

Addressing Growth in Viewership Through Various Media Streams Within the ABC: A Review of Enterprise Architecture and Proposed Solutions

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Abstract

The objective of this report is to identify and review the implementation, use, maintenance, and extension of existing technology systems within the ABC (Australian Broadcasting Corporation) organization and establish success factors for enhancing their sustainability and flexibility to evolving user requirements and how data is transferred within the organizational system. It will go through a revised Enterprise architecture strategy that has been adapted to the fast paced technologically enabled changing market.

Currently, the ABC is experiencing a growth in viewers/customers due to new streams of media, public interest, generational targeting therefore and the widespread adoption of accessing news via social media. This EA (enterprise architecture) strategy will be implementing new technology through capital investment which will optimize the ABCs operational capabilities.

This report firstly analyzed the problem of ABC current situation which followed by coming up with an improved TOGAF approach, an implementing plan and an expected result in the end.

Keywords: Information system innovation, enterprise architecture, TOGAF approach implement, analyzing of ABC current situation

1. Introduction

The ABC (Australian Broadcasting Corporation) has been experiencing a new wave of viewership within the Australian community. This new wave can be predominantly categorized as the new generation of Australian's who value high quality user experience as a requisite for interacting with any form of media. As technology trends shift the ABC has been able to adapt to this new market through the implementation of mobile applications, web applications, and new specific channels on the Television network.

Thus, the problem currently being faced by the ABC is how information is shared and stored throughout the whole organization. The volume of information to date has been managed using separate data stores, with multiple communication links throughout the enterprise. This has resulted in multiple hard coded application programming interfaces (APIs) implemented over time to connect business processes together. This design is the result of continuous soloing iterations of business unit processes improvements without an overall Enterprise Architecture view of the system.

Additionally, with growth on the radar for the ABC and projections showing over the next 2-5 years an exponential need to manage data and maintain performance in alignment with the ABCs vision and the ABC Act Part A to:

'to provide high quality content and services that will ensure ABC is valued by the community'

And

'to provide within Australia innovative and comprehensive broadcasting services of a high standard as part of the Australian broadcasting system consisting of national, commercial and community sectors and, without limiting the generality of the foregoing...'

The approach towards the issues currently being faced by the ABC is to follow a modified *TOGAF** approach, a proven EA methodology and framework used internationally to improve business efficiency. This approach has

been modified to suit the specific needs of the ABC, a state owned corporation (SOC) with an appropriate level of governance systems implemented to match the organizations obligations and risk profiling matrix.

(TOGAF: The TOGAF standard provides a new thinking of enterprise architecture management for organizations to improve the efficiency of business. It means ‘The Open Group Architecture Framework ’; which is one of the most popular and reliable Enterprise Architecture standard in modern society. This approach helps staff avoid being stuck into proprietary methods, work more efficiently and effectively, and gain a greater return on investment.)*

Figure 1 shows the general workflow for the TOGAF approach.

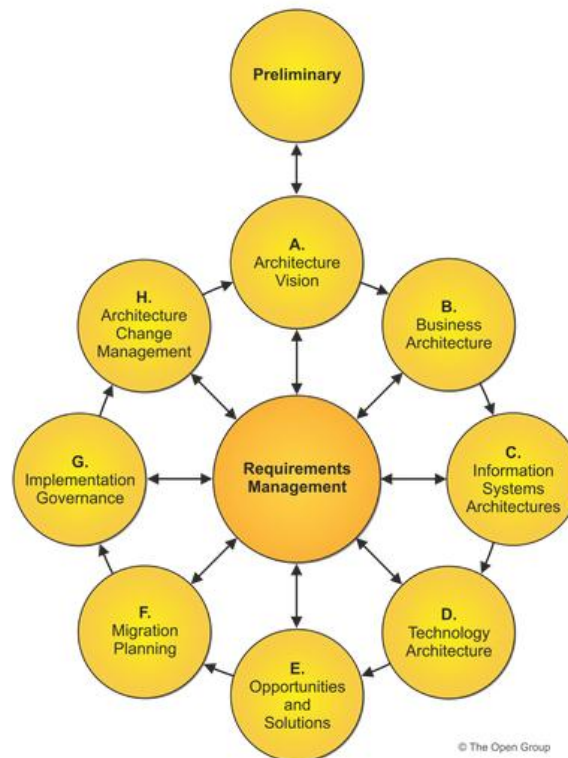


Figure 1. TOGAF methodology

During the implementation, we have gained details regarding the current state, investigated opportunities and solutions from an EA level to improve performance in alignment with the ABC core business objectives, and a detailed roadmap and implementation plan to achieve the desired result.

