

Business Excellence Program For SMEs

Introduction & methodology



Business Excellence Program For SMEs

The Business Excellence Program provides assistance to northern region SME's to implement business best practice and enhance their international competitiveness.

Primary objectives

- To evaluate current business systems and achieve productivity increases of the order of 20-30%
- To implement improved management control and measurement for accurate decision-making
- To encourage innovation and commercialisation and ensure products and processes are globally focused and aligned
- To identify and implement improvements in revenue, costs, quality, delivery, consistency
- The achievement of near zero defects in production and administrative processes

The program will help firms analyse business performance at the "grass roots" level and identify the factors limiting growth and profitability. It will provide assistance in the implementation of a leadership culture and management information system that ensures accurate decision making and total business control.

Through a series of workshops, guest lectures, networking opportunities and one on one advisory sessions, participants learn how to implement operational improvements; they receive assistance to examine their business systems and through networking sessions, develop a workable business improvement strategy for their organization.

Current capabilities, resources, business systems and operational procedures are reviewed as part of the process of developing a business excellence strategic plan.

A continuing emphasis on the development of employee skills and participation are a feature of the program.

Ultimately participants will have identified their competitive advantages; reviewed and implemented operational performance measures and streamlined their business systems.

Contents

Program dates	1
Total Business Excellence Model	6
Identifying Business Improvements	7
Implementing the Business Excellence Culture	8
Organisational Features of a Business Excellence Culture	9
Features of a High Performing Company	9
Controlling and Reporting Activities	10
A Measurable Vision Statement	14
Competitive Strategy	16
Managing Business Growth	17
Assessing Business Opportunities	18
The Marketing Plan	19
Preparing a Quotation Offer	20
Lean Manufacturing Systems	22
Identifying Profitable Opportunities	23
Key Performance Indicators	27
How to Derive Operational Improvements	29
Customer Order Entry to Delivery Process	30
Business Improvement - Checklist	31
Key Performance Indicators (KPIs) - Checklist	32

Business Excellence Program For SMEs

Intro

Program dates

2002

Date
By 19 July 02

SME's selected to participate in the 2002 program

Each enterprise visited and interviewed to obtain accurate assessment of their business position, i.e. management systems, manufacturing methods and their international competitiveness

Date
23 July 02

Topics

Program Introduction
Total Business Excellence Model

Diagnostic analysis – key elements of current business, introducing new performance drivers and measures

Date
6 Aug 02

Topics

Management information systems,

Creating a balanced 'scorecard'

Financial reporting, KPI's and customer perspective, controlling business objectives

Date
20 Aug 02

Topics

Marketing strategies

Market entry analysis and intelligence – market share/positioning

Agents, distributors, agreements and joint venture partnerships, customer expectations and analysis of competitive position

Date
12 Nov 02

Topics

A world of quality standards
ISO 9000:2000,
ISO 14000,
ISO/TS 16949,
QS 9000

Quality accreditation, quality costs, audits, how to build quality into the production process

Date
26 Nov 02

Topics

Manufacturing innovation

Maximising quality and productivity

People skills and knowledge, flexible systems, responsiveness to market needs, zero defects and waste

Date
10 Dec 02

Topics

Supply chain/Logistics management

Introduction of an effective supply-chain system, optimisation of materials and information flow, cost reduction and improved customer service

2003

Date
21 Jan 03

Topics

Trade finance

Funding business growth

EFIC insurance debtor risk, documentation, legal systems

Incoterms 2000, payment methods, method of freight

duction & methodology

Date
3 Sept 02

Topics

Leadership culture/
empowerment

Employee involvement
and accountability

Organisational skills,
decision making
capacity, team building

Date
17 Sept 02

Topics

Capturing the voice
of the customer

Market needs and
how to exceed the
competition

Customer satisfaction
and how to fulfil
customer expectations
to provide total value
and service

Date
8 Oct 02

Topics

e-business/
e-commerce to
maximise efficiency,
communications
internal and external

Case studies, electronic
transfer, access to new
markets and general
trade via the internet

Date
29 Oct 02

Topics

Research innovation
and technology
strategies

Commercialisation,
effective value-chain
proposition/technology

Date
4 Feb 03

Topics

Industry Tour
World's Best Business
Practices in Action

Date
18 Feb 03

Topics

Competitive strategy
Setting organisational
vision and strategy

New performance
drivers, assumptions
and control measures

Date
4 Mar 03

Topics

Government services and
funding e.g. R & D start
grants/loans, Export
Market Development
Grants (EMDG)

Trade Fairs, exhibitions,
trade missions

Austrade, overseas
assistance

AusIndustry, products
and services

DIIRD, business growth
support and subsidies

Date
18 Mar 03

Topics

Program summary
and achievements,
setting future business
improvements targets
and responsibilities in
the organisation

The program provides SMEs assistance and guidance for achieving productivity improvements and business excellence in the workplace.

Timing	Topics and Methodologies
By 19 July 02	Select 30 SMEs
23 July 02	Program Introduction and diagnostic analysis of current business <i>Action</i> Introducing new performance drivers and operational measures
6 Aug 02	Management information systems: the balanced scorecard <i>Action</i> KPI's and customer perspective, financial reporting that controls the total business objectives
20 Aug 02	Marketing strategies, market entry analysis, market share, positioning customer expectations <i>Action</i> Focus Group surveys, basis for growth, value adding, benchmarking, identify company competitive position and how to beat the competition
3 Sept 02	Leadership culture, empowerment and accountability <i>Action</i> Analyse organisational skills, decision making capacity of each employee, team building, improved communication channels, tap into people knowledge
17 Sept 02	Capturing the voice of the customer <i>Action</i> Introduce a method of assessing customer satisfaction and how to fulfil expectations. How to exceed the competition, provide total value and service
8 Oct 02	E-business, E-commerce <i>Action</i> Introduce e-commerce to maximise efficiency, communications internal and external, business promotions. electronic transfer via the internet/access to new markets and general trade
29 Oct 02	Research Innovation and Technology Strategy <i>Action</i> Implement review to identify the most effective value-chain proposition technology, commercialisation process and innovation
12 Nov 02	A world of quality standards ISO 9000:2000, ISO 14000, ISO/TS 16949, QS 9000 <i>Action</i> Quality accreditation, quality costs, audits, building quality into the production process
26 Nov 02	Manufacturing innovation <i>Action</i> Focus on maximising quality and productivity, flexible systems, responsiveness to market needs, zero defects and waste policy
10 Dec 02	Supply chain/Logistics Management <i>Action</i> Introduce an effective supply chain system, internal and external optimisation of material and information flows linked to capacity and customer service, cost reduction and improved customer service
21 Jan 03	Trade finances, funding business growth and minimising risks <i>Action</i> EFIC insurance debtor risk, documentation, legal systems, Incoterms 2000, payment methods and method of freight
4 Feb 03	Industry Tour <i>Action</i> Obtain first hand knowledge of business best practice: lean manufacturing methodologies, technical excellence, employee participation, supply chain management, export strategy, export successes, house keeping safety, customer focused, industry leaders
18 Feb 03	Competitive Strategy <i>Action</i> Set organisational vision and strategy, new performance drivers, assumptions and control measures
4 Mar 03	Enterprise government services and subsidies <i>Action</i> Apply for support subsidies DIIRD and Commonwealth
18 Mar 03	Program Summary <i>Action</i> Review achievements and set future actions, new performance targets and responsibilities in the organisation

duction & methodology

2002						2003					
July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
█											
	█										
	█	█									
		█									
		█	█								
			█								
			█	█							
				█							
				█	█						
					█						
					█	█					
						█					
						█	█				
							█				
							█	█			
								█			
								█	█		
									█		
									█	█	
										█	
										█	█
											█

