IMPLEMENTING AN ACTIVITY BASED COSTING (ABC)  
PROJECT KEY SUCCESS FACTORS

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SYNOPSIS

Traditional accounting methods and reporting no longer provide adequate information about the true costs of cross-functional business processes and nothing about where the non-value-added costs are occurring.

Activity Based Costing (ABC) is not a replacement for traditional general ledger accounting. It is a tool that lies between the expenditure account in the general ledger and the end-users who apply cost data in their decision making. ABC converts hidden (indirect; overhead; burden) cost data into relevant information that the end-users can take action on.

ABC is important for identifying process improvement opportunities and measuring the realised benefits of performance improvement initiatives. It brings visibility to the symptoms of problems, from which effective solutions can be inferred. ABC quantifies the business process across the organisation, highlighting where waste or opportunities are located. ABC is viewed as one of the more accurate methodologies for overhead cost assignment.

Since the late 1980's the concepts of activity based costing have been reported in sufficient detail, most financial managers understand what it is. The problem faced by organisations wanting to implement ABC is how to get started. Often there is a fear of accountability as well as misconceptions that ABC is a complex system with horrible updating and reporting problems. There is often a lack of appreciation by senior management for the benefits to be had from implementing ABC and scepticism from the work place.

Once the decision to implement an ABC project has been taken, there is concern with avoiding implementation failure. Companies have reported a lack of success with ABC implementation, consequently newly formed project teams are cautious to proceed and are often faced with a mass of negative perceptions and lack of buy-in.

Companies having piloted ABC, are motivated to move away from their traditional costing system. They appreciate the preventative steps that can be taken to ensure a successful implementation roll-out. The key issue here is how to migrate from the PC-based model to a permanent, fully-integrated ABC system.

One of the keys to ABC implementation success is the attention placed on stimulating the non-accountants and end-users to buy into the ABC concepts and data. There must be active stimulation of the end users to apply ABC information in their daily decisions and analysis. The biggest problem with an ABC implementation has been...
lack of understanding and appreciation for the benefits. Most companies have been occupied with the ‘what’ and ‘how-to’ of the method, they have neglected the ‘why’.

ABC project managers must remove the theory and supposed complexity of ABC from their project environment. They require a practical step-by-step approach to implementation. Trying to install ABC software and database interfaces without first implementing the project that will bring about the changes and awareness for ABC, necessary for installation, is a recipe for failure.

Implementing an Activity Based Costing (ABC) Project - Key Success Factors, goes someway towards defining how to get started with an ABC project. This paper presents an overview of ABC supported with an outline ABC project implementation methodology. View it as a guide to ABC project success.

Introduction

A big company was facing two related decisions. The bankruptcy of a competitor offered it an opportunity to pick up half a million units of incremental volume of its apparently best product on top of existing volume of 3 million units. The other possibility involved outsourcing 2 million units of a money-losing product to a Korean firm that had given a very attractive bid.

Putting the two situations together, the senior vice president of production recommended manufacturing the less profitable product in Korea and retooling its own local plant to produce the extra units of the better product. He estimated the strategy would convert the current $11 million loss to a $17.5 million profit the following year.

The expected profit did not materialise; instead, the loss ballooned to $20 million. Back to the spreadsheets. A new analysis revealed that the “best” product was, in fact, a money-loser. The ”worst” product had been a consistent money-maker. How could a big, assumed World Class Company make such a astounding mistake?

It turned out the company had been allocating depreciation and other fixed overhead on the basis of direct labour cost. A product that used, say, 20% of the company’s total labour bore 20% of the depreciation. This was unrealistic. Labour doesn’t depreciate. Machinery does. Where lots of labour is used, usually less machinery is used. Labour-heavy products should have carried less of the depreciation. This mattered a lot, because some expensive machinery had recently automated the production line of the “best” product and greatly reduced the number of workers. Meanwhile the “worst” product line used fully depreciated equipment but a relatively large number of workers. Traditional cost accounting had completely distorted the picture and given rise to worthless decisions.

"With declining margins and inefficient cost-accounting systems, many firms do not even have a clue as to whether they are making money on a product,” asserts Professor Bala Balachandran, director of the Accounting Research Centre at Northwestern University’s business school.
You can do more with ABC than shed unprofitable products from your product line. You can also use it to gain a marketing edge.