This report presents a systematic approach at a conceptual level which offers solutions by way of technology, business, and customer management solutions.

2. Proposed Solution

The proposed solution has been developed in collaboration with key ABC stakeholders by first understanding the current state of operation in the ABC. The findings revealed opportunities to incorporate a centralized cloud content management system to streamline information links throughout the enterprise.

Additionally, an opportunities and solutions matrix decision making tool was used in collaboration with ABC department heads to understand the priorities of the organization. It was found that both customer engagement management and content management was a high priority for the ABC and hence our proposed solution aligns with these priorities. Table 1 below is an excerpt from the workshops conducted with the ABC.

Table 1. Opportunities and solutions matrix tool excerpt

		1. Customer Base	2. Customer Engagement Fraud Advocacy	3. Customer Experience	4. Information Management	5. Time to Market	6. Cost Reduction	7. Staff Satisfaction			
	Weight / Rank	7	6	5	4	3	2	1	Strategic Value (COUNT)	Strategic Importance (SUM)	Strategic Importance H,M,L
Business Capabilities	Application/ Platform/ Infrastructure								0	0	
1 Support & Service Capability									0	0	
2 Customer Relationship Management (CRM) Capability									0	0	
3 Technology Management		7		5	4	3	2		5	21	H
4 Content Management		7	6	5		3			4	21	H
5 Marketing Management		7	6						2	13	H
6 Customer Engagement Management		7	6	5	4				4	22	H

The proposed solution will act as an enabler for internal information streams to be optimized, minimize waste, and enhance business capability to ensure cost of operation does not increase and technical capability is maintained into the future. Figure 2 below is a conceptual application interaction model of how this may look.

In the ‘Conceptual Application Interaction Model’, the ‘technology layer’ will uplift the application layer and provide infrastructure and infrastructure service including database and content management; the ‘application layer’ has acted as a connecting layer, on the one hand, ‘the application layer’ produces different applications bases on the basic data and infrastructures, on the other hand, it supports different channels in business layer. The ‘business layer’ is the up layer of the Conceptual Application Interaction Model; it shows the application published in different channels and the analytics of customers’ usage.

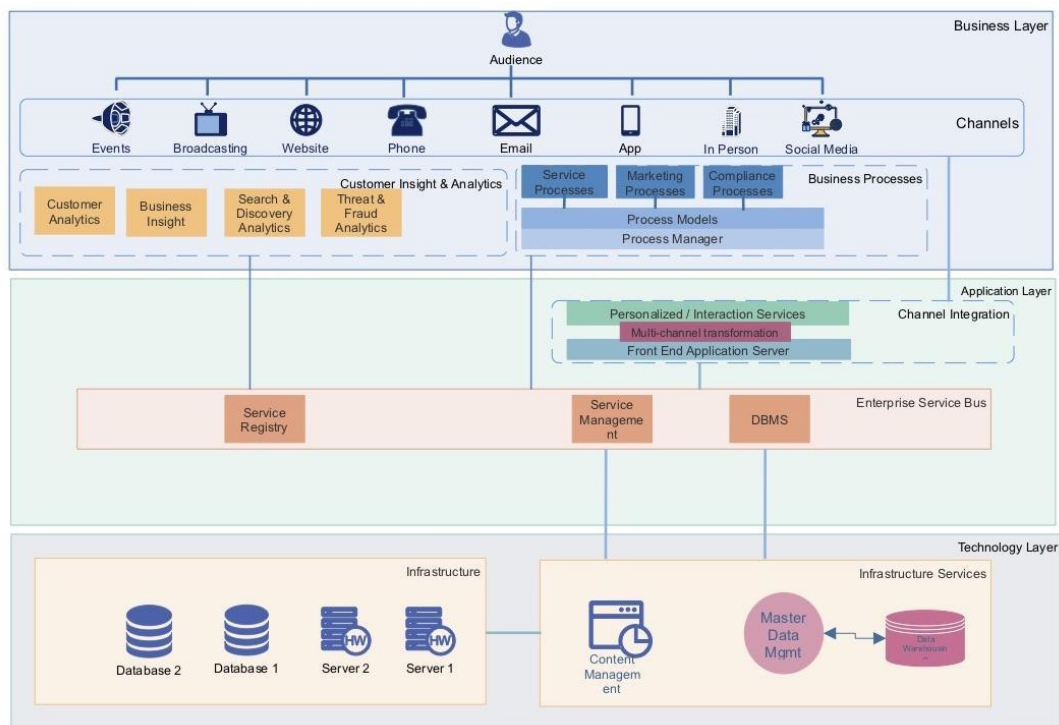


Figure 2. Conceptual application interaction model

The proposed solution will implement the following:

1. Improve cross-department collaboration by disseminating the narrow vertical management structure and the implementation of systems to enable leaders at all levels a platform to communicate and share information freely without obstruction or double-handling.
2. Performance criteria for departments to maintain accountability.
3. Empowering teams throughout the organization to produce meaningful outputs.

