



Building an Effective Business Case for Asset Services Change

Corporate Actions and Income event processing (Asset Services) is widely recognised as the riskiest area within post trading Operations. Despite this, many Financial Services institutions have inefficient and risk heavy, manually intensive processes and significant financial losses due to Operational errors are alarmingly commonplace.

Historically, the main issues creating this state of affairs have related to the lack of a globally standardised event announcement process, complex position keeping validation (often from multiple in-house sources), high levels of manual intervention required throughout the event lifecycle, an overuse of Excel spreadsheets and manually crafted notifications / communications / accounting entries and payments.

Through on-going discussions with our client base and industry network, Ibacas believe that the “Asset Services problem” is becoming even more challenging - particularly for those institutions that have not been able to execute the significant change required to address the historic issues in their current processes.

In addition to these historic issues, there are some newer drivers for change.

Many of the legacy platforms used to process Asset Services events are run on old mainframe systems that are coming to their “end of life”. They run on a batch cycle and do not have the ability to consume or generate data in real time. Technical support resources with the knowledge to maintain and change the systems are scarce. This limits the scope of possible change, whilst also increasing the time and cost to deliver any type of change.

The issue of maintaining legacy platforms is exacerbated by the constant change to market standards and new regulatory demands. Compliance with initiatives such as SRD II, ECMS, DORA, SCoRE and DTCC VRI rollout require significant investment to support, particularly when the processing is executed on legacy mainframe platforms. In many cases the only viable option is to introduce additional manual processes, creating further inefficiencies and introducing additional risk.

Over the last 20 years, the Financial Services industry has been an aggressive adopter of using near and far-shore resources in less expensive locations to drive down costs. Whilst there have been wage increases across the board in all location types (on-shore, near shore and far shore), the biggest rises have been in the far-shore locations, with rates in India increasing by up to 50% in the last four years.

This significant base cost increase suggests that improving system automation rates may now be a better option than simply moving processes to far-shore locations and increasing the headcount to support those processes.

Clients are becoming more knowledgeable and demanding in relation to the administration and processing of Asset Services events. Many clients spread their portfolios across multiple service providers and actively compare the quality of service. Clients now see formatted, electronic communications, very short deadlines on elective events and guaranteed payment offerings as standard, rather than as a “nice to have”. Asset Services is becoming a bigger factor in the choice of service provider and clients can be won or lost due to the Asset Services offering of potential service providers.

We are also seeing clients diversifying their portfolios, resulting in an increase in the number of securities across a growing range of markets being held for most clients. At the market level, there has been a significant increase in the global number of Asset Services events of about 50% over the last 7 years. These two factors combined have resulted in a significant increase in the workload for Asset Services groups, increasing the need for scalable processing platforms with higher levels of automation, flexibility and risk management capabilities.

In addition to the increased number of securities being held by clients, we have also seen a move towards increased investment in synthetic products to provide opportunities for larger returns. Processing events on synthetic product holdings adds additional challenges to the overall Asset Services function. Complex processes and system functionality are required to support this diversification in client portfolios.

In the last 5 years, the software vendor market supporting this function have made great improvements in their processing platform capabilities. The solutions now allow for high levels of “real time” automation, good visibility across the entire process through well designed user interfaces / dashboards and formatted automation of the communication processes, as well as having the ability to cope with the complex position keeping and accounting models employed throughout the industry.

This has largely been facilitated by the excellent work being done by the Asset Services Securities Market Practice Group (SMPG), supported by the National Market Practice Groups

(NMPGs)). These groups have published and continue to refine the market best practice for Asset Services processing, providing informed and consistent processing guidelines.

The SMPG process has been invaluable in defining the ISO15022 and ISO20022 data dictionaries that have been incorporated into SWIFT messaging, as well as data vendor feed formats and the vendor processing platforms.

There is a clear and obvious need for more sophisticated Asset Services process to be implemented across the Global marketplace, to improve Operational and Technology efficiency, identify / manage the associated risk and deliver better levels of customer service.

However, despite there being a clear demand for improvement combined with the availability of suitable processing platforms and formatted data standards / messaging to deliver that improvement, the number of Asset Services change projects obtaining the right level of funding is still relatively low.

Ibacas believe the main reason for this scenario is the difficulty in developing a comprehensive Business Case that demonstrates a viable return on investment.

This paper will provide a helpful guide to the challenging process of building a Business Case for Asset Services change. It will identify many of the issues that are faced during this process and provide useful tips for navigating through those issues.



What is a Business Case?

A business case is essentially the documentation of a “value proposition”. It is a comparison of the costs of delivering change vs the benefits that will be realised from implementing the change.

The cost of delivery is usually the easier part of the equation to quantify. The challenges tend to arise on the benefits side of the Business Case with Asset Services change projects. This is because many of the key benefits that will be realised are unquantifiable.

For example, if the change delivery will lead to a reduction in the headcount required to complete the process, the benefit gained can be stated in monetary terms (no. of heads saved multiplied by the cost per head). However, if the benefit realised is a reduction in risk, there is no recognised methodology available to calculate the monetary value of the overall risk exposure, or the level of risk reduction for inclusion in the business case.

The topic of unquantifiable benefits and the associated issues this brings to developing a business case will be covered in more detail later in this paper. Ibacas believe this issue to be the biggest barrier to developing a viable business case and the main reason why investment levels in Asset Services change initiatives are lower than warranted.

Based on Ibacas extensive experience in this area, each financial institution will have their own priorities and preferences for presenting and judging the merits of a business case. It is critical that you understand the process / methodology that is required within your own organisation. Speak to your colleagues who have already been through a similar process to understand what is required by those who will be reviewing your proposal. Get guidance on what works and what doesn't work at your organisation when presenting your business case.



Starting An Asset Services Change Initiative

Defining Scope

The first critical part of developing a business case is defining the underlying drivers and proposed scope of the change.

The proposed scope of change for an Asset Services initiative can vary greatly. It could cover anything from adding a new data vendor to replacing the entire Asset Services processing platform, along with an overhaul of the associated Operating Model. A clear definition of the scope is required to produce a meaningful and relevant business case.

In some instances, there may only be a high level directive, such as reduce headcount / fixed costs, reduce risk or improve the Client Service offering. In such cases, it may be necessary to execute the High Level Analysis tasks (detailed later in this paper) before defining the scope of the deliverable and commencing the more detailed analysis.

Some of the variables that need to be considered when defining the scope of your proposed change include the following:

What parts of the events lifecycle will be impacted?

Is it only part of the event lifecycle, such as Announcement Validation, or the Claims process? Or will your change impact the full event lifecycle from receipt of event information through to file closure?

Which Event Types / Regions / Countries of Issue will be impacted?

Income events vs Corporate Actions events, Mandatory vs Elective events, EMEA vs APAC vs Americas.

Which Business Units will be impacted?

All Business Units that are currently supported, or will only a sub-set of them be affected? Will new Business Units require support in the future state model?

Which other groups will be impacted?

Asset Services sits at the end of a chain of upstream processes, as well as providing output data to multiple areas of the organisation. Accordingly, your scope should not be restricted to Asset Services processing groups. Analysis of the impact on upstream and downstream groups (such as Reference Data, Finance, Treasury, Legal and Compliance, Tax, Settlements, Reconciliations etc) is also required in order to understand the full impact (cost and benefit) of your proposed change.

Which Product Types will be impacted?

Does the proposed change apply to equity and / or debt and / or synthetic products?

