovation practices:

- Largest FIs: Mostly specify the precise product requirements and roadmap, then make build-vs-buy decision to meet it. In-house technologists have the ability to both integrate and create.
- **Second-tier FIs:** Specify most product requirements and roadmap elements, liberally select myriad of vendors to fulfill most aspects of it. In-house technologists are largely integrators.
- **Upper-half of remaining Fls:** Identify general requirements for products and roadmaps, select multiple vendors based on projected ability to build integrated capabilities, few in-house technologists, if any.
- Smallest Fls (including all on-service bureaus): Identify general desired direction of future technology, generally select one based on

their projected ability to create, innovate and often entirely manage.

One mid-market FI selects innovation by selecting the vendor first

Barry Roach, CEO of Southern California Water and Power Credit Union, recently selected a new digital services platform. After taking a very short amount of time for executive and management buy-in, they went straight to vendor selection, allocating just 60 days for a key team member to complete the process.

In just 60 days, the leader attended a Source Media digital banking conference in Austin, where they identified one additional potential provider to round the prospects out to a total of eight. All vendors were asked to provide in-person demonstrations, from which the field would be narrowed to three. A team of eight decision makers—including the CEO—was involved in the entire process. The final stage was on-site visits to the vendors' offices (easy, since they were all based in Austin, a mecca for community FI technology vendors), from which the final selection was made. "It was tough to line all this up," commented Mr. Roach. They are now attempting to complete project management in 6-9 months, followed by two months for post-launch "tweaking and course correction," hopefully shaving over 30% off their previous duration time for bringing significant new innovations to members.

Build vs. buy and the impact on timeto-market at a super regional FI

One digital leader brought up the vendor impact on speed by first citing their four-stage innovation process:

1. Ideation and analysis

- 2. Internal approval of design
- 3. Execution of resource ramp-up
- 4. Going live (with optimization)

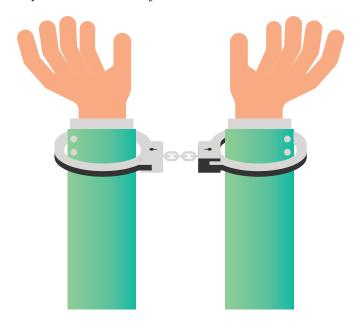
"If there's an RFP—which I'm not a fan of—it occurs at the first stage, or, alternatively, we build it in-house. Either way, the primary focus is tie-to-market. If I can speed something up, I do it ... because we're all about speed. At this stage, this is also where we assess if the new innovation will be a good fit." On how approval processes impact speed, he added, "We get a blank check (for a predetermined amount) at the beginning of each year, so dollars are not the issue. We don't have a bunch of funding committees; we have little bureaucracy. Everything is Agile and at the stage of 'internal approval and design' we also work with vendors to get the tech socialized and gain the know-how we need."

Community banks and credit unions may need to consolidate their cacophonic requirements for their technology vendors. While smaller FIs must successfully differentiate their go-to-market positioning, if this creates a bloat of time-intensive product requirements with questionable customer or member value, innovation will suffer. Advice to community institutions: With your peers, find a process for consolidating the myriad of requests that reach your vendors via a prioritization process. This will give vendors healthy pressure to move new capabilities rapidly through the production process, so everyone wins.

"We can't get in!" Small vendors' problem is one FIs secret answer

According to Nav Bubber, VP of Innovation at Meridian Credit Union, "We're one-twentieth or twenty-fifth the size of the largest banks, who are tied up with their existing vendors. I can work

fast with vendors who can't get in with the large Canadian banks, which means I can get multimillion dollar projects built for less compared to building something in-house." Referencing his organization's traditional 2—3 year development duration, he went on to add, "We try to work with external vendors with off-the-shelf solutions in order to achieve a duration of one year, in a very sophisticated and informed manner."



From friend to foe

Once-helpful tech vendors can eventually become innovation-crushers. Several small- and mid-market FI leaders noted how innovation is sometimes held back by core processors or service bureaus. Jim Morrell, President/CEO of Peninsula Community FCU commented on:

"...one big variable: degree of integration required with your core or service bureau provider. With many existing vendors they are a real pain, essentially, to work with here. The existing vendors give strong preference to their own apps. They discourage the integration of anything that's not being purchased from them."

