

## **Business & Operational Process for Scaling**

The following information is a brief summary of key business process, policy & objectives for those processes that will have the most important impact on organisations in achieving their goals for scaling their business.

These guidelines should be used to inform detailed procedures at all 3 levels of a documented quality system. Those areas marked \*\* below are considered the most important to impact performance, and have been elaborated.

Within each area, we include some tasks and interactions that you would not expect to see in a small company. However they are relevant because the company has aspirations to be a larger company which will require these. We encourage companies to review and digest all of this information and then select the core aspects (from the \*\* processes) that have high-impact on key KPI's, are manageable, and that as a whole deliver on the goal of becoming ready to scale.

### **Commercial Management**

#### **\*\*Lead Generation**

The lead generation process must generate and provide sufficient Sales prospects into the Sales Qualification process from the target market profile to the target customer profile. Leads are a response to a marketing intervention from potential target clients which indicate that the client has an interest either now or at some time in the future in an organisations products and/or services. Lead generation is a key component of a marketing plan (Overall marketing strategy and plan for a period-normally a year), or a marketing campaign ( A specific set of marketing interventions to achieve a specific objective-e.g. New service launch and/or generation of leads for a specific product in a specific segment as an example). Key considerations and objectives:-

- Documented Marketing Plans/Campaigns are in place.
  - Objectives defined (No, Type, Quality, Profile targets etc.)
  - Interventions (Those activities that communicate/interact with target market to generate leads)
    - Email, webinar, speaking engagement, advertisement, e-zine , referrals etc.
- KPI's
  - New leads, total leads, leads qualified for sales, source of leads
  - Website visits to specific pages, click through etc.
  - Actual interventions to plan and impact of each intervention
  - Conversion rates to qualified opportunities, to commercial contracts, to marketing list for on-going engagement, disqualified and why disqualified

### **\*\*Qualification process**

The qualification process is a set of Sales activities, carried out by a sales person or enabled through on-line navigation in an e-business model, whose purpose is to confirm that every lead is either an immediate sales opportunity that would meet the organisations criteria, is not an immediate but will be at some known time frame in the future, or does not meet the qualification criteria. Qualification is a central part of managing the sales pipeline and funnel. Frequent review of the sales pipeline profile especially qualified opportunities gives management and the company an indication that there is sufficient demand in the target market that the organisation can convert to profitable revenues at target levels. It also gives an indication for planning operational and delivery capacity. Qualification converts a lead to an opportunity that subsequently a proposal/bid will be made and feeds the bid process. Key considerations and objectives:-

- Well defined criteria are specified against which all leads are compared against to ensure sales effort and activity is only focused on those business opportunities that have a high probability in converting into Sales that are desired.
  - The Organisation has a solution to the customer problem/opportunity stated by the customer.
  - Competitive and other factors indicate that organisation has a high chance of winning the business.
  - In the case of a product based solution, the product in its “out of the box” form substantially meets needs (i.e. there is little or no development work)
  - In the case of a product solution, if there is to be development work, that work will materially enhance the product and will be relevant to many other customers
  - The stated problem/opportunity is financially or operationally important to the prospect
  - The customer meets the target Customer profile, business, size, revenues, head-count, IT relevance, industry etc.
  - Confirmation that the customer is in buying mode, or will be in buying mode at a date within six months
  - Customer buying team, process and criteria are documented and understood by the organisation and there are no insurmountable obstacles.
  - The customer has confirmed their capacity to buy (Budget for project is the ideal) and that the organisation agree they can provide the required solution within that budget.
  - The estimated gross margin of the project (taking into account likely competitive situation etc.) is likely to exceed 50% (SI projects) or 80% (product-based projects) . Whatever is relevant to your organisation
  - Etc.
- KPI's
  - Number and type of opportunities per month
  - Value of those opportunities individually and combined
  - Gross Margin of the opportunity pipeline individually and combined
  - Probability of closing a sale

- Likely date of closing a sale
- Likely dates of invoicing and cash receipt
- Conversion rate of opportunities to proposals/bids
- For e Business models conversion rates and dropout rates and details