In conclusion, this platform is well balanced and will provide both opportunities for improvement as well as challenges for both ongoing business considerations and implementation through change management. These opportunities and challenges are summarized below in Table 2.

Table 2. Proposed solution: opportunities and challenges

Opportunities	Challenges
Improve customer data quality through single source, area of responsibility, and traceability within the organization	Upfront capital investment justification required
Improvement in community interaction through a streamlined workflow	Project Risk - Requires intricate planning in migration of systems and data
Optimized marketing campaigns through data analytics and end-to-end management in a single location	Organizational cultural resistance to changing legacy workflows
Reduced time processing and vetting data within the organization	Additional hardware required to both operate and to implement risk averse migration planning (parallel systems if required)
Scalable as the organization grows over time	Training and development programs will be required as well as ongoing maintenance of skills.
Outsourcing of risk and technical support services for subscription based services.	On-going operational cost for subscription based services

3. Key Findings and Proposed Deliverables

3.1 Business Motivation Model (BMM)

The BMM is the starting point of our investigation;

Our lens into business improvement is linked to the key motivations of the organization to optimize both the means and the ends for achieving the core objectives for the ABC to align with;

- **public expectations**; by being a trusted content provider who using the latest technologies/platforms, and
- **shareholder expectations**; innovative and comprehensive broadcasting services of a high standard.

The ABC core objectives align closely with public perception and reputation as being a trusted and reliable source of information and entertaining regarding both news and culture. As the viewership increases so does the demand on the organization to be customer focused and agile in the way they operate. Funding for the ABC in recent times has been reduced as the Australian budget has reallocated funding to other areas of the economy. This is expected to remain the same into the future so it is critical that public perception is maintained so that voters will see value in public funding being allocated to the ABC.

This puts the ABC in a unique position with an opportunity. To increase their public perception and presence so that funding is maintained, as well as an opportunity to optimize business operation resulting in less funding requirements to achieve the core objectives listed above. The BMM below (figure 3) has been developed and agreed in collaboration with ABC department heads.

In figure 3, vision, goals and objectives have been separated: 'vision' shows the 'One of the main strategic decision of the organization', and it helps ABC clear what the company want to become in the future: providing high quality content and services that will ensure ABC is valued by the modern society. As for 'goals', it tends to be longer term and gives more attention on qualitatively instead of quantitatively. For ABC, we aim to set a working environment full of respect, integrity and embrace innovation in the long term. Pertaining to

‘objectives’, it provides the foundation for measuring whether current progress is being made towards the goal.