Total Business Excellence Model

Introduction

The essential attributes for a world class organisation demand the establishment of precise standards, operating procedures and policies. Major business objectives need to be presented through a realistic annual business plan and justified by identifying the critical key performance areas necessary to meet financial and non-financial objectives.

By dissecting the plan, control measures are identified and released as key performance drivers/indicators. The indicators are the basis for monthly reviews by the management team and the implementation of change according to business needs. Enterprises in the 21st century face new and increasing challenges just to maintain their present market share and need to totally focus on how to identify business growth and stability to provide shareholders their minimum acceptable returns and to finance adequate resources and technical support to meet customer requirements.

Management needs the capability to respond to these demands and develop adequate people skills to react and assist in controlling the business drivers that enhance their competitive advantage and exceed the competition.

Exceeding the Competition: the challenges

To successfully manage and achieve the new objectives and key performance drivers, it is essential for enterprises to focus on the relationships, skills and knowledge of their people and the internal systems and processes that support both. Achievement of these goals requires a management committee and sub-committees to provide the intellectual expertise. Each person will specialise in a specific area within the company and together the group will make the correct decisions and implement the actions to achieve the planned results.

duction & methodology

Identifying Business Improvements

NIETL/NORTH Link identified the need for northern region companies to accelerate the uptake and implementation of a business excellence culture.

In today's global economic environment it is essential that companies have the ability and flexibility to meet global challenges and respond to the increased competition of global markets through productivity and value adding initiatives that offer customers and markets high quality, technologically advanced products, and services.

The current competitive exchange rates mean now is the time to look at national and international growth opportunities - costlier imports and cheaper exports provide an increased number of potential markets.

To take advantage of these opportunities in the long term, the program will identify improvements in:

- **Marketing** – through market research and market entry to analyse the opportunities of un-tapped sales/market segments
- **Business Planning and Control** – by developing realistic business tasks and objectives through a business plan, strategic plan and methods of measuring performance outcomes
- **Organisational Reporting Structure** – by providing a leadership and work culture where every employee can play an important role in company activities: floor plan, safety, OH&S, productivity, cost control and achievement of key company targets
- **Operational Performance** – by reviewing current capacity to take advantage of any idle capacity and developing plans to increase through-put; creating new opportunities through team work and reducing lead time to delivery
- **Manufacturing and Technical Services** – by expanding R & D activities and lean manufacturing innovation systems, through improvements to product features that exceed those of the major competitors

- **Business Networking** – by networking with leading companies to share information and accelerate learning business excellence
- **Administrative Information Systems** – by implementing control measures that analyse business performance and provide a summary of the business position e.g. cash flows, product gross profit contribution, material costs and quantities, labour cost variances and identifying areas to reduce costs and accurately price new and existing orders

The ultimate aim is to generate improved performance outcomes that increase profitability through productivity and efficiency; create greater capabilities and accountability and drive new initiatives throughout the organisation. Company competitiveness depends on how creativity and cost-efficiency firms add value to manufacturing quality; service; market positioning; marketing promotion and distribution channel. Firms also need to give high priority to improvements through research and development and general innovation initiatives on products and processes that enhance competitive advantage through the reduction of the costs of core products.

Implementing the Business Excellence Culture

The program analyses business operations at the “grass roots” level to identify factors limiting growth and then provide participants with a “how to” global strategy for growth including:

- How to select the most competitive product/services
- How to compete on total value
- How to apply complete commitment
- How to identify market positioning and opportunities
- How to establish business and strategic plans
- How to measure and control business outcomes
- How to conduct market entry that provides the most competitive advantage
- How to select selling methods, insurance and documentation
- How to access government assistance support
- How to implement manufacturing systems that focus on zero-defects
- How to review capabilities and capacity
- How to ensure accurate pricing and costing in a global environment
- How to establish precise communication channels and reporting responsibility
- How to minimise financial risks
- How to enhance and build competitive advantages over major competitors

The objective is to generate performance outcomes that increase profits and create opportunities for R & D, innovation and process improvement plus marketing strategies for national and international markets.

This is achieved by developing and implementing a wide range of business performance reviews, new initiatives and a continuous improvement culture throughout the organisation. A review of business trading results will identify weaknesses and potential areas for improvements.

Group workshops and individual mentoring, will be provided to allow for companies with differing products and methodologies. On-site assistance on specific issues and to assess capabilities and evaluate business requirements will be provided.

Activities will strongly focus on implementing a wide range of improvements and assessment of capabilities including capacity and resource evaluation; the necessary steps to successfully conduct business in global markets and the need to ensure that systems, processes and procedures are correct before moving to larger markets.

Leadership culture and employee involvement is a key factor for the organisational change that delivers improved performance and productivity. “Empowerment” in the workplace is vital to the successful achievement of company goals. Employee participation and the developments of both multi-skills and cross-skills that provide the flexibility to implement corrective measures and respond to total customer and market needs are highly emphasised in the program.

duction & methodology

Organisational Features of a Business Excellence Culture

World best practice status can only be achieved with an organisational leadership structure and high performance management/workforce group that pays strict attention to the special challenges necessary for achievement of continuous achievement and peak performance. These include:

- Organisational leadership and interactive structure, visible, accountable and with strong cross-functional coordination
- Management controls of business objectives and continual improvement initiatives for the achievement of trading results
- Organisational structure to introduce new performance drivers that assures market leadership and remains one step ahead of the competition
- Customer focused and with the ability to be responsive to changing market/industry trends
- Actively pursuing new product and process innovation with quality improvement efforts that focus on zero-defect outcomes
- Maintaining a matrix that accurately tracks the progress of prime initiatives with accountability through-out and that provides a clear picture of the company's achievements and efforts
- Creatively using the skills and knowledge of its people to maximise new opportunities and the elimination of non-value added wastes

Features of a High Performing Company

- Presentation and promotional material including brief and clear explanation of the core business, technology, products, people, facilities and services
- Clean and efficiently organised
- Management/employee partnerships, good communication levels, common understanding of goals and objectives – well informed
- Customer focused and responsive with product innovation, manufacturing flexibility and on time delivery
- Product engineering capability documented and aligned with customers and long term market needs
- Supplier support for development of long term partnerships
- Strong focus on continuous improvement programs to maintain and improve competitiveness
- Established and precise standards and policies backed by realistic business tasks and objectives through business plans controlled by accurate measures of performance outcomes in every area of the business plus the capacity to analyse data and implement improvements
- Capability to respond to sudden changes in market trends and consumer needs
- Recognised for leading edge innovation, quality products and services, good corporate image and as a profitable business

Controlling and Reporting Activities

A senior management committee and appropriate sub-committees will action and monitor progress against targets through a four step process

1

Step One

Identify the critical elements for business success

Examine the business mission and vision goals to select and implement new challenges and performance drivers for the business.