“Tens of billions of dollars of expenses can be painlessly excised if departments and divisions are charged only for what they actually use,” says Balachandran.

Take the simple activity of invoicing. The total cost of invoicing is the combined salaries and benefits of the people who are doing it plus the cost of technology and consumables. This total would traditionally have gone to an overhead pool to be arbitrarily allocated. But with ABC you divide the total overhead apportionment by a non-financial measure, such as number of invoices generated. You now have a cost per invoice. Count the number of invoices sent out by a division, multiply by the ABC calculated cost per invoice and allocate the result to the division.

Now division A, with 20,000 customers who each order once a month, gets assigned a much higher expense than division B, with 500 customers who each order twice a year. Some of those less significant customers may be losing you money, but you never knew it.

If two customers purchased from your company the exact same mix of products and services at the exact same prices during the exact same time period, would they be equally profitable? Of course not. Some customers place standard orders with no fuss, while others require non-standard everything. Some customers just buy your product or service and you hardly hear from them, while others you always hear from-and it is usually to change their delivery requirements, inquire about and expedite their order or to return or exchange their goods.

Is bothersome or remote customer is worth it? If we added up all the costs of our time, effort, interruptions and disruptions attributed to those kinds of customers, in addition to the costs of the products and base service that that customer drew on, did we make any profit? How do we know? How do we know the level of profitability of any or all of our customers? Most organisations do not. Since we are continuously pursuing prospects, we might want to know how profitable they will be relative to each other or to our existing customers?

Why would you want to know these answers? Possibly to answer more direct questions about customers, such as:

- Do we push for volume or for margin with a specific customer?
- Are there ways to improve profitability by altering the way we package, sell, deliver, or generally service a customer?
- Does the sales volume justify the discounts, rebates or promotion structure we provide the customer?

For obviously unprofitable customers, you would want to explore the possible options of raising prices, surcharging them for the extra work, reducing the causes of your extra work for them, streamlining your delivery so it costs you less to serve them, or
finally altering their behaviour so that those customers place less demands on your organisation.

In Peter Francese’s book, Marketing Know-How, he posed key questions around a customer/marketing model which starts by asking what kinds of customers are loyal and profitable; and what kinds are only marginal, or worse yet, losing you money. Activity Based Costing can economically and accurately trace the consumption of your organisation's resource costs to those types, kinds and segments who place varying demands on the organisation. Determining the “costs-to-serve” each type of customer and market segment.

ABC not only determines the profit contribution of customers, including “accurate” costs of the products they buy, but also helps in understanding the elements of work that comprise the entire costs to serve them.

When companies take the time to define and measure their internal work activities and directly associate them to the bigger and smaller consumers of their work, they have realised that they make a lot of profit on a few profitable customers and then give back a lot on a large number of unprofitable customers. And they are usually big numbers.

How can such unrealised profits be so offset by the unprofitable products and customers? The major reason is no one sees it. Some people intuitively think it but can’t prove it. The traditional financial reporting in no way shows it for several reasons:

(1) it focuses on departmental expenses but not on the work-efforts within a department, and

(2) for those costs that are targeted (i.e., allocated), they are exclusively costed only to products or base-services but rarely isolated and directly charged to customer segments. In accounting terms, selling, advertising, marketing, logistics, warehousing and distribution costs are immediately charged to the “period” in which they occur, so the accountants are not tasked to trace them to customer segments.

LSI Logic, a high-tech semiconductor company, performed ABC and discovered they were making roughly 90% of their profits from 10% of their customers. Further, they were losing money on half their customers. What they did was explain to some of the unprofitable customers how those customers could alter their own behaviour to lessen the load on LSI Logic so that a fair profit could be attained. The remaining unprofitable customers were “fired”-they were asked to take their business elsewhere. LSI Logic’s sales levels predictably dipped, but profits tripled. The lesson is there is a “quality of profit” associated with sales volume and there should be a focus on the customer contribution margin devoid of cost allocations.

The fact is customers are the source of a much greater amount of work-creation than most people imagine. And even once that is understood, traditional accounting systems are ill-equipped to provide the “very local burden rates” to first accumulate the costs of the support work to the order-fulfilment work, and then to accumulate the
“burdened” order-fulfilment work into the product and customers who cause work to happen in varying amounts. Traditional financial accounting systems are structurally deficient.