Which position/ trade types will be impacted?

Does the proposed change impact all trade / position types or only a sub-set such as Stock Lending, open / failed trades?

A clear definition of the scope will allow you to limit your analysis to the relevant current processes and associated costs. It will also help when defining what the Future State model will look like, as well as identifying the relevant future costs incurred and the benefits that will be realised.

Governance model

Defining the scope of the change as described above will identify all the different areas of your organisation that may be directly, or indirectly, impacted by the proposed Asset Services change initiative.

In addition to capturing functional processes and their owners (inside and outside of Asset Services functions), it is also important to identify Technology Systems and owners, Business Unit contacts, Product owners, Client Service representatives etc.

The identified parties should be included in your analysis exercise and invited to participate in regular update meetings and Steering Group activities. Employing this approach means that impacted parties can contribute to the analysis and documentation of the “big picture” Current State model, as well as being able to identify additional benefits that could be gained outside of the Asset Services processing function for inclusion in the business case.

Including all impacted areas at the earliest stage possible means your analysis and business case will be more accurate. This type of early collaboration also allows a wider audience to understand and assist in developing the goals and benefits of your change initiative. In turn, this increases the likelihood that your business case will be comprehensive, received in a better light and will be more likely to be approved.

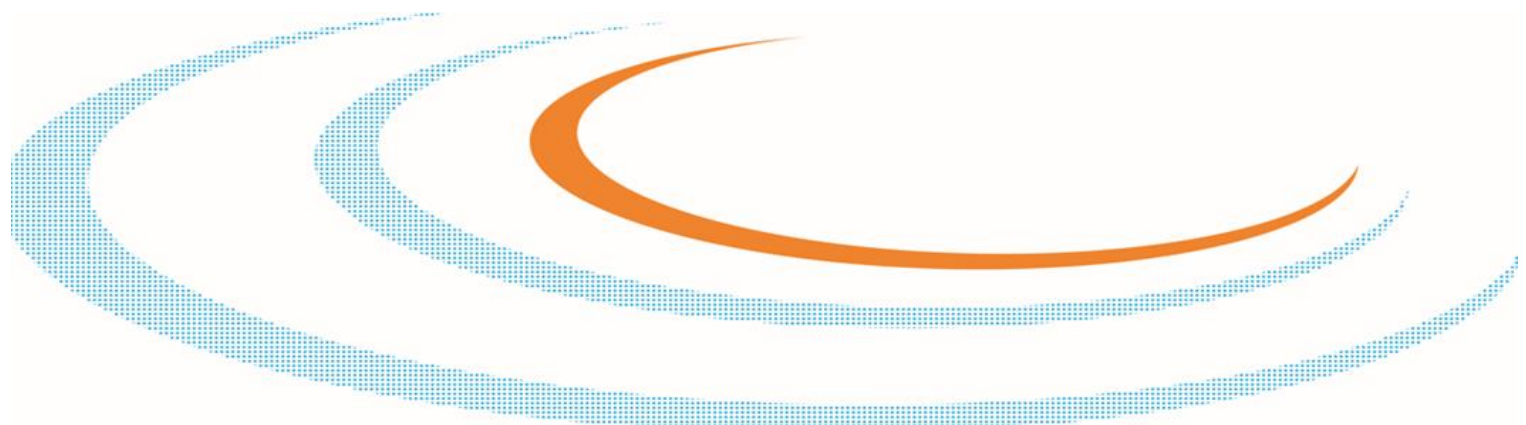


Business Case Development Process

Once the scoping phase has been completed, the process of developing a business case can be split into four phases:



The next sections of this paper will cover each of these phases. They will leverage the extensive experience that Ibacas have in this area, providing useful guidance and tips for navigating your way through each phase.





Current State Analysis



In order to identify where benefits can be realised and included in the business case, a clear understanding of the current and future models is essential.

As mentioned previously, it is vital to understand the big picture impact of Asset Services processing across your organisation and not focus solely on the process owned by the Asset Services team. This is good practice when defining any type of business case. In the case of an Asset Services related business case, it is even more important due to the fact many of the benefits that can be realised are unquantifiable, such as risk reduction and increased client satisfaction. Accordingly, additional effort will be required to ensure all potential benefits are captured in order to produce a viable business case.

Following the process outlined in the **Defining Scope** section of this paper will provide the details of all relevant parties that will need to be included in the Current State Analysis phase. This will include many areas outside of Asset Services management, processing teams and their IT support groups.

The scope of the additional areas that need to be included will vary from organisation to organisation, depending on the scope of the proposed change and the Asset Services processing model that is employed.

The below table gives examples of such areas for consideration

Input
Security Reference Data
Product Reference Data
Event Data Sources
Agent / Depository / Counterparty Data
Reconciliations
Position / Transaction Data
Client Reference Data
Client Media – Portal and SWIFT
Application Communications (ACK / NAK)

“The analysis needs to involve looking beyond the borders of the Asset Services function”

Output
Client Communications / Notifications
Agent / Depository / Counterparty Media
Application Communications (ACK / NAK)
Position Keeping Systems
Accounting and Ledger Systems
Sanction Screening
Reconciliations
Claims Management
Client Reporting systems
Inventory Management
Treasury / Funding Applications
Regulatory / Compliance / Legal
MI Reporting Tools
Tax Applications
Audit
Client Service Teams

Ibacas Current State Analysis Model

Ibacas' extensive experience in developing Asset Services business cases has taught us that there is not a "one size fits all" methodology for this process. This Ibacas model includes a superset of methodologies covering all the categories of analysis we have had to undertake in the past, across a range of different institution types and sizes. Having this "Superset Model" allows Ibacas to successfully execute the relevant components of building an Asset Services business case, regardless of the scope or scale of the proposed change.

The subset of processes and associated documentation that are required will be determined by the nature and complexity of the proposed change and the type of information required in the business case submission process at your organisation. It is critical to agree the nature of the required information with your Stakeholders and Governance team prior to starting the current state analysis. This will reduce the likelihood of having to go back and rework your analysis and improve the likelihood of your change proposal being approved.

Whilst it is critical to ensure all relevant parties are included in the Current State Analysis phase, the best place to start is with the Asset Services Operations and Technology teams. Ibacas recommend starting at a high level and working down to lower levels of detail as you progress through the analysis phase.

Once this process is completed for the Asset Services teams, it can be repeated for the non-Asset Services teams that will be impacted by the proposed change. Including representatives from these areas in the Stakeholder Group and associated meetings should assist with access to the relevant resources to complete this process.



1. High Level Analysis

Understanding the Current Operating and Architecture Models provides the foundations for documenting the overall Current State. Below is an overview of the steps that can be taken to document these areas:

Current Operating Model

- Work with the relevant Senior Management teams (Asset Services and any other areas identified in the scoping phase) to fully understand the Current Operating Model.
- Establish and document the processing group structure and how that is broken down. This will vary from institution to institution, as there are different ways of breaking down the various processing functions (by Function, Product, Event Type, COI, Business Unit, Client Type, Position Type, etc).
- The goal is to have a detailed record of the current headcount numbers and their responsibilities, along with the associated costs, for the groups impacted by the proposed change.
- Documenting this information will provide the starting point against which any future model can be compared, easily identifying any relevant changes that need to be included in the business case.

Note: It is not always the case that there will be a reduction in headcount / headcount costs associated with the proposed change. If your change relates to an improvement in the current service offering, it will often be the case that an increase in headcount may be required to support that service offering. Furthermore, if the service offering is completely new, there may not be an existing operating model to document.

