Project: Innovation Systems and Management

Partners: TD Enterprise & Innovation Lab, Communitech, Kitchener, Ontario

University of Waterloo, MBET Master's degree program

Prepared by:

Chase Denomme, Jeff Kent, Krysta Traianovski

Prepared for:

Ian McDonald, TD

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Injecting continuous and adjacent innovations within core delivery processes at large organizations is difficult. Scale factors require significant advance planning and financial commitments while risk and regulatory oversight add scope, overhead, and rigidity, which increases delivery time.

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University of Waterloo (MBET)
Chase Denomme
Jeff Kent
Krysta Traianovski

TD Innovation Lab
Ian McDonald

Special thanks to:
Jeff Martin, TD
Oliver Wilson, TD
Brian Healey, TD
Marc Hurwitz, UW

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The Innovation Framework

S1: Define Innovation Strategy

The first most crucial step in beginning to implement corporate innovation is explicitly defining an innovation strategy. As an organization, it is crucial to have uniform buy-in from the bottom up to senior leadership in order to make innovation a strategy and not just a mandate. This sets the base for committing and dedicating what will be needed to successfully implement a corporate innovation strategy. The organization should determine gaps between their growth goals and current operations. Once gaps are determined, the organization can identify broad innovation categories that might fill these gaps. These categories should be setup so the organization is ahead of their competition. The categories are defined as the 'pillars' of innovation for company focus and should be communicated across the organization.

S2: Identifying Innovation Opportunities

The next stage is to begin identifying strategic opportunities for innovation that fall under the pillars of innovation. This begins the adaptation of human centric design. The organization engages in customer discovery to understand their major needs, finding key opportunities for growth within the core portfolio. Workshops and interviews are a good source for building the funnel of potential opportunities.

S3: Hire Leadership and Implement Culture

Next is the most difficult stage of innovation. In order for the company to adopt innovation it must become ingrained within the company culture. With C-level buy-in for innovation focus, additional personnel must be hired. Select and train the senior management team and champions for the innovation cycle. Attract expertise for start-up methodologies, innovation management and skill sets required to be successful through the 'pillars' of innovation.

S4: Adapt TD's Minimum Viable Innovation System

Innovation Labs and development hubs have proven to be extremely useful. The lab is used as a team dedicated to exploring new opportunities that aligns customer needs

and the Firm's capabilities. The team will use start-up methodologies such as *design thinking* and *lean* to rapidly build minimum viable products that the organization can test out (Beta). The team will also be responsible for eliminating 'zombie' innovation projects. The organization will need to assign an executive sponsor for guidance similar to a Venture Capital group and their portfolio of companies.

S5: Scaling TD's Minimum Viable Innovation System

Once the MVIS has ironed out the process, the larger organization can begin to implement process methodologies to enable lean operation and foster an organizational culture around collaboration. This stage requires heavy involvement with employees in order to generate and evaluate ideas that could be commercialized successfully.

S6: Managing Innovation Processes

At this stage, the organization has streamlined the innovation process across departments and now needs a way to manage the results. An outline for the innovation process/cycle for projects should be created, innovations should be measured and the data should be used to continue proving ROI for innovation projects that will propel the organization forward.

Primary Research Insights Summary

Theme	Insights
Evaluating Ideas	- No uniform measurement system: - Developer points in agile system - Legendary experience index - Dollars for the bottom line.
Budgets	Incentives and delivery structure create barriers to collaboration and agile changes.
Reaction to Change	Difficulty arises when partners are not ready for the demands of a different project management style.
Motivation for Innovation	- No uniform opinion: - As a talent play - To strive for customer excellence - To create competitive advantage.
Minimum Viable Product	The MVP for a bank and a startup are very different in terms of scale and expectations from day one.
Innovation Strategy	No uniform buy-in towards innovation becoming an integrated strategy across the entire organization.
Expectations	Timelines, milestones, risk tolerance; participation levels all need to be communicated clearly and managed across groups and external collaboration partners.
Risk Management	- Managed in two ways: - Incremental innovation and controlled testing - Partnership to reduce technology risk.
Perception of Risk	- Larger risks are not appropriate for an institution like a bank - Too many ways for it to be detrimental, i.e., reputation, customer data, standards of service.

Recommendations

Based on the above insights into TD Bank and secondary research around Corporate Innovation, we are providing the following 6 recommendations in order to improve each stage of TD's Innovation Framework. The key areas for growth have been provided with digital tools to be implemented across TD. All tools are available in the 'Tools' folder.