For example, traditional accounting only reports employee-related salary and fringe benefit costs, which reveal no insights to the content of work performed. It also groups costs according to the vertical appearance of the organisation chart, denying any view of the end-to-end business processes that start and finish with customers. In contrast, ABC flexibly defines costs at the level of work activities and allows re-assembly and linkage to how each customer, channel and market segment get served. As customers consume their unique quantities of the mix of products, some products that may be stand-alone profitable and some not, then the “cost-to-serve” customer-related costs are identified.

As progressive organisations, and some may be your competitors, gain proficiency and mastery with the business intelligence provided by ABC, they can be formidable. What those companies are recognising is that each individual customer affects the profitability of their brand products, base services and market segments. The effect is due to the customer’s purchasing habits, delivery location, discount/rebate structures or other diverse ways it places demands on a supplier. When equipped with ABC’s superior data, they can cherry-pick the premium-profit customers, and strategically price for new product entry.

Activity Based Costing Outlined

ABC Defined

Thomas Johnson and Robert Kaplan published a book, and an article by the same name in the Havard Business Review entitled “Relevance Lost: The Rise and Fall of Management Accounting,” proposing an alternative way of calculating costs. The alternative came to be known as Activity-Based Costing or ABC. Unlike traditional costing methods, ABC counts the actual activities that go into making and delivering a specific product or service, attempting to calculate the costs of those activities. Rather than arbitrarily allocate the total cost of a machine across a range of products using an imprecise formula, an ABC methodology establishes how much machine time each unique product consumes and then accurately reassigns the costs accordingly.

Traditionally accountants use simple formulas to allocate indirect (burden) costs. They may allocate the indirect overhead costs across a range of products based on the number of labour hours each product consumes. That may have been a reasonable approach, so long as labour was the greatest cost of production. Or, maybe indirect costs were allocated in proportion to the total revenue generated from each product. This too would have made sense where all the products were very similar in their consumption of manufacturing resources. Today, labour is seldom the biggest cost factor and most factories are capable of manufacturing hundreds of different products. So the old allocation formulas no longer produce accurate approximations of indirect costs.
In the last few years ABC has produced an intellectual descendant known as Activity Based Management (ABM). ABC attempts only to measure a product or service’s true cost and thus its true profitability and the profitability of the customer buying, it to the company. ABM uses the ABC generated cost information to evaluate the entire operation to produce and deliver the product and service. The goal is to distinguish between the value-added costs (necessary costs) and the non-value-adding costs (unnecessary costs – waste).

Activity Based Costing is a tool that provides business managers with the ability to easily identify the true costs of doing business and utilise this information to make more informed business decisions. It provides a way of tracing indirect costs, such as customer service or administration, to specific activities and from there to products/services/customers.

ABC replaces traditional costing as a strategic tool that can be used far outside the finance department. It more accurately traces the cost of activities to the outputs of the organisation and provides significant new insight into real costs for decision makers.

It provides managers with accurate information on which products, services, customers and markets are profitable and identifies the costs of activities and processes within products.

Activity Based Management is the process of integrating activity based costing information into an overall management process. ABC is the first step in the Activity Based Management process. The ABC information is then used as the basis for Benchmarking, Process Management, and Performance Measurement. ABM enables proactive strategic, tactical and operational planning and decision making.

In response to increasing costs, squeezed profit margins and intensifying world-wide competition, organisations have searched for ways to streamline their operations, reduce unnecessary costs and gather more accurate data for decision making purposes. The result of this has been the development of two new management tools – Just-in-Time (JIT) inventory management systems and Activity Based Costing. JIT helps management to reduce costs, increase efficiency and expand outputs. ABC helps management to focus directly on the cost to manufacture and deliver and the accurate unit profitability of products and customers, on which to base pricing and product and customer mix decisions.

The most difficult task in computing accurate unit costs lies in determining the accurate amount of overhead cost to assign to each unit of product or customer. Three different approaches available for overhead cost allocation. Level 1 the least complex to Level 2 the most complex. Level 3, Activity Based Costing is viewed as the most accurate of the 3 approaches to overhead cost re-assignment.