The output from the Current Operating Model analysis will be:

- Detailed breakdown of headcount allocation.
- Detailed breakdown of the costs associated with headcount.
- Identification of the relevant processing groups that will need to be interviewed in the detailed analysis phase (see below).



Current Architecture Model

- Work with the relevant Technology Senior Management teams, system owners and SME's (Asset Services and any other associated technology platforms / technology support functions identified in the scoping phase) to fully understand the Current Architecture Model.
- The first task is similar to the Current Operating Model analysis. The objective is to capture a detailed record of the current headcount numbers and their responsibilities, along with the associated costs for the technology teams impacted by the proposed change.
- The second task is to identify any non-headcount related technology costs
- Examples of associated costs can include the following for Asset Services and Non-Asset Services platforms:
 - Hardware
 - Software
 - License Fees (3rd Party Software and Data Feeds)
 - Hosting
 - Maintenance
 - Support / Headcount
- The final task is to document the flow of data between the Asset Services processing platform(s) and the upstream and downstream dependent systems. At this stage, that only needs to be done at the high level, identifying the source systems, data category and method of data transfer. More detailed analysis of the data elements, format and timing of transfer etc. will be undertaken and recorded later in the Detailed Analysis phase (see below).

The output from the Current Architecture Model analysis will be:

- Detailed breakdown of headcount allocation.
- Detailed breakdown of the costs associated with headcount.
- Detailed breakdown of the non-headcount related technology costs
- Identification of the relevant technology SMEs that will need to be included in the interview process undertaken in the Detailed Analysis phase
- High level architecture / data flow diagram
- System inventory

2. Detailed Analysis

Once the high-level analysis has been completed, the next step in the Current State Analysis process is to gather the detailed information relating to the in-scope functions.

The best way to begin gathering this information is to execute a series of workshops / interviews with the Asset Services Operations processing groups and technology SME's identified during the high level analysis phases detailed previously. Including both Operations and Technology representatives in this process results in bi-lateral education of each group's responsibilities, process and issues, as well as ensuring completeness and accuracy of the analysis being undertaken.

To assist with this process, Ibcas has developed a comprehensive questionnaire covering all aspects of the Asset Services lifecycle, from announcement receipt through to file closure.

Our proprietary questionnaire breaks the full event process down by lifecycle stages, accounting for the differences between, Income, Mandatory and Elective Events, as well as the differences between processing events for Equity, Debt and Synthetic products.

Asset Services Event Lifecycle Phases:



Each of the event lifecycle stages is then broken down into the relevant sub-functions. For example, within the Announcements section the process is broken down into:

- Source Data – Internal and external, events and securities
- Process – Event creation and validation
- Control – Workflow and alerts, risk management
- Data Management – Data storage and access, audit

Experience has taught us that following this logical timeline approach ensures that all the relevant information is captured and prevents missing information / the need to re-interview.

In addition to recording the details of the functions that are being performed, it is also important to capture additional information for each sub-function that will help to identify areas for improvement and benefit realisation.

In the Ibacas model, we also capture the following information at the sub-function level

- Is the process manual, automated or hybrid?
- What prompts are provided to execute the function?
- What source information is required?
- Where does the source information come from?
- What tools / platforms are used to execute the function?
- Are there any SLA terms in place for completing the process?
- Are there any known issues associated with the process?
- Is there any work in progress to resolve known issues?

Adopting this type of structured approach will ensure that the information captured during this process is complete, accurate and consistent.

Having a structured approach becomes even more important for institutions with complex operating models. The Asset Services function can be split up amongst many distinct processing groups. The split can be driven by processing function (centralised Announcement Validation or Claims processing utility), by Event Type (Income vs Mandatory Corporate Actions vs Elective Corporate Actions) by Country of Issue or Region, by Business Line or Client Type, etc.

It is critical to understand and record the scope of responsibilities for each processing group to understand which parts of the overall process the information captured in the workshops / interview process relates to. Without this understanding it becomes incredibly difficult to create a true picture of the Current State. More importantly, it becomes harder to identify the most efficient way to deliver maximum benefit and build a viable business case.

Once this process is completed with the Asset Services processing and technology groups, it can be repeated for the non- Asset Services groups identified in the scoping phase to ensure that the bigger picture information is captured.

3. Process Flows

The information captured during the detailed analysis phase can be used to develop process flows. The process flows are a pictorial representation of the underlying activities and data flows.

Depending on the complexity of the proposed change / underlying processing model, it can be useful to include additional information to the flows, such as headcount and cost details.

Having a pictorial representation of your process is useful when discussing the issues with those in your organisation that are not directly involved in the lower-level processing. If questions are asked about the process flows by stakeholders, you have the detailed analysis information to back them up.

4. Scoring

The information captured in the detailed analysis phase provides a detailed description of the process and function being performed. The next stage is to identify the relative strengths and weaknesses in the current process to establish where the most benefit can be realised for inclusion in the business case.

Ibacas have developed a proprietary methodology for this process where we compare the Current State model to an Ideal State model. The Ideal State model developed by Ibacas is based on adherence to the following high level core principles:

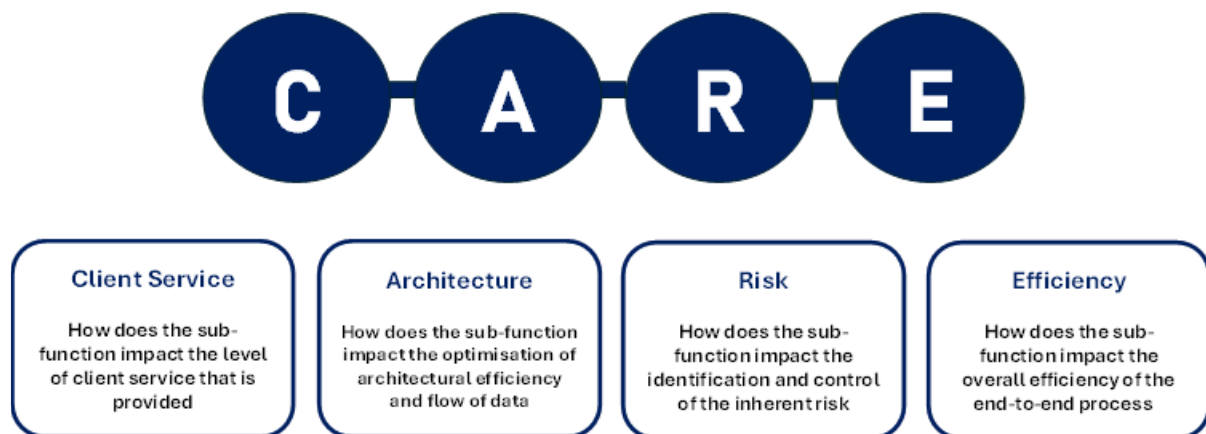
1	Compliance with local and global Standard Market Practice Group (SMPG) guidelines.
2	Adoption of ISO15022 and ISO20022 data dictionaries
3	A scalable process with high levels of automation / efficiency and real-time processing capabilities.
4	Effective risk mitigation and management with comprehensive risk prioritised workflow capabilities
5	Architectural efficiency with a focus on real time, formatted and automated data flows between upstream and downstream systems, including electronic client communications.
6	Adherence to Organisational / Business Unit goals and standards / SLA terms
7	Visibility of the overall process for management and processors, including on demand and scheduled reporting

In the Ibacas scoring model we take each sub-function captured in the detailed analysis phase and give it a score that reflects how it is executed in comparison to the same sub-function in the Ideal State model.

