

# **SMB Case - Rock Solid Industrial Parts, Inc.**

April 5, 2021

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Report Expressly for: Senior Director of IT Janice Drake

## **Executive Summary**

Rock Solid Industrials Inc is a family owned parts distribution business that is stationed in San Jose California. The executives of the company have created a 3 year strategic plan that involves an expansion across the entire west coast and mountain states. To properly execute this plan, it is required that they invest into and implement new IT systems and modern technologies. This document consists of a full report on Rock Solids Industry Inc. 3 year strategic plan. It first analyzes the firm's current processes and addresses all areas of concern. The next section includes a detailed analysis of all potential benefits that will come along with the implementation of the strategic plan. Both hardware and software issues are addressed and are given detailed recommendations on possible solutions and installations. Constraints, risks, and infrastructures conclude the remainder of the document with diagrams to help C-level executives visualize the changes and implementations.

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## Introduction

Rock Solid Industrials Inc is a family owned parts distribution business with a headquarters stationed in San Jose California. The executives of the company have created a 3 year strategic plan that involves an expansion across the entire west coast and mountain states. The goal of Rock Solids strategic plan is to **increase their annual sales by approximately \$39 million from their current annual sales of \$33 million**. With this plan, the firm is also expecting to grow their employee pool by **adding 70 employees to match the rate of expansion**. To properly execute this plan, changes must be made in regards to their technology use and efficiency. Details include introduction of new hardware, software, CRM system, and analysis and modification of current business processes. These IT investments are **only able to create value when they are aligned with RSIP business processes and goals**.

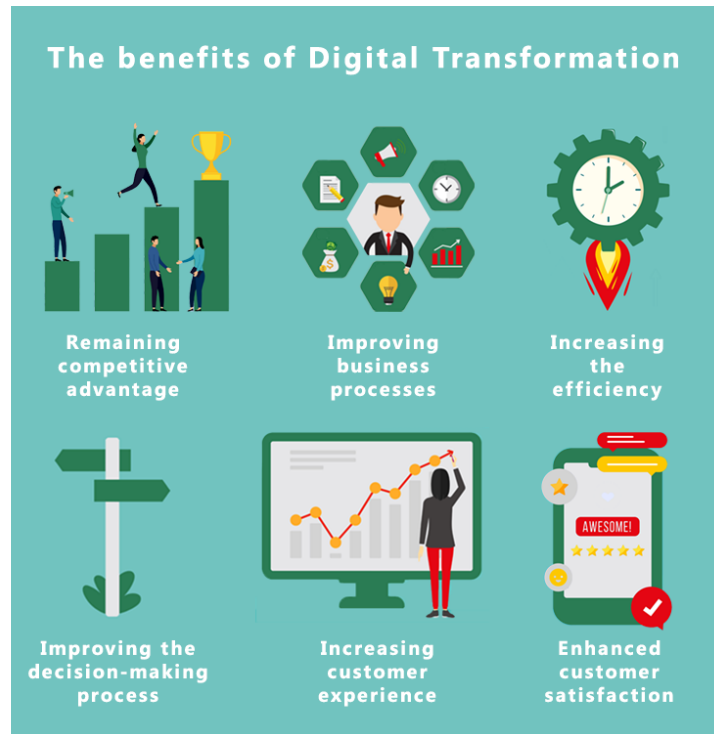


Fig. 1: Benefits of Digital Transformation

Source:

<https://www.palodesk.com/the-straightforward-digital-transformation-guide-for-beginners/>

## Areas to Consider

### Business Process

#### Current Business Process

RSIP current businesses processes are hindered by their ongoing use of outdated technology equipment. The state of the accounting department is poor due to their use of older softwares such as Windows 7, Microsoft Office, and older versions of both Excel and Quickbooks. The RSIP warehouse department currently has no automation, using single barcode scanners and translating data to sales representatives through PDF downloads of Excel files. This form of process is prone to human error, introduction of automation will help prevent the possibility of any costly errors. The infrastructure of the firm needs to also be reworked; currently only the front office is capable of accessing LAN, while the large remainder of the firm is accessing the internet through AT&T consumer DSL and consumer grade switches. It is important to quickly note that the firm does own a high-speed commercial grade fiber internet termination but it is not

currently in use. As for the remaining hardware, investments towards upgrading PC's and monitors are absolutely necessary to enable compatibility with newer softwares. By making these necessary investments and aligning them with RSIP strategic plan, we will see increases in overall efficiency and create a quicker pace work environment.

### Benefits of Change of Business Process

For RSIP to scale up to the levels expected within their 3 year strategic plan, their current businesses processes must be changed to be able to support the scaling. If the level of efficiency cannot meet the levels of growth, then problems such as employee dissatisfaction, low company morale, and poor production execution will occur. Growth is always followed by an increase in workload, to help your employees adjust to the changing environments and to avoid reaching a point of bottleneck, upgrades and installations must be made to ease this transition and create a new more efficient business process. Changes in business processes will be addressed and sectioned by each individual department. Rock Solid Industrial Parts will see benefits in terms of customer retention, higher levels of efficiency, and sales/inventory management.

### Introduction of CRM System

Automation is technology that is considered to be a requirement in all modernized forms of businesses. By introducing a CRM automation (Customer Relation Management), RSIP will be able to simplify collaboration processes and communication processes for those within and outside of the firm. By installing a fitting CRM system, it will create a brand new work environment that consists of more efficient paths to communication, access to live data, increased organization, and more accuracy in forecasting. These are all beneficial towards achieving RSIP 3 year strategic plan.

One of the main benefits of a CRM system is its ability to generate higher customer satisfaction. A CRM system will allow the firm to gain deeper insight on their consumers by being able to access all of the consumers data within the reach of a fingertip. CRM software helps users centralize information, optimize, and streamline their communication.<sup>1</sup> This will in turn allow them to improve customer relations and promote customer loyalty, thus generating a larger pool of consumers. For a firm that is operating on a completely paper based system, organization is key for success. The information held within a CRM system is centralized, meaning that anyone can access all readily available information, this would not be possible if RSPI were to continue operating a paper based system. As RSPI continues its growth, it is important to maintain and improve on the current state of communication. Everyone in the firm will be able to collaborate with one another on a shared record with no limitations to where they are on the globe. This opens a more modern approach to working; off-site and remote.