In developing improvement strategies, it is recommended that a number of issues be assessed and considered in the journey towards business excellence, including

Sustainable Competitive Advantage

A business whose strategic plan focuses and identifies a series of new competitive advantages and ways to exceed the competition might include carefully selected elements including superior quality, value added benefits to the customer, product design/technology with superior performance, defect free products and processes, 100% on time deliveries, responsiveness and flexibility to changing volumes/trends.

2

Step Two

Construct key performance objectives and measurable indicators for each critical element

Once new performance indicators have been identified, construct a series of strategic assumptions and control measures for each one. Indicators may be financial or non-financial, numerical, words, graphs or symbols. All need to be clear and unambiguous so and be easily understood. They also need to be based on data that can easily be collected and accurately reported and actioned within the organisation. It is recommended that the new performance indicators are closely monitored on an ongoing basis by the management committee to provide an overview of progress and achievement to the Board of Directors.

duction & methodology

Selection of key performance indicators

Key issues for business productivity and profitability include

1.0 Objectives

● Sales and marketing

Identify the actions and new markets needed to achieve growth. Review the critical factors that will impact on the achievement of objectives over a time span e.g. management of customer retention methods to provide existing customers with added value through continuous improvement

- **Profitability** Identify and implement activities that provide profitable opportunities. Conduct reviews that focus on productivity improvements in manufacturing operations such as, waste reductions and cash flow through reduction of inventory levels via an effective supply-chain process. Identify new sales with improved contributions and review existing products by evaluating their cost structure to introduce improvement measures. Eliminate customer back orders with better computer systems.

Identify material cost reductions through design reviews and use of alternative materials. Identify a range of administrative cost reductions through better communications, occupational health and safety savings

- **Customer Service** Identify how to become a customer focused organisation and provide 100% delivery performance, zero defects products and process outcome policy, value added products and services, world quality accreditations, advanced engineering services that support future developments
- **Company Image** Identify the measures to become a company that is highly focused on the achievements of business objectives that provide the results to satisfy shareholders, customers, employees, suppliers and the community. Identify measures to achieve leadership in the supply of superior products and services, environmental responsibility and internationally accepted corporate excellence

2.0 Assumptions and Performance Indicators

These assumptions and performance indicators are selected because they are the important issues to be achieved and controlled to fulfil the business plan. These measures also form the critical factors for satisfactory trading results. Management must focus its efforts on tracking the outcomes and to redirect unfavourable results at an early stage and introduce corrective actions before its too late.

Well structured key performance indicators will alert action on key objectives such as:

- *Achievement of sales predictions for each product category*
- *Maintaining capital investments and expenditures in line with the business cash flow plan*
- *Achieving the planned cost reductions and productivity targets*
- *Maintaining inventory stock levels according to plan*
- *Controlling variances from foreign exchange rate movements, material price increases, freight costs, interest rates on borrowings and payroll to sales*

Controlling and Reporting Activities (continued)

3

Step Three

Analysing data and reporting

The data required for each key performance indicator is collected and a report is then prepared with the results. Implications of results are discussed and recommendations put forward for actions to be taken. The analysis and management reviews must be conducted on a monthly basis to allow comparison of results. Any deviations from the business plan over time are monitored. Patterns and trends will emerge as well as the results of actions taken at earlier times, based on previous data.

Results will identify one-off factors such as increases or decreases in turn over. These may in turn be tracked to external factors influencing results e.g. down turn in the automotive market for instance, or an increase in the industrial sector of the market. Internal factors may influence results e.g. a change in the management reporting structure or achievement of productivity targets sooner than planned.

Identifying the factors behind the movements in key performance indicators ensures that the information that is useful for decision making.

4

Step Four

Taking action to improve results

The business considers recommendations in Step Three, examines its alternatives and actions some or all of them depending on the priority the management committee gives to the task and the improvements needed. Action will then depend on the level of resources required and the financial viability of the organisation at that point in time. Some will be easier to tackle than others. If the business takes no action, an opportunity to improve business performance may be lost.

duction & methodology

Six Sigma Status of Business Excellence

World class business excellence is measured today in terms of Six Sigma Status representing **< 10 defects per million in production process and administration transactions.** Achieving this level of excellence translates into many benefits in quality and productivity improvements.

The biggest challenge for SMEs will be to manage this change in the way business is conducted as it requires commitment to training throughout the organisation. Six Sigma Strategy focuses attention on a wide range of business processes that drive improvement in profitability. By designing, monitoring and controlling everyday business activities in ways that minimise non-value added waste and increase customer satisfaction, Six Sigma leads to fewer mistakes and provides specific methods to prevent errors in the first place.

It is generally accepted that the industry average operates at Four Sigma i.e. between five and six thousand defects per million, representing Cost of Quality of approximately 25% of sales. For a company with annual sales revenue of \$10 million and operating income of 10% of sales or \$1 million, the cost of quality is 25% of revenue or \$2.5 million. If the company can reduce its cost of quality by 20% it increases operating income by \$0.5 million or 50% on the current operating income level.

	Sigma Level				
	2	3	4	5	6
Defects per million	>300000	>60000	5000-6000	200-250	<10
Cost of Quality	Not applicable	25-40% of sales	15-25% of sales	5-15% of sales	<1% of sales
			Industry Average		World Class

Each sigma shift provides a 10 percent net income improvement

A Measurable Vision Statement

An enterprise will need to set a Vision Statement detailing the objectives and long-term strategies that will achieve the new business targets. It is recommended that these objectives are shared with employees, customers and suppliers to inform all stakeholders of the future directions that the company will strive for - the new products, technology, financial and non-financial expectations. Each objective is matched against measurable targets and the critical assumptions required to reach them namely

- Profitability
- Improvement targets
- Customer service targets
- Management information system and e-commerce
- Skill development and leadership program
- Product development and innovation
- Sales and marketing, including an export plan
- Best practice and benchmarking strategy
- Quality initiatives, zero defects and elimination of non-value added waste
- Quality accreditations world standards
- Lean and flexible manufacturing innovation

- Supply-chain and logistics management
- Supplier development and relationships
- International relationships, joint venture propositions
- OH&S and environmental responsibility

These become the key drivers for business excellence. Each objective is identified with a series of measurable performance indicators that can be reviewed as charts or words and become the strategic assumptions and the starting point for controlling and maintaining successful outcomes within the target aims and objectives. It is necessary to introduce control measures along the way to monitor the progress made. Employee development through investment in a wider business education will be necessary for employees to be able to adequately respond to the new challenges and increasing demands of organisational performance, employee empowerment, increased labour productivity and commitment to a higher level of business excellence.

