

Dassault Systèmes: Improving the RFP Process

MIS 306 Fall 2023

Team 3 - Section 1

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Executive Summary

Established in 1981, Dassault Systemes began as a small company mainly operating in the aerospace industry. Over the last forty-plus years Dassault has grown in both size and complexity. They now provide several products across many different industries, including aerospace & defense, architecture, engineering, construction, business services, public services, high-tech, home & lifestyle, and more. Their premier product, the 3DEXperience is a business and innovation platform that provides organizations with real-time vision of their business activity and ecosystem. Additionally, they develop software for 3D product design, simulation, manufacturing, and other 3D-related products. Currently, Dassault works with around 270,000 customers globally, with a bulk of their revenue hailing from software sales Dassault generated €5.6 billion in total revenue for 2022.

An integral component of Dassault's procurement of new customers is its RFx/RFP process. Whereas RFx is a placeholder until it is determined what product is best suited for the customer (whether it be a request for information(RFI) or request for proposal(RFP)), this report will focus on the RFP, specifically, how Dassault generates its proposals. Dassault would like to streamline its RFP process to lower the cost and amount of hours it takes to complete an RFP to be positioned to compete with rivals. To do so, they would like to analyze their current software, Loopio, and determine how it can be more effective within the existing process. Loopio is robust enough to facilitate most of the RFP process. After thorough research and interviews with core employees, we propose that their current software solution is the correct tool, but it is not being used to its full potential. Our team identified that the primary issue is a lack of organization and management when interfacing with Loopio, currently, the model that Dassault follows, "LEVERAGE" necessitates that many individuals who are unfamiliar with Loopio interact with the software. Another issue was that Loopio users wouldn't automate the generation of RFP responses, increasing the workload of sales individuals and subject matter experts. By utilizing all the management tools and Magic AI, a generative RFP response tool available within Loopio, we believe that the time to complete RFPs could be lowered by 50%, increasing their win rate. Remaining with Loopio would incur no additional software costs and minimal investment into personnel which already exists as a budget item. The proposed process will provide a return on investment of about 200% over a year, a payback period of about 12 months, and cost about \$70k per year.

Business Analysis

Enterprise Analysis

Dassault Systèmes is a French software company known for developing 3D design, 3D digital mock-ups, and product lifecycle management (PLM) software. They provide several products for profit across many different industries, including aerospace & defense, architecture, engineering, construction, business services, public services, high-tech, home & lifestyle, and more. With a focus on 3D experiences, Dassault largely targets organizations involved in product design, engineering, manufacturing, and overall product lifecycle management across various industries. They currently service over 300,000 customers worldwide with a revenue of 5.6 billion euros in 2022.

Strategic Goals

Dassault's initial focus was on CAD (computer-aided design) and aerospace solutions. In the years since then, Dassault has grown to become a global leader in sustainable innovation software solutions, with 13 brands spanning North America, Europe, and Asia. The company's overarching goal is to enhance digital environments, optimizing product development, production, and maintenance processes. Their current strategic goal for their enterprise is to continue to scale their business model by acquiring more customers, therefore increasing their overall revenue. To this end, Dassault Systèmes has consistently maintained an 8-9% increase in revenue year-by-year, with the same goal for 2023 and 2024.

To ensure that our solution would accurately reflect Dassault's characteristics and goals, we performed a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats). Dassault's biggest strength is easily its status as a global presence across a diverse set of industries along with its innovative product portfolio. Their weaknesses are the sophistication of their software, dependency on major clients, and market competition. Fortunately, there are many opportunities for Dassault to take advantage of, including the increasing demand for digital experiences, smart manufacturing, and cloud computing. The main threat addressed in the scope of this project is the lack of efficiency in some of their internal processes, primarily its compounding effect with the large competition within the market. (For a complete SWOT analysis, see Exhibit A). A lack of efficiency combined with competition *taking* business creates a larger threat for Dassault.

Baseline Strategic Performance

Dassault Systèmes has a current annual revenue (as of 2022) of €5.6 billion from four main revenue streams: software licensing, subscriptions and support, software, and services. Consequently, Dassault provides diverse products and services to over 300,000 customers, and operating costs are largely in researching, developing, marketing, and selling their software and services. According to their 2022 corporate income statement, Dassault's expenses include software and services selling costs of ~€919 million and marketing and sales expenses of ~€1.5

billion. Although Dassault invests significantly in their operations, 2022 proved to be another financially profitable year, generating an operating profit of €1,302,900,000.

Below is a summary of the KPIs we identify as integral measures of success for Dassault Systèmes on the enterprise level, based on their corporate reports from 2022. Later we will go over baseline and target measures within the scope of this project.

Strategic Performance Measure	Baseline measure (/year)	Target measure (/year)
Annual Revenue	€5,665,300,000	~ €6,118,000,000
Software and Services Selling Expenses	€919,400,000	~ €900,000,000
Marketing and Sales Expenses	€1,502,600,000	~ €1,500,000,000

Table 1: Enterprise Strategic Performance Measures from Corporate Earnings Report

As the impact of our project is minor compared to the overall enterprise, all target measures are estimates.

Business Area Analysis

Background and Goals

While Dassault Systèmes engages in various business functions surrounding virtual experiences, our project scope centers on the sales department of the enterprise. While the sales department has multiple functions, our analysis focuses on the RFP process. RFP, otherwise known as a Request for Proposal, is essentially a two-way document that allows companies and vendors to plan and optimize a solution that fits your organization. To manage their RFPs, the sales department uses the RFP management software Loopio to refine and enhance the RFP process and stay ahead of the competition.

Dassault's main goal in terms of RFPs is to create a process/system that would increase the efficiency and success of RFPs in North America. With only a 25% win rate on contracts that had RFPs, Dassault aims to achieve the industry average of 44%. That said, win rate as a general metric is very subjective as contracts have variable revenue packages and hours worked attached. For this reason, Dassault also uses an Expense to Revenue (the E-R ratio) metric attached to most of the reports. Another goal within the RFP department is to lower the E-R ratio by decreasing hours worked on a contract/project while aiming for higher revenue packages.

Problems, Opportunities, & Directives

As a solutions vendor in the competitive software services sector, winning bids is essential. For this reason, the Request for Proposal process takes on heightened importance. Currently, a

Dassault Systèmes

combination of sales and department heads identify worthwhile RFPs to address, query the Loopio database and SMEs for answers to product-specific sections of the RFP, and send out completed RFP packages back to companies. Although simple in concept, this process currently takes 2 weeks to a month to complete, much too much time to successfully win a bid for the majority of companies who want quick, efficient solutions.

Fortunately, business leaders for the Request for Proposal Department have identified this problem and are currently working together on a comprehensive solution, providing many opportunities for our team to conduct interviews with current employees, research RFP technologies, and assess the current processes.

Baseline and Target Performance Measures

The scope of our project focuses on the RFP department of Dassault Systèmes, our initial approach involved conducting an in-depth exploration of the existing systems and processes, looking primarily at key metrics, and supporting metrics, and engaging in interviews with vital personnel within the department. Based on the background and this initial approach, we concluded that the business area focuses on mostly win rate, expense-to-revenue ratio, and revenue-to-hours worked ratio as measures of success. Below is a summary of the baseline and target KPIs we identified.

Business Area Performance Measure	Baseline Measure	Target Measure
Win Rate	25%	40% - 44%
Average Expense to Revenue Ratio	0.8	0.5
Average Revenue to Hours Worked Ratio	250	300

Table 2: RFP Department Strategic Performance Measures

Current Business Process Analysis

Process Overview

This analysis focuses on the use of Loopio, the external RFP software currently used by Dassault's RFX teams. The current roadmap for Dassault follows an internal acronym, "LEVERAGE", as seen in Figure 1 below. The Sales Teams generate leads (L), and the leadership explores (E) the lead to assess value, transforming it into an opportunity. At this stage, Loopio and an additional internal CRM tool, MyClientEngagement (MCE) are utilized to store and share data amongst the various teams. Loopio provides several tools to its users including a database of query responses that can be leveraged with AI processing. This is the "VERAG" of Dassault's strategy, validating opportunity, establishing value, and reaching an agreement (closing the bid). Loopio is designed to expedite proposals by allowing sales to leverage an existing database of relevant answers or allow subject matter experts (SMEs) to import and save answers directly into the project. By having these answers available readily, Dassault will be able to complete its RFX process efficiently and return completed proposals in a timely manner, but performance indicates otherwise. While the industry standard win rate for projects is 44%, Dassault wins only 25% of the projects they pursue. After an initial investigation, our team quickly identified the two issues behind Dassault's low win rate: a lack of organization and automation within Loopio. Without these two factors, RFPs take significantly longer to complete, decreasing Dassault's chances of winning new projects.

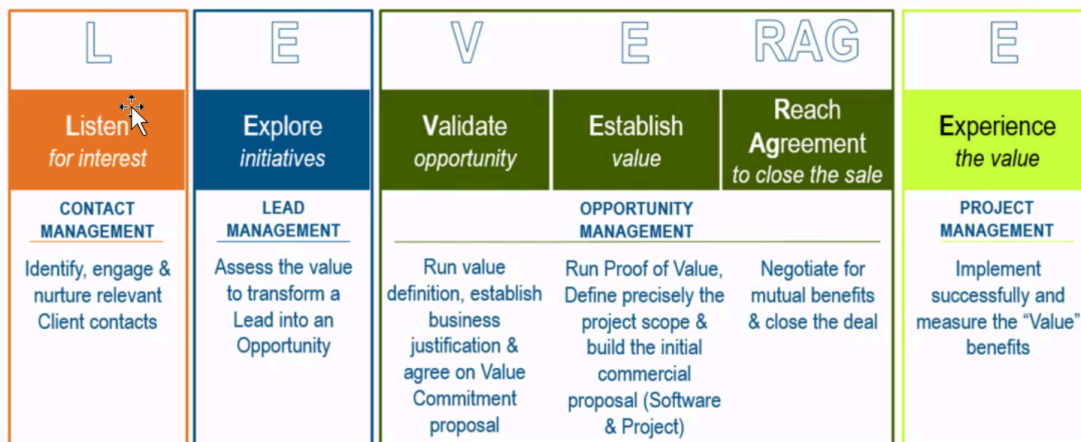


Figure 1: Sales LEVERAGE Model for successful client management

Physical Process Narrative

Once department heads and subject matter experts validate a project opportunity, an RFx Coordinator creates a new project in Loopio, the current external software that Dassault utilizes for RFx responses. Since only certain individuals are provided with permissions from the RFx Coordinator, data redundancy exists because of the use of internal information tracking programs to allow levels of the company to interact with the proposal beyond Loopio. The RFx Coordinator then compiles all questions from the customer into a single project, identifies the relevant departments, and assigns Loopio permissions to the team members in charge of answering questions (the individuals are assigned by the department leadership). The questions are then answered by the assigned individuals: employees who specialize in that area of expertise (typically sales, tech sales, and service experts). These answer teams either retrieve responses from the Loopio library, a database of existing answers, or create their answers if the database doesn't satisfy them. When answers are manually created for a project, they are automatically saved by Loopio in its library for future use. We identified this as the primary aspect of the issues Dassault faces within Loopio. Currently, 68% of queries are answered manually, and over 75% of the database's answers are never used again - severely reducing the organization's ability to operate. These answers are inputted without standardization and severely reduce the team's ability to operate. When finished, the completed project is exported back to the sales team for final review, this is also another point that the sales teams will modify Loopio responses and clutter the database. If additional questions emerge from the proposed bid, the process repeats until the customer accepts the final proposal.

Summary of Problems & Opportunities

The main problem Dassault Systèmes has within its RFP department is the loss of contracts and customers because of the inefficiencies of their RFPs. In our first interviews with project managers, sales individuals, and business leaders, we asked questions from our PIECES chart regarding this area of the enterprise and what inefficiencies they had found already within their system and processes. Organizing this information, we identified the root causes easily: a lack of automation and organization within the current system, which in turn led to a high turnaround time for the overall RFP.