### **\*\*Bid/Proposal Process**

The next step for a qualified opportunity is for the customer to request a proposal/quotation or issue a tender the organisation will respond to. A formal bid/no-bid recorded decision will be made where it's clear in the Sales process the criteria for making a bid. There will be different types of opportunity and therefore different approaches to the bid process, but the bid/no bid decision is important in that many proposals will consume resources and incur costs and therefore the management must be sure that when they make a bid decision and dedicate resource to a bid that those with the highest win potential at target profits are where the focus is. Also timeframes for customer buying must also be taken into consideration. The bid proposal process steps and content need to be well defined as should be the nature of reviews and sign-off approvals. A template best practice winning set of proposal documents should be available as should access to a knowledge base of commonly used components such as company data, references, case studies etc. Key considerations and objectives are:-

- Type of bid and authorisation level required
  - Standard off the shelf product or packaged service
  - Medium value understood solutions
  - Standard company documentation and contracts will be used
  - Large opportunities , complex opportunities above defined criteria should go into a higher level review and approval process before they are started and before they issue to the client.
  - Any significant deviation such as client will require their contract to be used, or where requirements are unclear must also have higher level approval before preparation and issue.
  - All fixed price proposals for anything that is not productized should be approved
  - Pricing of modifications to product should be at a predetermined rate and should be itemised in the bid
  - Records of each decision and stage of the process should be defined.
  - Estimation standards and processes as well as agreed contingencies must be the basis for all costing and/or pricing.
  - All bids/proposals set the KPI's for each project delivery manager, quality, revenues, profitability, schedule, etc.
  - Win-loss reviews should occur following debriefing from customer and feed sales process improvement
- KPI's
  - Number and type of bids per month
  - Value of those bids individually and combined
  - Profitability (GM) of the bid pipeline individually and combined
  - Probability of closing a sale
  - Likely date of closing a sale

- Likely dates of invoicing and cash receipt
- Sales Forecast based on info above
- Conversion rate of bids to sales
- # and combined GM of deals lost by reason
- # and combined GM of deals won overall and by reason

### ***Contract Management Process***

Contracts between the customer and the organisation are what inform all stakeholders of what the deliverables are for the client and what outcomes the client requires in terms of products, services and service levels. A formal signed contract and/or a purchase order combined with the receipt of down payment are the only indicators that should trigger work and delivery. Exceptions may be signed-off. There is clarity and definition of who and to what level of contract/contract type can sign and accept an order and this is recorded. There are two parts of a contract, the legal parts and clauses which should be standard and any adjustment to these requires a legal review and CEO authorisation, as does the review and acceptance of a customer contract. The second part of a contract concerns every aspect of the product and/or service to be supplied and ideally should be based on a standard set of contract schedules that can be used for all types of solution sales. Key considerations and objectives:-

- The software licence or rental agreement should be a standard one, addressing:
  - Modules licensed
  - Payment schedules
  - Warranty that software is as documented (documents can be amended)
  - IPR acknowledgements and warranties
- SI contract schedules should clearly state
  - The deliverables, milestones, timelines and format
  - The performance standards and service levels
  - The responsibilities on both sides
  - All commercial terms
  - Incident & Exception handling
- KPI's
  - Conversion rate bid to contract
  - No of standard and non-standard contracts (& Value)
  - Contracts in negotiation and signed by both parties
  - Contracts awaiting signature but agreed

### **Resource Management**

#### ***\*\*Engagement Management***

Staff assignment to customer or internal projects is a critical function for the overall performance of the company and the individual. Specifically in a services business where there is a continuous flow of different customer projects each with different skills needs. It is essential to know at any point in time what resources are available or will become available and what their skills and competencies are whether they be permanent employees and/or contractors. Services businesses are dynamic with peaks and troughs in demand for certain skills and often this is mitigated by using partners and

contractors to handle peaks in demand and/or very specialised skills that are only needed periodically. Forecasting now includes regular and periodic review of projected capability (capacity & competence) requirements. In addition bench resources need to be managed (Those resources available for billable work but currently not assigned to billable work). Bench resources can use this time for internal work, product work, training, pre sales etc. which must be managed assignments. This also influences sales, sales must consider from time to time the need to sell services that will utilise bench resources. Assignments for resources need to match the project, customer needs with the resource being assigned to the project, they may also need to consider the personal development needs of the staff member. Key considerations and objectives:-