Strategies for performance measurement will be developed in

New Markets

Identify the key areas for growth and how to best enter them e.g.

- Asia, USA, Europe, South America, Middle East
- Establish office, agents, distributors
- Participation in trade exhibitions, fairs, missions
- Joint venture/partnerships, technology agreements, manufacturing agreements

Company Planning

Identify and review

- How to be more cost and quality competitive through innovation, meetings with company key staff, feedback on continuous improvements
- How to value add and expand product features, systems and achieve product/process optimisation/commonisation
- Basis for growth analysis
 - Current markets with current products
 - Current markets with new products
 - New markets with current products
 - New markets with new products
- New markets, partnerships in new regions, product and technology sharing. Companies which can demonstrate key synergies and that have a sound business presence in the region

duction & methodology

Production Facilities and Capacity

Review present capacity and quality for

- Responsiveness to increased customer orders
- Improved supply-chain systems and flexibility
- Ability to deliver 100% on-time
- Zero defects operational procedures
- Building quality into the production process

Competitive Advantage

Approach new markets with the confidence to deliver total value or price **and**

- Quality, product technology and design/features
- Service and defect free products
- Regular visits to customers to present new ideas, refinements to existing products and display new products

Innovation Research and Technology

Maintain close contact with customers, markets and industry

- Promote your products features, performance and value advantages
- Promote quality and product function
- Update product literature and promote advantages over your competitors

Quality Accreditation

Inform customers and industry of your quality accreditation achievements and procedures including your

- International Quality Standards
- Quality systems that are in place
- Quality planning and policies process studies and feasibility analysis

E-commerce

Review the rapidly growing areas for embracing electronic commerce applications to

- Establish a website for sales activities and formal enquiries
- Enhance interaction with customers and suppliers to reduce the time spent in communication
- Reduce costs and streamline purchasing processes

Employee Involvement

Encourage employee participation in company projects, with regular briefings informing them of major outcomes and achievements and that

- Provide employees with greater authority and decision making powers
- Encourage group team participation for productivity and quality programs
- Provide training and education opportunities in cross-skilling and multi-skilling

Financial Management

Manage international trade finances and the risks involved with securing payments by

- Maintaining close contact with your bank and EFIC
- Selecting customers that have the ability to pay
- Preparing quotations with total knowledge of engineering specification, product application and function

Overall Commitment

Successful outcomes can only be achieved with total company commitment and financial support and

- Allocation of adequate human resources
- Clear understanding and commitment of international trade requirements
- Accurate and realistic business planning, reporting and accountability
- Technical and quality support to maintain near zero defect outcomes
- Good promotion of material and regular visits to customers

Competitive Strategy

Business excellence can be applied at two basic levels **The Business Administration Level** and **The Operational Level**. Strategy will strongly focus on transforming each area of the organisation through improvements in effective communications and reporting that provide productivity and quality initiatives for organisational change that ultimately results in higher levels of profitability and long term viability.

The Business Administration Level

Apply strategies that make cultural changes to management information and financial systems and that allow increased attention to planning for the future and the better identification of business objectives, assumptions, measures and controls. These will direct the business towards its major goals.

Important issues that need to be addressed include

- How the company will achieve a higher level of performance that increases total customer satisfaction in excess of the competition
- Analysis of the current business and a review of where it is at the moment to identify the measurable features and cost adjustments necessary to remain viable

- Analysis of the market and current market share to clearly understand trends and how the company will cope under any adverse conditions
- Introduction of financial and non-financial measures to control critical aspects of the business such as timing of new projects, proposed investments and cash flow
- Involvement of company employees in all business issues to develop team building incentives that encourage a positive attitude in the organisation. This will develop cross-functional and multi-functional skills with total accountability and an understanding of employees role in the company and their job tasks

The Operational Level

Apply strategies that identify the operational issues and problems limiting the achievement of the business plan. Provide organisational and technical support structure that drives improvements in productivity through advanced engineering/design value added and value analysis initiatives that optimise the products and processes from the initial stage of development to their final production.

Important issues that need to be addressed include

1. How will the company control manufacturing processes and variations to satisfactory levels of stability and consistency? Take action to identify the problem, formulate plans and take positive action
2. What actions are necessary to reduce supply shortages? Introduce supply-chain management controls to regulate material flows from both internal and external sources
3. What actions are necessary to replace poor delivery performance and customer back orders? Review customer order entry procedures, production planning methods, information sharing, capacity and lead times to solve the problem
4. How can we minimise equipment and tooling breakdown and stoppages? Implement a well managed preventative maintenance and reporting plan
5. How will we maintain an accurate and up to date product structure, bill of materials accuracy and labour routines? Implement better relations between design engineering, manufacturing engineering, supply department and finance department to communicate changes that are made to the product and ensure costing integrity
6. How can we control the cost of quality, waste, scrap, customer returns, warranty costs? Authorise the Quality Department to collect this data; report the findings and implement corrective actions. Conduct regular quality audits to maintain the standards

duction & methodology

Managing Business Growth

Expansion beyond the domestic market base will require a critical review of current capabilities to prepare and be ready for such a strategic charge. When expanding to service larger markets, variations in destination country laws and cultures will stretch the resources and knowledge necessary to comply with the stringent requirements of these markets. A well informed and researched market analysis and an accurate positioning strategy is necessary to minimise financial risks. A long term investment plan is necessary and must cover the following essential requirements:

- **Financial**

A thorough review of the investment and expenditures necessary must be identified and included in the annual business plan

- **Capacity**

The organisational, manufacturing and supply-chain support must be available to meet the predicted increase in volumes and long distances

- **Resources**

Need to ensure availability of adequate human resources with cross-functional communication skills and networks to service distant enterprises and difficult markets

- **Capabilities**

The willingness to expand into larger markets needs to be matched with systems that provide the capability to deliver larger volumes with improved process quality and production through put

- **Marketing Plan**

A marketing plan must evaluate and assess

External Factors

Environmental analysis of potential markets, including sensitivities, product selection, market choices, distribution networks, size of the market, competition, economic risks, barriers and political issues, relationships with customers and suppliers and strategic alliances

Internal Factors

Organisational computer and administrative systems, manufacturing factors, production/process capabilities, capacity, technology, flexibility, quality, management time and resources that have the knowledge, skills, attributes, competencies, attitudes and commitment for success

SWOT

Analyse the strengths and weaknesses, opportunities and threats. Build relationships through good communications and networks with customers and suppliers to identify these in a timely manner

Market Choice

Focus on selecting a stable and strong growth market with minimum barriers. Select customers that have the ability to pay

Assessing Business Opportunities

In searching for and assessing profitable opportunities, enterprises should firstly direct their efforts internally to better understand the value added areas of their business activities. In most cases manufacturing firms enjoy a value-added contribution in the order of 50-60%. Any efforts applied towards maximising profitability through productivity and cost reductions are normally within their own control, in contrast to external factors such as negotiating raw material, freight, energy, insurance and other fixed costs issues. Below are some examples and activities to minimise waste, reduce costs and increase productivity across the board.