After some research, our team identified two opportunities to solve this issue. First, to increase the number of resources allocated to organizing this portion of the RFP process, or to incorporate more features and software into their current system that could automate the query answering portion of the RFP. The primary project manager for the North American market pointed out that another team, called Medidata, was already succeeding by incorporating some of these practices into their processes.

Looking at Medidata more closely, we identified that where the main RFP team was suffering, Medidata was succeeding. For this reason, our team used Medidata's metrics as a target for the

RFP process we analyzed. Among these, we focused on the amount of manually answered questions, the amount of results generated with AI, and the turnaround time for completed RFPs.

Subprocess Performance Measure	Baseline Measure	Target Measure
% of Completely Manually Answered Questions	68%	10 - 20%
% of Magic (AI) Results Used	0%	22%
Turnaround Time for RFP	2 - 4 weeks	1 - 2 weeks

Table 3: RFP Process Performance Measures

Proposed Process Analysis for Dassault Systèmes RFX Process Using Loopio

Technical Solutions

The proposed technical solution that our team suggests is the incorporation of Magic AI and a library auditor into the RFP process. While Loopio accounts for basic database features and project management, it lacks automation and organization. To address the automation aspect of Loopio, one of the employees alluded to a solution in Magic AI. Magic AI is a feature in Loopio that uses natural language processing (NLP) algorithms to automate and streamline responses to RFPs.

For background, in the instance where team members must formulate a new response that cannot be pulled from the library, they are typically faced with two options:

1. Create a new answer from scratch while referencing various library contents and consulting service experts (SMEs).
2. Pull the most relevant content in the library and edit the answer so that it best fits the context of the question, while still referencing other library entries and SMEs.

Our proposed solution aims to leverage Magic's matching algorithm to eliminate the need for beginning responses from zero. This would also effectively reduce the need for a manual search through library content.

However, this feature's effectiveness is contingent on the quality and relevance of data in the Loopio library. Currently, the Dassault Systèmes Loopio library is filled with obsolete and personalized entries that result in drawbacks in not only the manual retrieval of responses for users but for Magic as well. To counter this, we propose the addition of a library auditor.

The library auditor, in this case, a part-time intern, would serve as a data custodian to the Dassault Systèmes Loopio library, ensuring that the state of the library is maintained. The library auditor will own the data-cleaning process. Data cleaning involves data normalization, updating the library with current information, and removing obsolete entries. Although this role has been recently established and is filled by an intern, we suggest there be a request for the approval of the library auditor as a full-time role.

Magic should not be perceived as a method to automate the *entire* RFX response process, but rather as streamlining the Loopio process. We encourage that Magic is attempted on all questions, and to refine the responses to maintain client personalization. As question specificity increases, so should user intervention. Although Magic learns from feedback when users edit and override suggested responses, it is unlikely that at its current stage, it will be able to capture Dassault Systèmes industry flavor without refining.

Proposed Physical Process Discussion

Our proposed physical process will pivot from the current manual approach for the answering process (process 2.0), where “one-off” answers are created and not added to the library, to first using Magic when creating new answers.

Additionally, our proposed process prescribes a new library normalization process (process 4.0). This process should be isolated and ongoing regardless if a new RFX project is initiated or not. Process 4.0 will be owned by a library auditor. The library auditor will reference a standard instituted by SMEs to update (process 4.1) and delete (process 4.2) redundant, obsolete, and highly specific answers found in the library. The library auditor will be among the few to have permissions for library appending enabled.

This additional process will enhance the quality of manual retrieval of library answers once sufficient data cleansing is done. Consequently, the assigned project team does not have to resort to the creation of new one-off answers. This, combined with magic, will mitigate library contamination and result in a sustainable auto-regulating process.

Alternative Solutions

In addition to the main proposal, our team considered two more potential solutions. These two solutions are to invest in another software, Qvidian, or build software from scratch using a large language model (LLM).

A large language model (LLM) can significantly enhance the Request for Proposal (RFP) process compared to using a dedicated RFP tool like Loopio because, unlike a generic RFP tool, a custom LLM can be specifically tailored to an organization’s preferences, while providing a competitive advantage. By utilizing a custom LLM, you can automate and expedite the response

generation process. This will save the organization valuable time while streamlining the process around RFP turnaround times. However, creating and training a new software utilizing an LLM would require a large amount of time and resources.

Another viable solution considered was investing in the software Qvidian, which is an automated RFP generator that was previously being used in the Medidata team. This management software has the potential to shorten the response time to clients because this is an automated generator. A team member from the Medidata team has expressed that this software is difficult to use in comparison to the current software but very effective. This can be a very helpful tool as it is similar to the current system and has analytic dashboards, a user-friendly library, auto-populated best-fit answers, templates, full document previews, etc. With this software, the company would be able to create high-quality and uniform RFP responses for clients. Although it is a viable solution, we have chosen not to recommend it because it had previously been used in the company (and had been voted out) and is similar to the current software.

Solution Assessment

Supporting The Enterprise

Our solution supports the enterprise by helping Dassault win new clients and support their sales initiatives. As their organizational goal is to scale their business model by acquiring more customers and increasing their revenue, increasing win rates for new projects is a logical step in achieving this goal. Looking back at the SWOT Analysis Table¹, we addressed that some of Dassault's biggest weaknesses were the sophistication of their software, the lack of new clientele, and general inefficiencies in some internal processes. Our solution addresses the two relevant weaknesses of the lack of new clientele and inefficiency. By giving Dassault's sales and RFP team a better process for organizing and managing RFPs, we would be improving the efficiency of their internal processes and effectively increasing their ability to create new business for the enterprise.

Benefits and Consequences

Because this system is already in use, there aren't many consequences to be expected. There are many benefits that come with our proposed system. The goal is to increase win rates while minimizing the turnaround time for their RFPs. Their current turnaround time is 2-4 weeks but maximizing the use of this system will allow the company to cut down to 1-2 weeks for their clients, raising the current win rate of 25% to the industry average of 44%. In addition to saving clients time, the team could save time because they are currently working at a 68% manual labor rate. This is a lot higher than it should be as this company currently utilizes a library where they can search, add, and filter specific answers. With proper use of the library and the AI Magic tool,

¹ Appendix A - SWOT Analysis Table

the manual labor rate should drop to 10-20%. Our solution will help the company reach its target goals by earning more clients and doing less unnecessary manual work.

However, some consequences that may come from our proposed system is that some users from any department might face some challenges with taking on extra work to learn in-depth about their current system. It will ultimately take lots of effort to become experts at using Loopio, as only one team member is currently an expert at it. In addition, it might cost additional funds as it would take more hours and they might need to hire additional SMEs to work on these proposals.

Beneficiaries

Both the clients and the company will benefit from this proposed system. The clients will benefit because there will be a shorter turnaround rate, meaning they will be able to get inquiries answered and ultimately make a decision faster. In addition, these clients tend to search for and request proposals from multiple companies at the same time, creating a bidding war with who can supply their proposal the fastest. The company would benefit the most because with our proposed system they would be able to answer inquiries all in one place as opposed to going through multiple people and channels to get one specific answer. Because the turnaround would be faster the company would be able to process and attend to more potential clients, raising their current win rate of 25%. It's important to raise this win rate because more wins equals more finances for the company. All stakeholders will benefit from higher client retention, financially. One main person who could benefit the most from this proposal is the current project manager because she takes on many roles in Loopio, including training, editing, assigning, etc. In our proposed system, most employees will already know how to do basic and advanced functions in the software, lessening the workload for the project manager. We don't expect there to be many people who resist this proposal because this software is already currently being used.

Feasibility

Operational risk

This system has been very successful in other sectors of the company such as Medidata. We believe this solution will make it easier to fall into a consistent and easier workflow because of the company's experience using this software. However, there has been push-back expressed by executives. Some view RFPs as a very small source of revenue when compared to the companies main revenue streams, so they view it as irrelevant. This may lead to resistance by stakeholders who would slow down the implementation of this system or decide to go with a different option.

Technical risk

The use of Magic may be overestimated by team members and could result in generated answers being used as *final answers*. Although Magic's matching algorithm has been proven to be effective in providing quality answers, the AI is still in its early stages, but like Chat GPT, may have hallucinations within its responses. However, because Magic is still being developed,

Loopio is still adjusting and fixing it. This makes it hard to use this tool to its full potential when attempting to search for specific answers. Loopio is constantly making adjustments and creating helpful resources, so this vendor works hard to make their software the best it can be for their clients and users.

Financial Risk

Most of the risk incurred with the proposed process (utilizing Magic and allocating more people to RFP) is financial risk. Adding more people to the process would incur two sets of costs: license fees and employee salaries. Although license fees are relatively cheap (\$10 / seat), the average salary of a project manager / auditor that we would be adding to this system is about \$70k. Adding a team of such individuals would definitely impact the budget for the RFP department negatively, with a variable payback period for the investment.

Security Risk

The lawyers who work for the company are the ones who give permission to employees to access and use Loopio. In addition, the lawyers have to draft legal documents such as NDA's for the clients to sign before the project begins. Our proposed library auditor will require access to a Loopio license, therefore access to sensitive data. Otherwise there are little to no security risks associated with our solution.

Implementation Plan

In order for this process to work, we suggest that the team members start with a meeting to notify all parties that they will need to start implementing change and a deeper understanding of their current system, Loopio. Although all team members should be familiar with Loopio, the company will need to invest in a Library Auditor who possesses the appropriate background in database management. This role should be taken on first, as this is a lengthy process that will require great attention to detail requiring significant manual revision. Additionally, all team members should be trained prior to interacting with Loopio and receive annual training within Loopio. Training would include how to use Magic, adding tags (helps sorting and filtering responses), and proper library etiquette. It is essential that new users be aware that manual answers are saved and will clutter the library. Loopio has great online resources with videos on how to use the software to its full potential, so this is an option for team members to do on their own, minimizing overall costs. The software is updated continuously and streamlined for customers, the library auditor will ensure that changes are disseminated appropriately. Dassault employees should stay proficient with Loopio and can refresh when necessary. This way, all team members will know how to use the technology without the need to continuously go back to the one person who solely knows how to work the application. This will make the process from the company to the clients more efficient and straightforward.

Conclusion

The proposed solution aims to enhance the efficiency and effectiveness of the company's RFP process. In this proposed system, team members will be able to complete RFP's at a faster rate by maximizing tools from the current software. This solution will allow the company to expedite their responses, which is causing their current low win rate. The new process will help support the company's enterprise goals, while also increasing revenue streams from customer procurement. This solution will set the groundwork for future improvements and sustainable growth within the business area. With this new proposed process, we hope to see an increase in client retention, allowing the company to raise revenues and the ability to expand even further.

