Domino's Final Consulting Report

Prepared for @Retail by Alpha Beta Data

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Executive Summary

The Domino's @Retail team, a group of 6 people focused on innovating Domino's store and delivery experiences, has no uniform process for collecting, documenting, and sharing their business ideas.

Interviews with team members revealed inconsistencies in the way the team handles their ideas as well as a lack of coordination in the team itself. Following the analysis of our six interviews, the below findings were made:

- 1. The Innovation Garage has allowed @Retail members to easily stay in sync with their project teams
- 2. The Innovation Garage has hindered @Retail member's ability to communicate and collaborate with other members of @Retail
- 3. @Retail member's tightly packed schedules causes idea documentation to fall in priority
- 4. Idea documentation and management is unsystematic
- 5. There is a lack of assistance in codifying and staying up-to-date on ideas
- 6. There is a lack of awareness of one another's ideas

Based on our findings, we propose that @Retail adopts an idea bank to reinforce the collaborative nature of the Innovation Garage as well as provide uniformity in the storage of their ideas. The idea bank is useless if it goes unused. Therefore, we provide additional recommendations for incorporating it into @Retail's workflow.

Introduction

Recently, Domino's built the 'Innovation Garage', whose members are focused on improving how technology is developed for their store and delivery experiences. Within the Innovation Garage resides the @Retail team. Their product development consists of five phases: idea generation and validation, idea development, prototyping, piloting, and national launch. Currently, the @Retail team has no uniform process for collecting, housing, and re-presenting their business ideas throughout these phases. Because their business ideas feed directly into Domino's research and development, they would like to build out an intentional resource and process for idea generation and collection within the team.

Innovation within a company is a constant determinant of its success. Deviating its goods and services from the norm, an innovative company carries an advantage over its competitors. However, the novelty of a company's innovation is fleeting. Once a company's innovation is publicly shared it is reverse engineered and adopted by its competitors; the change brought by an innovation quickly becomes a standard within the company's industry. Consequently, there is no guarantee that the innovations within a company that carried it to where it is now will continue to carry it to where it needs to go (Davenport and Prusak 10). A company must continuously innovate to uphold its competitive edge and, as its market becomes more saturated, its innovation life cycle must quicken.

Innovation begins with the generation of ideas, the collection of knowledge that follows, and the storage and dissemination of such knowledge. Knowledge is an asset whose value is reliant on how it is used. It is challenging to control, but if leveraged correctly it feeds directly into the success of a company's goods and services. To ensure the effectiveness of Domino's collection and use of ideas, this paper will highlight the key findings garnered from our research as well as provide recommendations to address such findings in the context of Domino's first phase: idea generation & validation.

Methodological Overview

Our research was conducted over the course of three months and was divided into the following phases: background research, contextual interviews, affinity diagramming, and conjuring recommendations. To become informed about Domino's history as well as the role that a uniformed innovation space can play in its agenda, our team conducted background research reports. Specifically, we examined the role that technology has played in Domino's growth as well as methods for managing knowledge in the workplace, especially in the food industry. Using our initial research, we compiled a set of questions for each role present within @Retail: director, program leader, and specialist. We then used our questions to conduct six interviews with @Retail members.

Following our interviews, we listened to their recorded audio as well as browsed through our interview notes to document relevant information from the interviews. We then affinity diagrammed our documented insights to form a set of findings. Specifically, we wrote each insight on a sticky note and grouped the sticky notes based on their relationships to one another. Once we had established groupings, we captured the overarching theme of each one. Each grouping either served as a key finding or supportive evidence for a key finding. Using our key findings and background research, we composed a set of recommendations. During our formation of recommendations, we conducted additional research to ensure that they weren't underlied by conjecture.

Finding 1 - The Innovation Garage has allowed @Retail members to easily stay in sync with their project teams

The Innovation Garage's open layout affords informal collaboration. It has created an environment where employees can quickly bounce around ideas, dig into problems, and talk about things right on the spot (P5).

