**ASSIGNMENT COVER SHEET**

For use with online submission of assignments

Please complete all of the following details and then make this sheet the **first page of each file of your assignment – do not send it as a separate document.**

Your assignments must be submitted as either **Word documents, text documents with .rtf extension or as .pdf documents**. If you wish tosubmit in any other file format please discuss this with your lecturer well before theassignment submission date.

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| --- | --- |
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| Unit Name: | ISYS3001 Managing Software Development |
| Unit Code: | ISYS3001 |
| Tutor’s name: | **Huang Zhenjing** |
| Assignment No.: | Assessment 2 |
| Assignment Title: | Practical Skills |
| Due date: | 22 September 2022 11:59 PM (AEST) |
| Date submitted: | **2023.9.25** |

Declaration:

*I have read and understand the Rules Relating to Awards ([Rule 3 Section 18 – Academic Misconduct Including Plagiarism](http://policies.scu.edu.au/view.current.php?id=00140" \l "s18)) as contained in the SCU Policy Library.   
I understand the penalties that apply for plagiarism and agree to be bound by these rules. The work I am submitting electronically is entirely my own work.*

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| Signed: | ZhangSixiang |
| (please type your name) |  |
| Date: | 2023.9.25 |

# **Configuration Management**

Resources：

[www.online.hbs.edu/blog/post/change-management-process](http://www.online.hbs.edu/blog/post/change-management-process) Kelsey Miller 2023.8.9

[www.atlassian.com](http://www.atlassian.com)

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What Is Change Management and How to Use It Effectively

-Written by Coursera • Updated: Jun 16, 2023

[www.simplilearn.com](http://www.simplilearn.com) --Simplilearn Mar 15， 2023

1. Change management

Change management refers to any adjustment to a company's operations; It can be as simple as employee promotion, or as important as a merger. Change management can happen indirectly, or it can be planned and introduced slowly. The goal is a smooth and efficient transition. It's best to plan changes to avoid disruption and employee boycotts. The primary focus of a change management program is to help employees understand and adapt to new ways of working.

As a leader, it's critical to understand the change management process to ensure a smooth transition across the organization. Doing so identifies the potential impact of any organizational changes and prepares your team accordingly. When your team is ready, you can ensure that everyone is on the same page, creating a safe environment and moving the whole team towards a common goal.

1. Prepare your organization for change

Start by focusing on helping employees identify and understand the need for change. They raise awareness of the challenges or problems facing the Organization that are acting as forces for change and generating dissatisfaction with the status quo. Getting this initial buy-in from the employees who will help implement the change removes friction and resistance later.

2. Develop a vision and plan for change

Once an organization is ready for change, managers must develop a thorough, realistic, and strategic plan to bring about change. The plan should detail:

Strategic goals: What goals does this change help the organization achieve?

Key Performance Indicators: How is success measured? What is the baseline of the current situation?

Project stakeholders and teams: Who will oversee the task of implementing the change? Who needs to sign at each key stage? Who will be responsible for enforcement?

Project scope: What discrete steps and actions will the project include? What is beyond the scope of the project?

3. Implement the changes

Once the plan is created, all that's left is to implement the required changes by following the steps outlined there. Whether this involves changes in company structure, strategy, systems, processes, employee behavior, or otherwise will depend on the specifics of the program.

4. Integrate change into company culture and practices

Once the change plan is complete, you must prevent a return to the previous state or the status quo. This is especially important for organizational change related to business processes such as workflow, culture, and strategy development. Without proper planning, employees can regress to the "old way" way of doing things, especially during transitions.

5. Review progress and analyze results

Analysis and review, or "post-event analysis," can help business leaders understand whether change initiatives are successful, failing, or a hybrid outcome. It can also provide valuable insights and lessons learned that can be used in future change efforts.

1. Version management

Version control, also known as source control, is the practice of tracking and managing changes to software code. Version control systems are software tools that help software teams manage changes to source code over time. As development environments accelerate, version control systems help software teams work faster and smarter.

Version control software tracks every modification to code in a special database. If mistakes are made, developers can turn back time and compare earlier versions of code to help fix bugs while minimizing disruption to all team members.