- Establish a realistic business and strategic plan, including a summary of financial forecasts, sales profit/loss and the assumptions underlying the plan
- Only enter markets that enhance your competitive advantages, long-term and short-term
- Develop unique products or services that exceed the competition. Compete on value not just price e.g. quality, service, technology and on-time delivery
- Introduce a costing system that identifies and collects all costs, internal and external
- Totally understand your customer service requirements and the products of your industry. Under costing a new product can be devastating to the business in the long term
- Keep employees fully informed of company achievements, non-achievements, future expansions and outlook
- Aim to release the product to the market on-time with zero defects and conforming to the initial quotation cost base
- Establish a manufacturing base that focuses on quality and productivity with flexibility and responsiveness to market trends and fluctuations
- Enter customer orders into the system diligently and link these directly into the production planning, supply chain and production departments
- Minimise inventory stock levels through an effective supply chain system
- Maintain on-time deliveries by fine tuning production planning to customer demand and productive capacity
- Run the MRP system or equivalent each day to maintain accuracy in customer order levels and material requirements
- Invoice products as soon as they are shipped and maintain close control of cash flows. Balance payables with receivables to prevent cash shortages
- Pay close attention to cost increases, both the direct and indirect costs that will affect profitability. Introduce continuous improvement activities where gains will offset cost increases, to avoid higher selling prices that could result in loss of competitiveness
- Maintain close contact with major customers and industry/market trends and adjust business financial forecasts to reflect any changes that could adversely affect business viability

duction & methodology

The Marketing Plan

The strategic analysis necessary for a marketing plan appropriate to both domestic and international activities requires analysis of

Situation

- An evaluation of the political, economic, legal and cultural factors impacting on the company, both domestically and internationally, including threats and opportunities
- A review of the company's strengths and weaknesses

Problems and Opportunities

- A synthesis of the findings from the situation analysis, including a statement of significant threats and opportunities in the proposed overseas market, together with a view of existing and required competencies

Marketing Objectives

- A statement of the desired outcomes from the international marketing plan, including financial (sales) and non-financial (market share) objectives

Strategies and Programs

- Statements as to how the company plans to achieve objectives, including positioning and marketing mix statements
- Detailed tactical plans relating to the product/service, pricing, promotion and distribution

Evaluation and Control

- Statements relating to the proposed method of tracking the performance of the marketing plan, including the collection of information for control purposes

The Key Components of the Marketing Plan

- Executive Summary
- Mission Statement
- Company Background
- The Business
- The Products
- The Market
- Political System – an Overview
- Regulation of the Industry
- Cultural Aspects
- Languages
- Religion
- Demographics
- Economic Statistics and Activity

- Regional Agreements and Bilateral Trade with Australia
- Political Environment
- Summary of Political Analysis
- Analysis of the External Environment
- Industry Analysis
- SWOT Analysis
- Marketing Objectives
- Financial Objectives
- Non-financial Objectives
- Requirements
- Marketing Strategy
- Supporting Arguments Entry Modes and Channels of Distribution
- Marketing Program
- Product
- Product Attributes
- Price
- Packaging
- Branding
- Place (Distribution System)
- Promotion
- Evaluation and Control
- Appendices
- References

Preparing a Quotation Offer

Business expansion can provide growth and profit, however, entry into new markets, requires long term commitment. The company must realise the process is complex and demanding.

It is critical that an analysis and assessment of the market, product expectations, financial outlay and risks be completed. Prior to finalising and committing to an export offer or contractual arrangement, many factors need to be assessed to ensure that all costs and conditions have been considered in finalising the selling price and the investment plan including

- **Customer**
Complete due diligence on the customer and their ability to pay
- **Country/Region**
Examine the culture, legal systems, foreign exchange risks and rate variations, tariff and non tariff barriers
- **Debtor Risk Insurance**
Discuss with and be guided by the representative active bank or talk to EFIC
- **Payment Methods**
Terms must be clearly stated and agreed upon
- **Trade Terms**
Select the most appropriate trading terms and agree upon the transport and insurance costs to be included in the quoted price. Cross check with the International Chamber of Commerce defined rules for trade terms, Incoterms 2000
- **Financials**
Plan for expected cash requirements as growth will have a significant effect on cash flow cycle and working capital needs. There is a risk involved in over borrowing and you must be able to fully service the additional borrowings
- **Unit Selling Price**
Always specify the currency in which the price is quoted and how long the price will remain unchanged. Endeavour to recover cost movements to materials and overheads
- **Annual Quantity Predictions**
Prepare production equipment and supply requirements based on the expected daily sales
- **Model Life Estimates**
Base the tooling, plant and equipment investments on model life quantity expectations
- **Annual Sales Forecasts**
Prepare a trading statement and assumptions analysis
- **Gross Profit and Costs of Production**
Assess the gross profit levels allowing for all costs, materials, direct labour, direct and indirect factory expenses and monitor the movements
- **First Sales Timing Forecasts**
Budget accordingly as cash flow will need to be able to support initial financial outlays
- **Assess the Size of the Target Market**
Identify opportunities for further growth and increased market share
- **Percentage of Market Share**
Undertake market research to obtain a clear knowledge of major competitors and their competitive position in the market

roduction & methodology

- **Market/Promotional Requirements**
Factor into the selling price, initial marketing costs and future ongoing costs
- **Competitive Position**
Aim to provide the best value product in terms of technology, quality and features to retain competitive advantage and market leadership
- **Initial Samples Required**
Establish with the customer, required quantities at all stages of product development and product introduction. Assess costs accurately
- **Project Timing Plan**
Establish an accurate and realistic plan of action including design concept, samples, testing, modifications, production, customer acceptance and supply requirements
- **Customer Sign-Off Procedures**
Develop a clear and agreed understanding of the required testing specifications and method for acceptance of results by the customer
- **Packaging and Labelling Requirements**
Long delivery destinations require special packaging. Do not risk product damage in packaging - obtain external assistance to reduce the risks of claims
- **Shipping Methods**
Obtain external advice on the best options to get goods to destination
- **Customer Product Specifications**
Develop products suited to the target market by evaluating all critical characteristics for functional use and make certain that production conforms to the standards set by the customer
- **Modifications to an Existing Product**
Ensure that the existing product conforms to international requirements e.g. performance, environmental factors, etc
- **New Product Development**
The development of new products can be an extremely lengthy process, especially when dealing with international markets. Costs will need to be allocated accordingly
- **Product Component Tooling**
Accurately obtain tooling costs from suppliers and toolmakers and allow for quality gauging and test equipment for both initial and ongoing requirements
- **Product Testing Requirements**
Product testing to standards can be extremely costly. Need to accurately identify product and component testing costs beforehand
- **Production Capacity**
Assess current capacity, including the feasibility of second shifts. Evaluate labour levels and equipment layout to maximise capacity
- **Plant and Equipment**
Evaluate whether present manufacturing facilities are suitable to support the volume predicted. Review all processes for quality and then make changes that support the achievement of the international zero process defects policy
- **Quality Planning**
Establish quality planning from the outset including feasibility analysis, process FMEA's, process flow chart, QA methods, mini production runs, process sign-off and customer sign-off acceptance
- **Management Team Members**
Form a management team to control the total project from start to finish with complete accountability through appropriate performance measures

