**IT Operations Plan Template**

Record all responses to C927 Task 1 in this template.

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| A. Current Environment Analysis |
| SaaS Operation:   * Sales and Marketing departments use separate instances of Salesforce as their respective CRM and sales automation tool * Both departments use custom HTML5 applications. This leads to more work, higher costs but no collaboration between the departments * Custom applications become a problem when it comes to upgrading the Salesforce platform. This leads to both departments becoming overly reliant on the app developer * Customer service department is outsourced to ServiceNow * Only the CIO receives a daily report of tickets created within 24 hours * As a result, TreasureChest is very slow to responding to customer service requests and the agile/developer process * Action parties can’t resolve anything without approval from the CIO, and only the CIO is informed after 24 possible hours if a bug must be repaired |
| Hardware:   * TreasureChest runs their hardware out of 4 Equinox Systems co-location Datacenters; Philadelphia, Phoenix, Paris, and Singapore * They own the hardware and use Equinox for rack space, cooling, power etc. * The 4 main DCs run TreasureChest’s main applications * Main offices have their own infrastructure in various networking closets including the ERP system and Email & Messaging * These features run off of on-premise servers in the Paris office closet * TreasureChest is considering migrating to a cloud platform |
| Operating Systems:   * TreasureChest provides both the hardware and OS for their DCs * The OS is provided using Windows Servers * This allows for interoperability while the applications allow for multi-platform installation |
| Networks:   * The physical network is reliant on network closets 14 system analyst, 2 database administrators, and two network engineers * It’s monitored by OnsOne Ltd. as a contracting company * French labor laws prevent constant monitoring for 100% availability |
| Software:   * TreasureChest’s core product is their SaaS product * It’s developed in-house using Python and Java * It’s based on old code from 2007 that must be rebuilt * It’s important for the service to be able to keep up with increased demand and security |
| Database:   * TreasureChest’s database is SQL structured * It’s hosted by the company on their hardware * Python and Java are used since they integrate well with the web-based program * Functionality allows for easy communication from database to web-program and vice-versa |

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| B. Strategic Goal: #3 – Update Technology Operational Workflow |
| IT Operations Goals: (Write three IT operational goals that you will develop to support the chosen strategic goal)  1) Relocate personnel from Paris to London. Also, it would behoove TreasureChest to select a single methodology for the entire company and stick with it. Both the Agile and Waterfall methodologies are being utilized by two different TreasureChest offices. They’re out of sync, which will definitely lead to issues if and when the two locations/teams must work closely together because they operate differently. The Agile methodology is the best fit for the rest of the recommended changes.  2) Conduct ERP Integration to streamline business processes while also centralizing all business data to promote collaboration and ease of data transfers from one department to another. This will also assist in driving revenue. Also, run the ERP out of the London location as Paris is no longer the technological center of the company.  3) Adjust the length of the contract with OnsOne Ltd. to account for employee relocation, DC hardware relocation & re-installation, and training for upgraded hardware. If TreasureChest decides to migrate to a cloud service, then this is the perfect time to make that decision and prepare for training with the new technology. 1-2 years should be enough time for all personnel to get situated and trained for their new environment. Adjust the contract to this amount of time to eliminate the conflict of interest ASAP. |

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| C. Strategic Goal: #2 – Enhance product for larger customers |
| IT Operations Goals: (Write three IT operational goals that you will develop to support the chosen strategic goal)  1) Migrate the application to a cloud-based infrastructure. This will allow clients to scale their resources as needed. Also, manually adjust to support the 30% increase in demand by larger customers. This will provide extra bandwidth for both exisiting and new customers  2) Streamline the onboarding process for new clients. This will save clients time and money on this process. Also, with ProServices accounting for almost 40% of gross revenue, this change will appeal to more clients and solidify ProServices’ position as a secondary revenue stream for TreasureChest  3)Mitigate errors and risk by consolidation all data into a single instance of Salesforce as the dedicated CRM for TreasureChest. Currently, there are two instances being used by two departments which is unneccesary. This provides incomplete data for both sales and marketing |