The scoring data is then recoded in a database and used for further analysis.

5. C.A.R.E. Weighting

Ibcas extensive experience within the Asset Services sector means we understand that not all sub-functions analysed in the detailed analysis phase will have an equal impact on the overall process and service offering. Accordingly, we have developed a unique methodology that takes into account the relative impact each sub-function has on the overall process across four different categories.



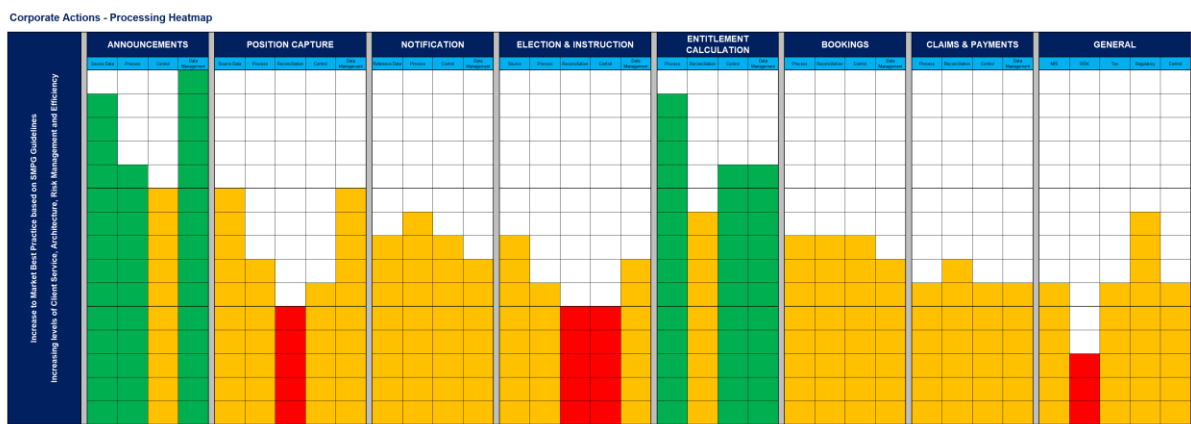
Each sub-function is given a C.A.R.E. rating based on the above factors. The C.A.R.E. rating is then used to apply the appropriate weighting to each sub-function score. The C.A.R.E. weighted scores are stored in the scoring database, along with the raw scoring data.

Application of the C.A.R.E. weightings provide a more realistic method for analysing where the real world strengths and weaknesses of the current process are based on real world impact. In turn, this allows organisations to identify the specific functions / sub-functions in the overall process where the biggest benefits to the overall process can be realised.

6. Heatmaps

Employing the Ibcas model detailed above provides the necessary data to produce a range of heatmaps that give a visual representation of the strengths and weaknesses of the current state model in comparison to the ideal future state model.

The sample heatmap shown below is produced using the C.A.R.E. weighted scoring data. The green areas show where the current process is closest to the Ideal State model, whilst the red areas show where the greatest benefits can be gained.



We have found the heatmaps are an invaluable tool when presenting the business case to Senior Management.

Different heatmaps can be produced dependent on the scope and impact of the proposed change that is being analysed.



7. Current State Summary

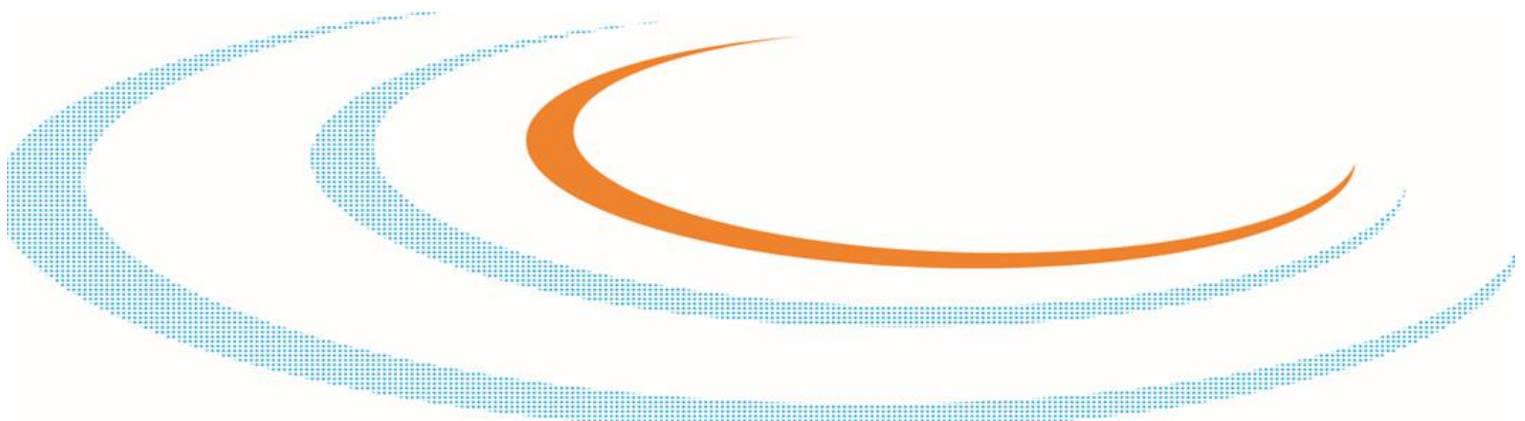
The Current State Analysis stage is critical to the overall process as it provides the baseline for comparison to any Future State proposals.

Key Focus Points:

- Include all relevant parties in the analysis (Operations, Technology and Business)
- Agree the high-level picture before diving into the detailed analysis
- Take a structured approach to the detailed analysis
- Document all of the feedback in a structured manner

Key Outputs

- Current State Operating Model
- Current State Architecture / Data Flow Diagrams
- Current State Cost Analysis
- Detailed Process Flows
- Completed Questionnaires and Scorecards
- Heatmaps – or another form of pictorial representation





Future State Analysis



As with the previous section of the Current State Analysis phase, Ibacas' experience shows that there is not a "one size fits all" approach to the Future State Analysis phase. The below information shows a sub-set of the full Future State analysis model that Ibacas has developed over many years, working with a range of clients across many different types of change projects.

Having said that, one aspect that is common across every single Future State Analysis exercise we have undertaken is the need to focus on the specific drivers and objectives of the proposed change. It is too easy to fall into the trap of expanding the scope of the Future State analysis and modelling beyond the boundaries of the Defined Scope that is agreed at the beginning of the process.

Extending your analysis and the proposed solutions beyond the original scope will inevitably lead to an increase in the associated costs and delivery timelines, making it even harder to develop a viable Business Case and reducing the chances of securing the required budget.

Another core consideration is that there are always different ways to achieve the same goal. Accordingly, multiple solution options must be considered during the Future State Analysis stage and all viable solutions should be included in the final Business Case for consideration.

As with the Current State Analysis phase, it is critical that all impacted areas of your organisation are included in the Future State Analysis process. This will ensure that comprehensive solutions are developed and that all the relevant Future State costs and benefits are identified.



1 Future State Requirements

Unlike the Current State Analysis model where you start at the high level and work down into the detail, the opposite approach is recommended for Future State Analysis exercises. Understanding the lower level requirements up front will allow accurate Operational and Architectural models to be developed that reflect potential Future State models that actually deliver the required benefits.