Lean Manufacturing Systems

The introduction of a production "pull" system in an organisation confirms that management is committed to business quality and productivity improvement. The production "pull" system provides the opportunities and benefits of process flow optimisation and waste minimisation. This is achieved by introducing a new floor plan with work flows in a more productive sequence. Lower material stocks will be required to service the supply-chain. Continuous-flow processing and standardised work methods are introduced to take advantage of the greater involvement of employees and their skills and knowledge, through small natural work groups and cross-functional teams. The new work sequence methods encourage greater employee involvement because they are provided with greater authority and decision making powers.

Lean manufacturing is an approach to innovation based on multi skilled workers, highly flexible machines and a very adaptable organisation with procedures to manufacture an increasing variety of products while continually reducing costs in the supply-chain through the "pull" system.

Benefits of lean manufacturing

- Reduction in non-value added wastes
- Improved supply-chain process
- Equipment up-time increased
- Increased employee empowerment and involvement
- Preventative maintenance enhancement
- Productivity and flexibility enhancements
- Lower materials stock and finished goods holdings
- Improvements in cash flow
- Improved communications throughout the supply chain
- Reduction in customer back orders – 100% delivery performance and more frequent deliveries
- Quality process improvements that result in zero defects
- Quality built into the production process, reducing the risk of poor quality
- Business is more responsive and adaptable to rapid change in market demands
- Better floor space utilisation
- Improved floor plan cleanliness, safety and housekeeping
- Better understanding of available capacity facilitating an even flow of production
- Reduction in supply lead times through channelling materials more efficiently
- Improved supplier relationships through continuous flow process and fewer fluctuations in production volumes
- Early exposure of problems that can occur in the production sequence

duction & methodology

Identifying Profitable Opportunities

The process of identifying profitable opportunities and continuous improvement begins by focusing attention on performance. This is achieved by reviewing all revenues, costs, operations and outcomes and breaking them down into

1. Business Operations and Financial Expenses
2. Technology and Manufacturing Innovation
3. Marketing and New Expansions
4. Employee Involvement in the workplace

Area of Review	Initiatives to identify continuous improvements	Target Measure
<div style="text-align: center; font-size: 2em; font-weight: bold; color: #0070C0; border: 2px solid #0070C0; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">1</div> <p style="font-size: 1.2em; font-weight: bold; color: #0070C0; margin-top: 10px;">Business Operations and Financial Expenses</p> <p style="font-size: 0.9em; font-weight: bold; color: #0070C0; margin-top: 5px;">By reviewing all costs and expenses in the trading statement, improved profitability will be achieved through strict control of variances in materials, wages and expenses</p>	<p>Review sales results Vs Forecasts</p>	
	<p>Direct Material Standards Maintain accurate Bills of Material for products and compare against business plan standards</p>	
	<p>Identify Material Variances resulting from Scrap, provision for obsolescence, price variances, sale of scrap, freight penalties</p>	
	<p>Direct Labour Standards Maintain accurate records of labour routines against products and compare against business plan standards</p>	
	<p>Identify Labour Variances resulting from Overtime, efficiency, annual leave paid, sick leave paid, LSL paid</p>	
	<p>Analyse Overhead Variances Hand tools, oils, protective clothing, chemicals, returnable containers, tooling amortization and assess for departure from Budget</p>	
	<p>Analyse Variable Expenses Warranty costs, provisions, freight, technical fees and assess for departure from Budget</p>	
	<p>Analyse Semi-Variable Expenses such as Electricity, gas, plant maintenance, water, tools, dies, element and mechanical materials and assess for departure from Budget</p>	

Identifying Profitable Opportunities (continued)

Area of Review	Initiatives to identify continuous improvements	Target Measure
<p>Business Operations and Financial Expenses (continued)</p>	<p>Analyse Factory Expenses such as Depreciation, cartage, leases, amenities, rent, production tools, wages and salaries, repairs and maintenance, fork lifts and assess for departure from budget</p>	
	<p>Analyse Selling Expenses such as Advertising, promotional, accommodation, travelling, entertainment, motor vehicle and assess against budget</p>	
	<p>Analyse Administration Expenses such as Audit fees, wages and salaries, insurance, legal fees, interest, subscriptions, publications, bad debts, bank charges, leases and assess against budget</p>	
	<p>Analyse Engineering Functions such as Bills of materials, accuracy of product structures, labour routines, costs of external fees, cost of samples, prototypes and product testing and assess for possible improvements</p>	
	<p>Analyse Quality Functions such as Scrap, reworks, end of line rejects, warranty, audits, customer returns defects, reviewing quality costs and wastes and assess for possible improvements</p>	
	<p>Analyse Sales Functions such as Accuracy of new quotations, review non profitable products, selling price reviews, on-time deliveries, customer forward orders, back orders and assess for possible improvements</p>	
	<p>Analyse Purchasing and Supply Functions such as Conditions and pricing of all production and non-production items, freight to customers, freight of purchases, inventory accuracy, inventory levels, obsolescence, slow moving stock and assess for possible improvements</p>	

duction & methodology

Area of Review	Initiatives to identify continuous improvements	Target Measure
<p>2</p> <p>Technology and Manufacturing Innovation</p> <p>By reviewing technology and manufacturing, improved profitability will be achieved through reduction in non-value added waste, increased productivity, reduction in the cost of production and increase the product gross profit/margins</p>	<p>Value Added Strategy</p>	
	<p>Product Design, New Idea Generation</p>	
	<p>Materials Used and Costs</p>	
	<p>Mass and Size Reductions</p>	
	<p>Product Performance and Features Improvements</p>	
	<p>Process Flow and Floor Plan</p>	
	<p>Material Handling Logistics and Supply Chain</p>	

Area of Review	Initiatives to identify continuous improvements	Target Measure
<p>3</p> <p>Marketing and New Business Development</p> <p>By reviewing marketing and new business development activities improved profitability will be achieved from increased sales/market share the benefits of spreading overheads and fixed cost over a larger volume base together with a better knowledge of the industry and the competition</p>	<p>Customer Position Analysis including Market share, sales per customer, market size, number of customers</p>	
	<p>Industry Long Term Forecasts</p>	
	<p>Major Competitors and Source (local and imports)</p>	
	<p>Sales Per Product Group, Gross Margins, Profit (Loss) for Each Product</p>	
	<p>Product and Market Diversification; and Commonisation of Products and Applications</p>	
	<p>New Markets and New Customer Opportunities</p>	
<p>4</p> <p>Employee Involvement in the Work Place</p> <p>By reviewing employee involvement in the work place activities, improved profitability will be achieved from increased employee participation, controlling costs and employees being accountable for the day-to-day operations and decision making</p>	<p>Organisational Reporting Structure</p>	
	<p>Employee Programs including Skills analysis, employee satisfactions, develop teams, participation, training and education</p>	
	<p>Leadership and Empathy Culture</p>	
	<p>Employee Briefings including Presentations twice per year to inform all employees of company goals and achievements</p>	

duction & methodology

Key Performance Indicators

Key Performance Indicators are selected and introduced for business reporting to focus attention on the important issues that need to be measured and controlled to achieve the business plan. Performance indicators may be financial or non-financial and presented in many different combinations of words, charts and graphs.