For instance, if P2 has a question "[they're] not going to write an email, [they're] going to stand up and look for the person" (P2). The Innovation Garage facilitates alignment within product teams so well because each @Retail member sits alongside members of their product teams. Being in such close proximity to their product teams has streamlined the teams' communication and in turn improved their productivity. For instance, P5 "can just swing over and talk to someone on [their] IT team and give them immediate feedback which is something [they] [weren't] able to do before" (P5). Further underscored by P1, "it's been advantageous to be in a place where [they] can turn around and [their] developers are right there" (P1).

Finding 2 - The Innovation Garage has hindered @Retail member's ability to communicate and collaborate with other members of @Retail

Face-to-face interaction is the preferred mode of communication among @Retail members, however, @Retail does not interact in-person as frequently as they used to since they no longer sit with the entire team. Although they have monthly and bi-weekly @Retail meetings, the team is significantly less concentrated than it was in the main building. As a result, @Retail members are stuck in info silos (P3). In an effort to combat this, a Microsoft Teams channel was created for @Retail. Specifically, "[they] needed one place where [they] could talk to one another ... because [they] don't have a lot of overlap" (P5). Although this channel has helped facilitate communication between @Retail members, it is not always effective and @Retail members' alignment with one another's ideas and projects continues to fall short. For instance, P5 "

had a meeting last week where it took [them] 10 minutes to get set up on Teams and [they] were left with only 20 minutes of talking time" (P5).

Finding 3 - @Retail member's tightly packed schedules causes idea documentation to fall in priority

@Retail can have more than 6 active projects at any given time. By virtue of there being more projects than team members, @Retail members are forced to balance multiple projects simultaneously. Consequently, their packed schedules hinders their ability to document their and others' ideas. Specifically, @Retail members do not have time between interactions to capture and document ideas (P3). Additionally, because @Retial members' time is so precious, they lack a willingness to consistently sacrifice it to document ideas. In particular, "documentation takes time, so it's not always a priority" (P5).

Moreover, because time is not formally set aside in @Retail members' schedules to document or update ideas, it normalizes the practice of solely keeping such information in one's memory. For instance, differentiating between ideas that are on hold, ongoing, or compared is mostly done in P5's head (P5). Unfortunately, this results in ideas becoming misconstrued or forgotten altogether. There have been several instances when ideas were lost in translation because time was not taken at the exact moment to document them (P5).

Finding 4 - Idea documentation and management is unsystematic

@Retail does not have a standard process for documenting and storing team members' ideas.

Because "[they] don't have a very rigid process to mandate everyone follows the same procedure" for documenting ideas, they are scattered across several forms of documentation (P2). In particular, ideas are stored in @Retail members' heads, notepads, Excel spreadsheets, Jira, email threads, and digital notes. For instance, P2's think tank "is a massive Excel file that just is a data dump of any of [the] crazy thoughts that [they've] had" (P2). Although these forms of documentation can be shared and discussed amongst team members, such as P2's Excel file, the documentation is isolated from other team members by default and is

not always made readily accessible. For instance, ideas were collected and disseminated through the personal devices of a select few members of @Retail during a store-visit (P5).

Although @Retail member's ideas are scattered across various tools, they "typically use Microsoft Teams for a lot of storage" (P2). Fortunately, @Retail members' ideas can end up being consolidated into various Teams channels. For instance, if P5 writes down ideas in a note page, they'll transfer them to a product roadmap once they get back to their desk (P5). However, such efforts are not consistently carried out and ideas can be scattered across multiple channels and channel folders. Not having a uniform place to store ideas inhibits how they are managed and discovered.

Furthermore, @Retail uses feedback and appreciates it, but team members are not consistently or proactively seeking it out. This forstalls the ability to document ideas coming from in-store employees because they may never even be collected. Domino's prefers to test products so that they can make data driven decisions, however, this phase of feedback can be deprioritized or skipped altogether. For instance, the current project that P6 is working on is going forward without testing to meet deadlines (P6).