Recommendation 1**: Implementing a Core Explicit Innovation Strategy.**

Implement a written innovation strategy that resonates throughout the TD organization at all levels and is congruent in all departments in order to outline the 'pillars' of innovation. This document builds upon current strategies and consolidates into one document explaining TD's innovation goals, the path to enable goal attainment, and how business units benefit by reaching certain milestones. In effect, a go-to employee document allowing to refocus their innovation efforts making sure everyone is in alignment at all levels across the organization. This document will promote better transparency in finding/filling gaps between TD's growth goals and current operations.

Recommendation 2**: Further Development of Opportunity Assessment Model.**

Implement an innovation assessment model through customer discovery workshops. This will help screen for inherent risks, narrowing down the breadth of the opportunity and ideas funnel into those that are feasible for possible TD innovation projects and growth opportunity.

> Tool 1: Idea Development Screening Tool
> Tool 2: Risk Analysis Breakdown Tool

Recommendation 3**: Expanding Partnerships for Non-essential/Core Capabilities.**

Continued leveraging of TD's network connections, finding partnerships and experts to collaborate with start-ups for innovation projects going outside of core competencies. If unavailable, find new collaborations and champions for innovation using TD's extensive innovation strategy resources. TD partners can include other large MNC organizations or innovative local start-ups.

<u>Recommendation 4</u>**: Scaling External Partner Connections to TD's Innovation Strategy.**

Implement additional internal tools to enhance transparency of TD's innovation strategy with external customers and channel partners while keeping abreast of the risk and regulatory timelines. These tools will help ensure TD's innovation projects align with all channel partners and customers to meet stakeholder expectations through focused beta testing, keeping the non-value-added projects out of the project pipeline. The MVIS best practices checklist will make sure the innovation process is uniform throughout TD while allowing for faster innovation developments due to the lean approach used.

> Tool 3: MVIS Best Practices Checklist
> Tool 4: Risk & Regulatory Timeline Guide
> Tool 5: Customer Beta Test Program.

<u>Recommendation 5</u>**: Adapting Strategy for Better Engagement with Start-ups.**

Implement and adapt to a separate team focusing on value creation, long track records, and established processes for identifying and pursuing venture investments. To be a better engager with the start-up community means being a *matchmaker* between them and TD's operations units. This will encourage more design thinking and exploit the lean methodologies used by these venture start-ups. The ROI would be partly financial and part strategic synergies for generating and evaluating new ideas. This way there is better bi-directional information flows between the start-ups and TD's operations division. There is also better structure for exchanging insights about the emerging start-ups, their methodologies, new technologies, and the dynamic markets. TD will acquire technical and platform capabilities through knowledge transfer and disseminate them organization wide.

> Tool 6: The CVC Framework and Metrics

<u>Recommendation 6</u>**: Expand Tools to Analyze Innovation Process & Success Factors.**

Expand and implement measurement tools for identifying key metric factors for use across TD's management relating to their innovation projects. These built-out KPI's will indicate the best innovation practices to follow for generating a higher probability of innovation project success. The scorecard allows management to see numeric results of their innovation efforts based on an overall score, which can be translated into ROI.

Tool 7: The Innovation Management Scorecard

Appendix A: Primary Research Insights (TD)

AREA	INTERVIEW #1	INTERVIEW #2	INTERVIEW #3
Innovation process	Transitional state between traditional and agile Ends up looking exponential as it takes time to gear up Team formation takes a while to get to efficiency Internal design expertise	Mandate vs. strategy: 1. Be where banking is going 2. Change the culture at the bank 3. Talent strategy Partnership to introduce with startups: VC speed dating	No set strategy Start with ideation and narrow down Road mapping for gap filling: what is lacking? What can be improved? Vs. competition Or building tools/capabilities Looking for existing solutions that line up with what we are creating
Reaction to change	Mindset shift across organization Partners may like the sound of change but then find it difficult to meet the requirements on their end - full-time attention Loss of cadence/visibility due to lack of documentation	MVP for a bank is totally different than a start-up - need to understand cycle from innovation to launch and regulation Banks must follow the law	Didn't have infrastructure to innovate a few years back: business lines and corporate support groups now have it as a standing function
Motivation	Success: ability to go to market with something original, doing it better than competitors, internal processes improvement, customer feedback	A talent play innovate or die (a growth company) 1. Customer experience 2. innovation	Seek opportunities to grow or preserve business Just to survive nowadays, pace of change is constantly accelerating
Risk and ownership	Wrong data or breaches critical Sweet spot	Little "I" vs. Big "I" innovation: don't want everyone to think about it, but want everyone to be receptive	Partnership from finance who knows P&L well Outsourcing to experts in other areas of the company