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| D. Strategic Goal 1 | | |
| **IT Operational Goal** | **Enhancements needed to support the strategic objective** | **Planned activities to meet each objective** |
| Goal 1: Relocate personnel from Paris to London. | Provide enough space and tools for the transferred and new team members | Send offers to employee. Those who accept the offer will be relocated while the rest will be let go. Interviews to fill remaining spots will be conducted in London focusing on local applicants. |
| Goal 2: Conduct ERP Integration to streamline business processes and consolidate business data | Transition to Salesforce ERP to promote uniformity of software vendors. | Consolidate all customer data into a single database. This will provide updated customer data for both the ERP and CRM. |
| Goal 3: Adjust the length of the contract to accommodate relocation and training | Update the company policy. New contractors will use the new policy while tenured contractors will continue using the old policy | Make sure to follow the legal process to change the policy. Make sure the new policy is shared with the entire company through a newsletter sent out via email. |

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| D. Strategic Goal 2 | | |
| **IT Operational Goal** | **Enhancements needed to support the strategic objective** | **Planned activities to meet each objective** |
| Goal 1: Migrate to a cloud-based infrastructure | Find a suitable cloud service provider. AWS is currently #1, so they’re an obvious option. Microsoft Azure is also a great option which seems to be more user-friendly. | Conduct research of notable cloud service providers. Focus on pros, cons, and prices to form a final decision. |
| Goal 2: Streamline onboarding process for new clients | Update the onboarding process by introducing DevOps to the company. This will allow both sides of the operation to fulfill their requirements and monitor the result. | Develop a DevOps team. Have key players from both sides of the equations come together and see who’s interested in building this new section of the company. |
| Goal 3: Consolidate all customer data into a signle instance of Salesforce | Transfer the data from both old instances of Salesforce into a new one, and delete both of the old instances. Another option is to transfer data from the smaller instance into the larger one that holds more data. This may be a quicker process. | Have a cybersecurity analyst conduct the data transfer. Ensure all data is secure and that least privilege is taken into consideration so that data is accessed only by authorized parties. |

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| E. Sustainability Plan | |
| **One Year** | COBIT 5 will be introduced to the company through a series of group trainings. These trainings will consist of informationals discussing that COBIT is, how it’ll be implemented and why it’s needed. The first 2 years of implementing this infrastructure will focus on the first 4 phases of the life cycle:   1. Identify and Analyze Drivers of Change 2. Determine where we stand. 3. Decision on where we have to be. 4. Recognize the factors to be improved.   Naturally, this will begin the process of evaluating the current IT operation processes and procedures to see what can be improved. All of the required processes and enablers needed to support business value creation will be provided. (**Meeting Stakeholder Needs).**  The best course of action would be to capitalize off of the training that will be conducted and have personnel who quickly learn and understand COBIT to become leaders in implementing its guidelines. Another option is to hire additional personnel who will assist in the training of staff as well as the review of current business processes to ensure that all functions and processes of enterprise governance are in place(**Cover the Enterprise End to End**).  This will lead to the implementation of a single framework that will fulfill the needs of the company owners and stakeholders. TreasureChest will abide by all relevant laws and regulations standard to the framework (**Implementation of a Single Framework**). |
| **Three Year** | After the first 2 years, the next phases will be implemented into the developing infrastructure. Phases 5 & 6 will focus on:   1. Formulate plans and visualize as how to get there 2. Evaluation of results to determine where we stand.   Starting in the third year of the implementation process, Treasure Chest will conduct a self evaluation and determine where it wants the company to go. This will be the focus of year 3, to understand where changes can be made to improve business processes, and how long this will take. The 4th year will focus on the implementation of new processes and procedures that have been noted in year 3. This will provide somewhat of a clear checklist of goals to fulfill to ensure that all improvements are implemented in accordance with the new framework (**Enabling a Holistic Approach**). |
| **Five Year** | Year 5 will be solely about implementing phase 7, the final phase of the life cycle. With the new system in places, processing changes will be quicker and easier. Quarterly evaluations/surveys should be conducted for year 6. If no major complaints or issues arise, then the COBIT infrastructure is finalized and ready to remain in place.   1. How to continue the momentum.   With the new infrastructure in place, all aspects of the company will be monitored with governance and management. Governance will focus on Evaluation, Direction, and Monitoring. Management activities will focus on Plan, Build, Run, and Monitor. Thanks to this new framework, TreasureChest will foster and function in a more collaborative environment. This will better meets the needs, risks, and benefits of all IT initiatives (**Separating Governance from Management**). |