Finding 5 - There is a lack of assistance in codifying and staying up-to-date on ideas

Maintaining an awareness of ideas and their status is the responsibility of each team member, rather than a collective effort. @Retail does not have a structure or shared tool for idea collection, management, and distribution. As a result, members of @Retail have to tediously codify ideas as well as pin-point their location to stay up-to-date on them. For instance, P2 will like Yammer posts from in-store employees as a makeshift means of tracking which ideas they've read in the feed (P2). Additionally, P4 will "flag emails in [their] inbox" such as "here remind me in 8 weeks" to prevent the loss of ideas (P4).

@Retail members set personal reminders to expend such efforts, however, going through ideas is inconsistent because it is not facilitated within @Retail. For instance, P4 tries to take time every morning to go through their notepad, however, meetings as well as other jobs to-be-done can end up replacing that time. Such replacement will "throw off the whole day" for P4 (P4). Moreover, because there is no shared space for documenting ideas, @Retail members have to individually figured out how to do so. For instance,

P5 manually transferred ideas garnered during in-store feedback sessions into an Excel spreadsheet (P5). This effort was not directed by leadership, rather it was a result of their own initiative.

Finding 6 - There is a lack of awareness of one another's ideas

Members of @Retail are not completely aware of one another's ideas. Although this can be attributed to their tightly packed schedules and isolated idea documentation, it is predominantly a result of team member's ritualized behaviors. Namely, @Retail members are not sufficiently invested in one another's projects to stay up-to-date on them. According to P1, "if [they] spend too much time digging into everyone else's projects then [they're] going to be too slow getting up to speed on [their] massive project" (P1). This self-regarding attitude is counter-productive to the overarching goals of the team as it can result in overlapping effort. For instance, in one of @Retail's meetings they realized that they "we're offering up to the customer, in the same spot, two [products] that competed with each other" (P4). Although this meeting made way for this information to come to light, proper team alignment would have likely prevented this overlap.

Recommendations

Recommendation 1 - Idea Bank

Knowledge begins with an individual's own experiences, a collection of information that has been brought to awareness as a result of their behaviors and actions. An idea tied solely to an individual is therefore limited to the scope of their existing knowledge, rather than the uncollected knowledge of their co-workers. Until an idea is made public, its ability to drive company innovation is limited to its owner's experience and is entirely in their control.

We recommend that ideas are collected from @Retail members such that they become collectively owned by the team. Often in companies "the left hand not only does not know what the right hand is doing, but it also may not even know there is a right hand" (O'dell and Grayson 157). Namely, documenting in isolation amplifies ignorance within @Retail. Such practice poses the risk of knowledge being forgotten as well as it being used suboptimally and in an untimely manner. Unless they have been made accessible to all @Retail members, opportunities for leveraging the ideas that an @Retail member has hoarded will be lost when they switch projects or leave the company. Therefore, ideas should should not end up in the personalized storage of each member, rather private storage should be a temporary measure. To spur collective idea generation and development, especially in the first phase of @Retail's product development, we recommend that @Retail implements an idea bank.

An idea bank, a form of information technology, is a centralized and readily accessible platform where ideas are documented, shared, and built upon by employees. For instance, Wella AG's use of an idea database has made idea management more transparent and substantially reduced the loss of ideas (Boeddrich 278). Because @Retail's idea flow is unsystematic, the idea bank would be wielded by the team as a northstar for idea documentation, especially in the first stage of product development. Unlike Jira, @Retail's tool for tracking product development, the idea bank would house ideas that aren't necessarily ongoing nor have been committed to be worked on by @Retail members. Idea banks typically take the form of a company-owned website and thus Domino's could internally develop their own. Alternatively, Domino's

could subscribe to an idea management software. In the context of @Retail, we recommend that the idea bank mimics Yammer and Reddit's post-like structure, however, with more codification. An idea bank needs to have a "commitment to certain individuals or organizational units that promote innovation" (Boeddrich 277). Therefore, this tool would be primarily intended for @Retail members, however, it could be shared outside of the immediate team, such as in @Retail member's product teams. In order to ensure that employees can utilize the idea bank, we recommend a direct path exists between them and the idea bank; in other words, the idea bank should not be buried in Microsoft Teams or other storage platforms. Based on our key findings and scholarly research, we've listed features and requirements below that we believe to be critical to the success of this recommendation. These requirements could be used to build out an in-house idea bank, or to evaluate the use of existing software options.