**The Role of ABC – Flavour of the month?**

ABC and ABM are not in the “flavour-of-the-month” category. Most companies are painfully aware that technology has made traditional cost accounting increasingly irrelevant. Many are trying to understand value-adding activities and to weed out
the non-value-adding activities and their attendant costs. Implementation of ABC and ABM is the challenge – that’s the major problem.

ABC has spread rapidly, though not as rapidly as its promoters had hoped. One reason for the reluctance to accept the benefits is for the sake of more accuracy, a company must spend more time and resources identifying, counting and measuring the activities that drive costs.

A company must expect a clear benefit from implementing the concept, and even if there is a significant benefit, reprogramming the necessary systems can be a massive assignment.

The predominant issue with ABC/ABM involves its perception as just another way to represent financial data, rather than its input to strategic management decision making.

For companies new to ABC, the key issue is how to get started. Companies wanting to pilot ABC are invariably scared of implementation failure. Newly formed project teams are overly cautious. The next step that results in loss of project momentum is the question of how to move from a pilot, PC based model to a fully integrated system.

Regardless of a companies starting point with ABC/ABM, much more attention must be placed on stimulating the non-accountants and end-users to buy into the ABC concepts, benefits and to use the data.

Companies require business improvement programs that create value and ultimately bring additional profits to the bottom line. Five of the most prevalent business improvement methodologies applied by companies are:

- The Learning Organisation - Peter Senge MIT
- Total Quality Management - Dr. Edwards Deming and George Stalk
- Core Competencies - CK. Prahalad and Gary Hamel
- Organisational Behaviour - Chris Argyris Harvard Business School
- Process Improvement - Michael Hammer MIT

Although ABC/ABM can serve as “initiative accelerators” to all five methods, its largest impact is on the last two. With regard to change management, ABC presents compelling facts that stimulate workers to want to change the way things are. With respect to process improvement, ABC quantifies the business process across the organisation, highlighting where the waste or opportunities are located.

ABC is a tool, not a solution. It brings visibility to the symptoms of problems from which effective solutions can be established. In some cases ABC brings visibility to “that which has never been seen before”.
ABC/ABM has four objectives;

- Eliminate or minimise low value-adding costs.
- Introduce efficiency and effectiveness, streamlining value-adding activities to improve yields.
- Locate and emphasise root causes of problems and correct them.
- Remove distortions caused by bad cost allocations and poor assumptions.

ABC can be considered as the mathematics used to accurately re-assign indirect overhead costs to cost objects – outputs, products, services and customers. Activity Based Cost Management (ABCM) uses the ABC cost information not only to rationalise what products or services are sold, but to identify opportunities to change and improve activities, thereby improving productivity. ABM integrates ABC and ABCM with non-cost metrics such as cycle time, quality and flexibility and customer service to make proactive strategic and operational decisions, assessing the value-adding content of work in business processes.

**Some Common ABC Misconceptions**

Many of the reasons for some ABC project implementations failing involve misconceptions about what an ABC project requires. Usual misconceptions involve:

- The amount and detail level of data required
- The degree of accuracy of the costs
- The length of time needed to define activities and collect the data
- The dilemma of having two sets of books
- The necessity to select and purchase dedicated ABC software.

Many people believe that ABC involves an inordinate volume of data and hard work. In reality ABC models can be of a manageable size. The level of detail will depend on the kind decisions to be made with the data. ABC models rarely need to be elaborate. The best advice concerning the amount of data and level of detail is to design the system for the decision maker’s needs. If the model is too simple, it wont be sufficiently accurate. If too detailed and complicated, the extra effort to maintain it will exceed the benefits.

Dependent upon the decisions to be made from the data, determines the level of accuracy required for the data. In most cases, informed estimates are as good as direct measurements and intense calculations. If management’s strategic intent is to understand profit flows form, products, services and market segments, there is some room for error. If the intention is to be more tactical than strategic, such as for individual price quotations at the customer-order level, then a greater effort with cost-drivers and more segmented activities will be required to detect the impact of diversity on resource cost consumption.

People will tell you it takes an inordinate amount of time and effort to construct a chart of activities and then collect and compile the time and resource consumption data. Furthermore they will state that the outputs are flawed with estimating errors.
and therefore unreliable. This is not true. The top-down approach used requires the identification of the significant activities in each functional department and by process ensuring all the primary activities are identified. With ABC, nearness is much better than precision, therefore a handful of “close-to-the-process” middle managers are needed for estimation. In a few days, the data can be collected and entered into a spreadsheet.

