# The Influence of Service Process on Performance Measurement

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#### **Abstract**

There is an increased recognition that companies compete on a wide range of dimensions whose evaluation cannot be confined to narrow financial performance indicators The challenge is to develop non-fmancial indicators which capture the quality, service and flexibility issues of today's customer oriented competitive strategies For service businesses the challenge is intensified; services are perishable so fluctuations in demand cannot be managed using the stock control policies common in manufacturing environments. Further, relatively junior personnel are ftequently the key points of contact with customers in the delivery of the service; so ensuring consistency of quality is difficult. This paper explores the influence of service process on performance measurement systems, by investigating the approaches adopted within two successful UK organisations, one a professional service (Arthur Andersen), the other a mass service (TNT). There are three common properties of the performance measurement systems and two areas of divergence. The common properties are *clarty*; there is clear communication of strategy to individuals within the organisation, consistency; the performance measures adopted support the corporate strategy, and range; both organisations measure performance over a range of financial and non-financial dimensions as advocated in the literature. Differences emerge in the mechanisms used to measure qualty and the apphoach to providing flexibilty, the how of performance measurement.

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#### 1. Inroductiton

A central question for management of any organisation is how well are we doing? The answer to this has traditionally been expressed in terms of financial performance but as organisations face increasingly challenging competitive environments the focus has switched to other measures such as quality, flexibility and customer service; concentrating on a single indicator of performance, such as profit, is no longer enough. How, though, does an organisation decide which measures are relevant to its partcular business? The act of measuring something can itself drive the business, for as most managers now understand "what gets mesured gets managed". Equally what is not measured tends to be ignored, so a company must ensure that those things are measured which it believes are its true drivers of success. Additionally, many factors interrelate so improvement on one dimension can lead to deterioration on another, hence any measurement activity must be integrated into a coherent performance measurement system. The focus of this paper is to investigate how two successful, yet very different types of service business in the UK are coping with these challenges by comparing their performance measurement systems with prescriptions from recent literature on performance measurement; that is, how does the service process influence the choice of performance measurement system. The two organisations considered are Arthur Andersen, the professional accounting and consultancy firm, and TNT, the mass distributor of parcels.

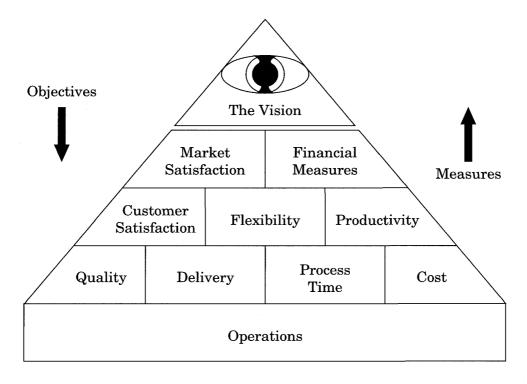
This paper is arranged in six sections. The next section identifies a set of common prescriptions for performance measures from a review of three performance measurement frameworks. Section three explores the special characteristics of service businesses leading to implications for performance measurement. A brief commentary on the performance measurement systems used in the two case organisations is provided in section four (for more detail readers are referred to Moon and Fitzgerald [5] and Fitzgerald and Moon[1]). The discussion in section five compares the empirical results with the prescriptions in the literature and the final section offers some conclusions.

## 2. Frameworks for Performance Measurement

Traditional performance measurement systems which focus largely on fmancial indicators have been criticised for their failure to measure and monitor non-financial indicators which "directly answer questions about quality, service and flexibility ... (and are) ... more appropriate for the customer-oriented strategies that have emerged during the past decade" (Nanni et al. [6]). In response to this dissatisfaction a number of performance measurement frameworks have been developed within the last five years. Three of these are outlined below.

#### The Performance Pyramid

The performance pyramid (Lynch and Cross [4]) proposes that we measure performance on nine dimensions; market satisfaction, financial measures, customer satisfaction, flexibility, productivity, quality, delivery, process time and waste. The horizontal divisions in the pyramid (see exhibit 1) represent organisational levels with organisational strategy and operations being linked by translating objectives, based on customer priorities, from the top down and performance measures from the bottom up.



**Exhibit 1**: The Performance Pyramid

At the top level a 'vision' for the business is articulated by corporate management. This is translated at the next level into individual business unit objectives defined in market and financial terms; that is, in the 'language of money'. Strategies are then developed for meeting these objectives and translated at the third level into objectives defined in terms of customer satisfaction, flexibility and productivity. the 'language of money and things'. At the base of the pyramid objectives are converted into specific operational criteria: quality, delivery, cycle time, waste, 'the language of things'.