### Sales Department

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<sup>1</sup> <https://www.superoffice.com/blog/crm-benefits/>

As businesses are beginning to transition into operating from the cloud, CRM investments have become a top priority and this can be seen through the rapid growth of CRM sales. The Sales Department would benefit greatly with the installation of a CRM system given their growth, as it will provide opportunities of a more efficient and proactive way of operating. Given that the current field sales operations are local with many sales representatives working from home, the enhancement of collaboration would be greatly beneficial for RSIP. As reported in CRM Magazine, 91 % of American businesses that employ more than 10 employees are now using a CRM system.<sup>2</sup> This is an indicator that companies that are beginning to scale such as RSIP have adopted CRM to help keep pace with their growth. A main priority of the sales team is to place an emphasis on consumer satisfaction to potentially build loyal relationships. Because all of the clients information is centralized and easily accessible, sales representatives can comfortably communicate with their clients, assisting them towards building a personal relationship with the client. CRM systems have been proven to improve customer retention rates, but more importantly, this equates to a profit increase of 25% to 85%.<sup>3</sup> These numbers are extremely impressive and promise great upside. In terms of the productivity and efficiency of a CRM system for those within the firm, it can be seen that productivity can be improved by up to 34%.<sup>4</sup> This increase in productivity is credited to the fact that many of the current business processes will now be automated. Because employees will be spending on activities that will soon be automated, they are allowed more time to work on strengthening relationships with existing customers. Investing into a CRM system will help support RSIPs growth, all the while creating value that will far exceed its initial investment.

### Warehouse

Currently the warehouse is facing inventory management issues, the department has accumulated 100K in SKUs in inventory and this number is continuing to grow as RSIP expands. Without any form of inventory management system and barcode scanners being the only form of automation, the warehouse is operating at insufficient levels. Using barcode scanners can be unreliable, allowing for common human errors that could be costly to the firm. By implementing an inventory management system, RSIP will be able to cut down on costly human errors, prevent stockment issues, and decrease the amount of required manual labor. RSIP would also be eliminating the need to use Excel spreadsheets, which is a timely task that can be managed in a more efficient manner. No longer will individual pieces of data have to be recorded and waited on by the sales representatives. IMS will allow for a direct connection between the sales representatives and the warehouse, allowing both ends to receive real time updates and access real time data. Compared to the current barcode system, an IMS system such as RFID improves visibility, enables quicker scanning (multiple tags scanned simultaneously), and reduces labor costs.<sup>5</sup>

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<sup>2</sup> <https://www.smallbizgenius.net/by-the-numbers/crm-statistics/#gref>

<sup>3</sup> <https://financesonline.com/crm-statistics-analysis-of-trends-data-and-market-share/>

<sup>4</sup> <https://www.nomalys.com/en/28-surprising-crm-statistics-about-adoption-features-benefits-and-mobility/>

<sup>5</sup> <https://www.camcode.com/asset-tags/using-rfid-for-inventory-management-pros-and-cons/>

## Human Resource

The greatest need for the Human Resources department is a transition to a cloud based system from their current paper form operations. To accomplish this, Rock Solid Industrial Parts would need to implement a CRM system that includes a human resource management software (HRMS). As previously discussed, all data under a CRM system is centralized. This is especially important for the HR department because it will allow for easier management of employee data. With an HRMS installed, employees can operate through a self service rather than referring to human resources to update personal employee data. The time saved from not having to update employee information can be used towards more **focused functionality**. Organization and time work together in harmony, because the program is centrally stored and easily accessible, searching for information for reports can be done almost instantly. HRMS can be used to measure the firm's effectiveness of turnover management, benefit costs, etc.<sup>6</sup> Having a deep understanding and capability to make these measurements is priceless in maintaining a sustained competitive advantage. Security may be a question that many have in regards to an HRMS, but rest assured the data held within the system is protected through encryption processes and firewalls. With the current state of outsourcing ADP, it remains sufficient and it is recommended for RSIP to continue doing so to alleviate the task of payrolls for the HR department.

## Accounting

In regards to the accounting department, the best solution is to continue their use of current softwares such as Microsoft Word and QuickBooks as it will provide a smooth transition while maintaining efficiency. These softwares are sufficient, but the problem is that the department is running older versions of both softwares. Updating to the newest version rather than replacing the software allows for an easier transition period and higher rate of acceptance from the employees. Newer versions of both hold more capability and are greatly improved compared to their previous forms. The current hardware must be addressed in order to successfully install a newer version of Microsoft Word. RSIP is currently operating on Windows 7, which is no longer able to receive updates from Microsoft, with Windows 10 version still being supported. These updates and constant maintenance not only allow for newer softwares to be downloaded, but an increase in security as well. The accounting firm deals with very case sensitive information, it is crucial that these documents remain safe and secure.

## Software

Until this point, integrating newer systems and softwares such as HRMS Software, a CRM system, an inventory management system have been the main topic of discussion. It is essential that these software updates be made to support the strategic plan in place. Below are the optimal softwares that have chosen out to perfectly match the needs of RSIP.

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<sup>6</sup> <https://www.camcode.com/asset-tags/using-rfid-for-inventory-management-pros-and-cons/>

## Zoho

Implementing a CRM system for RSIP may be the most significant in terms of successfully achieving the 3 year strategic plan because it has impactful interactions with the majority of the softwares that will be in place. Because of its significance, it is important to implement a CRM system perfectly suited to match the needs of RSIP and all of its software to maximize the tool's functionality. Zoho CRM is an all-in solution system that allows users to manage all sales, customer support, and marketing sales activities on a single platform. Zoho is highly customizable, this is a strong feature because it will enable RSIP to make customizations to best fit their needs. When compared to some alternative systems, Zoho is the best solution in terms of learning curves and cost budgeting. Zoho offers five options of subscription plans and consumers are charged by the user on a per monthly basis. The chosen subscription plan for RSIP is the standard version, as it will be the most cost efficient while still containing all the qualities that RSIP is looking for in a CRM. Given that the firm is new to CRM technology, the very user-friendly interface and easy implementation process of Zoho should aid the firms transition into a more efficient way of operating.

CRM systems can come off as a complex program with a steep learning curve, and this is true for many systems; but not Zoho. Zoho is highly regarded as having the easiest implementation process and friendliest user-interface for its respected price point and features. The manner in which the data is compiled allows the learning curve to be short, enabling users to master the craft of data analysis in no time.<sup>7</sup> In comparison to Zoho's strongest rival Salesforce, Zoho has a much lower learning curve. For example, the admin controls for Zoho are simplified and require no prior experience as a software admin. The user-interface features a clean dashboard with clear labels, centralised buttons and appealing colors for easy navigation. Even with its low learning curve, Zoho does offer both free and paid training sessions for their users. These training sessions are led by experts and are being held virtually, this is perfect for RSIP as their users are unlikely to attend many sessions. Overall, it is a great introductory CRM system because of its simplicity; but the power and engineering of the programs remains just as strong and efficient as its counterparts.