1a - Templating

When documenting an idea, we recommend @Retail members follow a pre-existing template.

Acting as a pattern, the template will ensure that documentation remains uniform among @Retail members and will mitigate the occurrence of documented ideas lacking sufficient information. For instance, an idea bank created for a Value Engineering teams in the construction industry uses a template "which includes general information, graphical information and detailed information" to effectively store and manage teams' ideas (Park et al. 3). In the context of @Retail, their template could include the following:

General Information

- Idea Description
- Type relation to any ongoing or planned project(s)
 - External Link to Jira if it's ongoing
- Status untouched, in progress, paused, completed
- Name of idea originator
- Role of idea originator
- Contact info of idea originator
- Date

Graphical Information

- Sketches
- Photograph

Detailed Information

- Considerations
- Notes

@Retail members must be willing to actively seek the ideas of others. Extrinsic rewards, such as monetary bonuses, can encourage @Retail members to collect and share ideas, however, in the long term "employees need to find the work itself rewarding" (O'dell and Grayson 168). In order to stay in the loop of what one another is doing, @Retail members must be intrinsically motivated. Therefore, P1 will not dig through other team member's product roadmaps unless they think there is an idea in there that may be useful to their project (P1). Namely, @Retail members must find idea collection and sharing enjoyable and supplementary to their work. Documenting ideas in a template will facilitate this by allowing employees to scan ideas in a consistent manner as well as easily filter them down. Namely, the classification schemes will allow employees to be able to recognize, rather than recall ideas' relevant to their work. Without a cue, people are unable to carry out a focused memory search and thus it takes longer for them to remember where or how to search for what they are looking for (Budiu). The classification schemes will serve as sensory stimuli, aiding in the quick retrieval of ideas pertinent to the work of an @Retail member. We recommend that the idea bank has a search functionality to leverage the indexing of ideas.

Domino's uses two types of knowledge to foster innovation in the workplace: explicit and tacit. Because explicit knowledge is codifiable and easy to document it is a people-to-document approach of managing workplace knowledge. Conversely, utilizing tacit knowledge is a people-to-people approach of managing workplace knowledge. Because "tacit knowledge is the skills, ideas, and experiences people have in their minds", it is difficult to articulate and unlikely to be understood in a document format (Chugh 25). Innovation largely forms around workplace conversations, co-workers sharing and collecting ideas in tacit-to-tacit interactions. Therefore, companies cannot solely rely on explicit knowledge to spark innovation. For instance, Bain once developed a vast paper-based document center so that insights gained from previous consulting solutions could be utilized by employees for future cases; however, the documents failed to convey the richness and subtlety of the acquired knowledge resulting in a complete rehaul of the center (Hansen et al. 7).

Namely, tacit knowledge must be converted into explicit knowledge to be stored; ideas must be brought into practical reality (Sallis and Jones). Metaphors and analogies are useful for the tacit-to-explicit conversion process. For instance, a team of scientists working on dam-busting bombs in the Second World War had the idea to bounce the bombs by conceptualizing how stones are skipped across the water (Sallis and Jones). Taking a complex idea and applying it to a simple and universally understood concept makes it easier to express and store. Therefore, the Notes section of the idea template will allow @Retail members to provide additional context to @Retail members who are not familiar with their idea, making the idea viewable from a new frame of reference. The name, role, and contact information of the idea originator is contained in the idea template such that @Retail members can follow up with that employee. Because the tacit knowledge that makes up an idea will rarely be completely captured in print form, talking to the originator of the idea will provide @Retail members with tacit knowledge that may not exist in the idea bank. For instance, Andersen Consulting and Mckinsey believed that their consultants would be able to solve problems merely by reading through their knowledge management database. Contrary to their assumption, consultants "found that those systems are most useful as annotated yellow pages, helping them find out whom to talk to about" the knowledge (Hargadon and Sutton). Thus, templating ideas allows @Retail members to easily garner the information they need and follow up with the employee who knows most about the idea.