Benefits of versioning: Create workflows Code with versions Preserve history Automate tasks Next steps

Software developers working in teams are constantly writing new source code and changing existing source code. The code for a project, application, or software component is usually organized in a folder structure or "file tree." One developer on the team may be working on a new feature, while another developer fixes irrelevant errors by changing the code, each of which can be made in multiple parts of the file tree.

Version control helps teams resolve such issues, tracks every individual change for each participant, and helps prevent conflicts with concurrent work. Changes made in one part of the software may not be compatible with changes made by other developers working at the same time. This issue should be discovered and resolved methodically, without hindering the work of other members of the team. In addition, in all software development, any change can introduce new bugs on its own, and new software cannot be trusted until testing. Therefore, testing and development proceed together until the new version is ready.

Version control software is an important part of the daily professional practice of modern software teams. Individual software developers who are used to using powerful version control systems in their teams often recognize that version control can provide incredible value to them even in small personal projects. Once accustomed to the powerful benefits of a version control system, many developers don't think about working without it, even for non-software projects.

1. System building

Build systems are tools used to automate the software building process. The most common way to use a build system is to use a continuous integration chain, which is activated when there are committed changes in the source code or in a new version. However, developers still need to be able to build and execute their code locally on their desktops in order to reduce round-trip times to test binaries in their environment. Developers have multiple iterations and changes to their code, then compile it until they are satisfied, all of which will have their own build that can be tracked and cached. So, when developers commit their code to a central repository, the build cache is also shared with the continuous integration chain, so it can jump straight to testing without having to rebuild everything. This allows developers to take the entire source code and build it without having to rebuild because everything is in the cache.

1. Release management

Release management is a relatively new concept in the field of software engineering. This process is a slow evolutionary change as engineers shift their focus from project-based results to product-based results.

Software developers used to think of each release as a project, rather than a product with a full lifecycle. However, as the software development process becomes more and more akin to the product cycle, and the goal of a release is not just the final product, but the transition point between support and revision, release management becomes increasingly important.

6 steps of the release management process:

Requests: The process starts with a change to an existing feature or a suggestion for a new feature, but there's no guarantee that the team will act on every request. Next, the team evaluates the feasibility of each request, why it exists, and whether there is a way to satisfy it by reconfiguring the existing version.

Plan: This step is crucial in the evolution of a release because it defines its structure. A solid plan ensures that the release team meets all requirements and stays on track. This phase also includes creating or reusing a manifest or workflow that stakeholders can refer to throughout the publishing process. The workflow should cover scope, milestones, and responsibilities.

Design & Build: Here's where requirements are translated into code. The team then designs the version and builds it into executable software.

Testing: When a release is ready for testing, the team deploys it to a test environment. Next, the version is tested for non-functionality and functionality; This includes User Acceptance Testing, or UAT for short. If the testing process finds any errors, the version is sent back to the developer to resolve the issue and then tested again. This iterative process continues until the development team and application owner finally approve the release for production deployment.

Deployment: The release is sent to the live environment and accessible to users. Deployment not only installs the version, but educates users on any changes based on new features and trains them on the operating system.

Post-deployment: Finally, the release enters the support phase. Again, errors are logged and eventually changes need to be requested. Therefore, the cycle starts again.

The goal of release management provides valuable dividends to an organization's application production process. Increasing the number of successful launches by a business reduces problems and quality issues and improves communication, coordination, and productivity. Release management enables businesses to deliver software faster while reducing risk, helping to streamline and standardize development and operations processes. This advantage allows the team to draw valuable lessons from the experience and apply them to future projects. Increased collaboration reduces surprises and provides more opportunities to quickly resolve configuration issues between operational and development environments. Release management helps organizations improve product delivery across the board by removing team barriers across multiple functions within a company's IT organization

# Request for Proposal

Release Date: September 20, 2023

Proposals Due: November 20, 2023

Proposals must be submitted via E-mail to

ABB916393516@qq.com

* **Background on your organisation**

Aussie Business Buzz (ABB) is a business that sells a variety of technology products (e.g., PCs, laptops, phones, routers), and provides device repairs and mobile device accessories. They want an integrated system to support their 4 branch shops as the opportunity arises. They envisage the system will evolve over time and plan to expand to many more locations.

* **Requirements**

1. customer relations database

A customer relations database with information about products and services purchased, and devices left with them for repair

Contracted services will include:

customer details

customer purchase history

problem report，and bug verification and testing on reported issues

work details

Based on "one piece of data, one engine", and supports both online real-time transactions and real-time analysis, multiple copies of "one piece of data" can be stored in multiple forms for different workloads, fundamentally maintaining data consistency.