The model addresses both external effectiveness and internal efficiency. External effectiveness can be tracked down the left side of the pyramid, with market measures such as market share being supported by the building blocks of customer satisfaction and flexibility. The right hand side measures internal efficiency in producing the goods and services with financial measures being supported by productivity and flexibility.

#### The Balanced Scorecard

The second framework is the Balanced Scorecard (Kaplan and Norton 13], see exhibit 2). It proposes that performance should be measured in a balanced way from four alternative perspectives - that of customers, the internal business perspective (what must we excel at), innovation and learning (can we continue to improve and create value), and the financial perspective (how do we look to shareholders). Supplementing traditional financial measures with criteria that measure performance from three additional perspectives enables companies to track financial results while simultaneously monitoring progress in building capabilities and acquiring the intangible assets needed for future growth. The framework implies that mangers select a limited number of critical indicators, grounded in the organisation's strategic objectives, within each of the four perspectives.

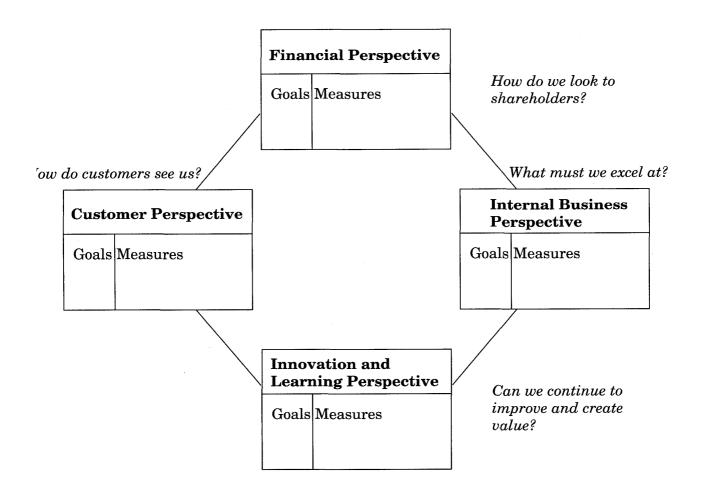


Exhibit 2: The Balanced Scorecard

	Dimensions of Performance	Types of Measures
RESULTS	Competitiveness	Relative market share and position Sales growth Measures of the customer base
	Financial perflormance	Profitability Liquidity Capital structure Market ratios
DETERMINANTS	Quality of service	Reliability Responsiveness Aesthetics/appearance Cleanliness/tidiness Comfort Friendliness Communication Courtesy Competence Access Availability Security
	Flexibility	Volume flexibility Deiivery speed flexibility Specification flexibility
	Resource utilisation	Productivity Efficiency
	lnnovation	Performance of the innovation process Performance of individual imovations

**Exhibit 3**: The Results and Determints Matrix

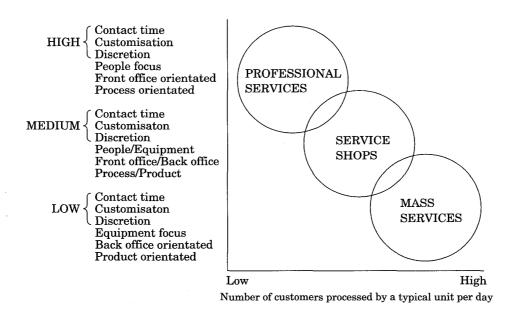
The results and determinants framework (Fitzgerald et al [2]) has been developed from research in the service sector, though it could be applied just as easily to the manufacturing sector. It proposes six generic dimensions of performance; competitive performance, financial performance, quality of service, flexibility, resource utilisation, and innovation. These six dimensions fall into two conceptually different categories (see exhibit 3). Measures of the first two reflect the success or 'results' of the chosen strategy, while the other four factors are 'determinants' of competitive success. While all companies will wish to measure the results of implementing their strategy, the mix of factors that determine that strategic success will vary. In consequence, there may be relatively little difference between companies' definitions and use of competitiveness and financial measures but their measures of determinants and the weightings applied will differ according to their strategy. This framework addresses the 'short-

temism' criticism frequently levelled at financially focused reports by emphasising the notion that improvements in quality. for example, may not hit the bottom line in the current period, but if these quality improvements are valued by customers future financial results will reflect this.

Some common threads emerge from the three performance measurement frameworks. First, that performance measures should be linked to corporate strategy; second that they should include both external (customer service type and competitor comparisons) and internal measures; third, they should include both financial and non-fmancial measures and finally that there needs to be a balance of measures.