- Assignment planning and management
  - A system which ensures visibility of staff assignments and demand
  - A system which enables visibility of staff experience , skills and CV's
  - A standard format CV, which staff member is required to maintain current
  - A system which records performance of each staff member on each project and can be used for staff performance review and career management
  - A pipeline of external resources for hire or contract
  - A process for maintaining support and connectivity between the organisation and its staff members assigned off site to assignments.
  - A system which projects skills needs
  - Target price and cost per day, per individual
  - Process for replacement of resources during a project
  - Standard price list per individual, role, grade
- KPI's
  - Billable utilisation per individual, services line, company
  - Training days completed per individual, service line, company
  - Assignment list per individual, history, current and projected
  - Bench project inventory
  - Target daily rate versus achieved daily rate, by individuals, grade, resource type, services line
  - Target gross margin by individual, grade type, resource type , service line

### ***\*\*Performance Management Staff***

One of the key strengths of an organisation are its staff. As many organisations are now knowledge intensive businesses, staff performance is maximised when they have interesting and challenging work, can develop their career and skills, work in a good culture of teamwork and are rewarded fairly for their contribution. Regular formal and informal feedback is essential to staff motivation and development and needs to be recorded. Employment legislation differs from country to country but in the EU the laws require that most aspects of the relationship between the employer and the employee are well regulated. From a performance management perspective the primary motivation is to get the best out of people, to improve company performance by improving its employee performance, where an employee is not performing to the required standard to work with the employee to improve their performance. However there are occasions where an employee's performance and attitude require he/she be dismissed this must be done only after all

options have been considered, following HR process and with strong records in place. Key considerations and objectives:-

- Performance management
  - Individual has goals and objectives that align with the team, project and company's objectives.
  - Employees are integral to contributing to setting performance goals and their input to a review is before formal final review meeting
  - A process for peer or other inputs to a staff performance review
  - Objectives are SMART (Specific, Measurable, Achievable, Realistic, Time lined)
  - Individual performance standards are documented and understood, for the role, project, grade and specific individual
  - There is consistency in the process for all staff members
  - Individual have mainly business performance goals but also personal development and career related objectives
  - Regular and recorded formal reviews take place
  - A standard form is used for setting objectives and recording performance
  - A special performance improvement plan/process
  - A simple performance rating system is in place and understood
  - Performance planning and execution has a Gaussian (Normalised) distribution
- KPI's
  - Reviews completed on-time
  - Reviews overdue
  - Number on special performance plan
  - Performance rating distribution

### ***Expenses Policy***

As an organisation grows and expands its markets there is a need for more employee travel to client locations , these can be short pre sales or meeting visit or medium term assignments. It is important that in the execution of their business duties employees are not out of pocket , but also its important that the company properly and fairly account for these expenditures. In addition project accounting for customers requires there is a plan for and tracking method to ensure customer projects meet their financial objectives. Local and international tax laws often regulate how and how much can be paid and where and how taxation might apply and any policy must take into account maintaining tax compliance in a region the company carries out business. Key considerations and objectives:-

- Expenses
  - Allowances for categories of expenses
  - Per diem versus out of pocket
  - Business travel versus travel assignment ( e.g. more than 30days)
  - Approvals and Records
  - Project accounting
  - Etc.
- KPI's

- Actual versus budget person/project
- Accuracy
- Timeliness

### ***Time recording & Management***

In a business time is its most valuable commodity, the effective and efficient use of staff time determines costs and profitability. In addition as the organisation scales senior and operational management need to make decisions relating to proposals, performance and projects which are underpinned by understanding the time and activity each resource spends their efforts on. Recording & Understanding time is essential for pricing, billing, and application of accurate costs to projects and programs. Key considerations and objectives:-