Zoho is able to attack all challenges that faces a growing firm because of its ability to provide insightful forecasts, real-time data inputs, and valuable consumer information; and these all translate to higher customer satisfaction, retention and ultimately profit and growth. Being organized and staying in sync is crucial in terms of team success, especially when expanding a company because of how displaced everyone would be. Zoho makes collaborations and communications easy because of their ability to combine multiple streamlines into one secure, common workspace. With Zoho, users are able to stay connected through created groups and Zoho Connect. Zoho Connect features the ability to create feeds that can be used for sharing ideas, and starting discussions, allowing users to be up to date on RSIP news and updates. Of

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<sup>7</sup> <https://www.thecrmexpert.com/solutions/zoho-reports/>

course, Zoho Connect is customizable, allowing users to prioritize feeds that they would prefer to see and hide those that are not useful. Another powerful feature of Zoho is Zoho Inventory, an inventory management software built for expanding companies like RSIP. This tool can be utilized heavily by the Warehouse department as well as the sales team because it covers inventory control, management, and shipping integrations. By simply opening Zoho's iOS and android application, users can retrieve data such as stock levels, retrieve tracking detail, and warehouse reports. This will generate higher efficiency rates by mitigating redundancy in these processes.

As previously mentioned, Zoho is perfectly suited for RSIP because of its integration with applications such as QuickBooks and Microsoft 365. Zoho can synchronize all data from QuickBooks and Microsoft Teams in real-time. Edits to meeting times or conferences on Microsoft Team can automatically be updated into Zoho, which in turn creates a better overall flow of organization. By integrating Zoho with other software that RSIP will implement, we would be strengthening and unifying all tools to maximize efficiency.

The 8 Best Free and Open Source CRM Software Solutions								
	Free Contacts	Free Users	Free Storage	Free Support	Upgrade Fee	Email Marketing	Cloud-based	Self-hosted
 AgileCRM	50,000	10	5 GB	Email	\$8.99/mo		✓	✓
 Bitrix24	Unlimited	5	5 GB	No	\$39.00/mo	✓	✓	✓
 Capsule	250	2	10 MB	Email	\$12.00/mo/user	✓	✓	
 HubSpot	1,000,000	Unlimited	5 Docs	Forum	\$50.00/mo/user	✓		✓
 RAYNET	250	2	50 MB	Email & Forum	\$19.00/mo/user	✓	✓	✓
 Really Simple Systems	100	2	100 MB	Email & Live Chat	\$14.00/mo/user		✓	
 suiteCRM	Unlimited	Unlimited	Unlimited	Forum	£1,500+ VAT Max of 15 hours support	✓	✓	✓
 Zoho CRM	Unlimited	3	1 GB	No	\$12.00/mo/user	✓	✓	✓
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Figure 2 : CRM Comparison  
Source: <https://www.pinterest.com/pin/26669822778355075/>

### 2021 QuickBooks Online Advanced

The chosen plan for QuickBooks moving forward will be QuickBooks Online Advanced Plan with a current price point of \$75 per month. When looking into QuickBooks there are two



different versions, the online form and the desktop form. QuickBooks Online and Desktop are both loaded with strong accounting features, the main difference being QuickBooks Online is a cloud-based software rather than being locally installed. Generally QuickBooks Online is designed for smaller firms, but the advanced version of it allows for 25 individuals. Although RSIP is not currently staffing 25 users, with plans to hire 2 more employees in the finance and accounting department, this would place the firm over the threshold of cheaper plans such as the simple start and plus. Because of the increase in limit of users, the Advanced plan allows for RSIP to scale immensely past their 3 year strategic plan. In addition to opportunities of scaling, the Desktop version holds fewer automations, is grounded to windows-only, and most importantly does not allow for remote access or mobile apps.<sup>8</sup> As RSIP continues to expand, this feature is especially important as it will free up the option to work remotely. It is also important to note that the UI of the Online version is much more simple and user-friendly, perfect for those who are not as tech savvy. In terms of the actual software, this version of QuickBook is a large improvement over the currently used one. Compared to the previous version, this version of QuickBooks includes new features such as automated invoices and automated receipt management. This eliminates the need for holding paper files, being able to quickly transfer data into the database through a picture of the receipt. In the most recent update of QuickBooks Online Advanced, they introduced exclusive premium apps. Exclusive premium apps allow users to manage all business in one place by being able to track data that is unique for the industry.<sup>9</sup> Examples of this include Salesforce, Hubspot, Docusign and more. This is a very important feature because it allows for easy integration with Zoho. Because RSIP is continuing to outsource payroll to ADP, there will be no need to add payroll to our QuickBooks subscription.

### Microsoft 365

As RSIP continues to expand across their business operations, maintaining their current state of communication will become increasingly difficult. With Microsoft 365 you are able to strengthen your communication and collaboration while installing many more essential tools. Microsoft 365 brings immense value, having included Microsoft Team, Outlook, Excel, Powerpoint, and Word. The entirety of this package can be utilized at all levels of Rock Solid Industrial Parts. To implement Microsoft 365, it is optimal to subscribe to a Business Standard plan. The Microsoft 365 Business Standard subscription is a much less costly alternative because it ensures every employee will obtain Microsoft 365.

Face-to-face and verbal communication are key in terms of having success collaborating with one another. Included in Microsoft 365 is Microsoft Teams, a voice over internet protocol (VoIP) tool that allows users located anywhere on the globe to collaborate with each other at any given moment. Because RSIP is expanding into different states, it is important that the quality of meetings and conversations are held at a high standard in order to have success. Microsoft Team

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<sup>8</sup> <https://www.merchantmaverick.com/quickbooks-desktop-pro-vs-quickbooks-online/>

<sup>9</sup> <https://quickbooks.intuit.com/pricing/>



has a range of uses including collaborative projects, general meetings, and simply provide a way for employees to build relationships. In a recent survey of 4,700 workers, studies found that video conferencing was able to increase efficiency and productivity by 94% and increased the impact of discussions by 84%.<sup>10</sup> These numbers are astounding when referring to the low cost investment of Microsoft 365. Many may argue that video conferencing is not as effective compared to in person conferences, but an increase of impact on discussion by 84% proves the effectiveness and functionality of having to do conferences behind a camera. Operating at the same level of efficiency while being able to work remote is definitely a key factor is success for all expanding firms. By holding meetings and conferences online, RSIP will also be cutting down on travel costs that are needed when having to meet face-to-face.

The remainder of Microsoft 365's package is already familiar for RSIP employees, so the learning curve will not be very high. Applications such as Excel, Word, and Powerpoint are already being utilized, but the great thing about Microsoft 365 is that it also comes with OneDrive. OneDrive comes preinstalled on Windows 10 devices as well as Microsoft 365 and is a cloud-based storage service to centralize all data files. Because OneDrive comes preinstalled in all Windows 10 devices, documents can be uploaded on tablets and phones as well, rather than just your laptop or desktop. Microsoft has designed OneDrive to store all files within one central location through a simple uploading process, allowing access to all those who are granted access within the firm.