### 3. Charaeteristics of the Service Sector

Service businesses are not homogeneous; the service sector is diverse embracing tourism, fmancial services, retail businesses, health care, catering and conununications. There are some commonalties among these organisations which have been used to identify three generic service archetypes: professional services, service shops and mass seivices (Silvestro et al [8]). Their key characteristics are represented in exhibit 4. Previous research suggests that the service archetype influences the measurement mechanisms for service quality, the scope for providing flexibility and the means by which flexibility is provided (Fitzgerald et al [2]). The current study explores this further by comparing the performance measurement system adopted within a professional (Arthur Andersen) and a mass service (TNT), the two extreme archetypes.



**Exhibit 4**: Service Classification Scheme

Although service businesses have a wide range of service delivery processes, mixes of inputs and types of output, there is a set of four key features which distinguish them from manufacturing and influence the approaches to control and performance measurement. These features are *simultaneity*, *perishabilty*, *heterogeneity* and *intangibilty* (Shostack [7]). and together they pose extra strains on service managers in terms of identifying what to measure and in particular when and how to measure performance.

The production and consumption of many services are simultaneous; for example, receiving tax planning advice. The customer has to be there during the process. Most services therefore cannot be counted, measured, inspected, tested or verified in advance of sale for subsequent delivery to the customer. Second, while having excess capacity can enable any organisation to respond to fluctuations in demand, services are perishable; a delivery vehicle's journey cannot be stored, for TNT spare capacity in a van at one end of the country is not transferable to the other end of the country. Controlling quality and matching supply to demand are, therefore, key management problems in services which are often exacerbated by the presence of the customer during the service delivery process. Third, many services have a high labour content, particularly professional services. Consequently the standard of service may vary; the service outputs are heterogeneous. This places particular pressures on the measurement and control systems to try to ensure consistent quality from the same employee from day to day and to gain comparability of performance between employees. Finally most services, unlike manufacturing outputs, are intangible. When buying consultancy services, for example, there are tangible measures of performance such as the completion of the project on schedule but other less tangible factors such as the helpfulness and responsiveness of the staff during the process influences the overall level of customer satisfaction. Identifying what the customer values from the complex mix of tangible goods and intangible services makes the process difficult to control.

#### 4. Case Studies

#### 4.1 Arthur Andersen

#### **Background**

The Arthur Andersen World-wide organisation is one of the largest Accountancy and Consulting firms in the world employing over 80,000 people world-wide with offices in over 75 countries. The partnership provides a comprehensive range of financial and businesses services to clients. Andersen's has a reputation for the breadth, depth and excellence of the financial services which it offers its many and varied clients. They provide Audit & Business Advisory Services, Financial, Taxation and

#### The Influence of Service Processon Perfomance Measurement

Business Consultancy to businesses and individuals. The case focuses on one of the ten regional offices through which Arthur Andersen operate in the UK. All offices provide a full range of services although the mix of those services varies from regional office to regional office, all have access to central databases and there is great stress on knowledge sharing to improve processes and customer service. Although staff are attached to a particular office there is some flexibility of movement between offices for specified periods to cover temporary staff shortfalls or for particular jobs such as corporate recovery where staff with specific areas of expertise may need to be brought together at fairly short notice.

Andersen's operate a "one firm concept" throughout the partnership, they guarantee their quality of service across the world. One partner has overall responsibility for any one client whatever the mix of services required by the client and that partner has the authority to command resources world-wide, if necessary. Standard methodologies and planning procedures are used world-wide, with all staff undergoing extensive training to give a uniform level of high quality in systems, processes and people. They have invested in a "Global Best Practice Knowledge Database" giving access to leading edge business practices from around the world to enhance client service. The partnership has seen constant growth and profits are shared on a world-wide basis. Critical to the success of the partnership is offering a consistently high quality of service, in terms of managing the technical task and managing the relationship with the client through providing consistent standards, culture, quality and approach throughout the worldwide organisation. The financial strength of Andersen's in terms of profitability and growth is dependent on providing this high level of service. In this market the ability to do the technical job is an "order qualifying criteria", a necessary pre-condition. The "order winning criteria" which Andersen's believe differentiate it in the market place are its reputation, its style and quality of service offered and its world-wide partnership network.

An issue that places significant demands on the performance monitoring and measurement systems used, is the fact that every job is different, some lasting a few days to others lasting several months. There are, however, some common elements. The first 'event' within any job is actually gaining the business. There is a dual aspect here; retaining established clients and recruiting new ones. Established clients have evidence of the previous quality of work, so the task is to maintain the client / partner responsible relationship. Potential clients are targeted at partner planning meetings and various presentations, social events, sponsorships, or partner visits are arranged accordingly. Whilst the expenses of these initiatives are easily measured their effectiveness, in terms of getting business is not.