ABC does not replace the traditional General Ledger accounting system. ABC is a translator inserted to extract general ledger and other relevant data. The general ledger collects a vast array of data transactions and serves as an accumulator. ABC selectively extracts data.

Initially no specialised ABC software is required. PC based or client –server software becomes necessary when users have a requirement for multistage cost flows. Generally, the need to progress beyond spreadsheet software occurs when more than two stages of cost flows are required. In many organisations, a well designed, periodically updated model is sufficient for most ABC needs. When a company wants to employ the ABC data and information for improving business processes and for forward planning, then a system permitting full integration of ABC/ABM into the organisation’s accounting and management information system is necessary.

**Why ABC Projects Fail – Preventing ABC Project Failure**

The discouraging reality about ABC implementations is their success rate which has been below expectation. Initially when the project starts, there is enthusiasm and optimism for the implementation and outcome of the project. But, as the project progresses, the enthusiasm wanes and project failure will result. Unless a planned implementation takes into consideration the factors which have been shown to lead up to project failure.

ABC project implementations can usually follow one of three courses:

1. Shortly after the project starts, employee disillusionment sets in with a resulting drop in interest and support for the outcome. Invariably there is no further effort or interest shown by the users. The project team or individuals lose interest, lose organisational support and the project collapses.

2. In the second scenario, strong individuals will continue to champion ABC thinking and initiatives. Unfortunately the quality and significance of the new cost data which is produced is late in being presented, not accepted or understood well enough by the users, with resultant loss of project impetus and possibly collapse.

3. Successful ABC projects are pulled through by the bold interests of individuals who use the ABC information to do their jobs better, making better decisions in the process.
The following major factors have been shown in previous ABC projects to result in a high likelihood of project failure:

- Projects initiated from the accounting department or staffed predominately by accounting personnel are usually perceived by the rest of the organisation to be another meaningless managerial or financial exercise – Thus there usually will be a total lack support from the users and people who should be providing the process and activity data. The project is launched by finance and not pulled through by operations.

- Cost accounting principles and methodology are usually outside the knowledge and comfort zones of most individuals. It is perceived as a “black art” practised by the accounting “wizards”.

- The ABC initiative is launched without first predefining tangible, results-oriented objectives. The problems or opportunities that the resulting ABC data and information will address must be identified and agreed up-front by the users prior to project initiation. No predefined problem or stated object.

- The ABC information becomes a second set of books, competing with the “official” accounting system. Employee performance measures are often linked to the “official” system. With two sets of numbers, people get caught up reconciling the differences.

- The magnitude of resistance to change is grossly underestimated. Non-financial people accept a financial system that produces a set of financial reports as adequate – “Why change it if its working just fine?”

- The new information produced by ABC is met with disbelief, which is totally underestimated by the ABC project team. With the accurate tracing and re-assignment of costs, the resulting bad profitability of once supposedly profitable products and customers differs radically from the results reported in the traditional accounting system. Organisational and managerial shock can be substantial.

- The ABC system is over-engineered, excessive detailed or flawed in some manner that the data is treated with scepticism. Credibility is compromised.

- The users such as sales and marketing personnel, do not understand how to use the ABC information, react to it nor what action to take, when presented with the new winners and losers of profitability – products or customers.

- ABC does not provide all the information required for product and market planners to make decisions. It simply shows the disproportionate consumption of resources in terms of costs.

- The ABC project is viewed as a competing improvement program rather than as an enabler to facilitate existing improvement programs.
• Acting on the information can involve pain for everyone. The information can lead to organisational changes and restructuring of work.

• Once the ABC project is started, implementation impetus is not maintained, momentum is lost and people lose interest.

• ABC as a business improvement tool is maligned by negativity and poorly informed office political players with hidden agendas, as being to costly or ineffective.

• The project manager and sponsor lack the tenacity and enthusiasm to drive the project and the need to drive change.

• ABC training and awareness is delivered too early and not maintained throughout the project to beneficial to the end-users.

• The relevant and measurable data required for ABC is unavailable or inaccessible.