Advanced features such as procedural languages and triggers are supported, automatic migration tools are provided, and migration evaluation and reverse synchronization are supported to ensure data migration security

FAQs available for end users

1. marketing system

A marketing system that allows for digital marketing using e-mail, social media, and any other modern marketing techniques. This will use details in the customer relations database but allow other prospective customers’ details to be entered in the existing Aussie Business Buzz website

1. stock management system

A stock management system that includes products for sale, parts for use in repairs, and automatic ordering from wholesalers. The system must be able to be used for individual locations to find products and parts at other ABB locations when necessary.

1. Reports for management

Reports for management, who may be at any location, of the status of all the above so they can order stock, recruit staff, and make other management decisions.

* How do you evaluate the proposals?

Supplier company information

Ask for all the general information about the vendor, the types of services they provide, the types of talent and resources they have access to, and the stability of their handling of projects. Be wary of vendors who list a large number of services, but only have the real experience and existing capacity to provide some of them.

Company background/history

Company size

What percentage of their overall business is marketing/web development?

A quick overview of services and features

Key resources for the projects described in this RFP

Resumes of management or key personnel

Contact

Vendor-recommended solution

Determine how well vendors understand the program and their ability to help me succeed

A basic summary of the proposed solution – this should clearly reflect what we are looking for and express an understanding of the program from the vendor's perspective

Solution Approach/Process – How and how does the supplier structure the solution and/or ongoing relationship?

Cooperation Plan – What is the overall framework of the proposed relationship? What resources will this utilize?

Development plan – The work required for the vendor to plan how to execute, build, and build the solution

Task list – What are the expected tasks to perform?

Timeline - Does their timeline reflect ours and help achieve goals? Is there some contingency space

Details about the proposed solution - this should clearly explain how it meets your business needs and achieves your SET goals. If your RFP is centered on the level of strategic development, expand the following items to focus on how a top-line strategy will create and drive an overall tactical plan

Strategy, original ideas – direction, creativity, etc. – looking for specific thinking, demonstrating the ability to creatively develop ideas and strategies to solve problems and help achieve goals. Does the supplier have some great "big ideas" that really add value to the project and amplify the results.

Scalability - It's important to have a solution to handle the scale of operations or business that may occur during its intended lifecycle.

Technical Requirements - Whether there are any special or noteworthy technical requirements for the solution proposed by the supplier.

* How to get additional details about projects

Responses to this RFP should adhere to the specified page limit and must be narrative and provide details about the vendor's product capabilities. Responses must be viewable in Microsoft Word or Adobe Acrobat, printable on 8.5" x 11" paper, must be in a 12-point font, each page should have margins of at least 1/2 inch, and the footer of each page should contain page numbers in the footer.

Responses must be received electronically by 8:00 PM on November 6, 2023. The reply will be sent to the sender's email address along with any other email addresses included in the submission.

Make sure that your submission is in Word or PDF format. All responses must be submitted electronically to the following email address: ABB916393516@qq.com

Calls about this RFP will not be accepted. Questions can be submitted via email until 5:00 p.m. on October 30, 2023. The Center will review the questions and answers posed to the RFP website.

* Budget/Time frame
  + $5000 for the first stage and $5000 for the second stage.

RFP timeline for events:

|  |  |
| --- | --- |
| **Inquiry activities** | **time line** |
| Release of a risk assessment proposal | September 20， 2023 |
| The final clarification of the question | October 15， 2023 |
| Released questions and responses | October 30， 2023 |
| The proposal expires | November 6， 2023 |
| Awards (expected) | November 20， 2023 |

Please complete the supplier contact information requested below:

Company Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Federal Employer Identification \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contact Person/Title \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Telephone Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fax Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Resources：

夏文. (2010). 浅谈电子化信息系统在招投标市场中的应用. *科技创新导报*, (10), 246-246.

曹慧卿. (2008). 对复杂信息系统招标采购的探讨. *中国招标*, (52), 29-35.

information Systems Risk Assessment March 20, 2020

丁明英. (2012). 浅议信息系统项目招标阶段的监理. *信息系统工程*, (9), 64-65.