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| **Enhancement** | **Security Risk and Plan to Address Risk** |
| Relocate team members from Paris to London. Provide enough space and tools for transferred and new team members | Confirm the implementation of secure ID authentication and authorization. Set permissiongs in the system to filter who may access what in the database. |
| Transition to Salesforce ERP to promote uniformity of software vendors | There’s a risk of downtime being the result of the data migration from the previous ERP to Salesforce ERP along with transitioning to Saleforce CRM. The best way to handle this is to run the current system while having a team handle the data migration simultaneously. That way when it’s ready to launch, everything is updated, connected, and will flow properly. This will also prevent major hiccups in the system that will lead to a downtrend in revenue. Overall, TreasureChest will remain pretty stable during this time of transition. |
| Update the company policy | Updating the company policy has a list of risks. As previously emphasized, it’s important to stay on top of ID Management so the company knows which contractors must adhere to the old policy and who must adhere to the updated policy. Also, we want to prevent instances of Shadow IT and other similar issues from taking place. |
| Find a suitable cloud service provider | Using a cloud provider is risky since your data’s protection is based on the provider and how often they patch their platform. Conduct a thorough research on past breaches, the frequency, and the level of severity. It’s also best to use a private cloud infrastructure to ensure unauthorized parties can’t access the company’s data. |
| Introduce DevOps to the company to help streamline the onboarding process | Introducing DevOps mean different IT Personnel need different permissions. This gives room for data leaks, zer-day vulnerabilities, backdoors etc. Have a strong access control policy in place in addition to a strong data retention policy. Implement concept of least privilege. |
| Mitigate data into a single instance of Salesforce | The risk of consolidating all of the customer’s data into a single instance is it makes all of the data easier for the taking in the event that a breach does take place. This comes down to making sure that Salesforce is secure, and it may be best to stay in regular contact in case red flags are raised. |

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| G. Operational Workflow |

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| The biggest changes to the IT Operations Plan include:   * DevOps + Agile Methodology * Possibly new teammates in London * Implementation of COBIT 5   These individual components must be implemented so all employees company-wide feel comfortable and functional during and after their respective implementations. Focus on opportunities for new personnel to join the team; especially for DevOps.  Send out a newsletter throughout the company to ensure that everybody is aware of the coming change. Again, this may help create or fill positions ahead of time. If new people are brought on board, emphasize access controls and training of new tech in the DC.  Conduct group trainings to create and establish a set of procedures and protocols to follow Cobit 5 following implementation. Conduct the same activities for DevOps training and position searches. Take this opportunity to also establish that the agile methodology will be the sole methodology used by the entire company from this point on.  Any and all offices that have been using the waterfall methodology instead of the agile method methodology must undergo training to properly understand the new methodology and how it works. Lastly, with the development and implementation of DevOps into the company infrastructure, it may be ideal to emphasize a company referral program if one has not been set already. With new positions being created and needing to be filled, it's best to create an incentive for people to bring friends and/or family into the team to help expedite the process of stabilizing the new company infrastructure. This can be evident with of course referrals as well as teammates expressing interest to go through training, whether company provided or using their own personal time, to fulfill the open positions.  **References:**  Chandana. (2021, February 12). Seven phases in Cobit Implementation: Cobit certification training. Retrieved April 09, 2021, from https://www.simplilearn.com/cobit-implementation-seven-phases-article  Ogden, J. (n.d.). 13 reasons to update your outdated data security policy right now. Retrieved April 09, 2021, from https://www.cimcor.com/blog/13-reasons-to-update-your-outdated-data-security-policy-right-now  Sofija SimicSofija Simic is an aspiring Technical Writer at phoenixNAP. Alongside her educational background in teaching and writing, & Sofija Simic is an aspiring Technical Writer at phoenixNAP. Alongside her educational background in teaching and writing. (2021, February 10). Devops vs agile: Key differences, head to head comparison. Retrieved April 09, 2021, from https://phoenixnap.com/blog/devops-vs-agile |