Having gained new business, Andersens devote considerable energy at the outset in trying to define exactly what the client wants, the time scale involved and the budget, recognising that clients have different expectations and that a "happy client" pays up readily and will repeat business. This is formally recorded in a letter of engagement which can be referred to during the contract period. The feasibility of producing a letter of engagement is partly a function of the service offered; for example it is much more difficult to forecast the complexities, and hence the time needed, on a corporate recovery job compared with a routine audit.

In carrying out the work, the team allocated to the job, through the job scheduling system, will reflect the nature and perceived complexity of the job. Progress of each job is measured against the job budget; this gives early warning of potential problems such as whether the job is likely to overrun because its level of complexity was underestimated or because of staff problems. It is important that this reviewing process takes place during the job so that any problems or issues can be identified and resolved immediately. On completion of an assignment, the partner responsible will formally meet with the client to discuss their perceptions of the work done and the quality of service provided.

#### Performance measurement system

Each Arthur Andersen partner owns shares in the overall profits made by the world-wide organisation, so it is not surprising that, at a partnership level, fees earned and profits made are keenly and regularly monitored. In the long run these depend, though, on the ability of Arthur Andersen to deliver a quality service. The service is highly labour intensive with a large proportion of staff having direct contact with clients. Apart from the post-completion client visit described above, the performance measurement systems predominately focus on staff. For monitoring purposes staff are classified as 'support' or 'practice'. Support staff (for example, in personnel and administration) do not have their time charged directly to clients while practice staff do. There are four levels of practice staff, partners, managers, seniors and assistants each with clearly defined roles within the organisation. Apart from their seniority implications, these roles dictate the amount of time that should be charged to clients; for example, partners are expected to devote time to gaining new business practice development - thus, less of their time is planned to be charged directly to clients than, say, managers whose role is predominately delivering the service to clients. Two sets of performance measures follow naturally from the staff classification; headcount and chargeable time.

Headcount or "managing the pyramid" is a key issue for control and refers to the ratio of the number of partners to managers to seniors to assistants employed, see exhibit 5. Andersen's have a clear notion, developed over the years, of an ideal shape of the pyramid which will lead to profitability and growth.

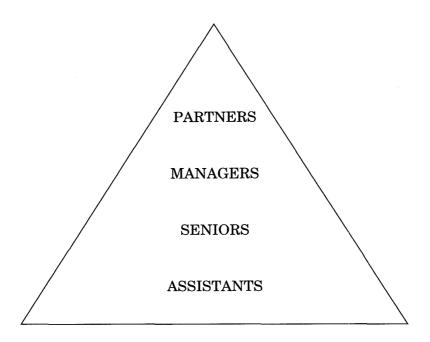


Exhibit 5: The Arthur Andersen Staff Pyramid

Chargeable time is the amount of staff time which is directly charged to a client. Each staff layer in the pyramid has a target amount of chargeable time. As with the shape of the pyramid these chargeable time targets have been built up from experience within the organisation. There is an acknowledgement that although exceeding the targets may lead to increased short term profitability, if this was at the expense of for example, training, it may lead to a fall in longer term quality and hence profitability.

As stated above the pyramid provides all practice staff with a very clearly defined career structure. Staff who join the organisation are under no illusions as to the future. This is "an up or out organisation", "you are better paid but have to work harder", "it's a meritocracy". Regular counselling and performance appraisal is provided for everyone; the process and regularity of staff evaluation varies with staff grade and to a lesser extent with division. Initially, some staff find this process threatening but there is general consensus that it is used in a positive manner.

Partners are reviewed every two years via the partner evaluation system. Financial rewards are directly related to this review. The first part of the process is a peer group review by division head, managing partner and any other partner they may have worked with. The results of this review are passed to a central (world-wide) review committee and this committee takes a comparative view on partner performance

throughout the organisation so that equity between partners is maintained on a world-wide basis.

Every *manager* has a strictly confidential annual review with his counselling partner. The process is driven by an annual reporting document; sections of this document are completed by the manager prior to interview. The personnel department add factual details such as courses attended and planned and the form is completed by the counselling partner during the interview. The outcome of this process is an agreed set of actions, by the individual manager and the firm, to achieve objectives for future personal and career development. Target dates for achieving the actions are agreed and responsibility for the firms actions is assigned to a particular individual.