#### Avast Business Antivirus Pro Software

When people think about antivirus softwares and cyber attacks, they assume that the only vulnerable devices are laptops and desktops. This belief is false and following it could be detrimental to a firm's success. Every device connected to RSIPs network is capable of suffering cyber attacks, which is why RSIP will install Avast Business Antivirus Pro to protect all devices under the network. This antivirus software has been proclaimed as the "Most comprehensive desktop and server antivirus of 2021".<sup>11</sup>

Avast Business Antivirus Pro enables endpoint protection, meaning every single device connected to Rock Solid Industrial Parts network will be protected. The software has superior antivirus protection, email protection, network firewall, and a web shield. One key component of the software that has brought it so much success is the Avast Patch Management. Unsurprisingly, 57% of all data breaches are because of forgotten software updates.<sup>12</sup> With the Avast Patch

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<sup>10</sup>

<https://www.viewsonic.com/library/business/business-benefits-of-video-conferencing/#:~:text=In%20a%20survey%20of%204%2C700,Expedited%20decision%2Dmaking%20%E2%80%93%2087%25>

<sup>11</sup> <https://www.itproportal.com/guides/best-business-antivirus/>

<sup>12</sup>

[https://www.avast.com/en-us/business/solutions/endpoint-protection?sid=hawk-custom-tracking&utm\\_medium=affiliate&utm\\_source=commissionjunction&utm\\_campaign=100134076&utm\\_content=13637464&couponfield=yes&cjevent=bd0259c1f23bec3da27a73c5f9038397f7c6ce3b8254af4bb#bundles-table](https://www.avast.com/en-us/business/solutions/endpoint-protection?sid=hawk-custom-tracking&utm_medium=affiliate&utm_source=commissionjunction&utm_campaign=100134076&utm_content=13637464&couponfield=yes&cjevent=bd0259c1f23bec3da27a73c5f9038397f7c6ce3b8254af4bb#bundles-table)

Management software, the patching process is automated and simplified, meaning users will not be constantly telling the program to “remind me later” for necessary updates. This software will also be saving RSIP the time of having to install these updates and costs that would arise from potential breaches.

The plan that will be implemented is currently priced at \$46.99 per user, while the downgraded version (non-pro) is \$36.99 per user. The increase in charge is definitely worth it because the pro version comes with server protection while the non-pro version does not. This is a key component because it is an additional multi-layer protection that is required, especially for a growing firm. The cost of the software also gradually decreases as the amount of devices increases. After reviewing the current staff and plans for future hires, it is safe to say that there will be around 100 devices under RSIPs network, given each individual has one laptop and one cell phone. When calculating the total cost, the annual fee comes out to be \$3,054.00, a small cost for the amount of data that will be safely protected. Continuing with no antivirus software or one that is not suited for RSIP will result in breaches and costs that will far exceed the minor investment in Avast Business Antivirus Pro.

## RFID

The inefficiency of Rock Solid Industrial Parts current inventory management system (barcode scanners) will be addressed and replaced with RFID (Radio Frequency Identification). The current process is outdated, less accurate, and prone to costly human errors. Rather than traditional laser scanning, RFID uses a radio wave scanner to communicate with RFID tags. RFID tags are unique because they are able to allow the reader to not only retrieve data, but also to write data to the tag. By being able to write data to the tag users can retrieve real-time updating, this is an extremely powerful tool because it increases levels of efficiency by a surmountable amount.

The reason RSIP will implement RFID technology rather than other alternatives for inventory management is because of its overly impressive ability to open opportunities to reduce labor costs, quicken the pace of scanning, and integration with automated readers. These are two qualities that would benefit RSIP given that their warehouse is likely to grow well over 100,000 SKU's. Labor costs account for 50-80% of a distribution center's cost, a very large proportion.<sup>13</sup> Processes such as shipment verification and inventory check can be done automatically, therefore they will require less amount of employees, allowing RSIP to cut unnecessary costs. Compared to

	RFID	Barcodes
<b>Read Rate</b>	High throughput. Multiple (1000s) tags can be read simultaneously.	Very low throughput. Tags can only be read manually, one at a time.
<b>Line of sight</b>	Not required. Items can be scanned in any direction, as long as it's in the read range, and does not all of it's is never required.	Definitely required. Scanner must physically see each item directly to scan, and items must be oriented in a very specific manner.
<b>Human Capital</b>	Virtually none. Once up and running, the system is completely automated.	Large requirements. Operators must scan each tag.
<b>Read/Write Capability</b>	More than just reading. Ability to read, write, modify, and update.	Read only. Ability to read items and nothing else.
<b>Security</b>	Highly difficult to replicate. Data can be encrypted, tampering is prevented, or inclusion of a unique ID allows for item authentication, so items are stored in a much more secure manner.	

**Figure 3 Source:**  
<https://www.pinterest.com/pin/49553676522990654/>

<sup>13</sup> <https://www.camcode.com/asset-tags/using-rfid-for-inventory-management-pros-and-cons/>

traditional barcode scanning, RFID is capable of scanning more than one tag at a time, from a distance as well. By integrating with automated readers, it is able to create an automatic tracking system because all information is being communicated in real-time. The chosen CRM solution Zoho integrates perfectly because of its compatibility with RFID. Levels of accuracy and efficiency should expect to see great leaps with the integration of RFID.

## Hardware

The current hardware being used by Rock Solid Industrial Parts must be addressed in order to support the adoption of newer and updated softwares. Softwares that will be utilized such as QuickBooks and Microsoft 365 are either unable to run or update on Windows 7 devices. Even if other softwares can be run on the hardware that is in use, they are not running on the most optimal settings. It is important that all software can run smoothly to lessen the likelihood of inaccurate data and glitches. All employees will receive the same exact hardware to ensure that everyone is working in a unified manner.

### Corporate Laptops (Lenovo ThinkPad X1 Carbon Gen 8)

When looking into Rock Solid Industrial Parts 3 year strategic plan, it is obvious that there is a need for laptops rather than a traditional PC. As the firm continues to expand, working remotely or outside of work hours will become an increasingly important factor of success. Companies are beginning to stray away from PCs and looking towards laptops because of its flexibility and efficiency. Laptops can be carried around easily, but with a PC, users are grounded to their desk and cannot complete work otherwise. Laptops have evolved immensely in recent years, carrying high capabilities that are more than sufficient in carrying out every day workloads. PCs are still superior in terms of specs and power, but given that corporate laptops are primarily used only for work, specs and power should not be considered when making the decision because all software that is being implemented does not require much strength.

After much consideration and many comparisons, the optimal laptop for RSIP employees is the Lenovo ThinkPad X1 Carbon Gen 8 14" Laptop. This laptop was featured on LaptopMag and was referred to as the best business laptop on the market because of its lightweight and high performance.<sup>14</sup> The ThinkPad X1 Gen 8 comes pre-installed with the latest version of Windows 10, meaning that it will have features such as OneDrive and Microsoft's support system. Some of the impressive specs built into the Gen 8 ThinkPad are 8GB RAM, an intel quad-core i5 processor, 4k display, 720p webcam, and a 19 hr long lasting battery. All of these features are perfect for performing work, not only in the office but anywhere else as well.