- Time recording
  - What frequency is required, Daily, weekly or monthly? SI/Services business usually require higher frequency. The accounting period and management/operational information needs will determine
  - Who records time? It's usually beneficial for all staff to have the discipline to complete time records, but it's those resources that contribute to direct costs that are a priority.
  - What is in it for the employee? Enhanced visibility of their contribution, also in effect the time card is a virtual invoice for their salary.
  - Employment legislation and working time acts tend to regulate hours worked, breaks, holidays and time cards act as employee generated evidence of compliance
  - As an organisation grows in scale and complexity time records become a critical primary driver for many of the business and information processes
  - Time cards feed billing process and enable correct and accurate invoicing and timely collection
  - Time cards feed project accounting processes and are important for project managers
  - Clients often require that they approve time cards especially in T & M contracts
  - Management must decide the level of detail required some that are likely to be included are:
    - Start & Finish time for work
    - Start and finish time of important discreet activities or project related activity (activity & project codes).
    - Training & personal development time
    - Absence and attendance time types
    - Billable and non-billable key activities
  - Automation and Integration of time management, with work-flow approvals makes for an easier life.
- KPI's
  - Time cards completed
  - Time cards overdue

- Time card errors

### **Career Management**

In a knowledge based organisation populated by professional staff, planning and building the profile of skills and expertise is an essential management function (Ref. engagement management above). Equally as important staff motivation and performance are enhanced when they understand the performance standards and road-maps the company offers for their careers. Training and development can be planned and the individuals can be encouraged to take ownership for their own careers and career development when they know what they need to do to progress their careers. Compensation and benefits can be managed fairly and consistently by being aligned to a career management system. As the organisation grows it allows for a framework and controls to manage careers, performance and compensation, Considerations and objectives:

- Career Management
  - Setting of grades to reflect skills, competencies, performance and standards
  - Defining development requirements and performance standards at each level
  - Documenting a career handbook for new and current staff
  - Identification of progression policy
  - Identification of promotion policy (competitive opportunities)
  - Recruitment and Training planning
  - Aligning to Pricing Policy and Compensation and benefits policy
  - Career paths can be defined and understood by all (paths for professions such as s/w development, SI, Support-back office staff)
- KPI's
  - Shape and numbers in the pyramid
  - Monitoring and managing progressions and promotions

### **\*\*Training**

There are many skills staff need to have in a knowledge based technology company, these include technology skills, project skills, administration skills, management skills , interpersonal skills to name a few. Depending on the role an individual fills and their individual competence each person will have development needs to enhance their performance and career progression. Having the right skills and competencies will enhance the company's performance, differentiation can be achieved through people and their capabilities. Forecasting future resource/skills needs enables planning in advance for training and development. From a quality perspective it is important to be able to demonstrate that every individual has the correct skills to execute the tasks and roles they are assigned and that there is a record of this. Key considerations and objectives:-

- Training
  - Needs analysis (Business, Unit, Individual)
  - Plans at each level
  - Alignment with roles, career grades and assignments
  - Certifications required
  - Company programs and individual programs
  - Testing and maintaining competence



- KPI's
  - Skills matrix
  - Training plans in place
  - Training record and CV's maintained current
  - Training completion to plan (E.g. actual versus planned training days)
  - Training assignment completion and records.

## **Delivery Management**

Delivery Management is that component of operations management that is concerned with Design, Build, Test, Install, and support of contracted and/or approved customer solutions (products/services). As some organisations are both Systems Integrator and an Independent Software Vendor its methodology should reflect the differing needs of these businesses.

### ***\*\*Software Development Processes***

The overall set of processes are often referred to the methodology. A methodology is in a sense the policy and approach to s/w development through its full life cycle and consists of the guides, processes, tools, controls and measurements that ensure software is delivered to the requirements, whether it be a product management release or a customer project requirements. Traditionally Waterfall (Sequential) has been used. DSDM/Iterative with more frequent interim deliverables and more engagement with users, more recently Agile using approaches such as SCRUM. Some businesses by their nature need to use some or all of the approaches. The most important thing is that the methodology is well defined, documented and understood by both staff and clients. The methodology controls the performance and consistency of the s/w development processes and can be a key differentiator. The maturity of the methodology and its completeness can indicate the quality of a software organisation and can be benchmarked internally and/or externally to a standard such as CMMI as an example. Once the core methodology is chosen then the relationship between key processes and sub processes within the s/w development lifecycle can be properly defined and documented and increased automation within the SDLC (Or SPDLC- P=Procurement) can be applied. We now look at some of these key processes.