Seniors and assistants are evaluated after every job by the manager or senior they have been working for. The document used to discuss performance is a rating form: "it is the primary piece of documentation which provides evidence of individuals performance - across the board performance". The form contains detailed questions grouped into six areas: Technical Skills, Quality of Work Product, Job Ownership and Wrapup, People Development, Client Service, and Professional Attributes.

An overall evaluation is provided at the end of the form with a ranking scale from "exceptional performance" to "Performance is below what is expected of an individual at the level of experience both in the present job and the requirement to demonstrate long term potential for progression within the firm", this latter rating would be problematic for an individual. Extensive guidance notes are provided for the reviewer responsible for completing the form. The sources of information suggested for the reviewer are the quality of the work product, client's comments and observation of the individual in action. The review process is treated seriously, clear advice is given on conducting the review discussion which includes giving praise and thanks for work well done and providing constructive criticism where appropriate. There is an emphasis on asking for and listening to individual's views. The outcome is a rating for the individual plus a series of suggestions for improving performance.

Secretarial staff are evaluated every three months. The review ranges from technical competence to personal appearance and conduct. The outcome is a rating from 1 "Far exceeds Job Requirements" to 5 "Does Not Meet Job Requirements", plus identification of training needs which could improve skills.

The importance which Andersens attach to staff appraisal is evidenced by the time devoted to the appraisal process, the frequency of appraisals and the positive way in which they are used. This is captured in the declaration at the top of every appraisal form;

"It is the Firm's policy to develop the competence and creative ability of all its employees to their fullest potential."

#### 4.2 TNT

#### **Background**

TNT is an international group principally engaged in freight transportation. TNT was first established in the UK in 1978, and now approximately one seventh of its world-wide workforce are employed there. The case study is concerned with TNT Express Delivery Services, which offers a comprehensive range of nation-wide door to door express delivery services throughout the UK. The most expensive service provided is the *Next Day before 9.00 a.m.* service, cheaper variants including *Next Day before 10.30 a.m.*, *Next Day before Noon.* and *Next Day* (time unspecified).

The critical success factor for TNT is to deliver the goods to the right place at the right time. If marketing claim at the point of sale that a delivery is possible, then operations need to ensure that the delivery actually takes place at the required time and place. Reliability is essential. Success in this area is dependent on a carefully planned operational system and a smooth operational flow. Fundamental to successful, reliable delivery is the extent of TNT's geographical coverage of the UK, and hence its number of potential customers. This is straightforwardly dependent on the number, size and location of the depots.

The operational system adopted is structured like a giant wheel, with a central hub and a set of spokes (motor ways and major trunk roads) running between the hub and the outer rim. On this outer rim are 28 depots, situated strategically around the country with each of these depots having a clearly defined, non-overlapping territory, so that the whole of the UK is broken-up across the 28 responsibility centres, thereby ensuring nation-wide coverage. Every weekday, each depot is responsible for the coordination and collection of all packages that customers in their territory wish to send. These are sorted at the depot, those for delivery in the same territory being retained separately. The remainder are packed into large trailers (trunks) which are then driven to the hub. Depots might send anything from one to ten trunks each night, though arrival times at the hub, and therefore departure times at the depots, are coordinated centrally in an extensive computerised scheduling exercise. On arrival at the hub the trunks are unloaded, again according to strictly controlled schedules, and parcels are mechanically sorted by destination on the purpose built conveyors. The reverse process then takes place with trunks being loaded with parcels for delivery in a particular

region, prior to making the return journeys to each depot, where they are again unloaded, and the parcels sorted into appropriate delivery rounds in time for the 9 o'clock deadlines that morning.

Responsibility for the smooth running of this system essentially falls on the General Manager for network operations at the hub, and on the 28 depot management teams at the rim. Within each depot there resides a depot general manager, who has overall responsibility, an operations manager and a finance and administration manager. It is these individuals, then, who effectively control the fortunes of the organisation, and whose actions will determine how near TNT come to achieving the strategic objectives of profitability and growth via coverage and reliability.

#### The performance measurement system

TNT's mission is to be the number one express parcel delivery service in the UK. Gaining and sustaining such a market position has obvious implications for profitability and growth. These are monitored regularly at Board level through an analysis of the management accounts against targets. Profitability and growth, though, are the results of success rather than the determinants of success. Critical to being successful is the quality of service offered: are parcels delivered to the right place at the right time? Customers will be quick to change their allegiance if reliability is questionable. Accordingly, a key performance indicator measured on a weekly basis is the overall "delivery-on-time" performance; the number of consignments delivered on time expressed as a percentage of the total number of consignments booked. The actual performance level achieved is compared with the prior week's performance and with the company target. For this to be sustained by the depots, it is imperative that the hub is operating effectively. As such, the company monitors the "end-of-sort-time" on a daily basis, with updated predictions being made throughout the night to act as an early warning system. Currently the company target is 3.00 a.m., it being estimated that every 15 minutes beyond this will significantly increase TNT's cost due to consequent money back guarantees or the need for some depots to employ sub-contractors to meet the delivery deadlines.