	New way to interact with customers via social media 24/7 to improve work, now 1 on 1 relationships Ongoing releases still get developed via customer feedback Partnership critical to outsourcing the parts that are complex and not the bank's expertise Haven't taken risks we didn't understand Need a leap of faith	Individual business units demonstrate Big 'I' when they think of opportunities and threats for Corp. in their strategy	like ATM for prototyping Opportunity cost when choosing to do a project Others have ownership & accountability to deliver Expected to grow/add value to business every year Always will be implemented as a pilot: smaller targeted universe. Larger innovation will be rolled out regionally to earn our way in.
Evaluating ideas	Not necessarily the decision maker, but able to analyze cost-benefit, spending (not over or under) Future-proofed? Leveraged by many? Custodian of doing the right thing with external investment Need criteria for how to assess alternatives Legendary experience index Development points		Identify needs and evaluate the business case for an idea, how it affects the bottom line Mapping customer journey and needs Cost-benefit, time, context Leveraging bigger initiatives in the organization Start with bottom line, add other values like customer experience Dollars as currency
Challenge	Resourcing Pace: project and documentation move on with or without stakeholders (must be accountable/present)	Should innovation be centralized? Which things should be centralized? Need a central way to ask those two questions.	Creating experiences that can't even be compared to competitors, so we have to compare to traditional ways of doing the same task Need to feel comfortable

	Old and new style Budgeting is done in summer and later in the year it can be difficult and disadvantageous to reallocate, even if it benefits everyone Using a visual map to communicate all this	taking on risk Working with large groups across bank takes time

Appendix B: Primary Research Insights (SAP)

SAP INTERVIEW
Chairman's Project Group
Friday May 6, 2016

Why is innovation important for large corporations and what is SAP's motivation behind being innovative?

- Innovation is important for accelerating growth and creating new opportunities.
- In competitive market, an organization is motivated to innovate in order to survive.
- For SAP (software), they have advantage - the industry is pushing them more to innovate, so motivation is high.
- Sense of urgency for SAP – *[Less so for the bank industry in Canada BUT could also be true, Growing FinTech companies are coming]*
- Forced to make bold decisions
- Need to find what the NEXT thing is… for SAP it was ERP then Business Suite - what's next? Cloud, HANA (In-memory database), etc.

What is SAP's innovation strategy? What methodologies do they use? How does SAP innovate?

- Design Thinking is their core methodology.
- Everything is Lean/Agile
- Build an innovation hub / team to test processes, tools, and methodologies to find what works for that particular organization.
- Rapid prototyping to get new products into market
- A lot of trial and error – SAP has spent years trying to understand corporate innovation and the best ways to bring innovative ideas to market
- Small groups - turn around the way the company thinks and works
- Once you find what works, apply it to the larger organization
- Need buy in from management team – Everything must come from the C-suite. Need strong commitment that can be filtered through the organization.
- Need to be 100% committed, trying to create a few innovative projects within a secret team is not enough. Need buy in from entire company and form a culture around innovation.
- Not an easy task. Took SAP 6+ years to bring it [innovation] into larger organization.
- For SAP, all around design thinking - studied it like hell
- Partnered with academic institutions to get research around innovation and the

methodologies that were being used. Applied and kept what worked.
- Culture is the biggest component, but also the most difficult
- Focused on the type of people - design minded
- For years SAP's workforce was primarily developers, they went on a binge hiring designers which was the KEY to changing the company and helping their innovation process.
- Changed the space – "apphaus" – Focused on open spaces that facilitated collaboration. Large meeting rooms turned into all white board rooms.
- Created design thinking kits with sticky notes etc.
- Replaced leadership – brought in the right people
- Many people left the company because they felt uncomfortable with the change.
- Executives were kicked out of office spaces because they were turned into meeting rooms.
- Eliminated hierarchical structures – some people didn't like in upper management – lots of push back, but was very necessary.
- Give people freedom. If you get the right people on the bus and provide them with the resources they need to be successful, they will be.
- Be careful with culture changes. Don't CHANGE it. Need to understand the current culture and how to communicate and inspire the way forward.
- Offered training on design thinking
- THREE KEY ASPECTS: 1) CULTURE 2) PROCESS 3) TOOLS
- SAP realized customer doesn't accept 2nd grade software anymore. The products needed to improve and the experience needed to improve.