### Business Smartphones (Google Pixel 4A)

Business smartphones will be given to all of the sales representatives as well as Phillip, Tim, Don, and David. These phones will be utilized effectively by these individuals by giving them

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<sup>14</sup> <https://www.laptopmag.com/articles/best-business-laptops>

the ability to work efficiently while being away from their desks. It is important to note that RSIP has been trying to find a solution to incorporate sales representatives into meetings while working remotely; and this would be the perfect solution. The convenience of being able to access databases and customer information is priceless for sales representatives in terms of productivity. After careful review, the Google Pixel 4A would be the optimal business smartphone for RSIP sales representatives and c-level executives given its compatibility with the newly installed softwares such as Microsoft Teams, Zoho, and its attractive price point. Having a smartphone that's compatible with other softwares in use will be especially important for RSIP in terms of their organization and maximization of utility. The Google Pixel 4A has a starting price of \$349, which fares more than well when looking at competitors such as the Samsung Galaxy A71 (\$899) and Galaxy Note 20 (\$599). Purchasing the Google Pixel 4a rather than the alternatives will help RSIP stay within budget, while operating at almost an identical level of efficiency. When compared to its largest rival the iPhone SE, it is \$50 cheaper, while still offering an OLED screen similar to that of the iPhone.<sup>15</sup>

### Miscellaneous Hardware

Aside from the needed software and hardware refreshments, there will be a few minor integrations to strengthen and organize the flow of work. These small investments include a few printers, monitors, and a projector. Currently meetings are held with a white board to draw diagrams and a projector for powerpoint slides in training meetings. To improve clarity and quality of presentations, Rock Solid Industrial Parts will upgrade to a newer projector, the ViewSonic PA503X DLP projector. A new projector will create better experiences for team meetings, quality of video is important in enhancing visual aids. This would be a small investment that would change the dynamics of team meetings by a large amount. Because it is an HDMI projector, it is safe to assume that need of a decent amount of HDMI cables; and this would also increase connectivity between other devices such as laptops and monitors. It was noted that CRT monitors are still being used, these will be receiving an upgrade to the Dell 19 monitor. This monitor is superior to a CRT monitor, it offers higher resolutions and is very affordable. Adding a couple of printers around the firm would go a great length in adding to the firm's utility, the printer that is optimal in price and sufficient for RSIP needs is the HP LaserJet Pro MFP M479fdw.

### **Infrastructure**

The current state of Rock Solid Industrial Parts infrastructure must be redesigned and updated to be able to support the expansion of the company. The only form of LAN (Local Area Networks) found at the RSIP headquarters resides only within the front office. To extend these local networks to other areas of the headquarters, WLAN will be implemented. WLAN allows all

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<https://www.tomsguide.com/reviews/google-pixel-4a#:~:text=That%20said%2C%20the%20Pixel%204a,th e%20model%20with%20comparable%20storage.>

employees within the headquarters to access a high speed internet connection from inside and outside of the office. To be able to implement a WLAN, the necessary components consist of multiport switches and a strong router and access points that are evenly spaced out. By spacing out the access points and placing them in optimal settings, it will allow for maximum coverage of the headquarters and mitigates possible dead areas. These components are foundational to network systems and are absolutely necessary for a successful implementation.

The selected router for Rock Solid Industrial Parts is the Synology RT2600AC due to its optimal settings for office structures. The Synology RT2600AC was built with offices in mind, the MU-MIMO support ensures that a large number of devices can be connected at high speeds.<sup>16</sup> Routers can be extremely vulnerable to attacks and breaches, so it is important that RSIP implements one that has built in high security. Luckily, the Synology RT2600AC has strong security tools that includes DoS (Denial of Service) protection, intrusion prevention, and a firewall management. The Synology RT2600AC is also perfect for RSIP because it is capable of supporting remote workers through “virtual offices”, which is simply a secure remote access to RSIPs network. An additional feature of RT2600 is that it can be used as a cloud server, meaning that it could synchronize files across all devices, acting as a way to share files between employees.<sup>17</sup>

#### [Infrastructure Diagram \(Headquarters & Warehouse\)](#)

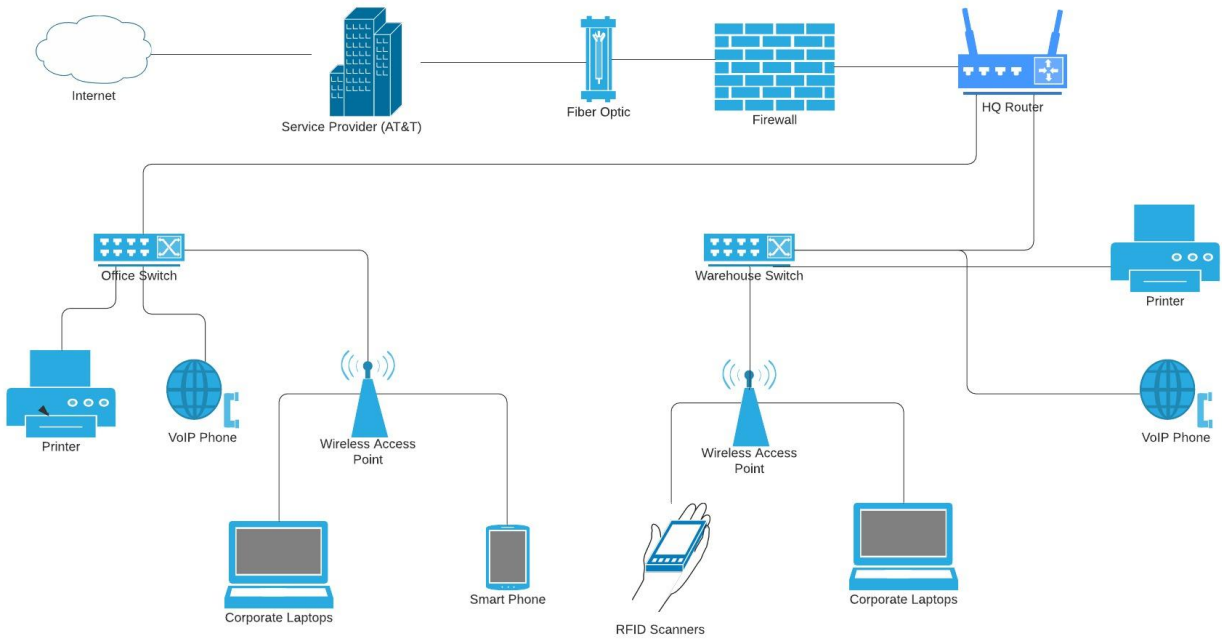
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<sup>16</sup> <https://www.thebalancesmb.com/best-small-business-routers-4171956>

<sup>17</sup> <https://www.thebalancesmb.com/best-small-business-routers-4171956>