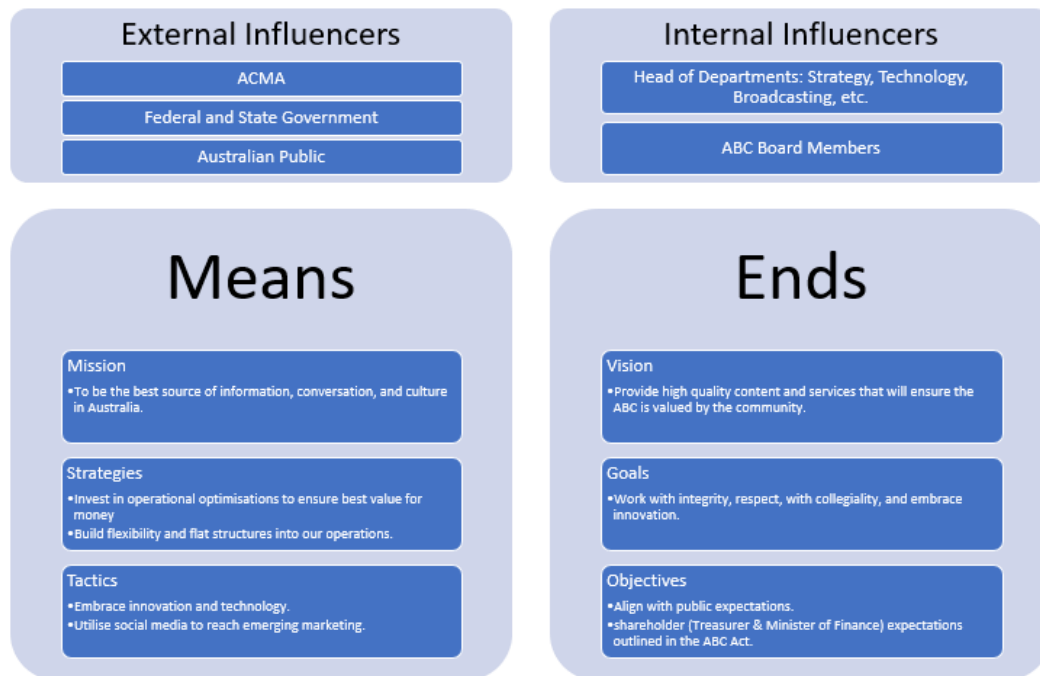


Figure 3. Business motivation model

3.2 Business Capability Mapping

The business process stream and capability mapping was done to understand the core flow of the organization as shown in figure 4 below. This process allowed the team to understand where each business division sits in relation to the ABC meeting its core objectives.

The maturity of each business unit in relation to effectively meeting their objectives was also conducted. Besides, this highlighted that there is a maturity breakdown regarding objective 3: *present data/news in an interactive media form*.

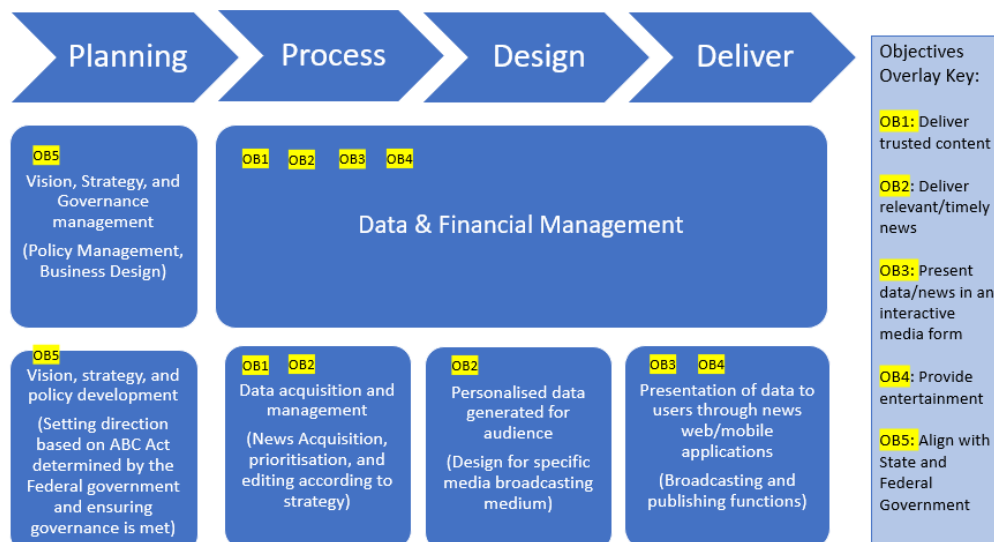


Figure 4. Business capability map with objectives overlay

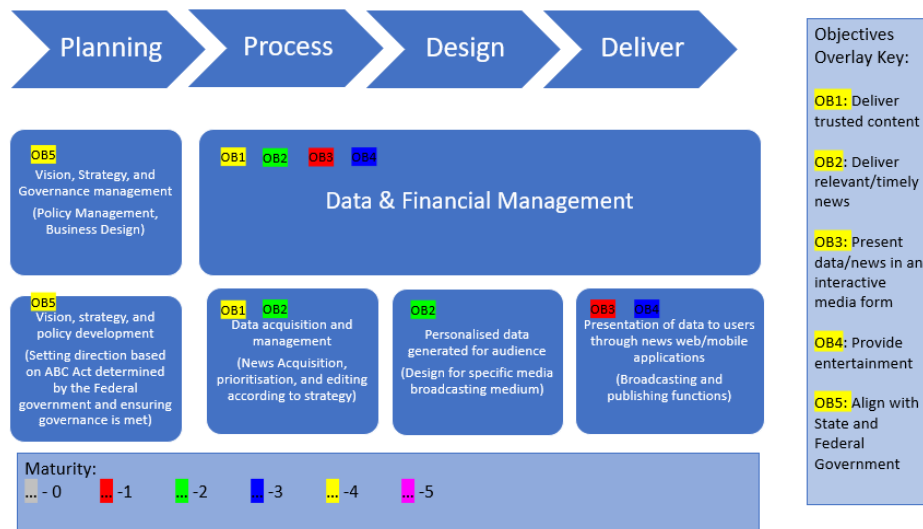


Figure 5. Business capability map with business maturity overlay

3.3 Portfolio Model - Information Architecture

The portfolio model describes which business concept the ABC should store data about, which business concept the ABC should keep track. Each business concept represent a group of information that is used to support the strategic direction and delivery of services.