Exhibits

A. SWOT Analysis Table

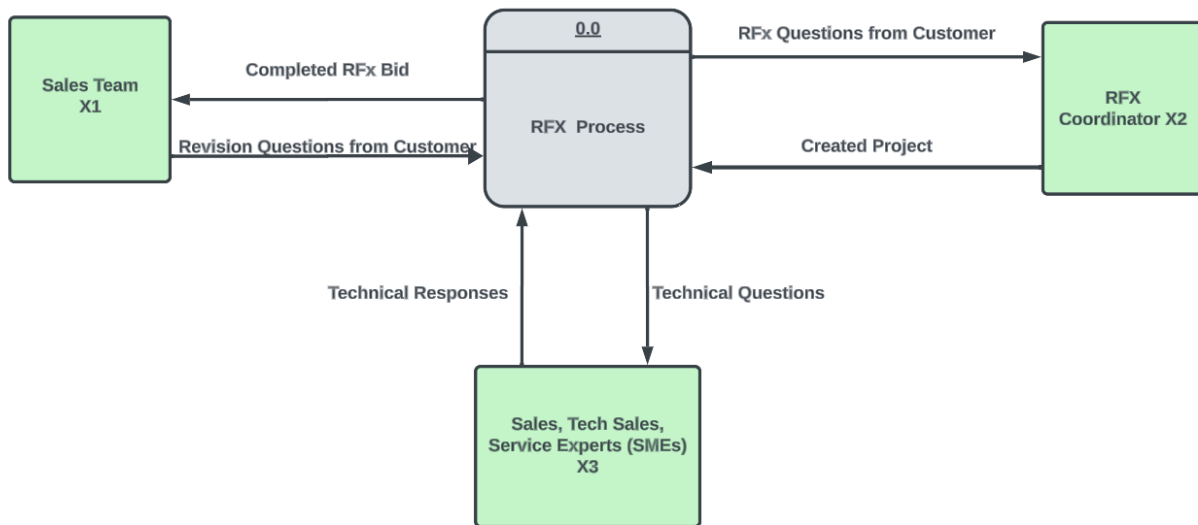
STRENGTHS <ul style="list-style-type: none"> • global presence across different industries • wide product portfolio including design solutions, project management platform, and cloud management services • integrative products • 300,000+ clients 	WEAKNESSES <ul style="list-style-type: none"> • sophisticated, high-learning products • dependency on major clients • some lack of efficiency • low win rate for new clients
OPPORTUNITIES <ul style="list-style-type: none"> • increased demand for digital design solutions • smart manufacturing options built into products • cloud computing services are becoming popular 	THREATS <ul style="list-style-type: none"> • large market = many competitors

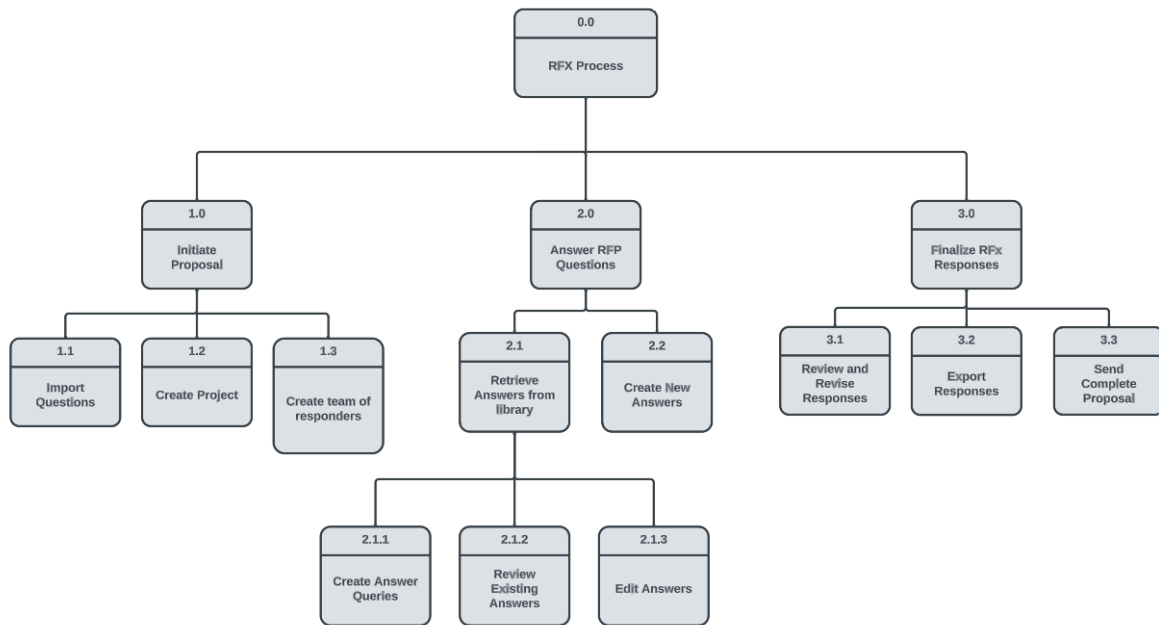
B. PIECES Analysis Table

	Performance	Information	Efficiency	Economics	Service
Data		How accurate is the data inputted into the software?	How and where is the data being pulled from?		
Software	How efficient is the software?		How much time are we wasting with the current software?	Cost per month of your RFP software?	Are your users happy with your software?
Processes	How long does the RFP process take?		How much time are we wasting with the current process?	How much do these processes cost? What costs are applied?	
People	Who performs what tasks?		Does the human element cause some inefficiency?	Salary of average RFP professional?	