## Rock Solid Industrials Inc HQ & Warehouse Infrastructure

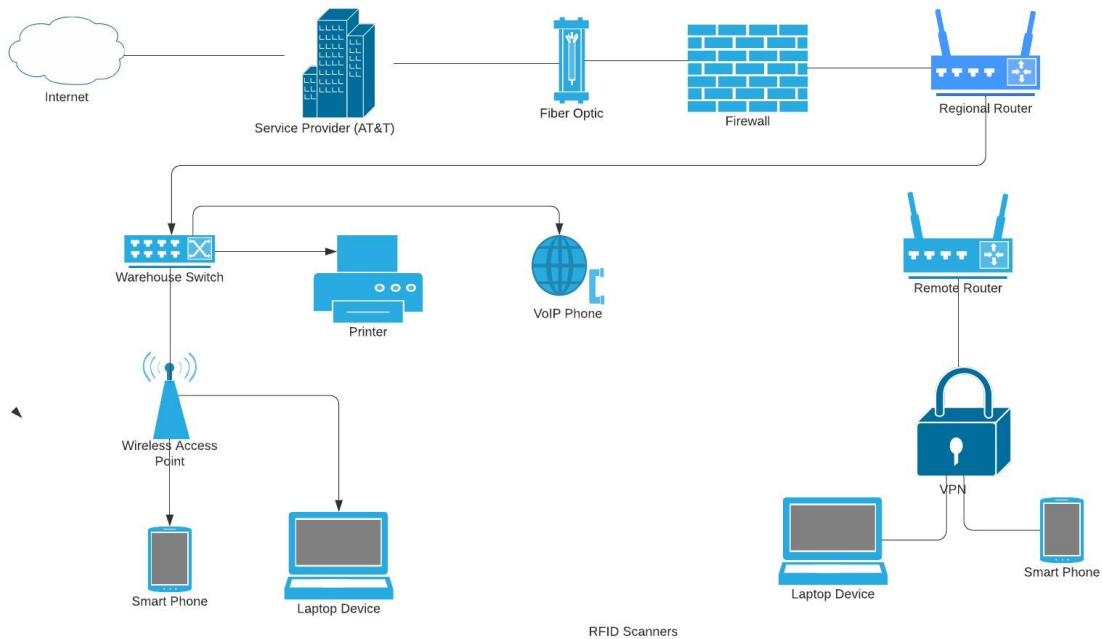
Ryan Tran | March 8 2021.



## Infrastructure Diagram (Regional Office)

### Rock Solid Industrials Inc Regional Office

Ryan Tran | March 8 2021.



### Internet Plan

Rock Solids Industrial Parts connection is currently being supported by AT&T consumer DSL plus consumer grade switches; but a high speed commercial grade fiber internet termination is available but unused. This should be addressed as fiber optic offers a much higher speed when compared to traditional cables. Fiber optic cables are more reliable and are able to send data faster, this is because the technology is able to recognize light and interpret it as data. After carefully reviewing all of the more popular fiber optic internet providers, AT&T Business Fiber is the optimal solution in terms of cost rates, reliability, and connection speed. The specific plan that RSIP will be subscribing to is the Business Fiber 300s, it perfectly meets RSIP needs in terms of the necessary supports and speed that it provides.

### Phone Plan

All corporate smartphones will be under one central plan, allowing for easy governing and managing. The plan that RSIP will be subscribing under is the AT&T Business Unlimited Elite plan; which is \$40/month per line. This would mean that each smartphone would cost 40 dollars a month, up to 10 lines. This plan offers unlimited data, so RSIP employees will not have to worry about finding a connection in case any work related emergencies arise. A feature about the Business Unlimited Elite plan that stood out above the rest was its added security. Because these are corporate phones, it is important that steps are taken to make sure there are no security breaches. To take these necessary steps, each smartphone will also have the Mobile Security Plus Application installed, as it will provide many powerful security tools. This is a free application under the Business Unlimited Elite plan and is used for generating VPN when using public networks, alerting users of theft, cautioning users of unsafe networks, etc. Understanding the importance of the data located on these phones will lead to sustained success because the firm will be safe at all times.

### Data and Data Management

Rock Solid Industrial Parts is currently without any form of data management, operating primarily as a paper-based system. This method is dated and could create a lot of organization and efficiency problems. To fix this, RSIP must transition into a cloud-based system. This may sound difficult, but because the softwares that has been recommended is easily integrated with the cloud, this should not be a big issue at all. As mentioned along with Microsoft 365, OneDrive provides 1TB of cloud storage. This drive can be shared amongst employees for added collaborative qualities; but should be restricted to only those who admins allow access for. The 1TB of cloud storage is also useful because of Microsoft 365s integration with RSIPs new CRM system Zoho! Because Zoho is able to sync all data from Microsoft Teams, it can be easily translated to OneDrive as well. Shifting from a paper-based to cloud-based system will improve overall efficiency and provide a sense of security by acting as a back-up. All data is stored centrally in OneDrive, so locating files and organizing them will be a much easier process than it currently is.



## People

Employees of Rock Solid Industrial Parts can be described as loyal, as the majority of them have worked for the company for over 20 years. These employees, especially the front line workers will be experiencing the most change in their daily work schedule and should be deeply considered when planning out implementations. The success of Rock Solid Industrial Parts is heavily accredited to them, and the continuation of this success will also remain on their shoulders. It is important that when making necessary implementations, RSIP is smoothly able to transition these workers. After operating as a specific system for 20 years, flipping it completely around will feel uncomfortable, instill fear, and result in a rejection of the change. If RSIP can not smoothly transition their employees along with their strategic plan, then the strategic plan will not produce its expected growth rates.

These employees lack strong technical skills and are highly conservative, not owning smartphones and do not use social media platforms such as Facebook. Because of their non-technical nature, it is likely that they can feel overwhelmed and frustrated with the new implementations and ultimately reject them. To ensure that this does not occur, employees should be required to attend training sessions, specifically for Zoho. There should be an emphasis on Zoho, not only because of its impact on the overall success of RSIP, but also because the other softwares is already being used by RSIP and the hardwares is highly intuitive. Training sessions are offered by Zoho experts and have both options of paid and non-paid. They are generally an hour long and are completed virtually, perfect for sales representatives who are primarily working remotely.

All of the implementations set in place have been based on the fact that the front end workers are the success drivers for Rock Solid Industrial Parts. Every software and hardware recommended was suited for the company, but tailored specifically for these individuals who will be working with them on a daily basis. Given that these implementations are considered to be easier in terms of integration process, with the proper training, RSIP employees should adopt them smoothly with little to no resistance.