### ***\*\*Requirements Management Process***

Requirements state to the Software development process, what needs to be built, how it should look and perform and what it should do for the end users individually and for their business process. Functional requirements state the business functions for each process and sub process to be coded in the s/w, what are the inputs, what are the conditions, what are the controls, how they are to be processed, what are the outputs and how should they be presented. Non-Functional requirements are those requirements that include performance, security, usability etc. they should also be specified and tested.

Depending on the Methodology chosen, the preparation of detailed requirements documents may be performed entirely up-front (with a formal sign-off by customer(s) which is the trigger for the Design and Build phases), or be developed iteratively with smaller more frequent software deliverables being used to engage users and elicit feedback to add next layer of detail to requirements or to influence the next element scheduled for design/build.

Whichever software development methodology is chosen, however, the key target functions of the software or product enhancement should be defined up-front and agreed with the end-customer and product-owner.

In a Software product business, there is the added complexity that many customers are using the same product, and multiple customer-projects may be on-going at the same time. Thus the **Product Management** process (see below) becomes critical and needs to integrate with this Requirements Management process. In a Services business they are a customer requirements specification agreed with the customer.

The Requirements Management process also needs to be integrated with a formal Change Control process (this may be part of the Project Management methodology). Continually changing requirements is one of the primary causes of development project failure, yet changes may be necessary simply to rectify mistakes or take account of real-world business changes.

Key considerations and objectives

- Requirements
  - Must be clear, concise and un-ambiguous
  - Must state how conformance will be demonstrated
  - Should be tested
  - Should be prioritised
  - Should be documented whether it be an agile story board or detailed document
  - Change management process applies
- KPI's
  - Signed off by parties recorded
  - Reviewed and tested (Test results)
  - Should not be released to design until test passed

### ***\*\*Design Process***

Design and Architecture are the functions where those responsible for the production of the software carry out the first technical deliverables relating to the s/w development. Their role will be to produce information that developers can use to write and test their code in a way that will be high quality. Key considerations and objectives:-

- Design.
  - Architectural standards
  - Coding standards
  - Deliverables
    - Architecture Specification
    - Design Specifications
    - Functional & Non Functional specs
    - Test Strategy
  - Platforms, technology & development/test tools and systems
  - Development, Test & Production environments
  - Deliverables (Functional specs, sprints, architecture documents, test plans etc.)

- etc.
- KPI's
  - Deliverables tested and reviewed
  - Pass/fail rates
  - Estimated man-days and elapsed time
  - Deliverables signed off , stored and recorded
  - Schedule adherence

### **\*\*Build (Core development) Process**

The build process is the actual software coding and integration process at a high level. It is where working software is produced by the development team to the required standards and specifications. The approach to the build process will be determined by the methodology chosen, the architecture and technology selected and the project plan.

**Version Control:** Especially on the Product side of the business, it is critical to have automated Software Release management tools (variously describes as Version Control, Configuration Management etc.) . The purpose of these tools is to facilitate the single-source product philosophy. Thus a good system will be a repository and tracking tool for:

- Check-in, Check-out management
- Production Releases (current and previous)
- Development Branches (and re-integration into main track)
- Tracking Releases within life-cycle stages (e.g. released to System test)
- Minor releases (e.g. Customer-specific, patch releases etc.)
- Minor Release consolidation into Trunk
- Regular Automated Builds
- Etc.

The Build Process may vary, as a traditional sequential build will see whole elements (or perhaps an entire project) follow one after the other in an inter-dependent way. A more iterative approach such as Agile will see incremental deliveries and a high degree of participation by end-users (or their proxies) to create on-going adjustment cycles repeated

- Code, Compile, Unit test
- Development and release notes
- Documentation, User Manuals etc.
- Etc.
- KPI's
  - % progress by project (based on current estimate to finish)
  - % progress vs planned % progress by project
  - No. of lines of code
  - No of build and test cycles
  - Delivered code failure rates by reason (Code inspection, incomplete, blocking defect, other defect)
  - Integration test defect counts vs acceptable norms by component

- Test Results
- # Blocking Defects detected
- # Defects fixed 1<sup>st</sup> time, or more
- Number of passes vs planned number

### ***\*\*Testing Process***

Testing and Quality should be an integral part of every step of the completed development life cycle, often referred to as the V-Model of full life cycle testing. There is testing as indicated above at every stage as finding defects early, and/or preventing them is proven to dramatically reduce the cost of software development. The key objectives of testing are validation and verification. We do have specific stages in the life cycle whether it be a large long waterfall projects and/or a short agile sprint run where we must verify the software works as intended. A Test strategy covers test and quality across the complete development life cycle, here we are concerned with mainly systems and integration testing.