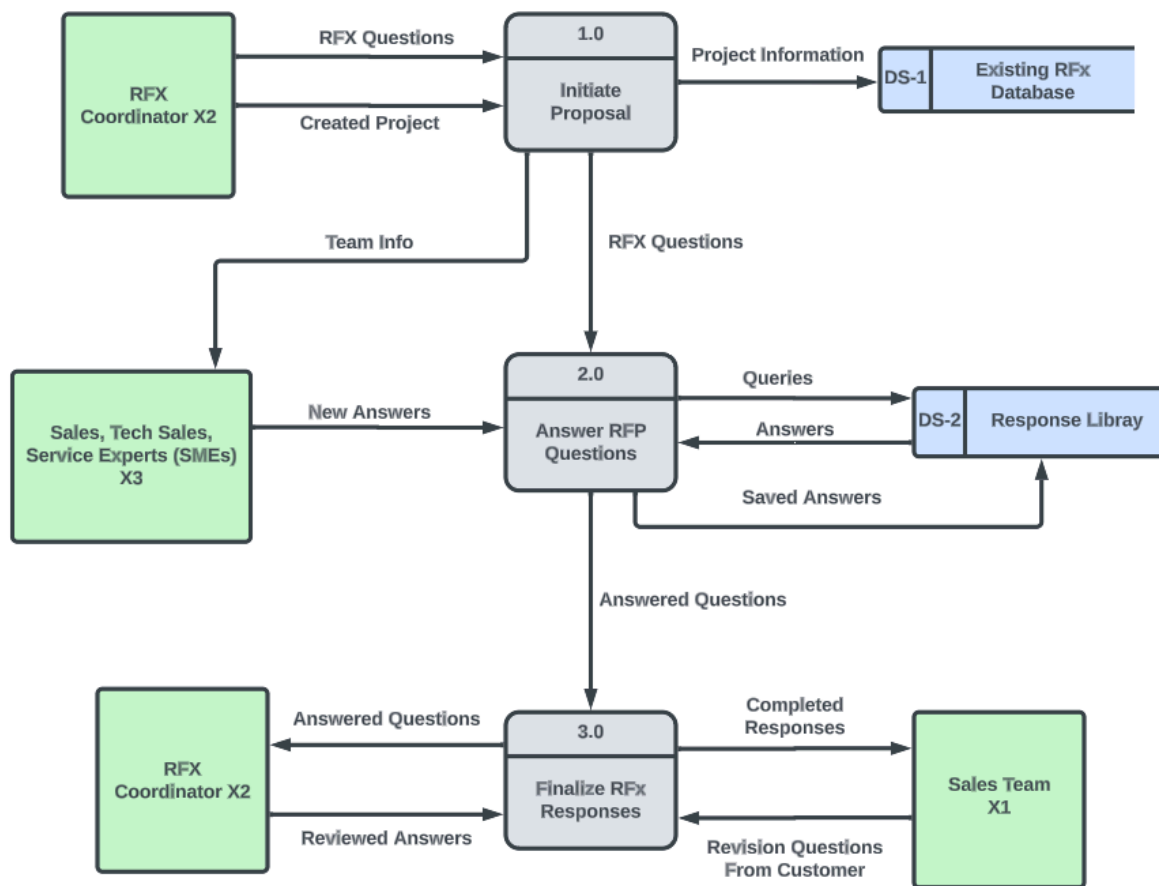
C. Current Logical Process Models

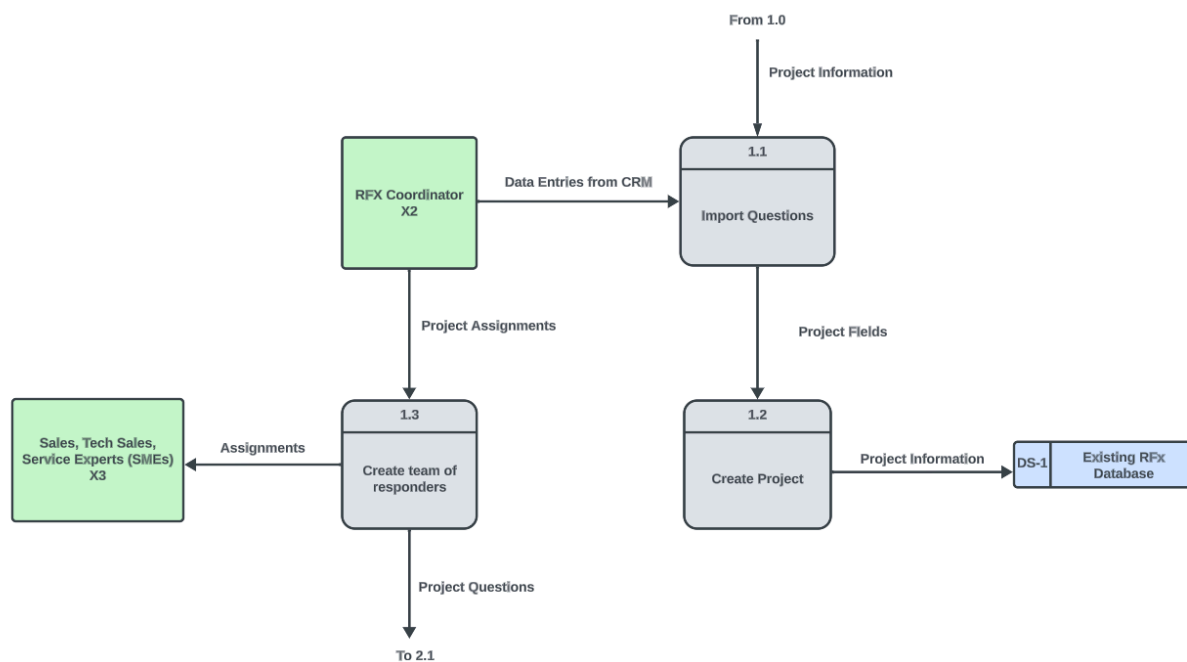
Appendix A - Current Logical Context



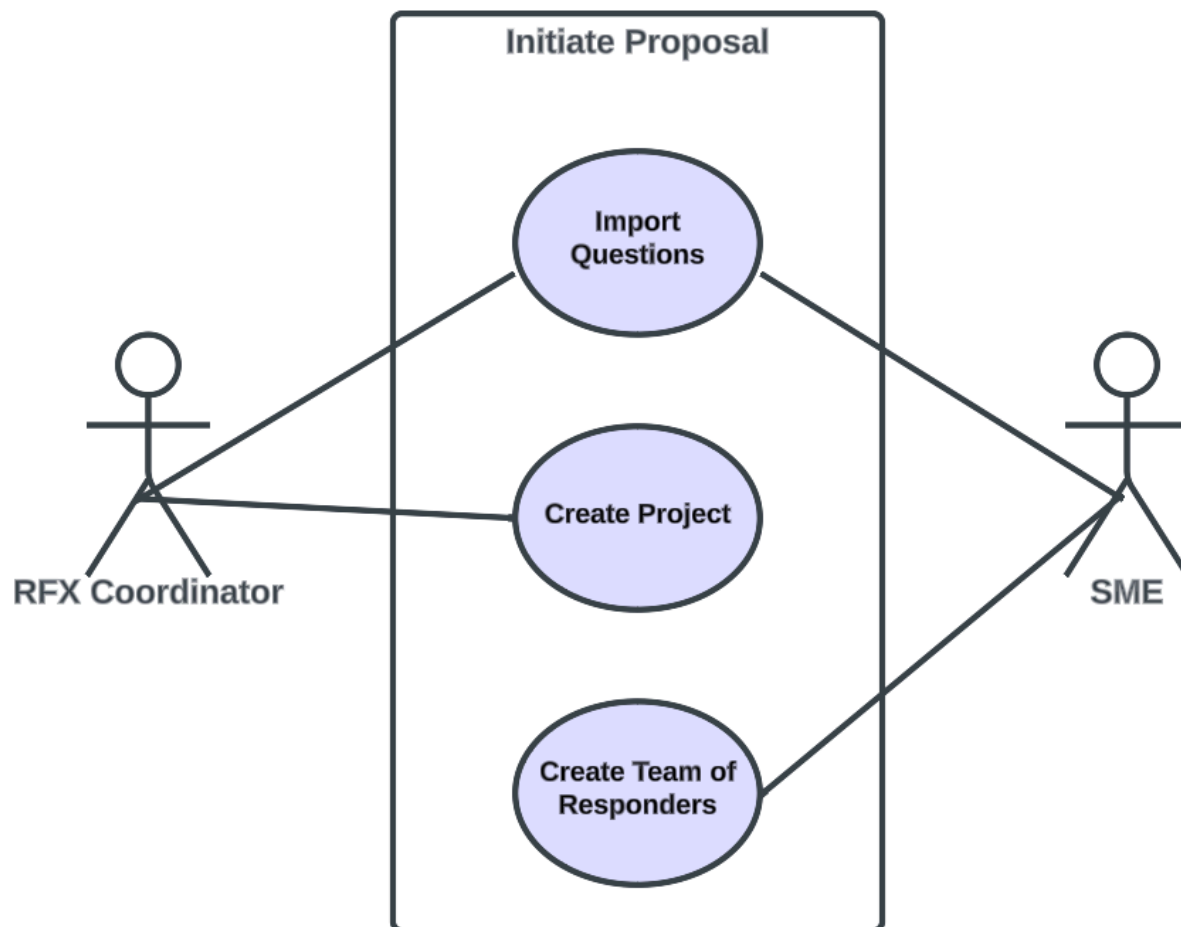
Appendix B - Current Decomposition

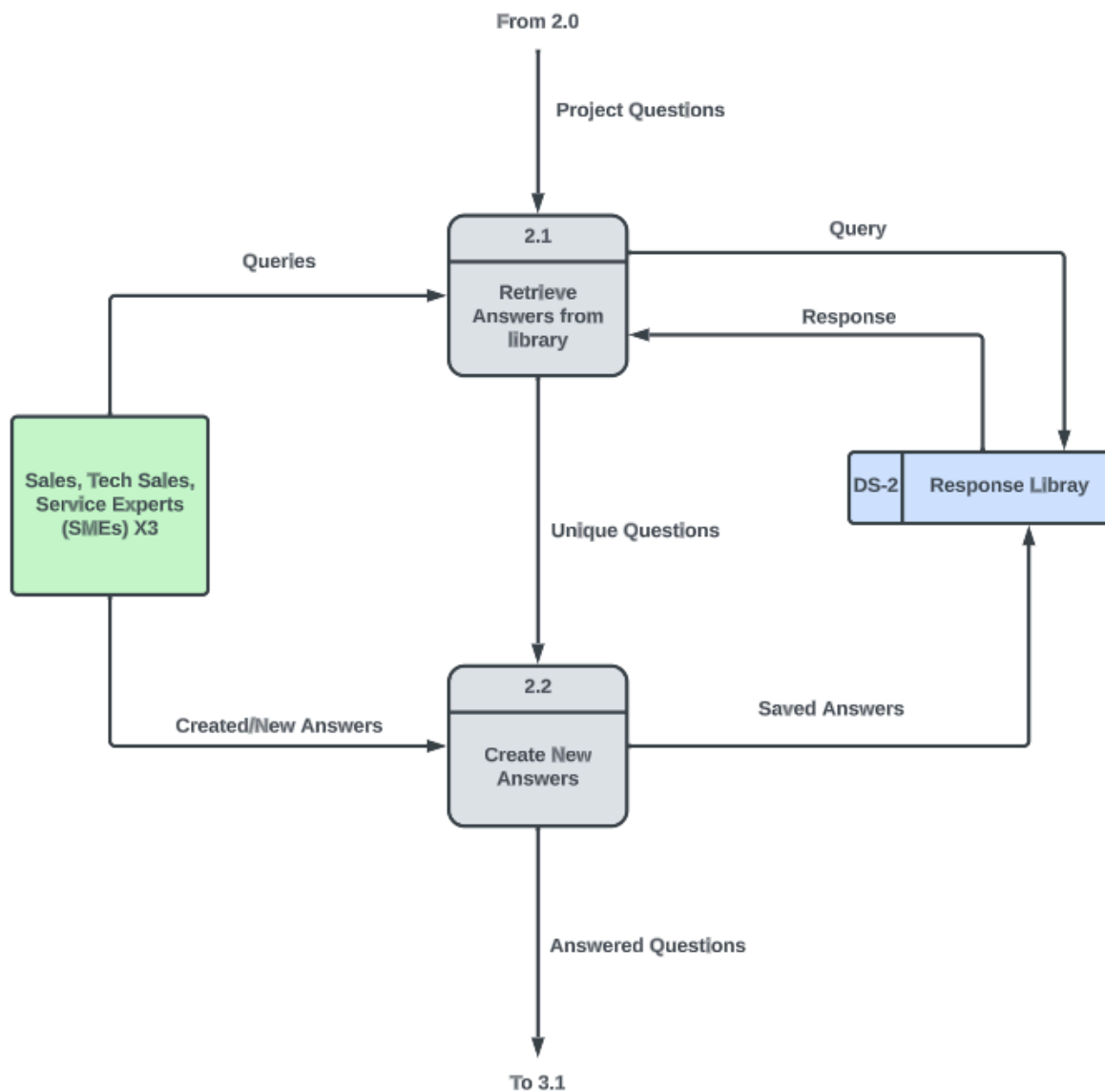
Appendix C - Current Logical Level 0

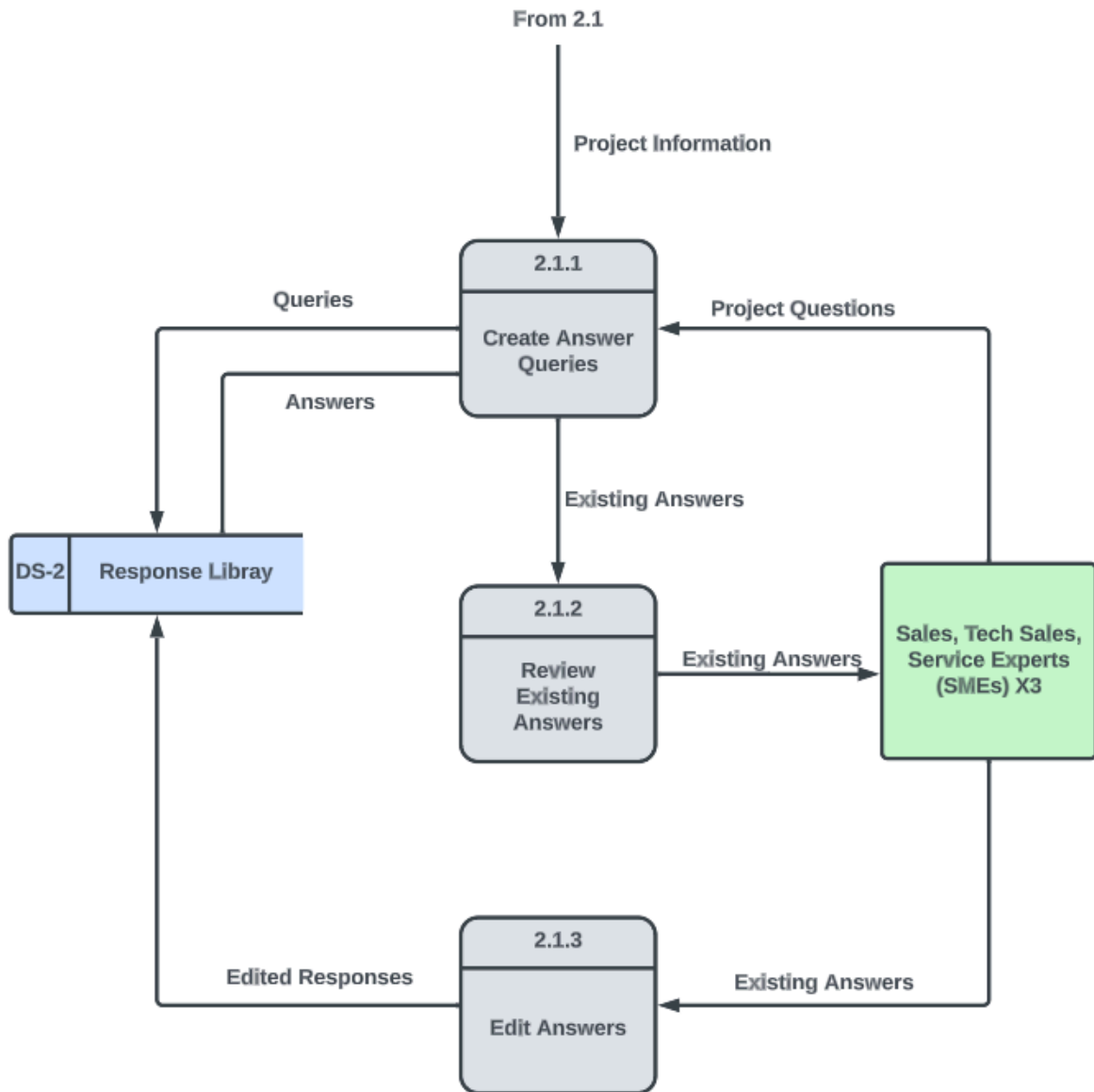


Appendix D - Current Logical Level 1 (from 1.0)

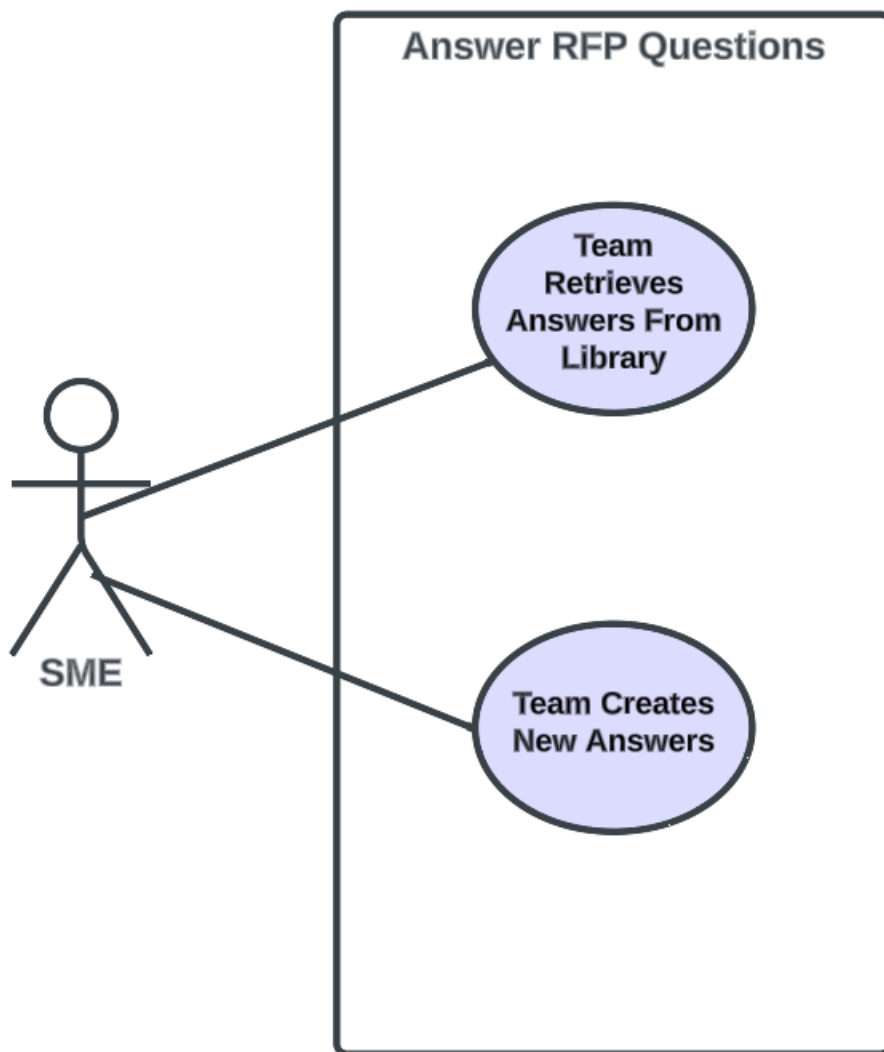
Appendix E - Current Use Case Level 1 (from 1.0)