## Budget

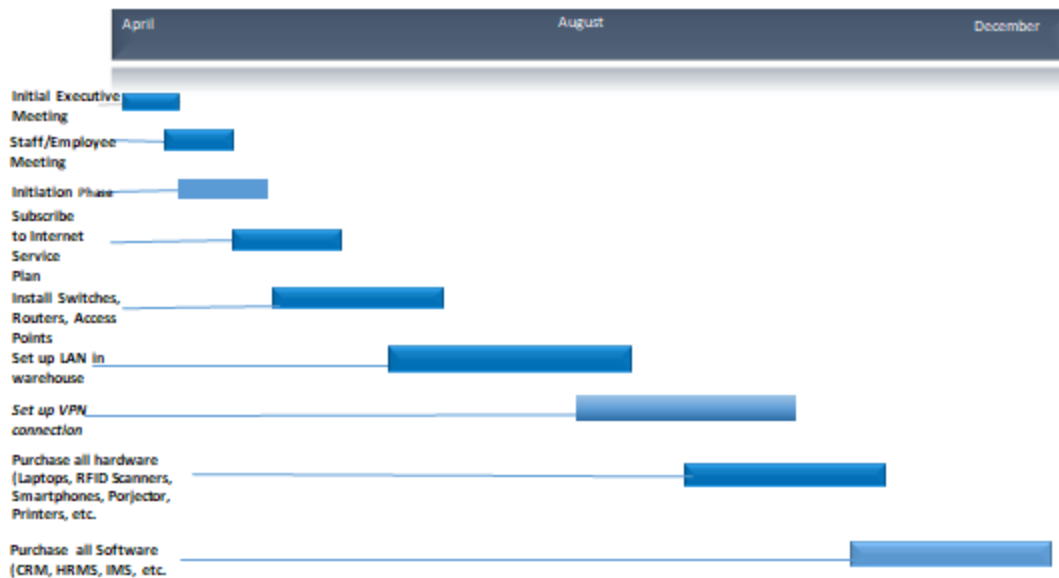
The grand total of all recommended implementations comes out to be \$315,767.99, an more than affordable option given Rock Solid Industrial Parts maximum budget for this transformation is \$750,000. Not only is this plan within the range of RSIPs budget, it is also optimized specifically for the firm. With more than half of the budget unspent, RSIP can look towards future investments that go beyond their 3 year strategic plan. In time, RSIP can expect to see initial investments recovered as it will pay itself off through generating more business and overall profit for the company.

Software	Expense Title	Unit Cost	Year 1 Units	Year 2 units	Year 3 Units	Total # of Units	Total Cost Year 1	Total Cost Year 2	Total Cost Year 3	Total Cost
	Zoho CRM Enterprise (Per user/Per Month) Billed Annually	\$40.00	39	56	74	169	\$18,720.00	\$26,880.00	\$35,520.00	\$81,120.00
	Microsoft 365	\$12.50	39	56	74	169	\$5,850.00	\$8,400.00	\$11,100.00	\$25,350.00
	QuickBooks Online Advanced (Per month) Plan supports 25 Individuals	\$75.00	1	1	1	3	\$900.00	\$900.00	\$900.00	\$2,700.00
	Avast Business Anivirus Pro Software (Per 100 Devices/ Per 3 Year)	\$6,413.00	1	0	0	1	\$6,413.00	\$0.00	\$0.00	\$6,413.00
	Zoho CRM Admin : Training Course (One Time Payment)	\$12.99	39	17	18	74	\$506.61	\$220.83	\$233.82	\$961.26
	Microsoft Training Course	\$14.99	39	17	18	74	\$584.61	\$254.83	\$269.82	\$1,109.26
Hardware									SUBTOTAL	\$117,653.52
	Lenovo ThinkPad X1 Carbon 8th Generation	\$1,391.40	39	17	18	74	\$54,264.60	\$23,653.80	\$25,045.20	\$102,963.60
	Google Pixel 4A Smartphones	\$349.00	21	16	17	54	\$7,329.00	\$5,584.00	\$5,933.00	\$18,846.00
	Synology RT2600AC Router	\$200.00	1	1	1	3	\$200.00	\$200.00	\$200.00	\$600.00
	Linksys - 8-Port Gigabit Ethernet Switch	\$44.99	2	1	1	4	\$89.98	\$44.99	\$44.99	\$179.96
	Dell 19 Monitor	\$199.99	4	1	1	6	\$799.96	\$199.99	\$199.99	\$1,199.94
	HDMI Cables	\$10.41	39	17	18	74	\$405.99	\$176.97	\$187.38	\$770.34
	ViewSonic PA503X DLP Projector	\$359.99	1	0	0	1	\$359.99	\$0.00	\$0.00	\$359.99
	HP LaserJet Pro MFP M479fdw All-In-One Color Printer	\$599.89	2	1	1	4	\$1,199.78	\$599.89	\$599.89	\$2,399.56
	Linksys - Business AC1750 Wi-Fi Access Point	\$149.99	5	1	1	7	\$749.95	\$149.99	\$149.99	\$1,049.93
	Zebra RFD8500 UHF RFID Handheld Scanner	\$1,360.80	5	0	0	5	\$6,804.00	\$0.00	\$0.00	\$6,804.00
	Zebra TC21 Mobile Computer (TC210K-01D221-NA)	\$492.23	5	0	0	5	\$2,461.15	\$0.00	\$0.00	\$2,461.15
									SUBTOTAL	\$137,634.47
Infrastructure										
	AT&T Business Fiber 300s (Per Month)	\$90.00	1	1	1	3	\$1,080.00	\$1,080.00	\$1,080.00	\$3,240.00
	AT&T Business Unlimited Elite (Per Month when purchasing 5 lines)	\$45.00	21	37	54	112	\$11,340.00	\$19,980.00	\$29,160.00	\$60,480.00
									SUBTOTAL	\$63,720.00
									GRAND TOTAL	\$315,767.99

## Timeline

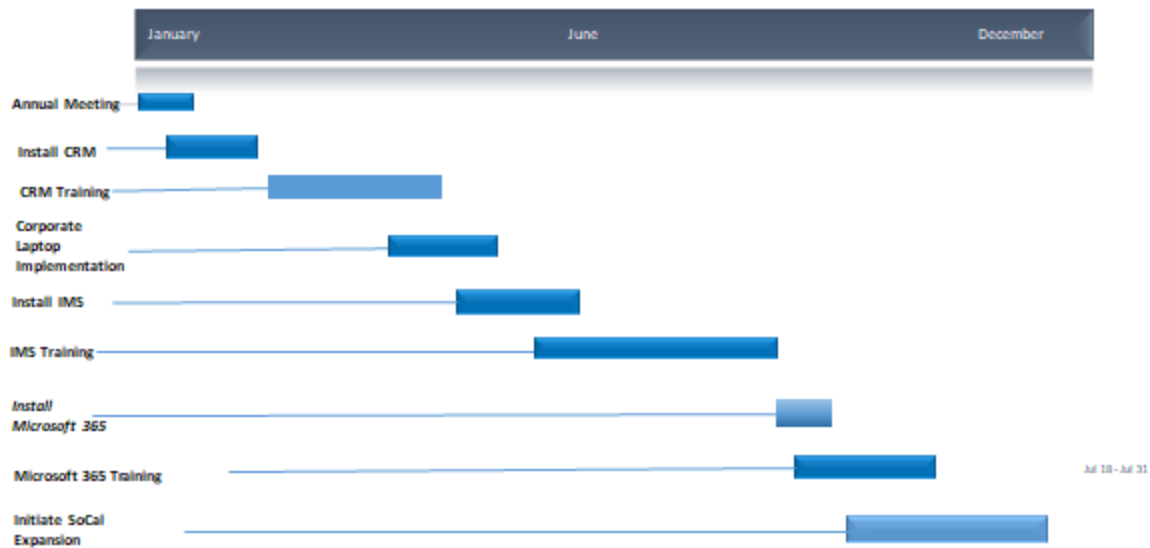
Year one of the strategic plan will be primarily focused on notifying the company and installing the network. Before any hardware or software is bought, RSIP must make sure that their network is in working condition. Without carefully setting up the network, these devices will not be able to operate. Towards the end of year 1 is when RSIP will begin to purchase all of the necessary hardware and software.