The best way to gather this information is to execute a series of workshops / interviews. Initially, these should be held with the Asset Services Operations and Technology SME's identified during the high level analysis phase. Once that process has been completed, expand the process out to the non- Asset Services groups.

Unless you are designing a completely new process or service offering from scratch, leveraging the information captured during the Current State Analysis phase will simplify the Future State process. Use the completed questionnaires, detailed process flows, operating model and architectural / data flow diagrams to drive the workshop agendas. Identify changes to the existing process, or new requirements that are needed to meet the defined objectives for your Future State model.

Methodologies for capturing the Future State requirements will vary from organisation to organisation (use cases, business requirements documents etc.) and you should follow the standards / methodologies adopted by your organisation. However, three things that remain key, regardless of the methodology employed, are to capture as much detail as possible, ensure that you keep within the bounds of the proposed change and to prioritise each requirement in terms of criticality.

Whilst capturing comprehensive details, we recommend that you record the following information for each requirement. Recording this information will help greatly when modelling Future State solutions

- What prompts are provided to execute the function?
- What source information is required?
- Where does the source information come from?
- Are there any SLA terms in place for completing the process?
- Is an authorisation process required?
- Is a confirmation that the process has been successfully completed required?

As mentioned previously, Ibacas have developed an Ideal State model, based on the core principles laid out in the Scoring section of Current State Analysis. When engaging with our

clients in Future State Requirements workshops, we use this model to drive the workshop agendas and help validate / challenge / improve the requirements that are captured. Employing this approach has drastically reduced the time taken for our clients to agree their Future State requirements as it makes it easier for them to envisage what their Future State process could / should look like.

Whilst it is not practical to show the complete Ideal State model in this paper, it is useful to be mindful of the following core principles of the model when defining your Future State requirements:

1	Adherence to local and global Standard Market Practice Group (SMPG) guidelines.
2	Adoption of ISO15022 and ISO20022 data dictionaries
3	A scalable process with high levels of automation / efficiency and real-time processing capabilities.
4	Effective risk mitigation and management with comprehensive risk prioritised workflow capabilities
5	Architectural efficiency with a focus on real time, formatted and automated data flows between upstream and downstream systems, including electronic client communications.
6	Adherence to Organisational / Business Unit goals and standards / SLA terms
7	Visibility of the overall process for management and processors, including on demand and scheduled reporting

Once detailed Future State requirements have been captured from both the Asset Services teams and the impacted non-Asset Services teams, the solution modelling phase of the process can begin.

2. Future State Modelling

The next stage of the process is to take the Future State requirements and the original business drivers for change and begin the work of modelling solution options.

As mentioned previously, there are usually multiple ways that the same challenge can be met. However, that does not mean that every solution can be considered viable and included in the Business Case.

A high-level analysis of the benefits, costs and delivery timelines should be undertaken for each potential solution at the early stages of the Future State Analysis phase. Whilst a potential

solution may deliver the desired benefits, it may take too long / be too expensive to implement and should not be included in the subsequent detailed analysis and modelling exercises. It may still be useful to include such options in your final business case to show that they were considered and correctly rejected.

It is not always the case that a technology solution is required to deliver the proposed change. Sometimes, effective change can be delivered through a combination of process re-engineering, combined with some system configuration changes and the provision of additional reporting. This may often be the case when there is a pressing Client Service or Risk Management issue to address. A temporary, manual fix may be required to address the issue very quickly, until a more robust systemic solution can be developed and delivered.

In other cases, the desired change and associated benefits may only be achievable through a technology delivery. For example, if significant efficiency benefits are required, automation rates will need to be improved, which is only really feasible through technology driven change.

In the cases where a technology delivery is required, it is important to consider the ways in which the technology delivery can be achieved.

- Changes to the in-house, proprietary platform.
- Development of an additional in-house, proprietary platform.
- Upgrade / development of existing third-party platform.
- Adoption of a third-party module / stand-alone platform (for example – Announcement Validation or Claim Processing platform).
- Replacement of in-house, proprietary platform with a third-party platform.
- Replacement of third-party platform with alternative third party or in-house solution.

Each of these variations of solution delivery will have different benefits, costs and delivery timelines. Providing options in the Business Case is always better than providing a single proposed solution. It allows the decision makers to determine the most suitable balance between cost vs. benefit levels from the options provided.

If a proposed solution requires the adoption of third-party software, a vendor selection process should be undertaken to establish which of the commercially available solutions is the best fit in relation to your Business Drivers, Future State requirements and overall Architecture model.

Ibacas have developed a proprietary model for undertaking vendor selection initiatives. We will not cover the details of that model in this paper but please contact us (info@ibacas.com) if you would like to discuss this subject further.

In most cases, the potential solutions will include a combination of Technology delivery and Operational changes. The following sections provide guidance on how to develop Future State Architectural and Operational models for the potential solutions.

There is an element of “chickens and eggs” with regards to whether the Target Architecture or Operational Model should be developed first. How can you determine a Target Operating Model without knowing what the supporting platform capabilities are? How can you determine a Target Architecture Model if you don’t know the Target Operating Model that it needs to be able to support?

In reality, this part of the overall process is always iterative with the two processes running in parallel with Operations, Technology and Business unit representatives participating in both aspects of the modelling exercise. Including Technology representatives in the Operating model exercise and vice versa will help to ensure the two models will be complementary, achievable, support the proposed Future State model and deliver the required benefits.

3. Target Architecture Model

The overall objective in this phase is to work with the Technology groups to develop a Future State Architecture Model, that supports the Future State Requirements and delivers a solution that is in line with the Business Drivers and any targeted benefits.

Work with the relevant Technology Senior Management teams, system owners and SME’s (Asset Services and any other associated technology platforms / technology support functions identified in the scoping phase) to review and fully understand the Future State requirements.

Assist these teams with development of the different types of Architectural solutions detailed in the previous section, including delivery of the supporting Architecture / Data Flow diagrams.

If any of the proposed solutions include the use of a third party supplied solution, the same exercise will need to be conducted in conjunction with the third party / parties. Always include a cross section of stakeholders in workshops with third party suppliers to ensure the correct range and detail of analysis is achieved.

The associated benefits and costs for delivering each solution and supporting it going forward will also need to be calculated and documented (see Gap Analysis section). Remember that

both Asset Services and non-Asset Services systems may need technology change. The full benefits and costs should be calculated across all impacted platforms.

The number of potential models that you will need to develop will depend on a range of factors, such as in-house guidelines / preferences for Business Case format and the size of the scope of change. Work with your governance team to determine which solutions should be included in the final Business Case.