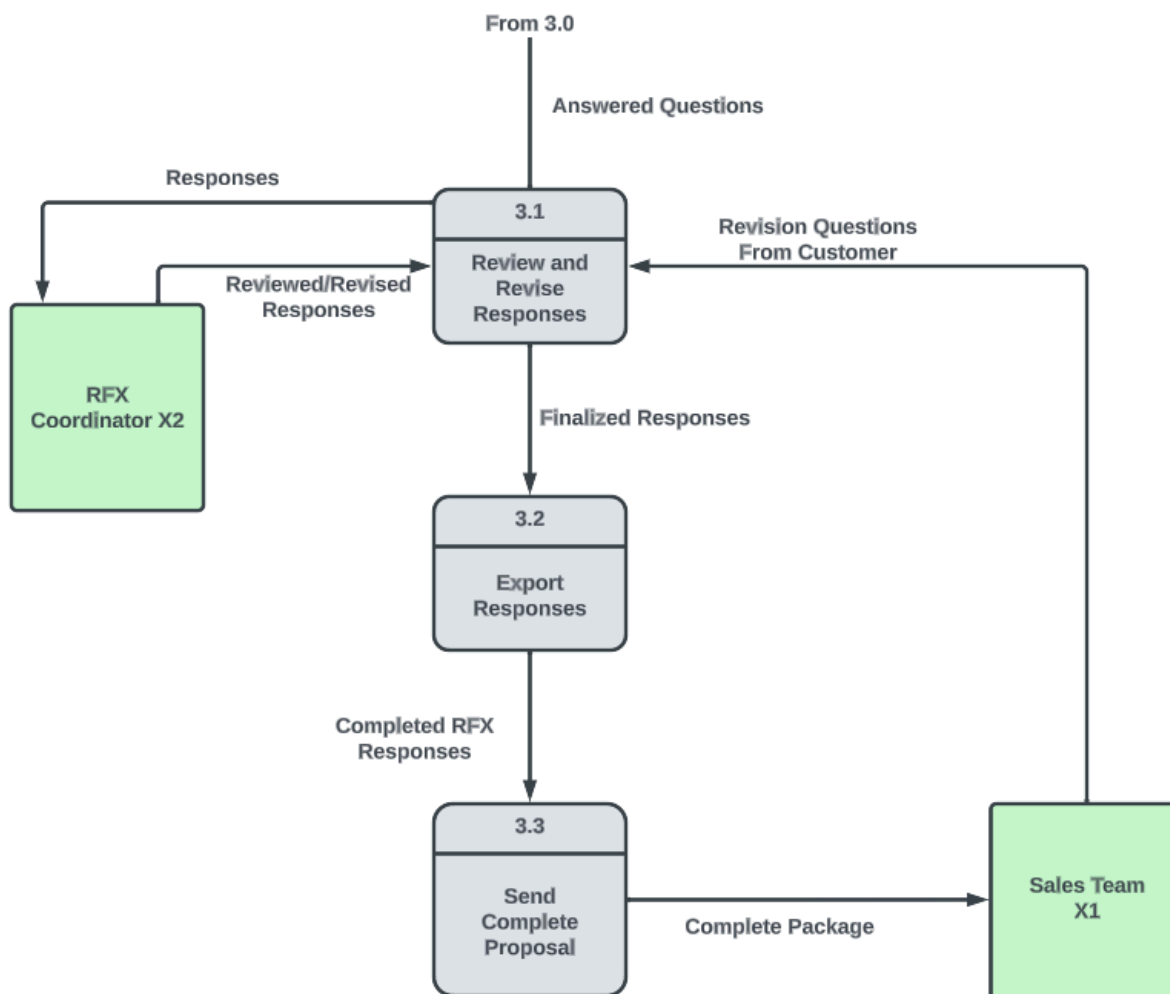


Appendix F - Current Logical Level 1 (from 2.0)

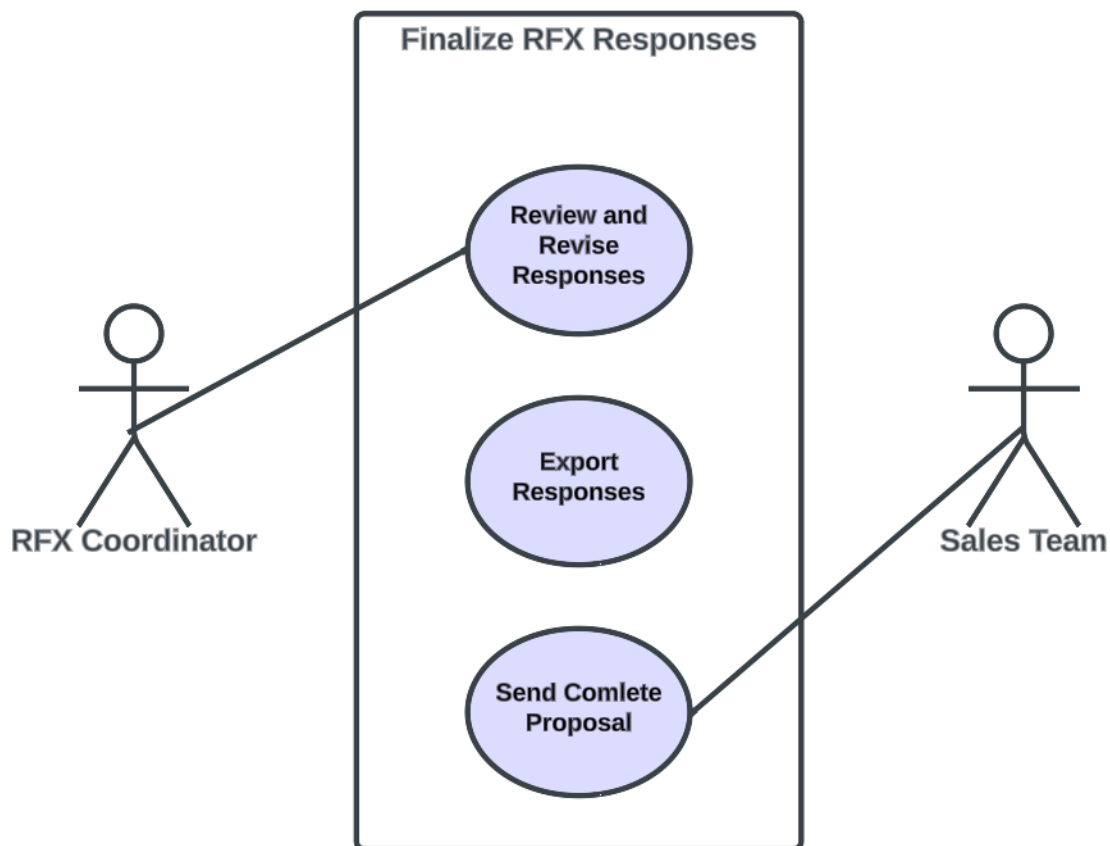
Appendix G - Current Logical Level 2 (from 2.1)

Appendix H - Current Use Case Level 1 (from 2.0)



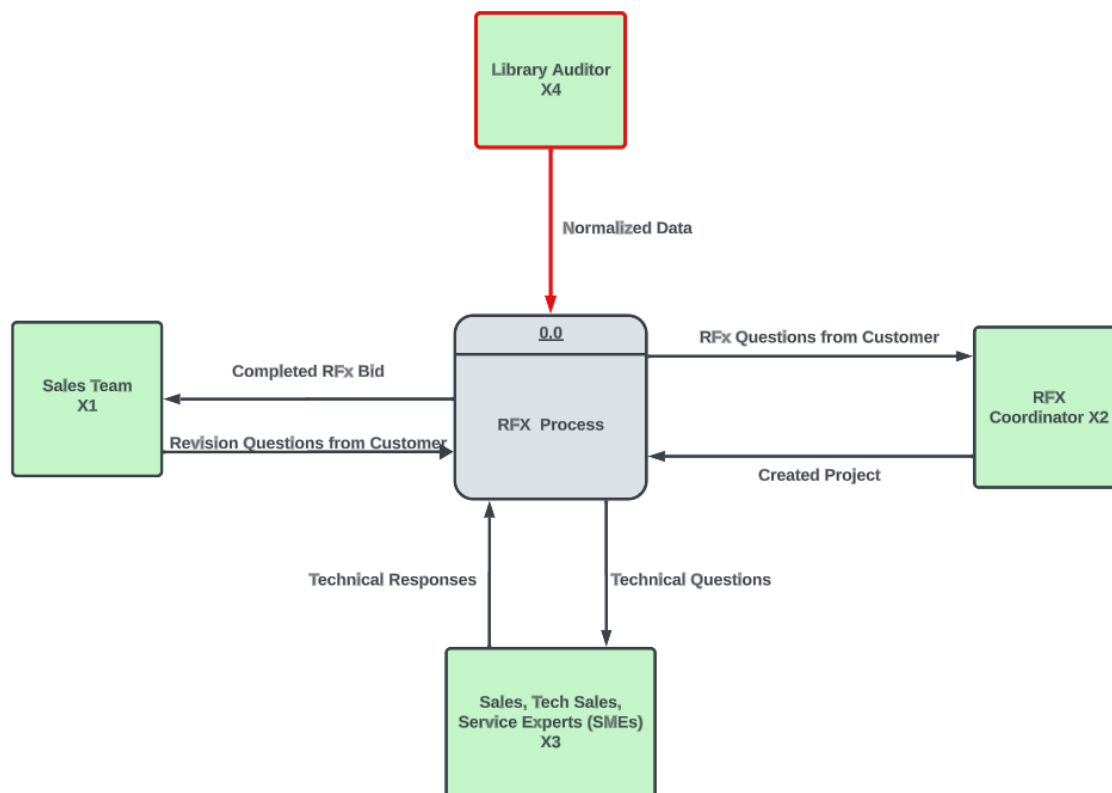
Appendix I - Current Logical Level 1 (from 3.0)

Appendix J - Current Use Case Level 1 (from 3.0)