• The scope of the ABC model is limited to front-line operations, excluding hidden or second order costs such as in marketing or product planning and development.

**ABC Project Implementation – An Outline**

1. Determine why the organisation intends to initiate an ABC project.

   • What are the objectives to be met by the successful implementation of ABC?

   • What needs to be changed and why? Ask why again.

   • Who will be the end users of the data and how will they benefit from it?

   • Workshop with the end users, the shortfalls of the current accounting system and practice – validate the need for ABC and how it will improve the organisation’s ability to compete.

   • Establish a thorough communications plan to keep all the stakeholders and users informed, educated and involved.
2. Disregard the organisational chart.
   - Diagram the business processes across the internal value chain, mapping processes.
   - Ensure all processes have inputs, outputs and customers at the end

3. Construct and compute an ABM outline model.
   - Construct an activity dictionary.
   - Collect high-level material and activity resource cost information.
   - Trace resource costs into activities and group them into business processes along the value chain.
   - Present the data in graphic form to facilitate end-user interpretation and analysis.
   - Trace activity costs, combining into common groupings – activity centres – to high level final cost objects – product groups and customer groups.

4. Identify opportunities and problems.
   - Workshop the ABM value chain costs along the business processes using a cross functional team.
   - Interpret and analyse the resultant cost and profitability data.
   - Determine which activities / processes require focusing on and what opportunities exist for improvement.

5. List and prioritise the identified improvement opportunities

6. Using root cause analysis and / or 5 why analysis, explain the problems in the opportunity areas.
   - Identify and record alternative solutions.

7. Convert the opportunities into management action items.
   - Select specific improvement projects.

8. Using ABC/ABM data, test the potential financial impact of each project by quantifying the potential cost saving to be realised.
9. Make changes to product and service delivery design, changing peoples attitudes, restructuring work.

For any ABC project to be successful, the model design must be correct and change management must be a priority. Achieving project success requires the following principles to be followed religiously:

- The objectives of the project must be fully understood by all the stakeholders.
- The success determinates of the project must be identified. “How will we know the project has been completed successfully?”
- Define the project objectives, each having measurable indicators as milestones are achieved.
- There must be full support not only from the executive but also the end users of the final ABC data.
- Recognise the end users of the ABC data as internal customers – continuously keep them informed and supply them with small packets of data or new insights that they can value and take action on.

**Conclusions**

Though Activity Based Costing has been around for over ten years, it is still evolving. However, the transition of companies to ABC systems in the next ten years is not so much a question of if, but when. Though many companies have tried ABC and then abandoned it for a number of reasons previously highlighted, ABC data is far more essential to the emerging styles of management, being more process based and customer focused than the traditional silo organisations supported by the traditional accounting practices ten years ago.

Traditional cost accounting data provides poor and frequently flawed information. As organisations focus more and more on customers and value delivering processes, managers are realising that they are poorly supported departmental cost reporting.

Activity Based Costing supports process-based thinking. It provides a framework for capturing costs across business processes. It traverses hierarchical functional boundaries. It associates costs efficiently with end products and external customers, providing a true reflection of profitability.
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Key Words

Activity Based Costing; Activity Based Management; ABC; ABM; Project Implementation
Business Focus

Value Chain Projects focuses on the application of project knowledge and techniques specific to business process re-structuring and value chain best practices in the general business environment. Focusing on the initiation, planning, implementation and close-out of value-chain analysis, improvement and Business-to-Business information flow projects. Implementing Activity Based Costing and Management projects. Providing the knowledge, skills and training to organisations essential to ensuring projects are scoped and implemented effectively to deliver the required objectives within time, budget and quality.

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Mike has extensive experience in marketing, sales and general business acquired in the pharmaceutical industry both in South Africa and Zimbabwe. He has worked for IBM Global Network (Trafex) and has managed a number of EDI and computer network related business projects. Since establishing his own company in 1997, Mike has become a Resource Partner to Competitive Capabilities Africa (CCA), working with them on a number of value chain best practice projects. He has implemented an Activity Based Costing project and developed an ABC model for a JSE listed holding company at three of its subsidiary companies. Mike is a member of the Project Management Institute. Key knowledge areas and interests are project management specific to business process modelling, measurement and value chain strategy and transformation.