1b - Management

Without management, the idea bank will falter. Namely, we recommend the idea bank has a designated knowledge manager. The knowledge manager, whether a member of @Retail or an automated characteristic of the idea bank, would be responsible for filtering ideas, screening them for their importance as well as redundancy. For instance, the product design firm, IDEO, has a large filing cabinet called the TechBox in their office. Each item in the box represents an idea deemed useful by an employee for ongoing and future projects. The TechBox "has its own curator who is responsible for maintaining and cataloguing the items and for promoting its use within the office" (Sharp et. al, 60). Because IDEO has an appointed

knowledge manager, they are able to maintain the TechBox's storage and ensure it remains an effective tool for employees. By filtering out ideas, the knowledge manager controls the volume of knowledge stored and prevents it from becoming an information junkyard. An over-storage of knowledge can result in "de-knowledging", the reversion of knowledge to information or data (Davenport and Prusak 6). Thus, successful storage in the idea bank is not a result of quantity, it is a result of quality.

1c - Interactivity

Steering away from the isolated documentation of ideas is not merely an effort to make them viewable to other members of @Retail, it is an effort to encourage their collaborative development.

Effective information technology helps employees think and act together. Rather than being a static list of ideas, we recommend that the idea bank is interactive. Specifically, the idea bank should follow a post-like structure, similar to Yammer and Reddit, in which posts can be commented and voted on. Voting would allow @Retail members to quickly express their support for or against an idea whereas commenting would allow @Retail members to share a more in-depth opinion. For instance, a @Retail member could comment on the technical feasibility of an idea or direct the idea originator to an employee they think would be helpful to talk to. @Retail members could post the seed of an idea and have it repeatedly be built upon by other team members using the commenting and voting features. Innovation is not a product of a few individuals.

Fueled by a culmination of ideas from several employees, @Retail's innovation is a product of its collective effort. Thus, the idea bank should spur collaboration.

1d - Notifications

@Retail members should be able to easily stay in the collaborative loop of ideas they've originated or interacted with. For instance, when an employee at National Semiconductor sends an email to their co-worker, it automatically gets sent to co-workers whom the system has deemed to have a vested interest in the conversation (O'dell and Grayson 162). By being effortlessly looped into idea threads, @Retail members can collect insights from members they may not have interacted with about the idea otherwise.

Moreover, because it is insinuated that the idea is relevant to them, they are more likely to approach the content with an attentive and receptive mindset. Therefore, we recommend that the idea bank notifies @Retail members, via the idea bank or email, when an idea they've created or interacted with has been updated by another member of @Retail. Moreover, once a @Retail member has viewed an idea, the idea should be differentiated from those that they have not seen. This will assist @Retail members in tracking how up-to-date they are on the idea bank's content.

Recommendation 2 - Workflow

An idea bank only "reinforces an organization's norms about documenting, sharing information, and using the ideas of others" if it is thoughtfully designed around such norms (McDermott 104). An idea bank can enhance employees' awareness of one another's ideas; however, just as having a car does not guarantee one will go to scenic places, using an idea bank to store ideas does not necessarily improve a company's ability to innovate. Merely having information technology does not afford its use and guarantee that "share everything" and "look for ideas everywhere" are innovative mantras that will be embraced (Wojcicki). The idea bank is a tool for innovation, not a solution. Therefore, we recommend that @Retail creates a workflow to facilitate the use of the idea bank.

1a - Utilizing the idea bank is incorporated into the individual schedules of @Retail members

We recommend that @Retail members are given time to individually enter and interact with ideas in the idea bank. Namely, time should be allotted in the daily schedule of each member to use the idea bank. For instance, meetings should not be immediately back-to-back, rather they should have a slight gap between them. This will allow members of @Retail to document any ideas conjured during the meeting while they are still top-of-mind. It is crucial that @Retail members have adequate time to think through ideas and put them in the idea bank on a daily basis. Therefore, we recommend that a few minutes are set aside at the beginning or end of @Retail members' daily schedules as heads down idea time. This blocked off time, whether 15 or 30 minutes, will allow employees to scan through ideas they want to remain familiar with,

discover newly documented ideas by other members, as well as document any ideas they came up with during the day. As a result, the ideas of @Retail members that have been privately documented will be further detailed by being put into a uniform format and become accessible amongst @Retail and other relevant stakeholders.