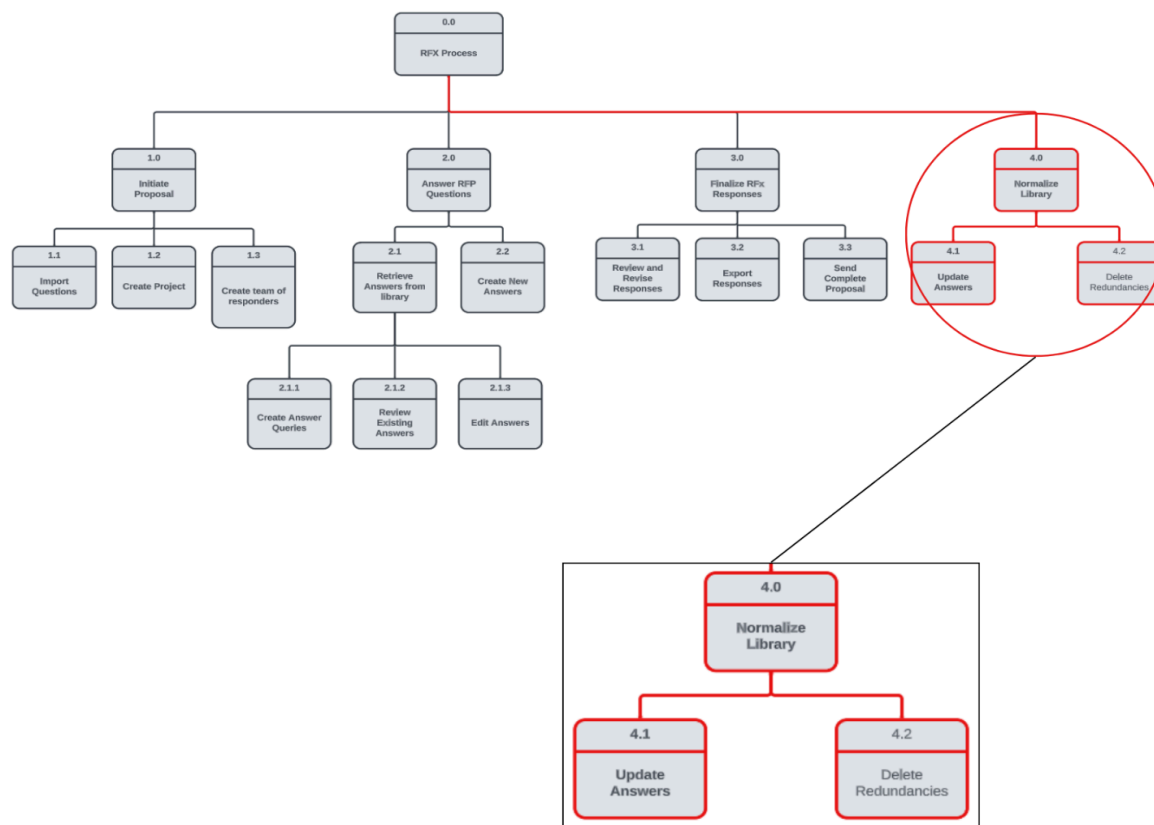


D. Proposed Logical Process Models

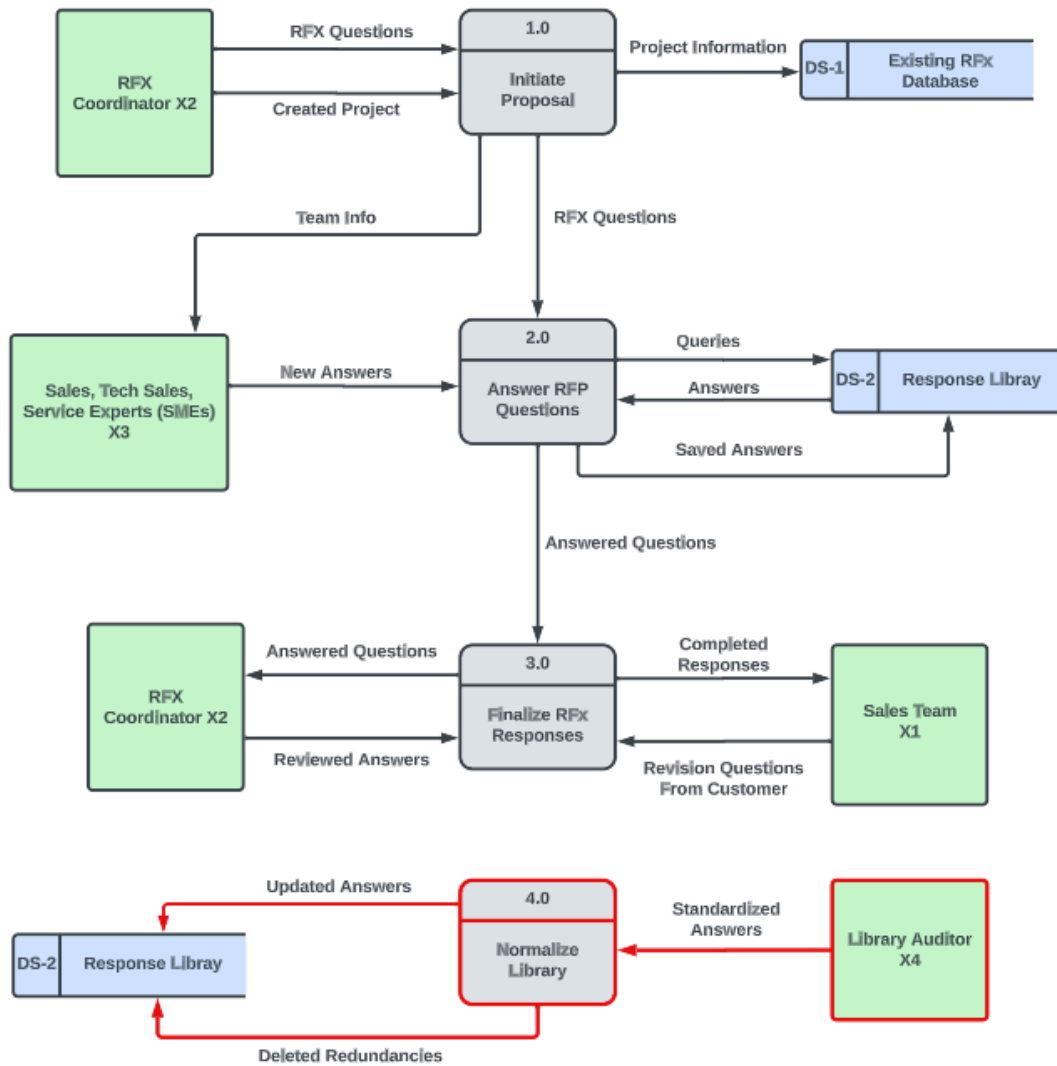
Appendix K - Proposed Logical Context

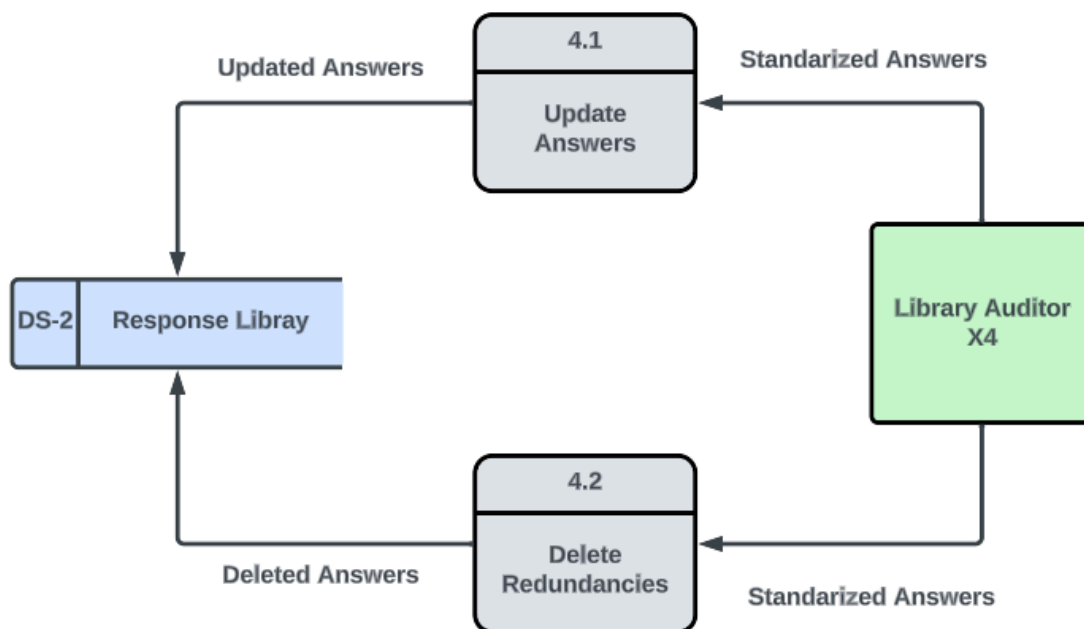


Appendix L - Proposed Decomposition Diagram

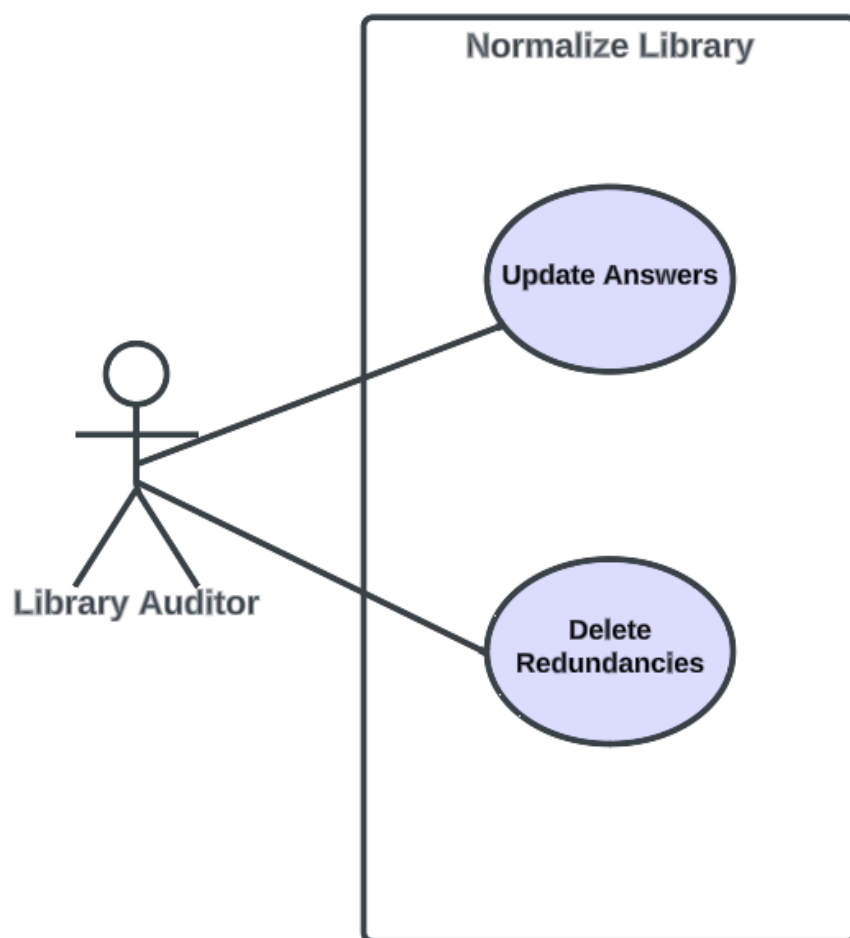


Appendix M - Proposed Logical Level 0



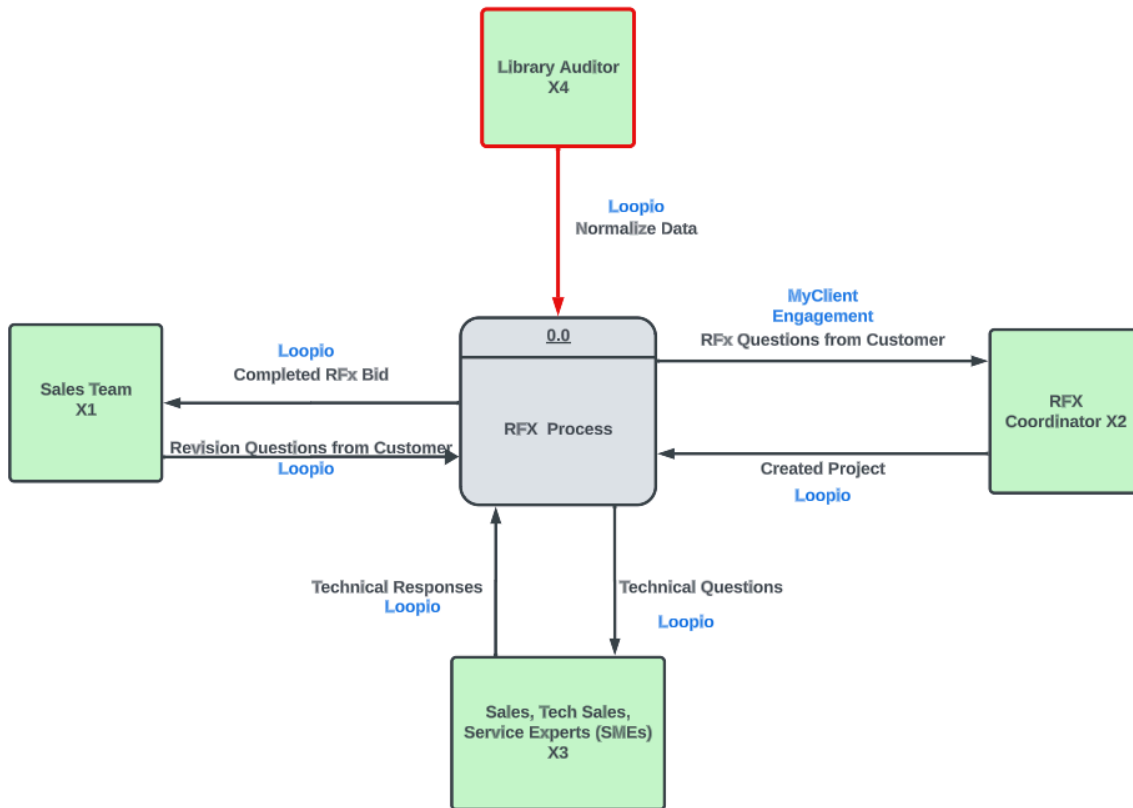
Appendix N - Proposed Logical Level 1 (from 4.0)