- Testing process
  - Test Strategy (Where we will test for what and how)
    - Risk based testing a common approach
    - Use of automation
    - Test plans and records
    - Etc.
  - Test Plans
  - Test cases
  - Test Data
  - Test environment
  - Test procedures and records
- KPI's
  - Test cases number and type
  - Tests passed and failed
  - Defect detection rate
  - Defect analysis charts etc.
  - Sign-offs
  - Schedule adherence
  - Non-functional test performance parameters

### ***\*\*Software Packaging/Distribution Process***

Here we are ultimately concerned with how we release deliverables to end-customers, but the same process should apply to internal releases e.g. from Development to Test, from Test to User Acceptance Test.

Ideally this process can be automated in that it is an output of the Version Control process. Given the complex nature of software installation, there may be some or many manual steps in the process. Whatever the level of automation the process should cover the technical aspects such as:

- Release Notes
- Installation Process:
  - o Packaging/Badging
  - o Upgrade or Fresh install
  - o Default parameters
  - o Upgrade to existing database structure or
  - o Creation of skeleton DB
  - o Digital Signatures
  - o License Management – Registration - Activation
  - o Release identification
- Patch releases
- Documentation

### **\*\* User Acceptance process**

It is an essential step before any new software is released for general use that there is an agreement between development and the customer or product management (who represent the customer market) that the software meets the requirements specified and is approved for release.

- User acceptance test
  - o Normally covers test scenarios that represent some end to end sub processes
  - o Should be defined and agreed at the start of the projects
  - o Often requires users to be trained in advance on the process and the system
  - o Should be designed and executed by the true end users
  - o Should be overseen by a professional test manager
- KPI's
  - o Test cases and scenarios
  - o Test cycles
  - o Pass/fail rates
  - o Defect analysis
  - o Bug Fix rates
  - o Etc.

### **\*\* Maintenance process**

The maintenance process concerns itself with the core released software maintenance as regards ensuring it is conformant to the documentation on an on-going basis.

Maintenance is a Product Engineering (Software Development) responsibility and the primary external interface is with the Support Engineers who are driven by the Support Process, of course in a small company there is likely to be direct customer contact as well.



The Maintenance service will include occasional diagnostic help to Support personnel who are dealing with incidents to determine the cause. Where such cause is a software deficiency, the deficiency is logged (in a separate system to that employed for support incident tracking), or perhaps in a combined system. Deficiencies are categorised based on severity of impact, cost/risk of rectification etc., and based on this information may be scheduled for a specific patch release for affected customers or inclusion in an upcoming major point release.

The maintenance process should also facilitate the assignment to each incident to the specific internal maintenance process, the correction and re test of the software (Including regression test) and the release of the fix as a patch, service pack or other defined release.

- KPI's
  - Incidents Investigated (Total, #bugs, #wishes, #other)
  - Known Bugs (# by priority, by component)
  - Average fix time by priority and component

### **\*\* Support Process**

The support process is the process that enables end users for any software secure information, help, assistance and repair services from the organisation. It is the primary corrective action process an organisation uses with its customers. Its objective is to maintain satisfied customers and supporting them maximise the value they derive from the delivered software. Key considerations and objectives:

- Support process
  - Channels for requesting support or reporting incidents
  - Incident details as discussed for the current systems being evaluated
  - Workflow management from report to closure agreement with customer
  - Communications between all stakeholders in support system
  - Self-service support as appropriate
- KPI's
  - Incidents reported (Type, customer, product, solution etc.)
  - Incidents closed
  - Average & exceptional response times, closure times (vs SLA)
  - Exception reporting/escalation of Critical incidents or SLA failures.