At the depot level, four separate performance measurement mechanisms are used. Although each one carries implications for the other three, there is no formalised connection made. The four relate to (i) the depot overall, (ii) sales, (iii) deliveries, and (iv) finance and administration.

#### (i) The depot overall

The need to generate a profit at the company level is driven down directly to the depots. A detailed Profit and Loss statement is produced weekly for each depot show-

ing its results for each week in that quarter, and the cumulative actual against budget. Each week a memorandum is sent out to all Depot General Managers from the Managing Director. This memorandum focuses exclusively on the revenue and profits earned by individual depots, these being displayed in the form of "league tables" in order of actual profits achieved for that quarter. Specific mention is made of the top six profit makers for the week, and all the managers earning in excess of budgeted profits for their depot. The memorandum is not perceived as a document to be taken lightly.

#### (ii) Sales

The transference of corporate objectives for growth to sales employees is simple. All concerned are encouraged to make as high a volume of sales as possible, in accordance with nationally set price schedules dependent on size, weight, distance and location. Actual performance against sales targets is rewarded on a commission basis, though this is not adjusted for any delays or shortfalls relating to debt collectability. In addition to standard commissions, bonus prizes are awarded for those employees exhibiting outstanding sales performance. Further incentives are available for sales leads initiated by non-sales staff. For example, drivers are paid 10% of the first four weeks revenue from any new customer introduced by their actions.

As part of their overall marketing strategy, TNT Express Delivery Services have adopted a formal customer care programme, for which it has gained awards from the Motor Transport industrial sector. A copy of their Commitment to Customer Care statement is shown as exhibit 6. Performance against this standard is monitored regularly, partly on an informal basis, partly as a by-product of other parts of the performance measurement system, and partly by "random" comprehensive checks. For example, outside organisations are employed to research TNT's performance by sending consignments through the system. This tests out TNT's claims that they will "answer your incoming telephone calls promptly, courteously and within six rings", that the parcel will be properly collected, weighed, Iabelled and delivered, that invoicing will be clear and easily understood, and any queries dealt with efficiently.

# Our Commitment to Customer Care

- We will answer your incoming telephone caffs promptly, courteously and within six rings.
- When calling you will always be able to speak directly with the TNT person you ask for. irrespective of seniority and without having to state your name. your company or the reason for your call.
- A team of one field sales person and one telephone sales person dedicated to a defined postcode area will be made personally responsible for the day to day handling of your account. This enables us to establish a sound business relationship and provide you with unparalleled levels of sales and after sales servece.
- ◆ As a TNT Express customer, you will be contacted on a regular basis at least once every six weeks to ensure that we maintain a close liaison and provide excellence in customer care.
- Should we ever fail to collect your consignment as agreed we will ensure delivery is made meeting your orignal time criteria wherever possible at no extra cost to you.
- We pledge to check your collected consignments against their consignment documentation and to verify the number of items. their weight, destination, selected service level and postcode, we will then ensure that all your parcels are accurately routed and delivered on time.
- In the unlikely event that we mis-direct one of your parcels, we guarantee to deliver the item direct within the shortest possible time at no extra cost to you.
- We will provide instant access confirmation of delivery information 24 hours a day, 365 days a year via our automatic telephone response system - TNT Tracker Personal confirmation of delivery is available immediately on request the next working day.
- TNT Express invoicing will always be clear and easily understood. Any query you may have regarding invoicing or accounts will be quickly and efficiently resolved. All enquiries will be responded to immediately.
- Our reputation for safe and secure handling enables us to offer Free Transit Liability cover of up to £15,000 per consignment with confidence, providing extra peace of mind for you.
- In the unlikely event that you have to make a claim. we guarantee that a written response will be forwarded to you within 24 hours and if necessary, a full investigation will be undertaken to resolve any claim.
- We will communicate with you regularly to ensure that you are fully informed of our developments and to seek your opinion on the services we provide. our people and our standards.
- All TNT employees are our ambassadors and they are trained to be efficient, helpful and courteous at all times Despite the rarity of complaints, we guarantee that should you ever complain about the behaviour, attitude or road manner of any TNT person. the issue will be taken up and we will reply to you within 24 hours.