Appendix O - Use Case - Proposed Logical Level 1 (from 4.0)

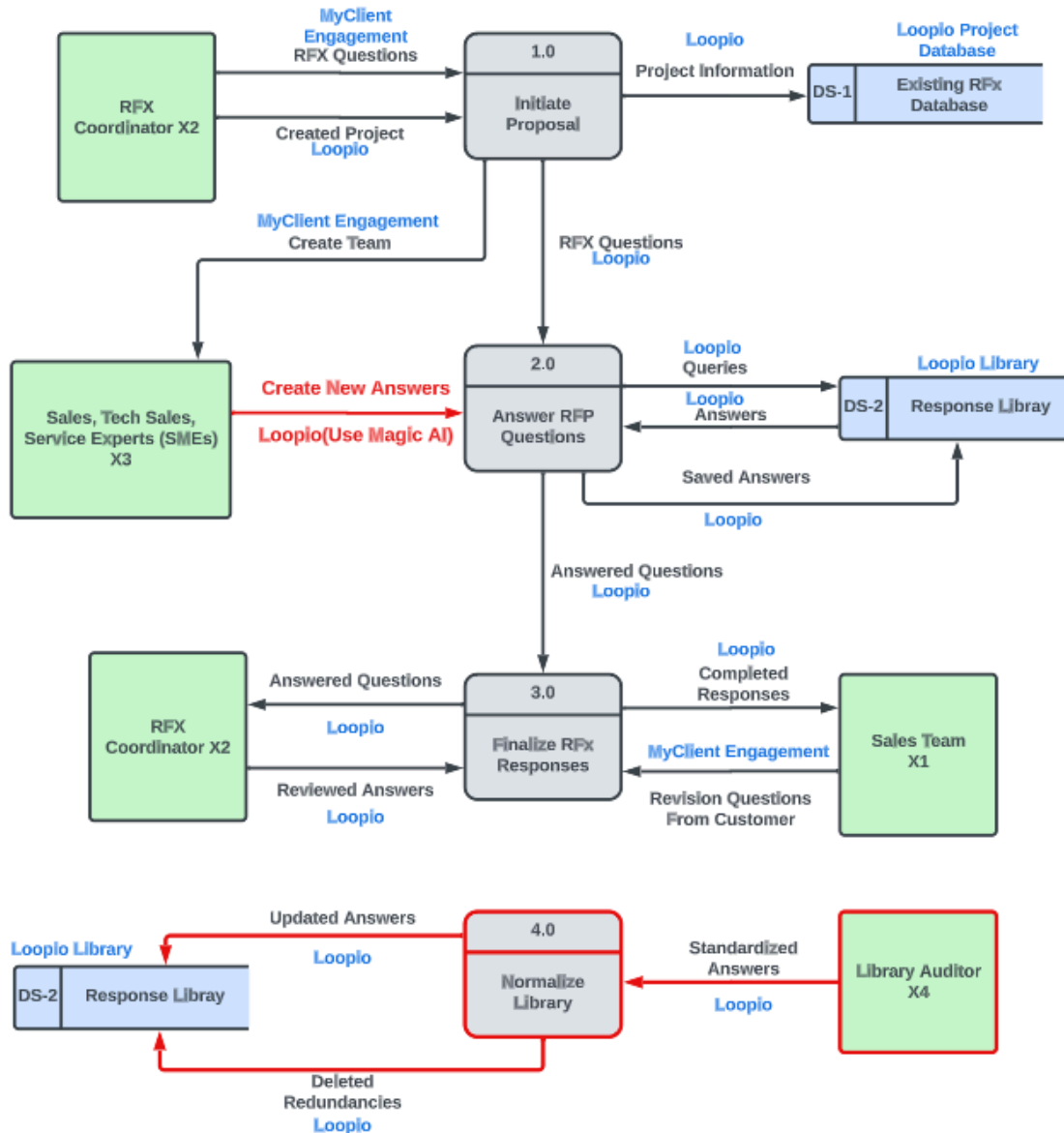


E. Proposed Physical Process Models

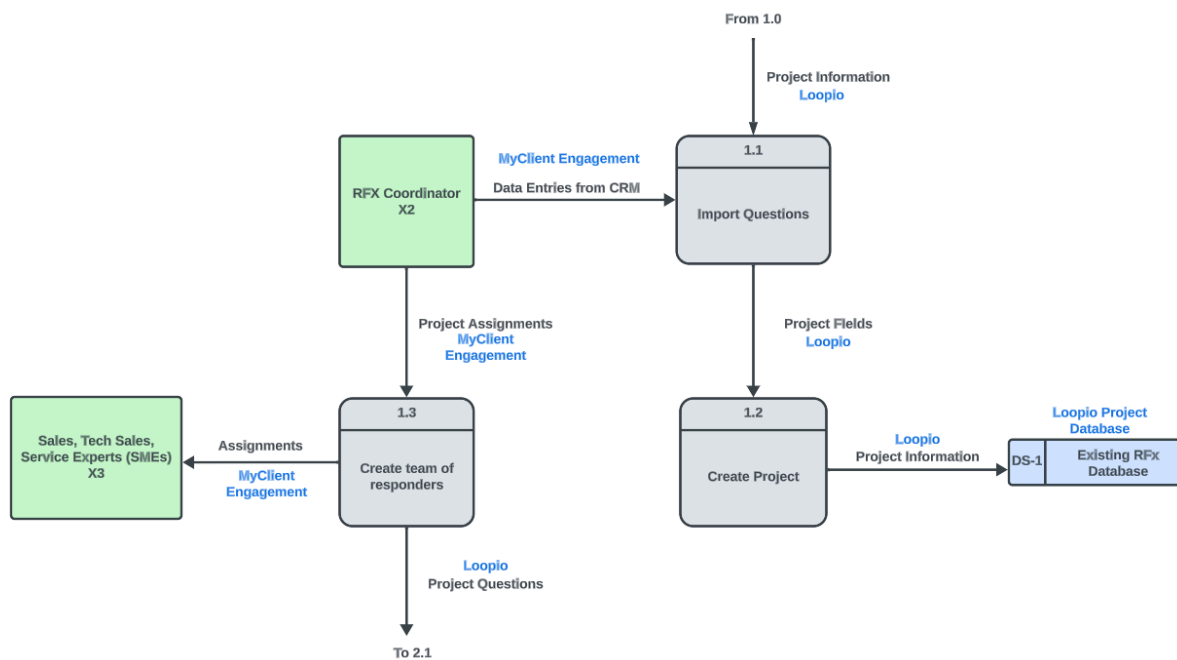
Appendix P - Proposed Physical Context



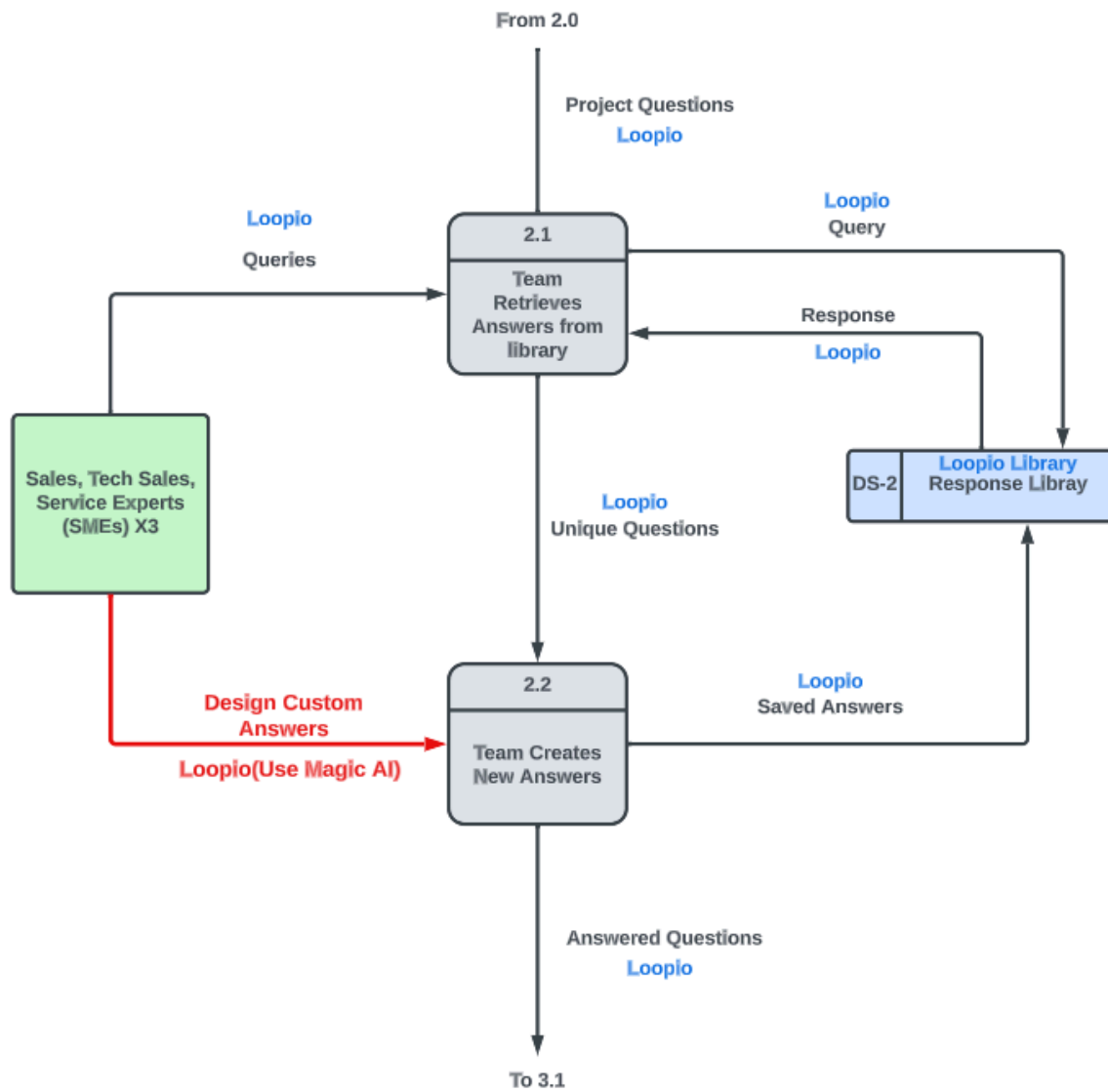
Appendix Q - Proposed Physical Level 0

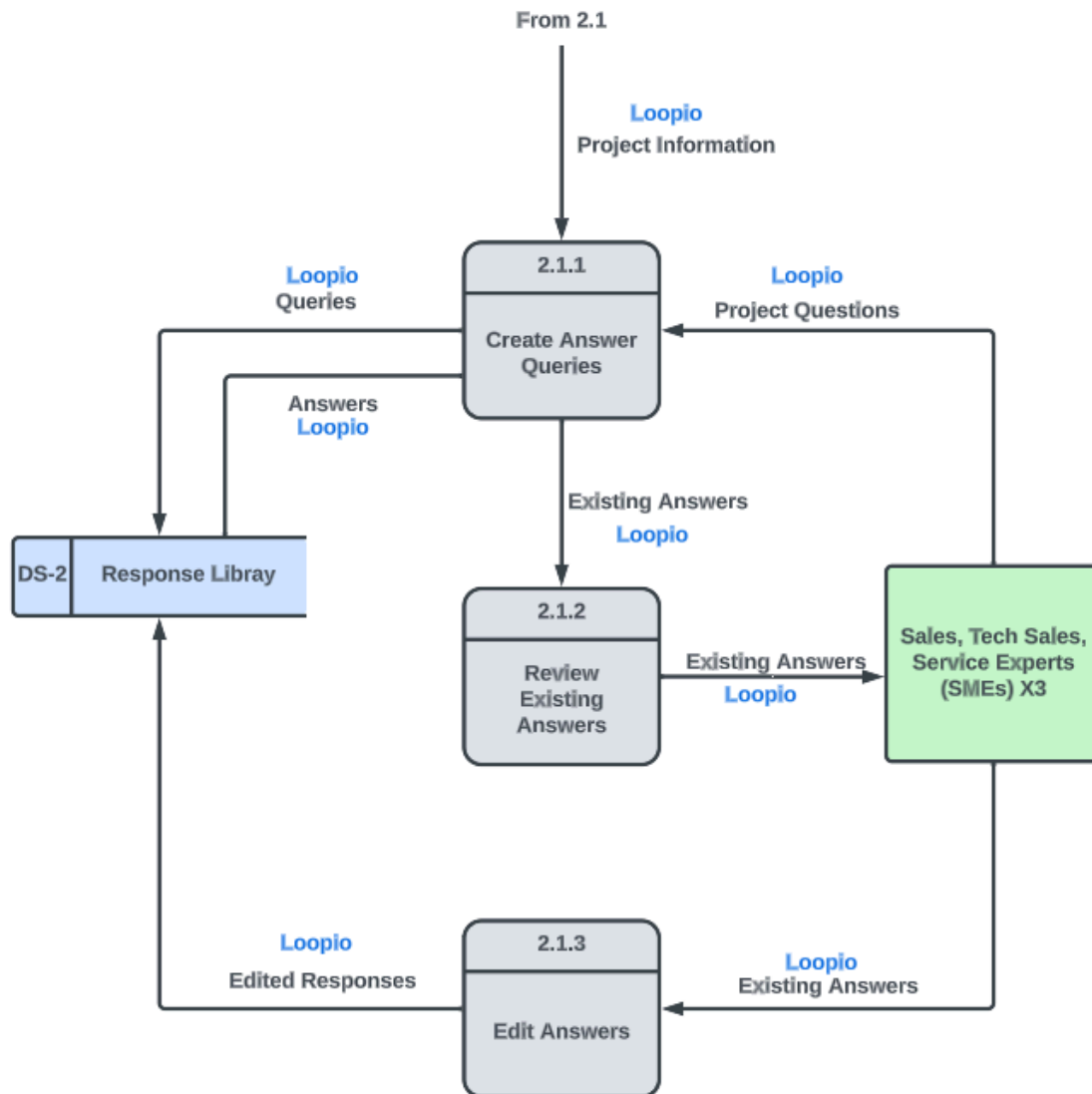


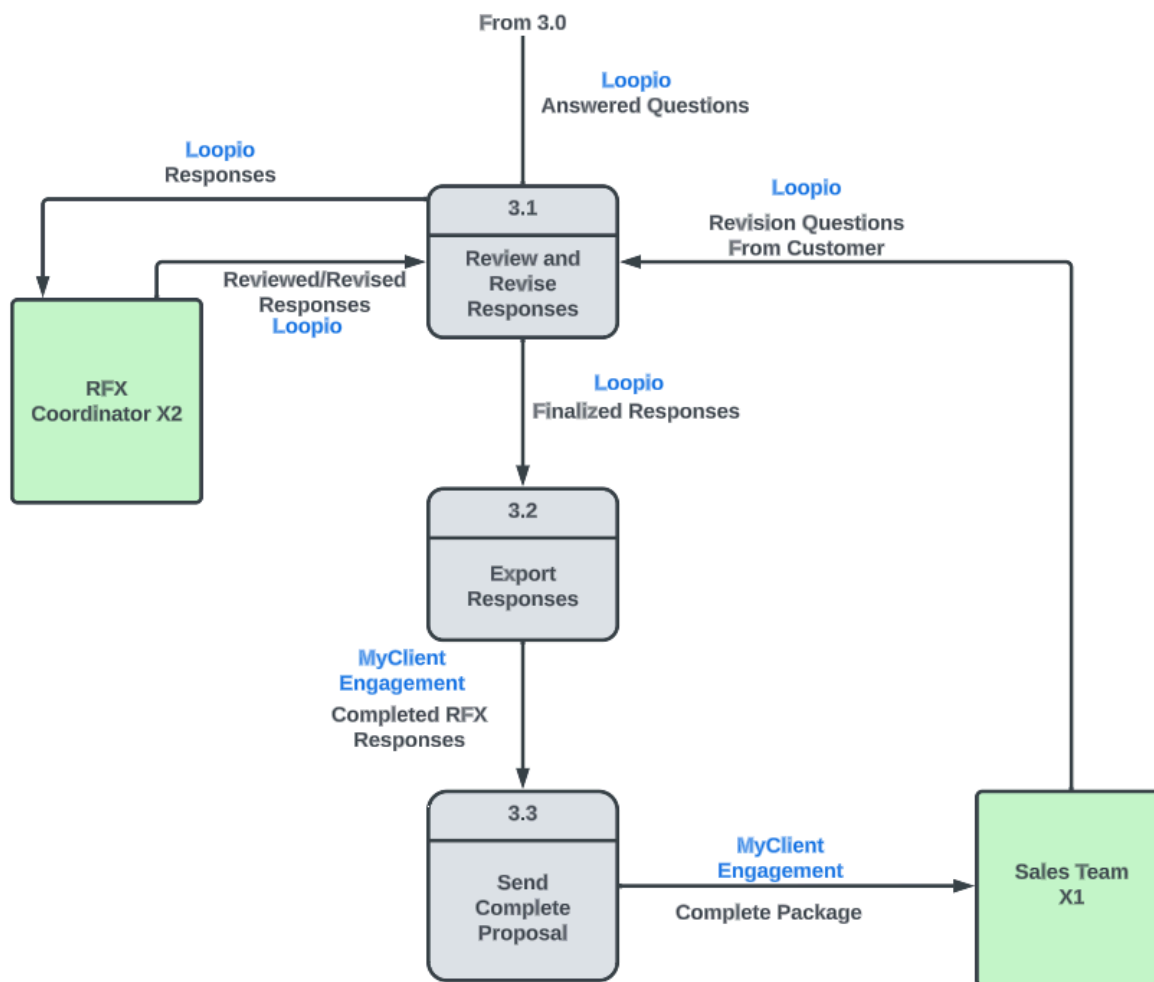
Appendix R - Proposed Physical Level 1 (from 1.0)

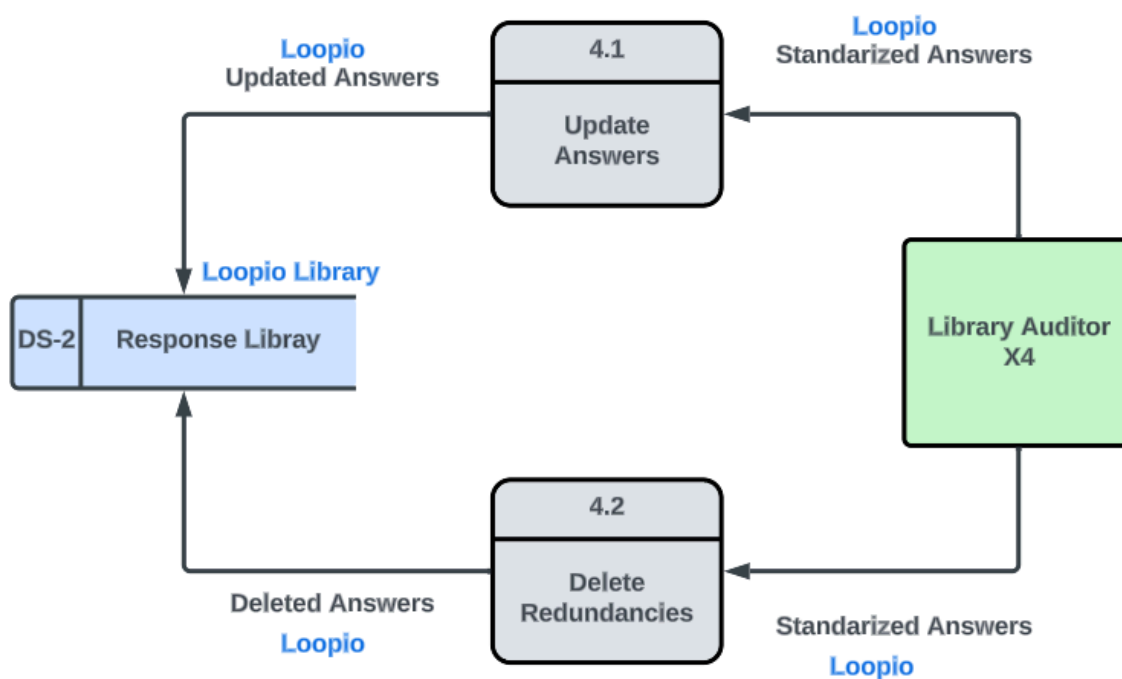


Appendix S - Proposed Physical Level 1 (from 2.0)



Appendix T - Proposed Physical Level 2 (from 2.1)

Appendix U - Proposed Physical Level 1 (from 3.0)

Appendix V - Proposed Physical Level 1 (from 4.0)

Team Member Post Mortem Reflections

Several aspects contributed positively to our team's workflow. The group calendar via Google Calendar facilitated efficient coordination, ensuring everyone was on the same page regarding deadlines and schedules. The iMessage group chat served as a quick and convenient communication channel. Google Drive was a valuable source of organization, facilitating collaborative work and easy access to shared documents. Regular weekly meetings, both internally and with the client, played a crucial role in our project's success. These sessions not only helped in scheduling interviews but also provided a platform for feedback on our findings and allowed for incremental revisions to the report. Maintaining an open line of contact with Janet, our point of contact, through email and text proved beneficial because she was able to answer questions and concerns promptly. Overall, this approach allowed us to identify the strengths and weaknesses of team members early on, contributing to the overall improvement of the final report.

However, some small challenges did occur throughout the project. Scheduling regular meetings during midterm and finals seasons posed difficulties, as team members were required to allocate their focus to multiple classes. Additionally, there were instances where we deviated from the Gantt chart, which affected the planned timeline.

Over the 4+ months we've spent on this project, we learned a lot about systems analysis and design, project management, and how to operate as business professionals. Some lessons we'll take with us to the next project we work on is to communicate effectively, perform tasks within the allotted time frame, and to think about business problems as systems analysts.

Personal Statements