A Four Perspective KPI Model

1

The Financial Perspective

“Measure the Ultimate Financial Results”

- Revenue/total sales
- Value added
- Prime margins
- Gross margin
- Cost of production
- Direct materials and variances
- Direct labour and variances
- Factory direct/indirect expenses
- Fixed costs, selling and administration
- Earnings before interest and tax
- Interest and interest cover
- Profit (loss) before tax
- Profit (loss) after tax
- Total inventory value
- Debtors outstanding
- Creditors outstanding
- Payroll
- Number of employees
- Sales/revenue per employee
- Total assets
- Cash flow
- Income tax
- Return on investments
- Return on assets
- Capital investments
- Tooling investments
- Cost reduction targets
- Cost increases – predictions
- Productivity cost downs, agreements and discounting levels
- Product costing – accurate breakdown of material, labour and overheads
- Fixed assets
- Current assets
- Current liabilities
- Long term liabilities

2

The Internal Process Perspective

“Focus on the Performance of the Internal and External Processes Driving the Business”

- Equipment effectiveness and up-time
- Daily production achievements against planning
- Reporting scrap
- Material shortages and causes
- Production line stoppages
- Suppliers delivery performance
- Supplier quality
- Customer back orders
- Premium freight
- Internal line rejects
- Internal line reworks
- Manufacturing routine maintenance
- Premium Overtime costs
- Injury rate
- Delivery against customer orders
- Inventory value by category:
 - Finished goods
 - Work in progress
 - Materials and components
 - Goods in transit
 - Slow moving stock
 - Obsolete stock
- Inventory turns by product category
- Inventory accuracy, cycle counting measures
- Customer order entry maintenance
- Process raised concessions and actions
- Bills of materials maintenance
- Productivity improvement
- Cost of quality trends per product category
- Quality audits
- Process control measures, stability and conformance to standards
- Network up-time

Key Performance Indicators (continued)

3

The Customer and Market Perspective

“Focus on Customer Needs, Satisfaction and Market Share”

- Number of design changes processed
- Number of samples submitted
- Cost of developments
- Product testing hours
- Number of customers
- Sales per customers
- Total market value by size
- Total market share per product category
- Major competitors and source (local or imports)
- Industry long term forecasts
- Sales per product groups
- Profit (Loss) by product category
- New sales prospects
- Profit from new business
- Customer contact time
- Customer satisfaction surveys
- Customer complaints
- Customer returns (PPM) defects
- Customer warranty (PPM) defects
- Customer lost and reasons
- New customers gained
- Marketing expenses
- On-time delivery
- Customer back order value
- Customer orders entry control
- Review forward orders value
- New product introduction
- SWOT analysis
- Basis for growth analysis

4

The Learning and Growth Perspective

“Direct Attention to the Basis of all Future Success – People and Infrastructure”

- Employee training time for production and staff
- Absenteeism
- Staff turnover
- Employee skills analysis
- Employee satisfaction
- Effective reporting structure
- Developing an empathy culture
- Structure of teams: participation, quality circles and TQM
- Management and employee briefings of company achievements
- Employee goal setting and outcomes
- Work instructions
- Job descriptions and work plans
- Number of teams operating in the organisation
- Number of team projects completed
- Formal training scheme
- Skills audit
- Formal selection procedure
- Staff appraisal
- Team building
- Semi-autonomous work groups
- OH&S committee
- Affirmative action
- Suggestion schemes
- Grievance procedures
- Joint consultative committee
- Employee representatives on management committees
- Incentive structures
- Bonus arrangement
- Performance based pay
- Promoting procedure
- Termination procedure

duction & methodology

How to Derive Operational Improvements

Operational improvements can be achieved by adopting a Just In Time production 'pull' system. This methodology provides opportunities for maximising on-time deliveries and inventory control throughout the supply-chain process, materials and production sequence. The pull system is an excellent way to reduce inventory variations, shortages and for controlling non-value added waste. Its efficiency relies on transporting raw material assemblies in an orderly and timely manner with controlled documentation.

On-time deliveries

Shortening the time it takes to convert customer orders to customer deliveries will yield very significant operational improvements and is achieved by