Outside developers can come with outsized approval processes. A top-20 banker also noted the potential slowing effect of working with tech vendors, but for reasons related to their particular procedural requirements: "When you work with vendors, you constantly have to get funding approval. If they can perform initially and deliver ... enhancements, then great [Implication: it's less certain than when BAC does this on their own]." The digital leader added, "Most of our competitors have an affinity for a particular vendor. Some of these have flashy front-ends, but what we care about are great APIs, engineering talent and speed-to-market disciplines."

Communication—both with the vendor and internally—is everything, said one tech-forward regional. "We have vendors on-site throughout all stages of the innovation creation and rollout. We also establish a command center, where many changes can be made on the spot." The digital leader went on to prioritize internal communication as well: "Employee communication is vital. People need to be discussing topics like 'What's the status?' and 'What's coming?' And team members need to be fully ready with employee training."

Summary: Final Words about Innovation

Surprisingly, the innovation practices within the 28 companies represented by this project's interviews have more differences than commonalities—even though the software industry is generally characterized by having a relatively high degree of commonality in how new ideas come to market. For FIs who increasingly compete against tech-sector companies, this must change, with a full embrace of Lean approaches as the overall approach.

Senior executives must change first, conducting an unflinching assessment to ensure that ideas are often coming from those who are also empowered to bring them to reality. To help them move adroitly from approval into reality, executives must then work to create a blueprint for cross-functional teams that will be assigned to new ideas. In today's world, this team must not overlook any potential contributors, even those from risk or security. The broad, cross-functional, "ideas everywhere" approach will also aid in maximum creativity and talent retention, as will the more rapid time-to-market and embrace of new technology development environments.

Product roadmaps must be balanced with innovations of direct or indirect value to the end-user and market as well as changes that are simply required to meet operational, compliance or technology platform requirements.

If you're just now going mobile-first, it might be time to skip that step and go to mobile-only from now on



Bringing It All Together

The ability to swiftly respond to changing market demands is key to future business profitability. The rapidly changing pace of technology and whipsaw of customer needs create a vacuum for leading FIs to establish a strong internal process for sustainable innovation. Competency in innovation becomes even more acute as product life cycle times decrease and the velocity of technological change increases. Larger firms may build capabilities in-house, while other FIs may depend on vendors, but all firms will need to develop a set of core competencies in innovation.

While there are many different models of innovation, Waterfall and Agile development are two of the most prominent for FIs who haven't yet begun to implement a full-scale Lean transformation. Among the FIs who described their innovation development stages for this project, we categorized 52% of them as using methods most closely resembling Waterfall vs. 40% who use Agile (and 8% either in transition from Waterfall to Agile, or using both methods depending on project characteristics).

Waterfall, or traditional development, is a sequential, top-down process, starting with a detailed product specifications document. More time is spent up front early in the production cycle to define and document project requirements. Waterfall provides a structured, linear approach to product development, with defined developmental milestones. If the project is very stable and the impacts of changes to the design later in the process are very high, Waterfall is likely to be a superior method.

Agile,⁴ in contrast, is an iterative process which depends on collaboration between cross-functional teams and customers to evolve the product. Software is developed quickly using a continuous learning process based on each new iteration. Agile development values:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

The short development cycles in Agile provide higher flexibility and allow for immediate customer feedback. If ongoing changes to the project are likely, Agile tends to be the preferred solution.

An important tool in the Agile framework is the **Minimum Viable Product (MVP)**. The MVP is the version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort. MVP allows FIs to learn about customer appeal by observing actual behavior with a lean product offering.

A **Lean** philosophy begins well before development cycles, with the goal of maximizing customer value while minimizing the concept of waste across all processes and resources required to deliver value.

According to the Lean Enterprise Institute, Lean begins by changing "the focus of management from optimizing separate technologies, assets, and vertical departments to optimizing the flow of products and services through entire value streams that flow horizontally across technologies, assets and departments to customers."



- 1. Lean Enterprise Institute
- 2. https://a16z.com/2016/08/20/ why-software-is-eating-the-world/
- 3. https://www.bbva.com/en/3-6-9-formula-create-amazing-customer experiences/
- 4. http://agilemanifesto.org
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