CUSTOMER CARE AWARD WINNER

✓ Tom Bell,

Managing Director, TNT Express Delivery Services.

**Exhibit 6**: The TNT Customer Care Statement

#### (iii) Deliveries

Delivery performance is reported in the weekly 7 Star Service Performance Report. In keeping with other TNT Express systems, this is set out in the form of a league table, depots being ranked in descending order of delivery-on-time performance. This is the first of the seven indicators included. The others are the proportion of "failures" (where the whole system has broken down for a particular consignment), the proportion of deliveries that result in credit notes or that are unmatched with invoices, the proportion of misroutes, the number of late trunks (that is, trunks arriving late at the hub and therefore potentially delaying the end of sort time), and the amounts of loss claims and damage claims expressed as a percent of revenue. Further weekly reports are circulated that present more detailed analysis about each of the categories above.

There is incentive scheme based on delivery-on-time performance, the actual percent achieved being compared with a depot specific, regularly monitored and updated, target. Meeting this standard on average over a four week period earns a bonus for the depot manager and a further bonus to be shared out across the team. Poor performance on delivery does not only impact personal bonuses, however, it also leads to adverse profit and loss account charges. Each depot will be charged for any loss and damage claims for which it is responsible, will foot the bill for sub-contractors hired as a result of misroutes, and will be fined £500 for each trunk that is late on arrival at the hub (unless there are mitigating circumstances outside the depot's or driver'scontrol).

#### (iv) Finance and administration

The monitoring and evaluation process of the finance and administration function again involves the circulation of regular league tables detailing the finance and administration performance for each depot on a monthly basis. The focus of these reports is almost exclusively on the level of outstanding sales ledger balances. Thus, there are reports ordered by debtors weeks, and by the percentage of debt over 60 days old. Again, related financial bonus schemes operate.

#### 5. Discussion

Although the two organisations operate in very different service sectors, there are some striking similarities in the systems they have adopted for performance measurement. Both organisations attach great importance to the 'bottom line', profits being regularly monitored at top level. Both, however, recognise this as the 'results' of success rather than the 'determinants'. Thus, both Arthur Andersen and TNT incorporate a range of financial and non-financial measures, and use both internal and external measures of performance. This is consistent with the prescriptions of the literature

outlined in section 2. There is an implicit balance between the range of performance measures used, their belief is that if the "determinants" of performance, such as service quality and efficiency, are monitored and controlled then profitability and market position will result.

In each case, performance measures are linked to corporate strategy which seems to reinforce the organisation's critical success factors to all employees. At Arthur Andersen, internal perceptions indicate that the firm's strategy is very well understood throughout the organisation. Individuals understand their individual and collective responsibility for the reputation, style and quality of the organisation and this is clearly motivating individual performance. "No surprises" was a recurring phrase during our research interviews; the idea being that if you keep clients fully informed of issues or problems during the process of a project, for example taking an aggressive stand on a tax issue the outcome should not come as a shock. The same "no surprises" philosophy underpins the staff reviewing process with the rating forms giving regular feedback prior to the annual or six monthly reviews. These rating forms are a recurring feature of life at Andersens. As one employee commented, "you are rated as soon as you walk through the door", comprehensively, from how you dress and conduct your relationships with colleagues and clients to your technical skills. The rating forms also reinforce the emphasis on client service, as one partner explained;

"we tell people all the time the focus is the client, we are about client service, our rating forms right down to assistant rating forms are on technical skills and client service. They know all the time that client service is of fundamental importance and they learn what aspects are going to be critical to their own advancement in the firm"

In similar fashion, TNT needs to ensure that it delivers the goods at the right time and to the right place. This is well understood throughout the organisation. Almost all personnel interviewed mentioned the overriding need to "get the service level right", and could see how their own roles, whether in management, sales, operations, or administration, helped with this objective. The specific sets of (functional) performance measures also echoed different aspects of TNT's corporate strategy. For example, operations' measures have a clear focus on deliveries-on-time, sales' measures on volumes achieved. In both Arthur Andersen and TNT the benchmarks for comparing performance results are internally generated. While external benchmarks might be desirable, these are not available in the public domain for either organisation.