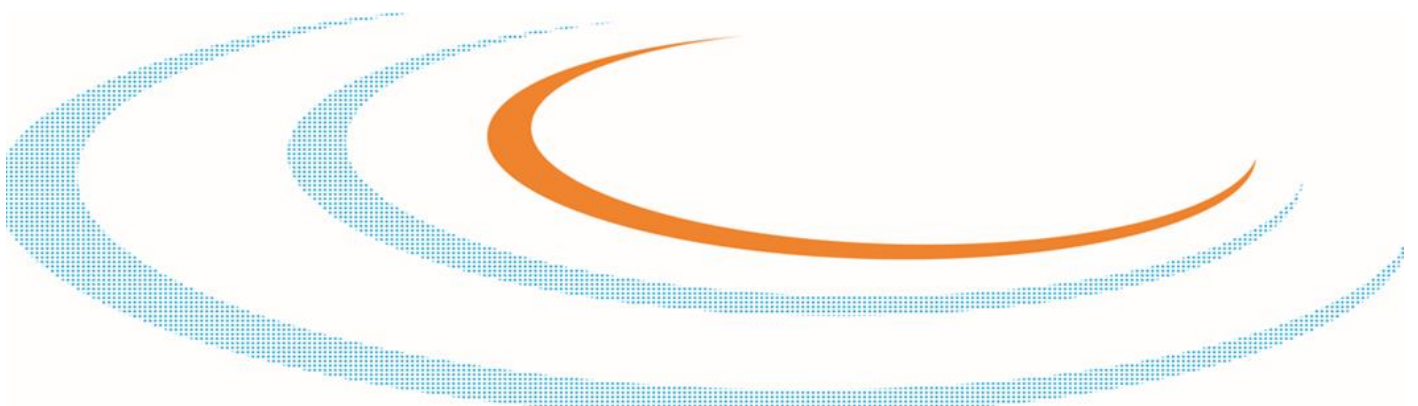
4. Target Operating Model

The overall objective in this phase is to work with the relevant Operations and Business Unit Senior Management teams to develop a range of Target Operating Models that could be achieved and supported by each of the proposed Architectural Models.

Ensure that each proposed model delivers a structure that supports the Future State Requirements and is in line with the Business Drivers and any targeted benefits.

As with the Target Architecture side, the associated benefits and costs for transferring to and supporting each Operating Model will also need to be calculated and documented (see Gap Analysis section). Remember that both Asset Services and non-Asset Services functions may need Operating Model changes and the full costs should be calculated across all affected groups.

In addition to identifying the potential Operating Models and costs, it is useful to document the associated process flows that would support each model. This information will be useful in identifying potential benefits in the Gap Analysis phase.





Gap Analysis



The Gap Analysis phase is where the comparison between the Current State Model and Future State Models is undertaken. The goal is to accurately capture the benefits that will be realised, the associated costs incurred to deliver the proposed change, as well as the costs to support the Future State models once implemented. This analysis will need to be completed for each potential model that will be included in the final Business Case.

In reality, the Gap Analysis takes place in parallel with the Future State Analysis phase. There is no point in spending time developing models that do not deliver enough benefit or are clearly not financially viable.

The Gap Analysis should be broken down into 3 categories

- Benefits to be realised
- Cost to deliver the benefits
- Cost to support the Future State model

You will need to analyse these categories from an Operational, Business Unit and Technology perspective to identify the full data set required for inclusion in the Business Case.

Where the change is delivered in a series of stages, you will also need to determine the delivery staging strategy and break down the total benefits and costs by delivery stage.

1. Benefits Analysis

When identifying potential benefits, it is important to be aware that some benefits will be quantifiable and some will be unquantifiable.

	Description	Examples
Quantifiable	A quantifiable benefit is one that can be expressed in monetary terms. For example, a headcount reduction (or reallocation to a cheaper location) will have a quantifiable saving equal to the reduction in total headcount costs.	<ul style="list-style-type: none"> ▪ IT costs (headcount, hardware, etc). Includes general maintenance and support as well as delivering change / improvements / upgrades ▪ Ops costs – Asset Services resources plus other impacted areas (e.g. recs, treasury, finance, tax) ▪ Business Unit costs ▪ Data feed costs ▪ License fee and hosting costs for software ▪ Operational losses / near misses ▪ Processing model scalability to cater for any increases in market or business unit growth ▪ Time / cost to adapt the process to cater for market, Business Unit or Operational changes
Unquantifiable	An unquantifiable benefit is one that cannot be expressed in monetary terms. For example, a reduction in risk due to automation of a manual process, will clearly be considered a benefit. However, expressing the reduction in risk in monetary terms is incredibly difficult with the tools available in the market today.	<ul style="list-style-type: none"> ▪ Risk exposure (other than losses / near misses) ▪ Client service satisfaction levels ▪ Staff retention / morale / career progression - on, near and far shore ▪ Regulatory compliance exposure (including tax specific) ▪ Market reputation (damage / risk) ▪ Process resilience ▪ Alignment with Firm technology directives ▪ Ability to move towards “real time” processing

It is critical to ensure that all possible benefits are identified, including those that can be realised outside of the Asset Services group. This is particularly relevant where the high-level business drivers are focused on unquantifiable benefits, such as “improve client service levels”, or “reduce risk”. The greater the level of quantifiable benefit identified, the greater the likelihood of your proposal being accepted.

Even though it may not be possible to include monetary values for unquantifiable benefits, other information can be included in the benefits case to assist with the decision making process.

Some examples of the type of information that can be included in the Business Case for unquantifiable benefits include:

- **Client Service satisfaction levels** – Review any data available relating to client queries / complaints and categorise them by root cause. If the root cause is addressed in your proposed solution, you can state the anticipated reduction in the level of future queries / complaints. Work with your Client Services teams to identify whether there will be a cost saving relating to a reduction in the number of resources needed to support the client query process.
- **Staff retention / morale / career progression** – Investigate staff retention rates to identify any patterns. Work with HR to establish the costs for recruiting, on-boarding and training replacements. Estimate the reduction in turnover and multiply by the costs for bringing in replacements. Ensure that your estimation assumptions are clearly stated if you need to take this route to prevent issues when presenting the final Business Case.
- **Risk exposure*** – Review historical losses / near misses and identify root causes. If the root cause is addressed in your proposed solution, you can state the value of losses / near misses that will be unlikely to occur going forward. This does not give any indication of the overall risk exposure but will provide some useful data to include in the Business Case.

* For further information on the issues relating to measuring Asset Services risk, please refer to this article on the Ibcas website –

https://www.ibcas.com/_files/ugd/3c6aa3_f14d027057fa4d74aaf2c520add1c589.pdf

The level of weight given to any unquantifiable type of information will vary greatly from institution to institution – and can also vary within the same institution, depending on the preferences of those with responsibility for reviewing and approving the Business Case.

Accordingly, you should be aware of who is reviewing your Business Case and speak to others in your organisation who have presented Business Cases to the same panels, to establish what level of weight is given to the different components.

2. Costs Analysis

In order to identify the information required for inclusion in the Business Case, you will need to look at costs from two aspects – “Business as Usual” and “Change Delivery”

Business as Usual (BAU)

The objective here is to identify the difference in costs to support the Future State Model on a day to day basis once the proposed change has been delivered. The BAU cost will be made up of Operations, Business Unit and Technology costs.

Compare the cost data identified in the Current State Analysis phase with those identified in the Future State Analysis phase and capture the deltas. Dependent upon the scope of the proposed change, it may be necessary to break this information down into sub-categories to allow easier presentation / interpretation of the data.

For example, the Operations costs could be broken down by processing location or function, whilst Technology costs could be broken down by license fees, hardware, support etc.

Change Delivery

Change Delivery costs relate to those incurred to deliver the proposed change and will include Operations and Business Unit costs, as well as Technology costs

The Operations / Business Unit costs will largely be people based, where certain resources are seconded to the project team to assist with the delivery process. A calculation based on the number of resources, their cost and the effort required will need to be undertaken and included in the overall costs analysis

The Technology costs will also include people-based costs. In addition to the types of Technology costs listed in the Current State Analysis section of this paper, the following potential costs should also be considered for the change delivery cost analysis.

- Development
- Testing
- Integration
- Decommissioning
- Recruitment
- Training

In addition to the above mentioned internal costs, there may also be some external costs to consider and include in your analysis.