1b - Leading by example

Knowledge sharing and collection in a team is not automatic. Thus, even if time is made for members of @Retial to sift through their and others' ideas, @Retail members need to use the time accordingly. To facilitate the use of the idea bank, directors of @Retail must set the example (Lee et al. 475). Therefore, we recommend that leadership consistently encourages team members to interact with the idea bank as well as uses the idea bank themselves. By sharing their own ideas in the idea bank as well as staying up-to-date on the ideas of others, @Retail directors will demonstrate that collecting and sharing ideas is not simply a company mantra, but a value that @Retail is expected to exercise as a team. For instance, the Chief Technologist at IDEO, without being asked to, shared his knowledge gained from a similar past project when he overheard two designers discussing how to make an electric razor that would vacuum up hair (Hargadon and Sutton). Such action reiterated the mentality that team members should be invested in one another's work, not merely their own. Additionally, @Retail directors' use of the idea bank will reinforce its use among other team members and help avoid them from perceiving it as a time sink. For instance, a director within @Retail is not all that familiar with a product roadmap belonging to the product team of another @Retail member. Not knowing the ins and outs of the product roadmap, the various ideas related to the project, sets a precedent for other members of @Retail to not familiarize themselves with other project teams' roadmaps as well.

1c - Shared Use

Beyond interacting with the idea bank digitally, @Retail should collaboratively use it in person.

Acutely aware that @Retail is trying to stray away from the meeting culture of the main building, we do not

recommend that an idea bank related meeting is added to @Retail member's schedules. Rather, we recommend that the idea bank is used throughout @Retail's bi-weekly and monthly meetings. Specifically, @Retail members should come to these meetings with knowledge of new updates in the idea bank as well have new ideas or status updates on ideas that they'd like to talk about prepared. Additionally, the idea bank could be used in the product team meetings, such as standups, that each member of @Retail has. Moreover, just as meetings can have appointed roles, such as time keeper, meetings should have a designated documenter for the idea bank. Meetings can be so informal that documenting ideas is seen as an afterthought (P6). Thus, having an @Retail member present at the meeting be responsible for documenting conjured ideas would help ensure that they are actually documented.

Tools for Consideration

We recommend @Retail build their own internal idea bank so that it can be well tailored to the needs and behaviors of the team, we understand that suggestion may not be technically feasible nor economically viable. Therefore, we have provided descriptions of a few idea management softwares that align with the features discussed above: Spigit, Brightldea, and Qmarkets.

1a - Spigit

Spigit (spigit.com) is an innovation management system that allows organizations to crowdsource breakthrough ideas from employees, partners and customers. Similar to Yelp and Reddit, it is an open platform that people can share and post their ideas on. Spigit supports both laptop and cellphone use, enabling users to document ideas regardless of where they are. To post a new idea, users have to fill out an intake form detailing the category and description of the idea. Based on what the user jots down, the system will display several ideas that its deemed to be related. The user can then quickly read these ideas, double-checking that their idea isn't too similar to an existing idea in the system. Moreover, Spigit has a Challenge Community feature, a contest or tournament that pushes users to create several ideas and comments around a topic. Additionally, each posted idea goes through an evaluation process in which its voted on collectively by users.

1b - Brightidea

Brightidea (brightidea.com) is an innovative cloud-based management solution designed for medium and large companies, such as Cisco. It's provides a digital space for employees to communicate and share their ideas. Within Brightidea, users can post ideas and comment on the ideas of other users.

Additionally, users can filter comments on a software-generated map based on team, topic, or idea.

In Brightidea, users can create pages that detail product issues or challenges they're facing.