## Rock Solid Industrial Parts 3 Year Strategic Timeline Year 1 (2021)



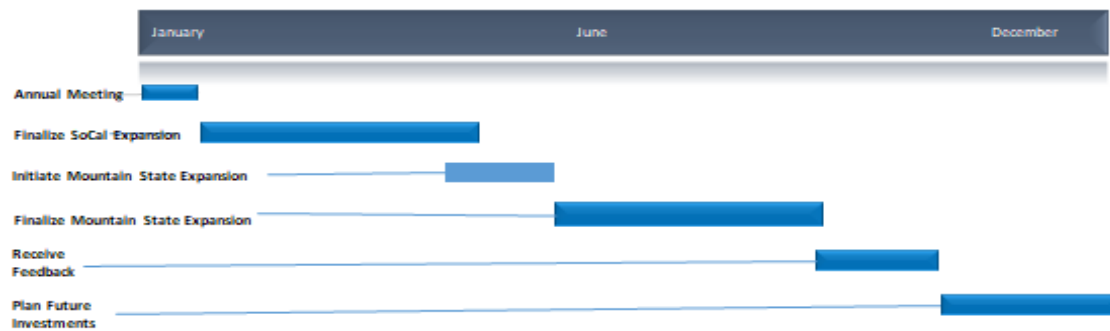
Year 2 of the strategic plan will be primarily installations and training of software and hardware. This will be the time where employees are beginning to familiarize themselves with the implementations. The year will start off with an annual meeting, similar to the previous year so that everyone within the firm can be on the same page. Given that all employees will be introduced to softwares such as CRM and IMS, there will be an extended period of training. This training would take courses online and through the training programs that RSIP has purchased. After the training period ends, RSIP will look towards tackling the Southern California region and repeat a similar process over in that location.

## Rock Solid Industrial Parts 3 Year Strategic Timeline Year 2 (2021)



By the end of year three, RSIP should have already implemented all softwares and hardwares as well as established a secure network system in their current location. The year will kick off with another annual meeting just to make sure that everyone is still on the same page. This will be especially important as RSIP continues its expansions and employees are moved around. By the first half of the final year in the strategic plan, RSIP should be done with their expansion in the Southern California region. Once they have fully integrated themselves into the region, they would then start initiating their expansion towards the Mountain states. This should be completed within the year and finalized prior to the end of their 3 year strategic plan. Now, RSIP can start gathering feedback from all locations and look towards the future. Depending on the feedback that is received, RSIP can look to plan future investments with the \$200,000 remainder of their budget.

### Rock Solid Industrial Parts 3 Year Strategic Timeline Year 3 (2021)



## Implementation Risks

Changes to business processes are hard to accept and are generally met with some form of resistance, especially if the processes have remained the same for a long period of time. In the case of Rock Solid Industrial Parts, their employees will have a difficult time adjusting themselves to these changes due to them lacking the technical experience. This is a legitimate cause of concern as resistance to the implementations could be detrimental in the successful implementation of the 3 year strategic plan. As RSIP continues to implement new hardwares and softwares, security is always an imposed risk and should be considered at every level of implementation. Because all data files will be centrally stored, it must not be given access to anyone outside of the firm. The information stored is highly sensitive, any breaches could tarnish RSIPs reputation as a trustworthy company.

It is important to note that resistances may not only be coming from front-line employees, but the executives as well, especially Don McCloud who has already stated his uncertainty in the plan moving forward. Mr. McCloud has voiced his opinions and it is likely that he will contribute to much of the resistance to change. If Mr. McCloud does not become open to the implementations, it could create a real risk that could jeopardize the entire transition. To properly implement all new pieces of technology, the four c-level executives must have come to a mutual agreement about moving forth.

## **Mitigation of Risk**

To ensure that all Rock Solid Industrial Parts devices stay secure and are not vulnerable to breaches, security programs and applications should be installed on all devices. As mentioned in the security section, all laptops should be secured with a strong and reliable security software. Features such as a strong firewall, end-to-end connection, email protection, and antivirus protection should all be considered when finding a reliable antivirus software. For the corporate cell phones, it was suggested that downloaded security apps will help mitigate the risk through a variety of methods and tools. Popular options such as Avast, Bitdefender, and Avira often combat as much as 100% against email threats and zero-day attacks, a clear and obvious sign of successful protection.<sup>18</sup>

In terms of receiving the four executives blessing and support on the strategic plan, they must fully be educated on the plan. It is best that they are well aware of all changes and communication with them remains completely transparent. If the four executives are able to understand the change and how powerful of a tool technology is in terms of their success, it would be increasingly likely that they will be supportive. To mitigate any of their concerns, benefits of each integration should be expressed loudly.

Briefly talked about earlier, Zoho offers training sessions hosted by Zoho experts. Zoho is the one software that may bring RSIP difficulty in terms of resistance to change. To mitigate the risk of employees rejecting Zoho due to its complexity, training sessions should not only be required given that the employees are completely unfamiliar with the program. Although Zoho is known for having a very user-friendly interface and an easy integration process, the lack of technical skills from employees will still present a learning curve. Through attending these virtual sessions, employees will be able to smoothly transition themselves over that learning curve and ultimately feel comfortable working with Zoho.

## **Conclusion**

In conclusion, Rock Solid Industrial Parts will have not only achieved their 3 year strategic plan, they have also planned for the future and placed themselves in a position to maintain a sustained

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<sup>18</sup> <https://www.safetydetectives.com/blog/antivirus-statistics/>

competitive advantage. With the installations of all hardware and software, Rock Solid Industrial Parts will be operating with much more efficiency and accuracy. Operations such as customer service, inventory management, and sales operations will see dramatic results, as their implementation is heaviest in terms of change in work processes. The business processes that they have been accustomed to will have transformed as their employees adopt the new processes. The change will be difficult as all transformations are, but with the assistance of extended training periods, enforced lessons, and steps to mitigate risk are taken, the learning curve should expect to shrink by a large margin. The company's growth will begin to grow at fast rates, promising a quick turn around on their initial investments.

## **Endnotes**