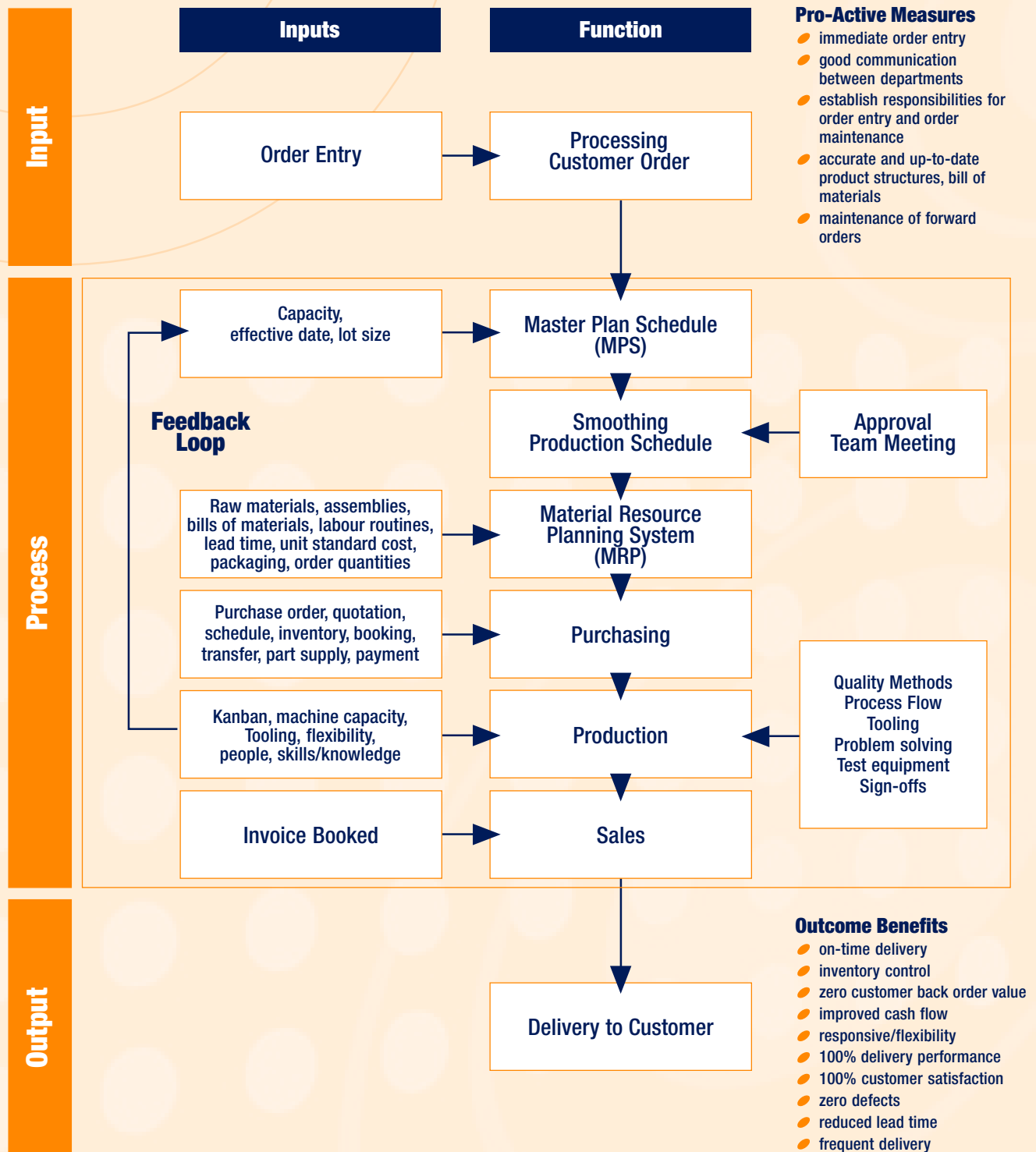
- Immediate customer order entry and review of customer back order value
- Review of customer price acceptance and establishment of delivery dates
- Establishment of good communication between departments to achieve maximum effectiveness in the supply-chain sequence
- Accurate recording of bills of materials and obtaining engineering/quality sign-offs
- Review of tooling, machine availability and labour resources
- Preparation of a production plan in-line with capabilities and capacity
- Regular meetings between sales, production and planning departments to smooth-out the schedule and action any known concerns to prevent delays
- Establishment of a production schedule with lead times, lot sizes and packaging in accordance with demand
- Ordering materials in accordance with the production plan and using the material resource planning system
- Channelling materials effectively through the production areas
- Manufacturing only to the specified order quantity scheduled and not over producing
- Constantly monitoring quality throughout the supply-chain

Inventory Control

Inventory accuracy requires total support, attention and adherence to procedures throughout the supply-chain and production sequence and yields operational improvements through

- Accurate Bills of materials and product structure maintenance
- Precise identification of products and components by part numbers, description, location and quantities
- Accurate documentation of transactions and bookings
- Delivery accuracy according to specified weights and measures
- Material handling transfers, frequently and in small quantities e.g. supermarket replenishment methods
- Design transportation bins for easy to handle and clear identification of part number and quantities
- Booking accurately to the warehouse
- Recording accurately scrappage, reworks, slow moving stock and obsolete stocks
- Conducting regular stock takes and cycle counting to prevent stock-outs and stock losses

Customer Order Entry to Customer Delivery Process



duction & methodology

Business Improvement - Checklist ✓

A checklist of areas to prioritise upfront for Business Improvements

Tick ✓

- Business Vision and Strategy Development
- Policies and Procedures
- Administrative and Financial Systems
- Establishing Company Performance – Key Indicators and Control Measures
- Establishing an Effective Organisational Reporting Structure
- Reducing Risks in Trade Debtors
- Implementation of Employee Briefing and Improved Communications – Teamwork
- Review of Company Trading Statement Format and Allocation of Costs
- Cost Control Measures
- Identifying Profitable Opportunities
- Managing Key Performance Drivers
- Developing Teams and Work Groups
- Improvements in Industrial Relations
- On-time Deliveries, Order Entry and Planning
- Product Costing – Accurate Breakdown of Material, Labour and Overheads
- Customer Satisfaction, Improved Image and Problem Solving
- New Market Opportunities and Analysis of the Basis for Growth
- A Review of Business Strengths and Weaknesses
- A Review of Business Opportunities and Threats
- Inventory Control – Supply Chain Management
- Production Process Flow, Productivity and Quality
- Production Planning Tuned to Demands and Capacity
- Measurements of Major Machines Process Up-time and Utilisation
- Environmental Responsible and Safety Company
- Introducing Lean Manufacturing – “Pull” Systems
- Controlling Quality Costs
- Supplier Developments and Measuring Supplier Performance
- World Quality Accreditation
- New Projects Introduction Controls

**Confidential
Information**

Key Performance Indicators (KPIs) - Checklist ✓

The world's most successful companies conduct the following activities. Do you? If you do on a regular basis tick yes.

Major Business Activities Tick ✓

- Annual Business Plan
- Strategic Plan
- Monthly Finance and Departmental Reporting
- Weekly Senior Executive Meetings
- Monthly Management Meetings
- Quarterly Employee Briefings
- Mission Statement
- Vision Statement
- Benchmarking Financial and Non-Financial
- Lean Manufacturing and JIT methods
- MRP System or equivalent
- Key Business Performance Indicators
- Quality Accreditation

Continuous Improvement Initiatives

- Customer Satisfaction Analysis
- Employee Skills Assessment and Development
- Manufacturing Innovation
- Measure Quality Costs
- Monthly Performance Review
- Advanced design Benchmarking and Innovation Targeting peak performance

Performance Measures

Do you measure and control (daily, weekly or monthly) the following:

- Machinery Performance
- Production Performance Review
- Material Shortages and Causes
- Material Variances
- Production Rejects (Daily)
- Production Reworks (Daily)
- Customer Warranty (PPM) Defects

- Customer Returns and Corrective Actions
- Labour Variances
- Employee Absenteeism
- Overtime Penalty Costs
- Premium Freight Charges
- Supplier Quality and Delivery
- Deliveries Against Orders
- Customer Back Orders
- Customer Visits
- Slow Moving Stocks
- Inventory Turnover
- Obsolete Products and Materials
- Bills of Materials Maintenance
- Manufacturing Routines Maintenance
- Process Raised Concession and Actions
- Lost Time Injury Rate
- Customer Concerns
- Customer Order Entry Control
- Forward Order Forecasts
- New Projects Review
- New Products Review
- Productivity Levels
- Network Up-time
- Creditors Outstanding
- Debtors Outstanding
- Tooling Costs
- Capital Expenditure
- Cost Increases
- Product/Process Cost Maintenance
- Quality Audits
- Process Control Measures
- Injury Rate