If your solution requires the implementation of third-party software, there will be additional costs to consider. These costs could include consultancy services, license fees and hosting costs. Work with any potential vendors to ensure all costs are included in your analysis.

Specialist consultancy services from providers such as Ibacas may be required to support your change delivery. Whether the need to engage with external consultancy providers is driven by the size of the change, a lack of dedicated change specialists within your organisation or concerns over the impact of removing SMEs from the day to day process to support your initiative, you should work with the service provider to identify such costs and include them in your analysis.



3. Delivery Strategy Impact

As mentioned in the Future State Modelling section, it is likely that the proposed change will be delivered in stages. Accordingly, you will need to breakdown the sub-set of total benefits and costs by delivery stage for each proposed solution.

Unless the scope of the proposed change is very small (in which case you may not even need to develop this type of Business Case), you will need to deliver the overall change and associated benefits in logical stages. The sequencing of the phased delivery should be included in the Gap Analysis. The sequencing will be influenced by a range of factors such as Business Driver priority, lifecycle dependencies or technology considerations. As always, work with your stakeholder group to agree the best approach.

Develop logical roadmaps detailing the delivery stages of each proposed solution. Match the sub-set of benefits that will be realised and costs that will be incurred for each stage of delivery.

This method will show Senior Management clear timelines on when benefit will be realised and how much each benefit delivery will cost to achieve. It is critical to show that staged benefit will be delivered throughout the change initiative, rather than all the benefit being delivered at the end of the initiative.



4. Future State Heatmaps

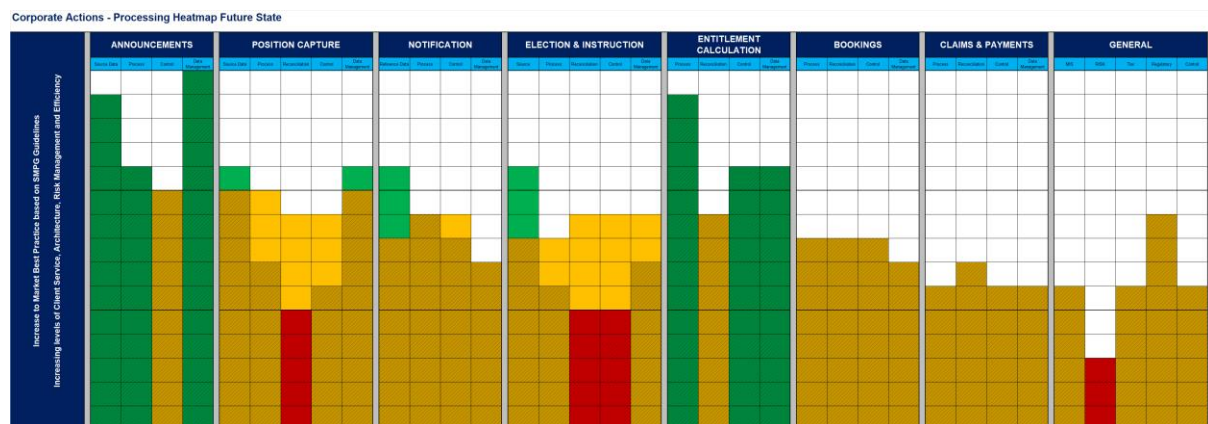
Once Future State requirements have been gathered, the associated modelling has been completed and all costs and benefits have been identified, Ibacas have found that it can be useful to represent those models in a set of Future State Heatmaps, which can be included in the final Business Case submission.

In those cases where a phased delivery is required, you can produce Future State Heatmaps for each corresponding delivery phase to show the levels of process improvement over time.

As with the Current State Heatmaps methodology, Ibacas compare the Future State model to the Ibacas Ideal State model.

In the example shown below, the proposed Client Service driven change focused on improving the Election and Instruction process.

Future State Heatmap



The above heatmap shows the original values from the Current State Analysis phase, indicated by the shaded boxes. The improvements in the proposed Future State Model are shown by the non-shaded boxes.

In this particular example, it was established there were underlying issues with validating the entitled positions for elective events. This resulted in incorrect / late notifications being sent to clients, affecting their ability to accurately submit their election options.

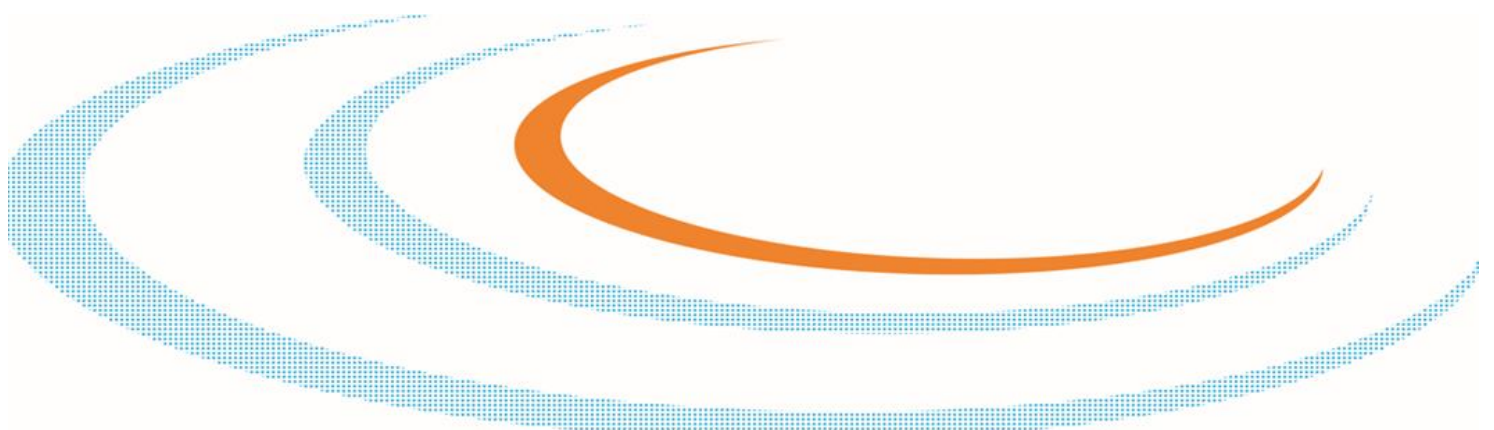
It was necessary to improve the Position Capture / Reconciliation process and the Notification process in order to provide the foundations to achieve the end goal of an improvement in the Election and Instruction process.

- Work with the owners of the underlying position keeping systems to improve the inbound entitled position information
- Improve the aggregation and reconciliation of entitled positions within the Asset Services platform
- Update the content and display of entitled position information in notifications to holders

Once these underlying issues were addressed, work could be undertaken to improve the Election and Instruction process.

- Upgraded functionality within Client Portal
- Automated receipt of inbound electronic Election Option messages
- Automated allocation of Election Option instructions
- Automated generation of outbound Instruction messages to agents / depositories

This is a good example of why it is important to look at the bigger picture when developing Business Cases for Asset Services change to ensure that the optimal solution is identified and implemented.