According to the project is aiming to improve the customer experience and increase the efficiency of data information exchange. In order to attract more audiences and customer form new generation. ABC is targeting at the new broadcasting channels (e.g. a new mobile application) and provide unique content to different viewers in refers to their preference. The models in figures 6 and 7 present the current and future architecture of portfolios respectively. Figure 7 provides a solution of information integration by implementing a CRM system. The CRM system links the data from the perspectives of ‘User’, ‘Stakeholder’, ‘Marketing’ and ‘Content’ together to provide a customer based and more personalized service to the audience. In figure 7, the data from new application has also been considered as one of the components for the marketing sector, by acquiring these information ABC would be able to measure whether the new applications are successful, and what would be the improvement to attract more users. The change from an architectural point of view is that the implementation of CRM will effectively link data together for separate business units to utilize.

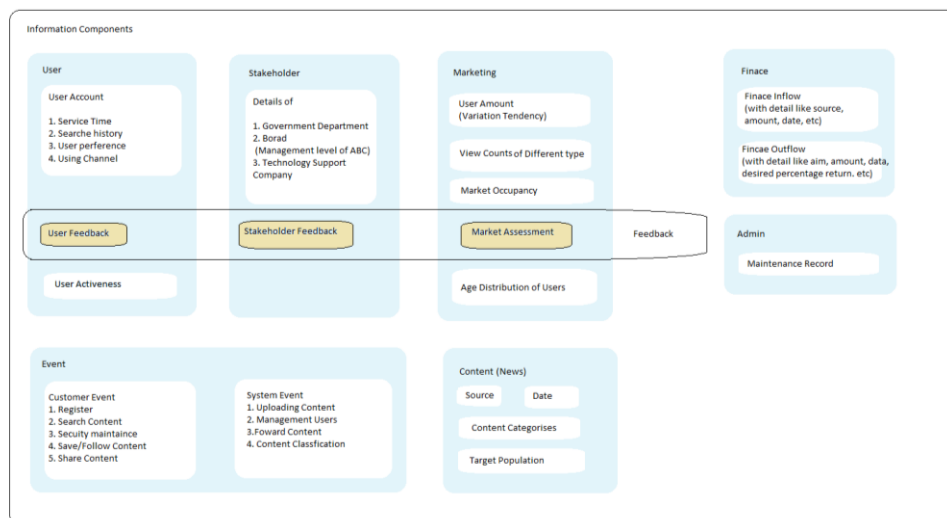


Figure 6. Information portfolio model of current stage

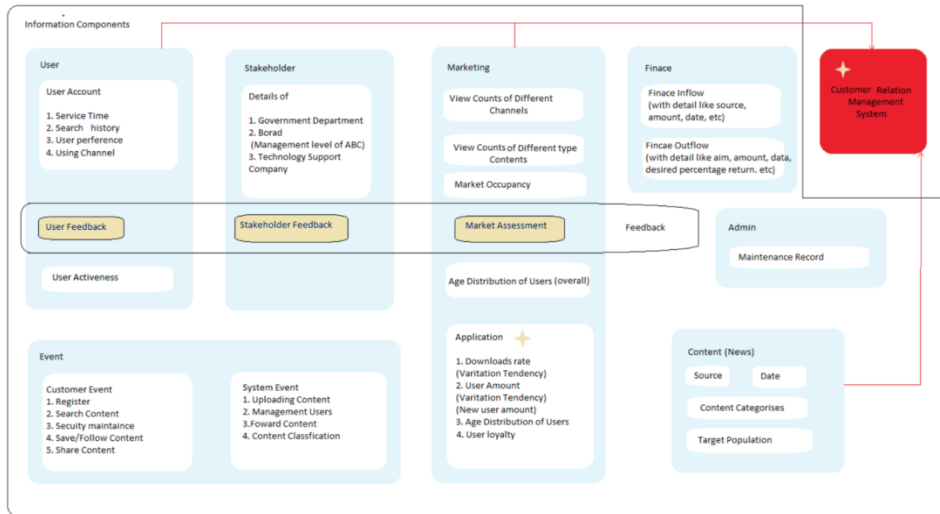


Figure 7. Information portfolio model of future stage

3.4 Relational Modelling - Information Architecture

The models below are an example of how the implementation of a CRM will optimize the flow of data throughout the digital mediums current in use and being developed for future use. Figure 8 shows how data from both web and mobile applications interact with the ABC. It shows that the current system uses multiple communication lines to retrieve specific data. For example; if data about users and news is required for business operations. The data is stored in separate business systems, i.e. the user data within the digital operations division system, and the news data is stored inside delivery and broadcasting division system.