### **Project Management Process**

In order to achieve the goals for contracted delivery of a solution to a customer and/or key internal goal , there are many tasks, activities, processes and skills brought to bear on creating and delivering that solution. Project Management is an essential method and capability required in a knowledge based company delivering customer bespoke software, SI , products and product based solutions. At its highest level it is operations and/or program management where multiple projects and activities must be scheduled and executed to achieve the overall delivery goal. The organisation should adopt an overall standard projects management methodology and set of processes, it is essential it is



- Balanced Score Card MBO
  - Global Objectives and KPI's, the top 5 goals and KPI's for the business overall for the period, in-line with the vision, strategy and business plan. (These are the CEO's objectives and KPI's – reporting to the board)
  - The functional Objectives & KPI's , the top 5 goals and KPI's for each key business function informed by the Global Objectives. Sales, Marketing, Operations, Development, Delivery, Support, Finance etc.) These are the functional managers objectives and his team/functions
  - Team & Project Objectives & KPIs (Next level down)
  - Individual Objectives Informed by the above depending on role and assignment. Each individual may also have one or two personal development objectives
  - The overall process is normally an annual process, however it is broken down to shorter term more detailed objectives and reviewed every 90 days.
  - This process creates a tree where each objective down to an individual level can be connected through a chain to the overall global objectives for a period.
  - Top down-Bottom up process of setting goals and KPI's
- KPI's
  - Objectives agreed, documented and communicated to schedule
  - Reviews completed to schedule and recorded
  - Completion of each objective as planned and record of performance standard
  - Achievement of KPI's to target and improving performance trends.

### **\*\*Document Management**

A growing knowledge based technology company produces many different types of documented and/or digital information deliverables. Each will have multiple versions through their lives. Stakeholders will make key decisions and carry out key tasks and actions based on paper and digital documentation. It is essential that each stakeholder can clearly identify what a document is, its purpose, how it is to be used, and if it is the latest approved release. Equally as important every employee will create paper and/or digital content to be used in the business whether it's a process document, a deliverable to an internal or external customer and/or an important record that may be required as evidence of conformance. The document management process/system defines the required standards and controls for the production, storage, access and disposal of the organisations paper or digital data/records.

- Document Management
  - Templates & Standards
  - Records
  - Naming & Numbering
  - Controls and access
  - Reviews, signoffs and approvals
  - Etc.
- KPI's
  - Document Index
  - Version management
  - Audit results



### **\*\*Product Management**

In a product business , your product is designed to service a market need or market needs by segments. To maximise commercial success the launch and/or release of a product to a target market must ensure that the value proposition and competitive advantage are visible and communicated to the target customers in the target segment. Product Management represents the target customer base needs to the organisation and aligns product release functionality with a view to maximising the commercial success for that release, while meeting contractual project and maintenance obligations to customers.

The objectives of the Project Management function are:

- To plan enhancements to existing products and development of new products:
  - In line with corporate objectives
  - In response to well-researched business cases
  - Informed by requirements of existing markets
  - And opportunities of new markets
  - Meeting immediate needs of customers and on-going projects
- To determine and oversee a Product Release cycle
- To provide product-specific sales and marketing collateral
- To be the Product Owner on behalf of the business

There should be an appointed Product Manager who is responsible for this function.

*Product Planning:* It is usual to maintain a rolling **Product Roadmap** which identifies at a high level all the contracted or determined improvements. The Roadmap may contain additional data for each item, such as business case data (estimated cost, target market, projected sales revenue, pay-back period, etc.).

The contents of each planned release will be agreed between Development Management and Product Manager (may be the same person in small companies). Other stake-holders in this process will be Head of Services and possibly Head of Sales.

Although the Roadmap itself does not need a lot of detail (this will be added in the requirements phase above). The combined requirements of a Product Release will be stated in a specification which has been derived from the product road-map and may include also the requirements of other customers and projects, as well as bug-fixes and other technical improvements. This Product Release Specification will be the subject of the above-described Requirements Management process.