How does SAP involve employees and customers in the innovation process?

- Customer involvement – mostly strategic partnerships - very defined customer engagement initiatives. Interviews, etc.
- Designers would work with customers on improving existing products and new products. Really innovative ideas would be worked on with a strategic partner (customer).
- Feedback loops – constantly iterating products
- Engagement with employees – have gate before shipping stuff - people from different organizations.
- Define someone from business unit that is responsible. They own a piece of that shipment.
- All employees are encouraged to share their ideas. SAP has been looking for a tool/process to help facilitate employee input/brainstorming.
- Closeness to customer is still a challenge - no easy way to send us ideas

- Started idea market places for customers to drop ideas.

How does SAP identify problems/assess what ideas move forward? What has SAP done that is innovative?

- Innovation pillars, investing in certain areas. If it does not fit it gets deprioritized.
- If it fits, run a business case, analyze
- Portfolio meetings with a portfolio management team and team gives thumbs up or down.
- Pillars are set out by c-level. Focus is on cloud, etc. etc. Those will be the areas we will focus on over the next year.
- If additional funding/resources are needed it escalates to higher level if you need more money for approval
- Assessing risk – c-level did "White horse" exercise - low risk low reward - high risk high reward.
- Only happens with the top executives.
- Few years ago going for more disruptive models. Focus now is on lower risk.
- SAP is very conservative. If they disrupt it could affect lots of customers
- Already have large client base and make lots of money, Focus is on adding value and improving offering. Innovation tends to be ideas that are lower risk. Even low reward ideas can generate a lot of money for SAP
- Do things that they haven't done before. Build and test quickly.
- Innovative products… products like analyze video snippets, sports engagement app, digital analytics tools for casinos, etc. Smaller projects
- Larger scale – HANA – in-memory database platform that runs analytics applications smarter, faster and simpler. Fastest data processing on the market, advanced analytic processing.
- Investments are very controlled now. Very focused.

Startup Engagement & Acquisition Strategy

- Large part of strategy is strategic partnerships and competitive acquisition strategy - high growth businesses.
- If you can't do it organically you need to do it through acquisition.
- SAP Startup Focus program [project that we worked on]
    o Startups receive funding, resources (HANA) for free to build big data startups
    o Pitch competitions
    o Support
    o SAP will launch to their global customer base

- o 2700+ startups in 59 countries
- o Facilitating acquisition strategy
- More and more focus on getting involved with startups that align with SAPs current offering and innovation pillars
- SAP Ventures (Saphire Ventures)

What are some of the processes and tools that you use? What are problems with executing/launched products to market?

- Processes part is still a struggle - tools perspective - how to communicate. [Thought for a while]
- "If you figure out a process that works, let me know"
- Tools: externally and internally - white boarding tools - nothing really took off
- Get the customer and employees involved with each other. Work with customers and the organization wakes up
- Prototype/platform - 'Build' - design thinking processes and - Design Thinking Kit
- Execution – The challenge is often the handoff from the development team to the 'owner' of the project. Projects can get stuck there.
- Created Innovation Centre's 600 people worldwide – focus on execution
- Processes for going to market are very difficult - pricing, marketing, etc.
- BU have different asks - need more than a prototype team - need a group in charge of bringing ideas to market.
- New framework for cloud deliveries – 'golden standards'. Need to achieve them, how you do so is up to you.
- Cloud framework – Started to ship in the cloud - helped a lot.
- Idea pin - every wall is writable
- Mirrorly app
- University Potsdam partnership
- Whiteboards with camera (were horrible. Very expensive and did not work at all)
- Splashapp SAP – knowledge, tools and inspiration that help create apps
- Slack for communicating and cutting down on email
- GitHub - Open source and transparency
- Invision for design prototyping

How do you evaluate which ideas move forward?

- Idea tryouts - 2 weeks' iteration - find measures - validation methods - interviews, landing page, run an exercise - get a yes or no in the given context.
- Funnel on higher scale - funnel interest
- Ideas come through customers, employees, innovation teams. Get funneled

through based on the pillars. Evaluated and analyzed. Ideas worth pursuing get put forward.
- Change language around killing ideas - we in the given context will not work on it. Instead put it on hold but potentially come back to it later and pursue
- Build up the portfolio – don't kill ideas right away.
- Need to bring in the guys that own the process.

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