Figure 9 depicts how a CRM system can ‘centralize’ all recorded data and hence it is easily accessed by anyone in the organization in relation to any other specific data that may be needed for business operations. From figure 8 to figure 9, the information flow in the ABC should be more effective and less redundancy in the future.

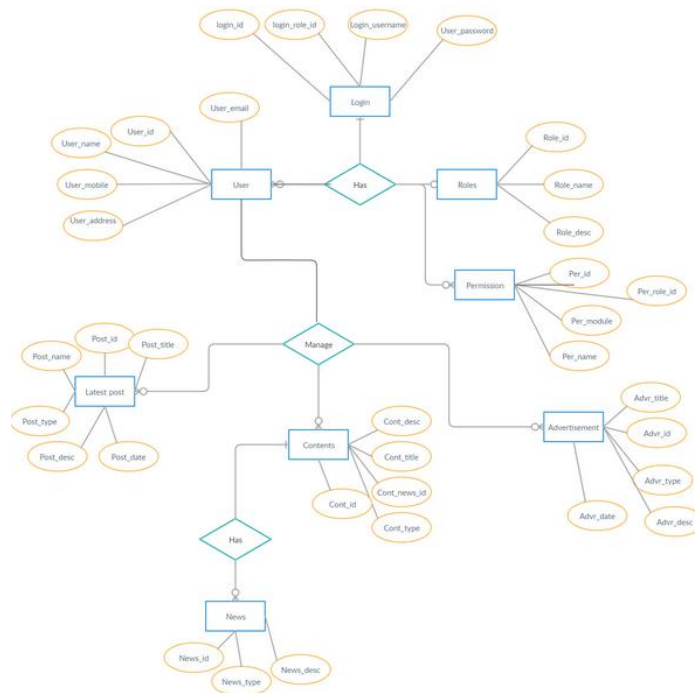


Figure 8. Current relational model ABC

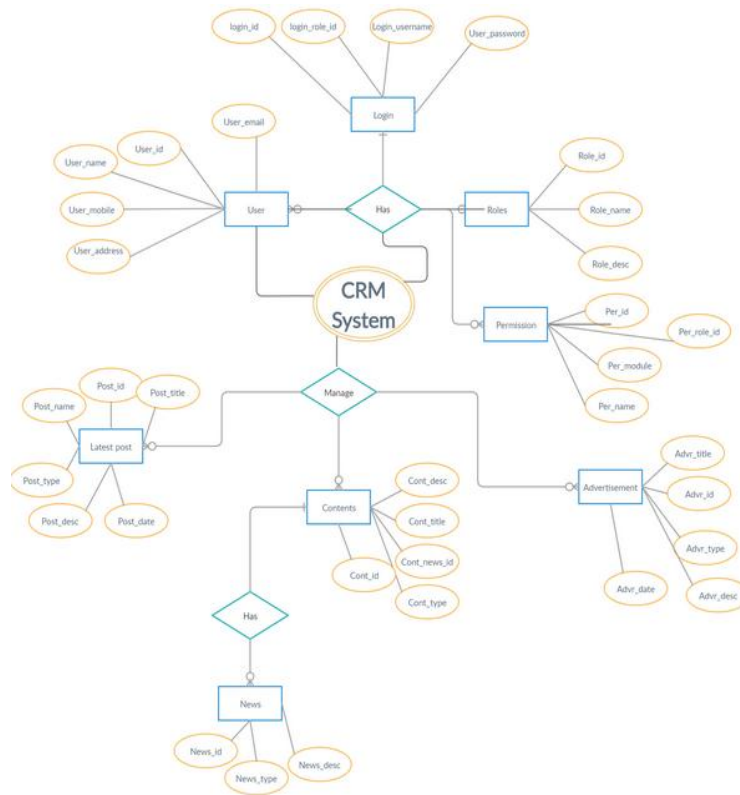


Figure 9. Proposed conceptual relational model ABC

3.5 Information Exchange - Information Architecture

A more detailed look at how the proposed CRM solution may interact with existing ABC information streams can be seen in figure 10. The diagram (figure 10) shows a circular economy of information flows to and from the CRM as the focal point. This system will handle data storage routing from multiple places such as customer/viewer data, financial data, strategy, and news content information.