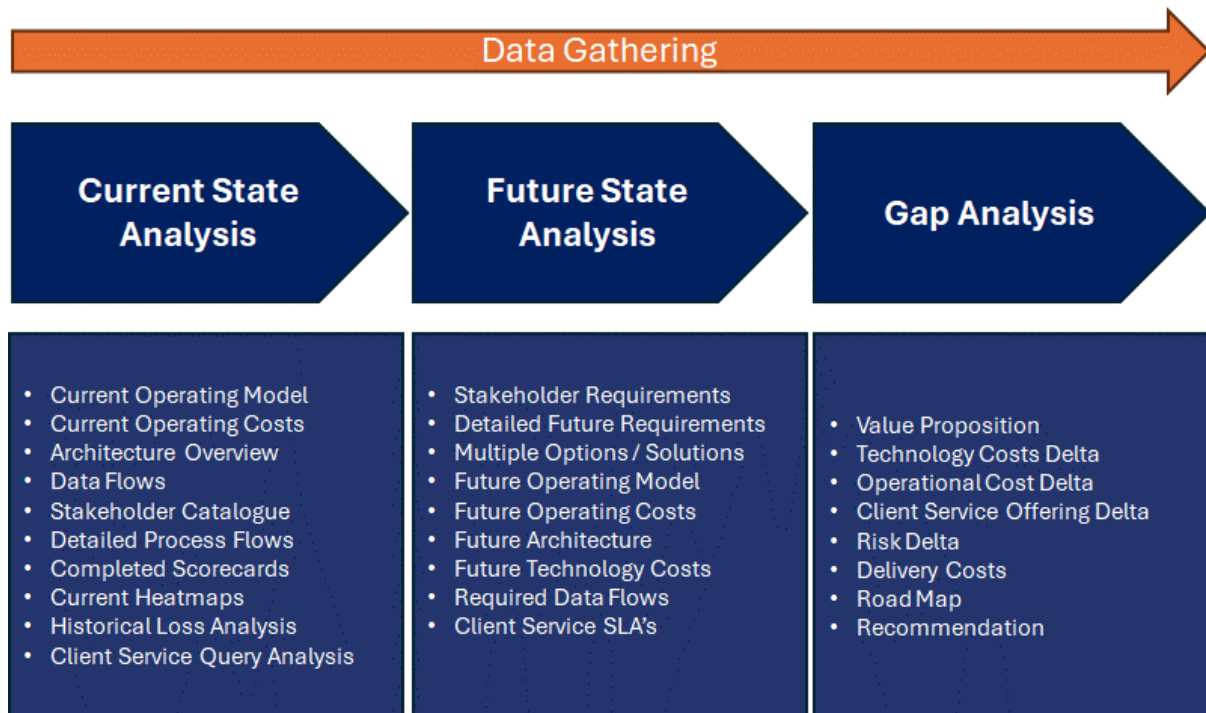
Business Case

If you have made it this far – either through this paper, or through the process of building your Business Case – congratulations!!! You have done all the hard work.

The previous sections of this paper were designed to give some ideas and potential tools to identify and gather the information required to make a viable Business Case. This section will simply focus on pulling that information together into a single, coherent document.

This White Paper does not profess to be the only way to build a Business Case. It was written to share some of the experience Ibacas’ Directors have gained over the last 20+ years working as consultants with our clients across the industry.

The tools discussed are some of the options available in the overall Ibacas model. They can be employed to collate data that explains the current issues, model options for creating an improved Future State process and identify the benefits / costs associated with moving from the Current State to the proposed Future State.



Summary of potential outputs from each of the Data Gathering Stages

When writing the formal Business case it is important to understand your target audience and what information they like to see in a Business Case.

In the very early stages of your initiative identify who will be reviewing your Business Case. Then speak to others in your organisation that have presented to the same panel. Find out what works and what doesn't work for that group. Do they prefer hard data or pictures? Do they focus on certain aspects of the Business Case? Are they Ops, IT or Business Unit focused?

Having this information will help you write a more "recipient focused" Business Case. More importantly, it will allow you to tailor your underlying analysis, focusing on the required data needed to make the decision on approval and funding of the proposed change.

Deciding the amount and level of information that should be contained in the Business Case can be a juggling act. Trying to include all the relevant information without producing War and Peace to present can be a challenge.

Some general tips in this area are:

Review sample Business Cases – when speaking with others in your organisation, get copies of successful Business Cases. Leverage the format and style to assist with completing your own documentation

Less is more – try and reduce the amount of information contained in the main body of your Business Case to the minimum. Only ever include summary information in the main body of the document but make use of appendices to include more detailed data and analysis

Use pictures – a picture can speak a thousand words.....Use graphical representations of data to summarise complex information. Use colour coding to easily identify positives and negatives points (for example the Current and Future State Heatmaps).

Practice document review – undertake "dry run" presentations of your business case with senior stakeholders. This will not only give you practice at delivering the final version, it will also drive out some likely questions that you will face in the formal review and give time to prepare answers to those questions or update the Business Case accordingly.

Back-up data – Have all of your back-up data to hand from each phase of the process. This will allow you to answer any questions thoroughly and provide supporting data.

As stated previously, there is no agreed standard for the format or content of a Business Case document. However, we suggest that you include the following components for completeness:

- Statement of objective – based on business drivers / initial brief
- Approach summary – overview of the process
- Current State summary – Heatmaps have proved very useful
- Future State options – Heatmaps have proved very useful
- Value proposition – cost / benefit analysis per option
- Delivery methodology – explain staged delivery if relevant
- Recommendation – state a preferred solution with reasoning
- Agree next steps – often overlooked but keeps the process moving forward

Select relevant data from each phase of the process to include in the relevant sections, to build the overall picture and “tell a story” about what is wrong and the best way to fix the issues and deliver improvements.

Once your first draft is complete, arrange a review with key participants and stakeholders. This will not only ensure that all stakeholders are in agreement with the final version to be presented, it will also give you a chance to practice delivery of the Business Case and to pre-prepare some answers to likely questions.

When presenting your Business Case, ensure that key stakeholders from Operations, Business Units and Technology are also present to support you as required, by providing specialist input and responding to questions in their areas of expertise.

Presenting a Business Case, especially for larger Asset Services initiatives, can be a daunting prospect. This is largely because of the level of up and down stream dependencies but also because of the complexity of the Operational process itself.

There is also increased pressure from Ops Management to improve efficiency and reduce costs whilst also reducing risks, along with demands from clients and Business Units to improve the service offering.

Accordingly, the need for viable Business Cases to be developed becomes more important, so that those increased pressures and demands can be met. Hopefully this paper has given some insight into the process and provided some useful tips.

At Ibacas, we never underestimate the effort involved in this complex challenge. However, our extensive experience in this area has allowed Ibacas to develop a comprehensive model and accompanying set of tools that helps make the process more manageable and we hope that sharing this information will assist you in your own efforts to build Business Cases.

If you want to discuss the ideas mentioned in this paper, or need some support in your Asset Services related Business Case development or any aspect of Asset Services change delivery, please visit our website – www.ibacas.com or feel free to contact us directly via info@ibacas.com

About Ibacas

Ibacas Consultancy Limited is the leading, independent Corporate Actions specialist consultancy firm that engages with the major Financial Institutions in the market on a range of Asset Services related projects.

Since being formed in 2002 we have worked with our clients to help optimise their Asset Services processes. These engagements have ranged from data vendor rationalisation engagements, right the way through to front to back process re-engineering of existing systems, as well as full implementation of third party processing platforms.

We have worked closely with our clients to help develop the business cases that have secured the funding to deliver the required improvements.

This broad experience has enabled us to successfully build a tried and tested flexible model and supporting tools to drive the business case development process. The core model can be adapted to suit the individual needs of each client, regardless of the client type / size, or scope of the required change.