Isabella: Overall, I think this was a very valuable and interesting project. It was great to be able to apply what we are learning in class to a real, multi billion dollar company. In addition, I was happy I had a great team who wanted to put great effort forward and were committed. Working as a team helped build a deeper understanding of what we were learning in class. I really had fun, from start to finish, completing this project by finding a problem and providing solutions to a real company. This is one of the only classes where I was able to actively apply my knowledge in the field I will be working in, in the future.

Rohan: As a semester-long project, I thought the team and I did a great job overall working together. From communication, effort, and quality of work, I'm proud of what our team accomplished. Additionally, I'm glad we organized our technologies, expectations, and communications with the client effectively. It set us up for success and overall made writing the report and making the poster much easier.

Alex: Overall this project was a fantastic experience and a great introduction into real world skills used in the workplace. Having the opportunity to work with such a big company was great, getting to meet different people from the company was an amazing experience. I feel that this has been one of the most rewarding and educational projects I've been a part of in my college career. I was lucky enough to be paired with such an amazing team as well, which really helped the project move forward so smoothly. I look forward to using the new skills I've developed in future endeavors.

Anthony: I enjoyed working with my team members, I can say with all honesty that this has been an extremely pleasurable experience, and up to this point in college I had been disappointed in the work ethic of the groups I was in. I was extremely impressed with the ingenuity and technical expertise demonstrated by fellow team members. Interacting with them and learning through their insight has added significant value to the class.

Jose: What I initially believed would be an extremely daunting and challenging project turned out to be an enjoyable learning experience. Prior to even selecting our company, I knew we had great potential in creating an innovative solution. I consider myself fortunate for the opportunity to work with such a talented group of individuals, each with their own unique and valuable skill set. I can confidently say that this is by far the best group assignment I have been a part of in my academic career. I am grateful, as this project also created an opportunity for me as an intern for Dassault Systèmes, which I recently accepted.