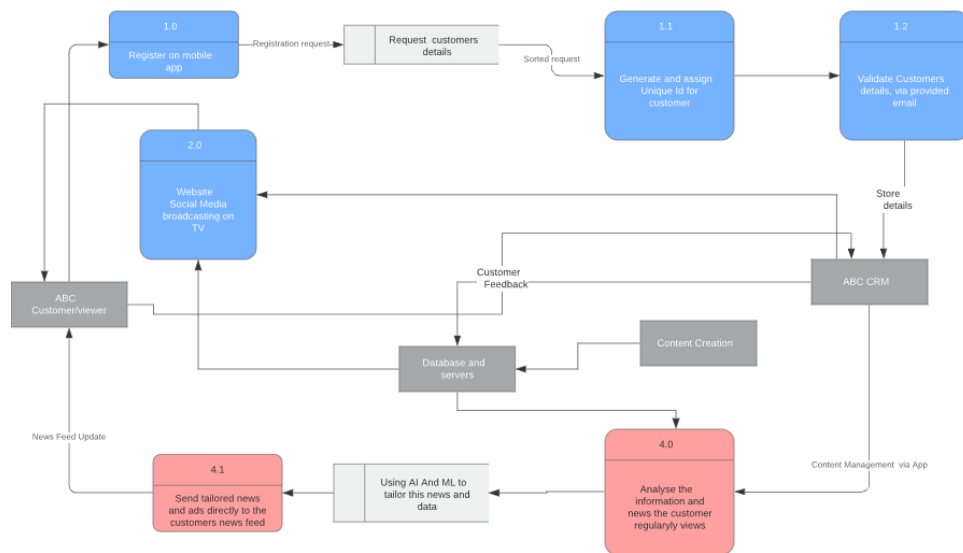


Figure 10. CRM interaction with various ABC media streams

4. Implementation Planning

A number of projects have been identified and prioritized in Table 3 and Figure 11 respectively.

A combination of systems updates, software, and hardware projects will be required to ensure a successful outcome is achieved.

Additionally, the project team involved in the strategic planning, the Architecture team (Figure 12)

Table 3. Proposed implementation projects

Priority/Phase	Project Name	Project Detail
1	Architecture and detailed plans approvals	<ul style="list-style-type: none"> ● Conduct detailed requirements analysis ● Finalize entire project details ● Seek endorsement ● Procurement strategy approval from ABC board ● [Hold Point] : Funding approval from ABC board
2A	Hardware Procurement and Installation	<ul style="list-style-type: none"> ● Set up contracts with service providers ● Installation of hardware requirements
2B	CRM package selection and requirements analysis	<ul style="list-style-type: none"> ● Match package requirements with business needs ● [Hold Point] : Ensure service requirements are met and gain endorsement from divisional heads
3A	Hardware, software integration and temporary operating modes setup	<ul style="list-style-type: none"> ● Integrate new infrastructure with existing operational requirements ● Set up operating modes in parallel with existing system
3B	Process checking and migration (one by one divisional switching to the new system)	<ul style="list-style-type: none"> ● Process and quality checking of functionality against user/business requirements ● [Hold Point] : Approval of functions against project objectives by the governance team ● Migration of functions over to new system
3C	Usability testing, document handover, and user training rollout	<ul style="list-style-type: none"> ● User testing and training rollout ● Modifications based on user feedback ● Documentation handover
4	Final migration, system monitoring, and defect rectification	<ul style="list-style-type: none"> ● Final acceptance testing ● Ongoing monitoring and system support ● Defect rectification

