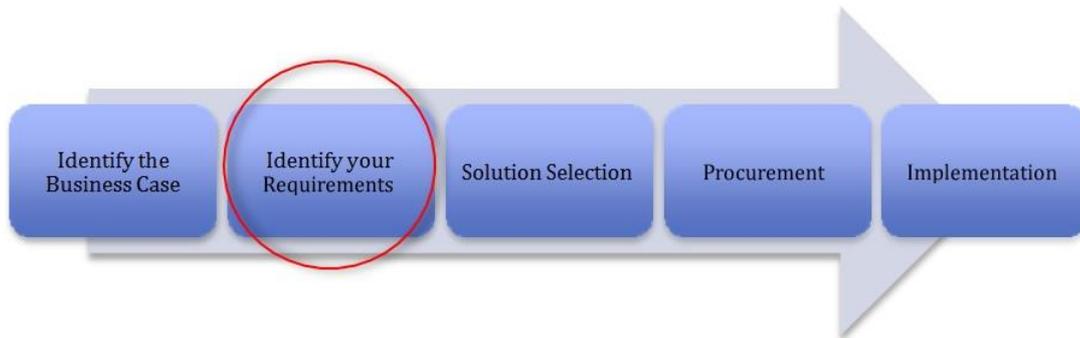# Quick guide: Developing Business Requirements

This Quick Guide is one of a series targeted at small to medium sized businesses purchasing an Information Technology (IT) solution.

When purchasing an IT solution, it is important that the business is clear about what it needs the solution to do to support the business develop and deliver its products and services. This is the role of a business requirements gathering process and the development of a requirements document – to describe, at a high level, what the new system needs to do.

Identify the Business Case → Identify your Requirements → Solution Selection → Procurement → Implementation

What is a Business Requirement?

Business requirements are statements of what a system should do rather than how it should do it. They are instructions describing the functions the system should provide and the characteristics the solution should have. They answer the question: "what does the business want to do?" Small to medium-sized businesses typically buy solutions from the market, because development of one-off systems is too expensive. Developing business requirements is a disciplined way to differentiate between the products on offer.

The Purpose of Business Requirements

When developing or implementing a new IT solution, business requirements serve a number of important purposes. They:

- Clarify and document the needs of stakeholders

- Set and manage expectations about what will and what will not be delivered

- Help a business understand and articulate what they are looking for and provide a framework for them to make an informed purchase decision

- Help manage the scope of an IT development or purchase

- Provide a mechanism to communicate to a technology service provider what the solution needs to do to satisfy the business' needs

- Enable different products to be compared when buying off the shelf solutions

- Inform cost and product pricing decisions

- Provide a basis for testing the functionality of a product

Collecting, analysing and documenting Business Requirements

Identifying business requirements can be as simple as noting down the range of functions or features you want your system to have or be able to do. However, a thorough requirements gathering process typically involves a more detailed and structured process. The following five-step approach provides a useful guide to conducting your own business requirements analysis.
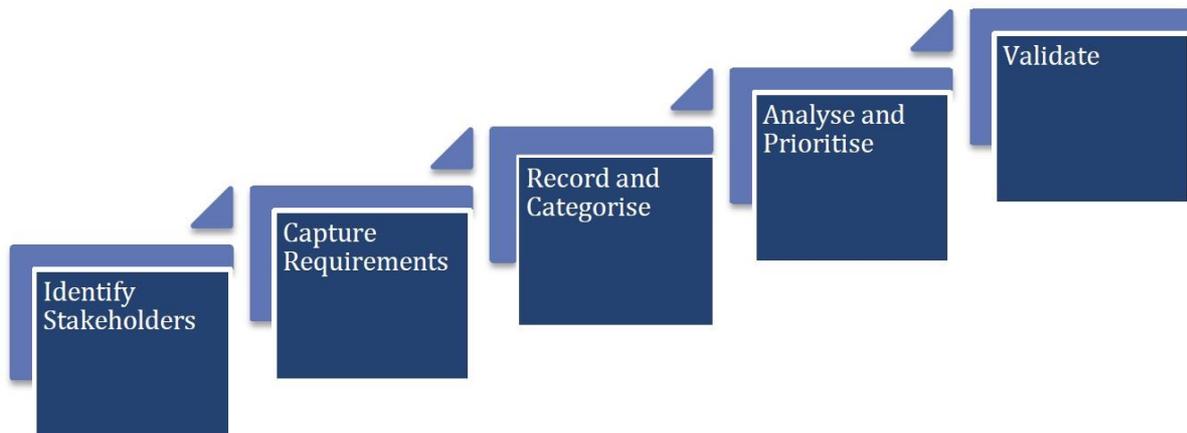
Step One: Identify Key Stakeholders

Step One involves identifying the people who will use the new solution, product or service. Because these are the people who will use the system and whose needs you need to address, it is important to get their input.

This step should also clarify who is the project/purchase sponsor. This is the person or group of people who ultimately decide the scope of the project and in most cases, if the project/purchase will proceed. The interests of these stakeholders also need to be addressed.

Tip:

- When talking to stakeholders, ensure you are clear about the scope of your project otherwise you risk requests for functionality that you never intended to include. If not managed, this increases costs and results in stakeholders who are not satisfied.

- Keep asking why? This helps filtering out unwanted or unnecessary requirements.

- If unsure about your use cases, look at those developed for similar types of businesses. These can be a starting point to develop your own.

Step Two: Capture Requirements

Step Two is the process of gathering the requirements from the stakeholders identified. Various techniques can be used to elicit this information.