#### *Sales & Marketing Collateral*

- Statement of capabilities (incl. Competitive Comparison)
- Value Proposition
- Demonstration Software

- Product Brochures
- Website Sections and Pages
- Pricing Information
- Configuration Information

#### *Identify New Potential Developments*

- From projects, e.g. commissioned by customers
- Requested by Sales or Service managers
- Suggested by management
- In response to market needs or competitive initiatives

#### *For each New initiative:*

- Compile business case (in conjunction with Sales, Product Engineering, and Implementation):
    - Based on reasonable market research
    - Identify and Quantify Target Market
    - Articulate and Quantify Value Proposition
    - Competitive position
    - Cost / Revenue Analysis
    - Go-to-Market plan
  - Seek approval of Board (of Management)
  - Incorporate in Product Release Specification
  - Hand-over to Product Engineering (SW Development)
  - Keep track of progress
- 
- KPI's
    - Initiatives: # researched, # recommendations
    - Value of release
    - Schedule adherence

#### ***Knowledge Management & Collaboration Process***

As an organisation grows so also does the body of knowledge and complexity of the organisation. In addition the number of stakeholders grows both internal and external. Inefficiencies will arise if this is not recognised and addressed up front. What an organisation needs to achieve is to be able to have answers to the following questions on demand for internal and external stakeholders:-

- Where & How can I find a resource (Skill, Information, Person, Expert, Record, Deliverable etc.)?
- Who can work with me to achieve a specific goal? And How?

- How can I make my capability and artefacts available to help others achieve their goals?
- What is happening?

Knowledge management & Collaboration are often enhanced by the use of software systems. Often in early stage organisations it's down to the people and what is in their heads and how they work together, it may also include point solutions such as shared files on a server. As an organisation grows and plans to scale the process and systems need to be formalised and integrated.

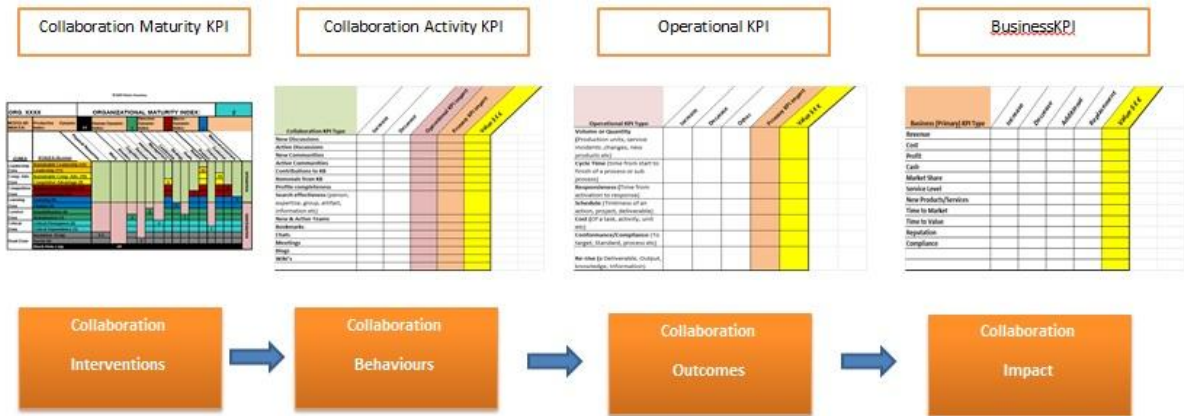
#### *Why Collaboration & Knowledge Management*

- a) Speeding up Responsiveness*
- b) Improving Productivity & Quality*
- c) Identification of sources of competence and information*
- d) Knowledge and information re-use*
- e) Facilitating Innovation*
- f) Enhancing Learning*
- g) Growing the competence mass of the organisation*
- h) Increasing the capacity and speed of organisational intelligence*
- i) Improving Involvement and Sharing Responsibility.*

#### *Essentials for a Platform*

- **Profile:** Like any social media the profile is central: - It answers the Who?
- **Blog:** an individual/group on line log for information sharing
- **Wiki:** a location where a community of users can edit, build and update
- **Discussion Forums:** a place where users can interact around a topic
- **Community:** a group with a common interest or goal
- **Repository :** a location where information/files can be stored or accessed
- **Chat:** a place where two or more can verbally, visually or textually interact live
- **Meet:** a virtual meeting facility
- **Project Management:** where stakeholders can manage and work together in a structured manner
- **Search:** fundamental function to find people or information

KPI's



Process, Methodology & Systems in an integrated Model for an ICT organisation to scale