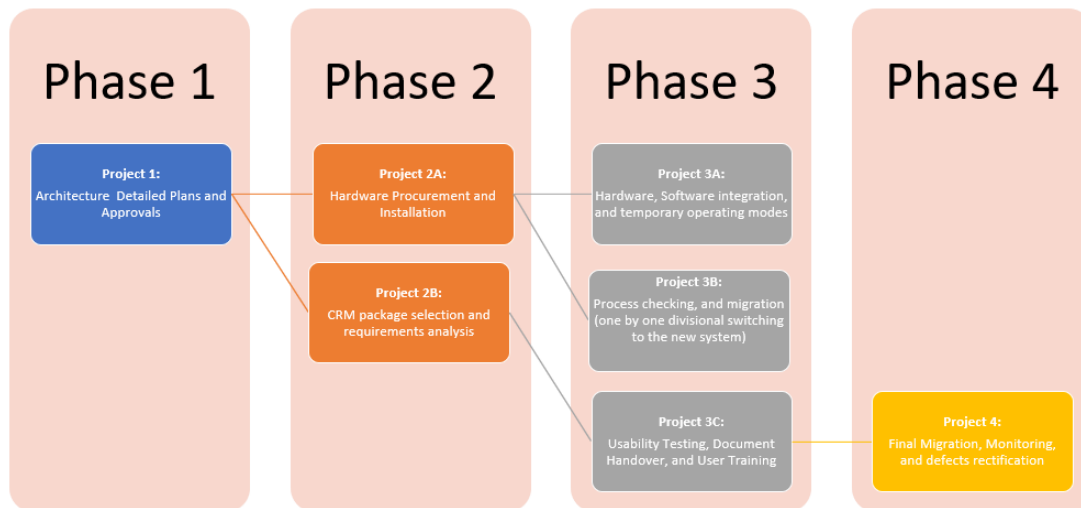


Figure 11. Project roadmap

5. Governance Structures and Processes

The project will adhere to a formal governance structure developed in collaboration with the ABC management. The proposed structure is detailed below in Figure 12.

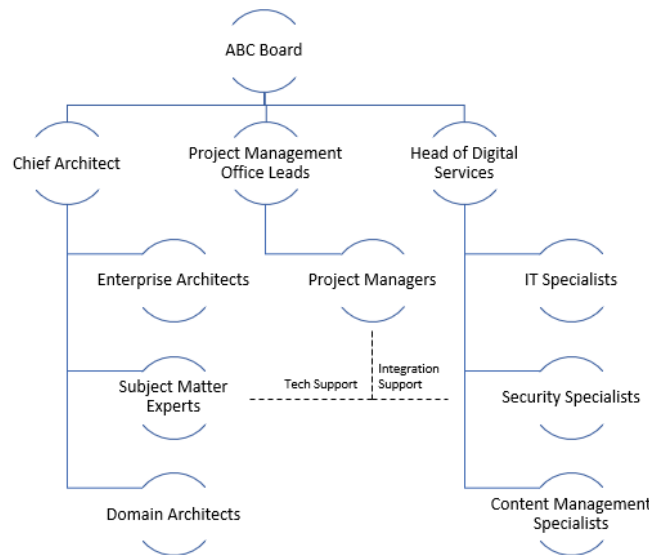


Figure 12. Governance structure

Our proposed governance structure is summarized below;

Phase 1

- Enterprise Architecture team:
 - Develop and seek approval of EA plans through ABC Board
 - Develop and allocate timeframes and budget for project management team for delivery
- Project Management Office:
 - Agree on scope, time, and budget

- Allocate resources for project delivery
- Head of Digital Services:
- Agree on scope and technical deliverables
- Agree on implementation/migration planning

Phase 2

- Enterprise Architecture team:
- Ensure hold points (table 3) are maintained and documented
- Project Management Office:
- Maintain project timeframes, scope, and budget
- Implementation of Project 2A and 2B
- Head of Digital Services:
- Technical support during project delivery

Phase 3

- Enterprise Architecture team:
- Ensure hold points (table 3) are maintained and documented
- Project Management Office:
- Maintain project timeframes, scope, and budget
- Implementation of Project 3A, 3B, and 3C
- Maintain change register and variations
- Head of Digital Services:
- Technical support during project delivery
- Facilitate training and handover documentation
- Final acceptance testing

Phase 4

- Enterprise Architecture team:
- Final hold points to check all project objectives are met with the delivered scope
- Project Management Office:
- Finalize handover documentation
- Provide technical support during monitoring phase
- Address defects/issues which arise
- Head of Digital Services:
- Acceptance of handover documentation
- Acceptance of final product
- Maintain training sessions
- Ensure all security protocols are in place

We aimed to set several management positions in our team to manage the resource, control each phase and keep track with the upgrade processes:

The management positions includes: The Chief Architect; Subject Matter Experts; Enterprise Architects; Domain Architects

6. Conclusion

In summary, in order to provide innovative and latest technology platform to customers and maintain their trust, new projects and changes have been introduced. A new CRM (Customer Relationship Management) system utilized to build stronger relationships with audiences and receive early customer feedback. By creating new mobile and web application, new platform channel has been introduced to target mobile device users' viewers

and address the growth.

Different project has been identified to carry out this mission. Each project will be implemented in different phases to allow early customer feedback and a smooth transaction to new platform. These project has been designed to improve customer experience, reduce costs and provide more centralized data sharing system for better business management. The end vision is having outstanding customer engagement management and business management to better serve the emerging demand.

The new system is designed to be scalable and flexible for future growth and unavoidable changes.

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