These include:

- Stakeholder interviews
  - Provides insight into each person's/group's specific views and needs

- Focus groups or workshops

o Helps understand how information flows between different departments/divisions/teams
o Provides insight into hand-over points and what needs to be in place for these to occur smoothly

- Scenarios or 'use cases'

o These are working examples of your business processes. They provide an opportunity to walk through the process as a user to better understand how the system works, or should work, and the function of the new solution in that process.

- Observation

o Provides insight into what currently works and what doesn't and helps identify issues, bottlenecks, etc. that need to be resolved.

Step Three: Record and Categorise Requirements

Once requirements have been collected they need to be organised. This will help you analyse, review and prioritise your requirements. Requirements can be categorised in various ways. Three different approaches are outlined below.

Approach 1: Functional and Non-functional Requirements

- Functional requirements

These describe how a solution should function from an end user's perspective. They describe the features and functions of the system required by the user.

- Non-functional requirements

These describe the operational characteristics of the system. These could relate to availability, accessibility, performance, scalability, auditability etc.

Approach 2: Generic Sub-Headings

In some instances, requirements are simply listed under a broad range of generic sub-headings, e.g. user requirements; technical and infrastructure requirements; reporting requirements; access requirements; security requirements; privacy requirements, performance requirements; and support requirements.

Approach 3: Sub-headings that directly relate to the functions of the proposed solution

Where a specific type of IT solution is being purchased, sub-headings that are specific to the characteristic of the system may be identified.

For example, in the case of an Enterprise Resource Planning (ERP) system requirements might be described under headings such as: financial and accounting requirements; inventory management requirements; purchasing or procurement requirements; document management requirements; manufacturing or production requirements; design or engineering requirements; customer relationship management requirements.

In documenting requirements, it is also important to be as specific as possible. For example, if a business is looking to implement a new payroll system, the requirement should include something along the lines of, *'with integrated payroll, sufficient to cope with a staff of 50 personnel based in three different locations, some of whom work part time and are on penalty loadings for shift work'*.

Step Four: Analyse and Prioritise Requirements

Step Four involves analysing the requirements you have collated and organised and determining their priority. On review you might decide that some requirements are out of scope or not feasible.

The prioritisation process helps identify those requirements that are most critical to meeting your business needs. The prioritisation process is important because at some point, unless you have a limitless budget, you will likely need to compromise between functionality/features and cost.

Typical prioritisation categories include:

- Mandatory versus non-mandatory

- Mandatory, Highly Desirable, Desirable, Optional

- High priority versus non-critical

Tip:

- Even if the vendor of a solution undertakes the requirements gathering process on your behalf, ensure you retain clear visibility and control of what is developed and how requirements are prioritised.

Prioritisation is also useful when comparing different product solutions. It will help you understand which solutions meet your highest priority requirements.

Step Five: Validate Requirements

The final step is the validation of your draft requirements with your stakeholders. This is a way to check that requirements have been captured and correctly articulated and that there is overall agreement in how they have been prioritised.

The following provides some simple examples of how business requirements can be documented.

Example One: Requirements categorised as functional or non-functional

No.	Type	Requirement	Priority
FUNCTIONAL REQUIREMENTS			
1.1	Work Orders	System needs to keep track of production build stages	Must have
2.1	Inventory	Must track stock by BIN and warehouse location	Must Have
2.2	Inventory	System capable of lot tracking for purchased materials	Optional
2.3	Inventory	Display image of inventory item in database	Preferred
3.1	Manufacturing	Display production routing by phase	Must have
NON-FUNCTIONAL REQUIREMENTS			
4.1	Performance	Real time access to data	Must have
5.1	Availability	Remote Access	Preferred
6.1	Security	System administrator rights	Must Have
6.2	Security	Individual and role based authorisations	Must Have

Example Two: Requirements categorised according to the type of system to be developed

No.	Requirement	Priority
ORDER PROCESSING		
1.1	Ability to support pricing and discount categories for different customers	Critical
1.2	Provide option to automatically place orders on hold when order is over credit limit	Critical
BILL OF MATERIALS		
2.1	Unlimited level Bill of Materials	Critical
2.2	System needs to support revisions of products	Critical
2.3	Attach routings to job sheets	Non Critical
CUSTOMER SERVICE		
3.1	Document and monitor sales leads/opportunities	Critical
3.2	Generate revenue forecasts based on pipeline data	Critical
3.3	Support for email marketing and mail merge	Non Critical

Example Three: Requirements categorised by generic sub-heading

Type	No.	Requirement	Priority
BUSINESS USER REQUIREMENTS			
General Ledger	1.1	Process multiple general ledgers for multi-entity business	Mandatory
General Ledger	1.2	Compare current month and YTD to previous year month/YTD	Desirable
Budgeting	1.3	Use account numbers from General Ledger for budget preparation	Mandatory
Budgeting	1.4	Provide ability to drill down to supporting detail in inquiry screen	Mandatory
Payroll	1.6	Process multiple payrolls for different companies within multi entity business	Mandatory
Payroll	1.7	Provide self-service ability to employees to access current pay period and YTD payroll through web browser	Desirable
Shop Floor Control	1.8	Monitor and report work in progress	Mandatory
Shop Floor Control	1.9	Provide graphic displays/reports of expected work load at work station compared to capacity at work station	Highly Desirable
USER ACCESS/SECURITY REQUIREMENT			
Security	2.1	All security controls managed by system administrator	Mandatory
Access	2.2	Role based authorisations	Desirable

Further information

Visit the business website at business.gov.au.