Quality of service, then, is seen as critical. Section 3 proposed that the service archetype would influence the measurement mechanisms for service quality. Evidence from the two cases supports this. Both organisations recognise that service quality means more than saying 'have a nice day', it is the entire package, the goods, the tan-

gible physical objects that are used within the service system or removed from it by the customer; the environment where the service takes place and the service provided. For a "professional" service like Arthur Andersen this means measuring the quality of the customer experience from initial contact to job completion and beyond, which is done by a partner who has overall responsibility for planning and co-ordinating all the services on behalf of his/her client. This customer perception of the quality of service provided is matched with an internal review of the staff involved in the service provision evaluating a range of technical and personal skills. For a "mass" service like TNT the critical success factor is to deliver the goods to the right place at the right time so a key performance indicator, keenly monitored, is "on time delivery". In addition they have adopted a formal customer care programme and performance against this standard is monitored regularly, by internal management checks and the use of 'mystery shoppers'. The essential difference in the measurement of quality for these two organisations, then, is that for Arthur Andersen quality is measured for every customer whereas TNT relies on sampling, a direct result of the differing sizes of the customer base. The mechanisms and measures for monitoring service quality at Arthur Andersen and TNT are summarised in exhibit 7.

Quality	Arthur Andersen	TNT
Measure Mechanism	contract fulfilment	on time delivery
Internal	staff rating forms	delivery statistics
External	client evaluation interview	mystery shopper, customer surveys

**Exhibit 7**: Quality Measures and Mechanisms

Section 3 also suggests that there is a link between the service archetype and the scope for and means of providing flexibility. The perishability of services implies that managing capacity is important; there is a need to respond to fluctuations in demand whilst keeping costs under control. Flexibility is fashionable, but it is used by managers to mean different things. There are three types of flexibility: volume, delivery speed and specification (Fitzgerald et al [2]). For a professional firm, providing all three types of flexibility is important, dealing with peaks of demand (volume flexibility), satisfying widely differing customer needs in terms of project completion times (delivery speed flexibility) and designing a customised project for each client (specification flexibility). The key to providing flexibility in Arthur Andersen is the extensive

training provided to staff. In keeping with the one-firm concept, many courses are run on an international basis so employees have the opportunity to meet and study with colleagues from around the world. This in turn provides consistent standards throughout offices and consequently facilitates both project and staff sharing between offices to satisfy customer needs. The problems in providing flexibility faced by a "mass" service like TNT are somewhat different. In the short term, volume flexibility can be managed by hiring extra delivery vans, but in the longer term volume flexibility can only be met with increased capacity in the whole system, through perhaps a larger central hub or additional, smaller hubs on a localised basis (recently, TNT have indeed opened a second hub in the south-east for London specific freight). There is limited scope for varying delivery speed such as a faster processing time to meet specific customer needs, or a customised service to satisfy a particular requirement, since essentially a standardised service is being provided. Exhibit 8 summarises these differences in providing service level flexibility. While both organisations employ some mechanisms for providing flexibility, neither formally measure this aspect. The nature of flexibility does not really lend itself to regular, routine reporting.

Type of Flexibility	Arthur Andersen	<u>TNT</u>
Volume	high degree of flexibility	limited flexibility
mechanism	world-wide transferability of staff	sub-contracting collections and deliveries
Delivery Speed	some flexibility	little flexibility - average response times built into the system
mechanism	job scheduling, staff transferability	delivery speed governed by the (limited) product range
Specification	high degree of flexibility	little flexibility
mechanism	customised service is provided for each customer	standardised product range

**Exhibit 8** : Scope for Providing Flexibility

#### 6. Couclusions

This paper has investigated the performance measurement systems adopted within two successful UK organisations - one a professional service, the other a mass service - and compared them in the light of theoretical prescriptions from performance measurement frameworks in the literature. There are three common properties of the system and two areas of divergence. The common properties are *clarity*; there is clear communication of strategy to individuals within the organisation, *consistency*; the performance measures adopted support the corporate strategy, and *range*; both organisations measure performance over a range of financial and non-financial dimensions as advocated in the literature. These companies recognise that performance measurement is an essential part of any feedback control system and that what gets measured gets managed. Unsurprisingly, the measures of "results" are fairly consistent between businesses; competitiveness, in terms of market share and repeat business, and financial performance in terms of profit and liquidity. Differences, though, emerge in the mechanisms used to measure *quality* and the approach to providing *flexibility*, the *how* of performance measurement.

The paper has focused on identifying the dimensions of performance to be measured and the influences of business archetype on the mechanisms used. This is only the first stage of the management control process. These measures need to form part of a control system where standards or targets are set for measures, achievement of targets is monitored and corrective action taken; a feed-forward / feed-back control system. Further case study based research into such control systems across all three service business archetypes would be fruitful in providing further insights to the theory and practice of performance measurement. In addition, such studies might examine whether there is any evidence that trade-offs between different performance measures lead to conflicts within an organisation; for example conflicts between cost and quality of service, or between short-term and medium or long-term performance.

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