Moreover, Brightidea has a scoring mechanism that allows users to evaluate their ideas. Brightidea also

provides a channel for users to submit individual or team business proposals. Managers can then easily analyze the ideas contained in submitted business proposals.

1c - QMarkets

QMarkets (qmarkets.net) sells itself as a 'collective intelligence solution' which harnesses the idea generation potential of employees. Big name companies like Liberty Mutual, Nestle, Cigna, and Ford Motor Company have already signed up for the application. Their goal is to drive their internal work cultures, break down information silos, effectively engage with employees, and overcome the bureaucratic red tape that prevents innovation from occuring in the first place.

The creators of QMarkets offer multiple different software packages to accomplish different goals along the innovation process. The tools range from internal collection services to external crowdsourcing. For instance, there is the QIdeate package that is geared towards front end idea development and problem solving, there is the QOptimize package designed to help employees interact and engage with developing ideas, and then there is QOpen which allows companies to better handle and organize customer feedback. One, if not all, of these software packages would help the @Retail team standardize the first stages of the innovation process.

Conclusion

The issues that @Retail faces are not unique to Domino's, rather they are knowledge management problems commonly found in other companies. The idea bank has the potential to resolve these issues. Its use of templates, interactivity, management, and notifications will help create a uniformed process for collecting, housing, and re-presenting ideas within @Retail, however, it is not a solution. In order to be effective the idea bank must be accompanied by an adequate workflow that collaboratively integrates it into the schedules of @Retail members.

Appendix

- Boeddrich, Heinz-Juergen. "Ideas in the workplace: a new approach towards organizing the fuzzy front end of the innovation process." *Creativity and innovation management* 13.4 (2004): 274-285.
- Budiu, Raluca. "Memory Recognition and Recall in User Interfaces." *Nielsen Norman Group*, 6 July 2014, www.nngroup.com/articles/recognition-and-recall/.
- Chugh, Ritesh. "Workplace dimensions: tacit knowledge sharing in universities." *Journal of Advanced Management Science* 1.1 (2013): 24-28.
- Davenport, Thomas H., and Laurence Prusak. Working knowledge: How organizations manage what they know.

 Harvard Business Press, 1998.
- Hansen, Morten T., Nitin Nohria, and Thomas Tierney. "What's your strategy for managing knowledge." *The knowledge management yearbook* 2000–2001 77.2 (1999): 106-116.

- Hargadon, Andrew, and Robert I. Sutton. "Building an innovation factory." *Harvard business review* 78.3 (2000): 157-157.
- "Idea & Innovation Management Software." Spigit, www.spigit.com/.
- "Innovation & Idea Management Software." Brightidea, www.brightidea.com/.
- Lee, Pauline, et al. "Leadership and trust: Their effect on knowledge sharing and team performance."

 Management learning 41.4 (2010): 473-491.
- McDermott, Richard. "Why information technology inspired but cannot deliver knowledge management." California management review 41.4 (1999): 103-117.
- O'dell, Carla, and C. Jackson Grayson. "If only we knew what we know: Identification and transfer of internal best practices." *California management review* 40.3 (1998): 154-174.
- Park, Chan-Sik, et al. "BIM-based idea bank for managing value engineering ideas." *International Journal of Project Management* 35.4 (2017): 699-713.
- "Qmarkets Idea Management & Innovation Management Software." Qmarkets, www.qmarkets.net/.
- Sallis, Edward, and Gary Jones. "The Synergy Between Explicit and Tacit Knowledge." *The Synergy Between Explicit and Tacit Knowledge* | *Tomorrow's Professor Postings*,

 tomprof.stanford.edu/posting/417#targetText=The%20process%20of%20linking%20tacit,describ ed%20by%20Nonaka%20and%20Takeuchi.&targetText=The%20first%20element%20is%20the,a %20tacit%20to%20tacit%20interaction.
- Wojcicki, S. (2011, July). The Eight Pillars of Innovation. Retrieved November 29, 2019, from https://www.thinkwithgoogle.com/marketing-resources/8-pillars-of-innovation/.
- https://www.softwareadvice.com/idea-management/brightidea-profile/