

COST REDUCTION THROUGH IMPROVED OFFICE METHODS, SYSTEMS AND PROCEDURES

—a case study—

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by

HERCULAAS SMIT VAN DYK

B. COMM. (U.S.), HONNS B. COMM. (P.U.), C.I.S.

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PROF. A. J. E. SORGDRAGER D. Econ., F.C.W.A.

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THE PROBLEM DEFINITION

1. INTRODUCTION

The size and complexity of the world's business concerns are growing every day - the Republic of South Africa is no exception. Efficient management is becoming more and more aware of the importance of the systems which are in fact the life blood of their various enterprises.

Forms are the nerve-network of a system. They carry the messages; initiate action and supply data for decisions. When filed completed they become the memory centre of the system. Forms compel obedience to routine. Without forms, systems cannot exist because systems operate through the medium of forms. Just consider the end products of systems :- record, report, control, notify, transfer, etc. - each one is effected through the use of a form. H.J. ROSS (-The technique of systems and procedures-, Office research institute, P.O. Box 744, Miami 43, Florida. p.217) states that : -when you are in search of what makes a system tick you must sooner or later ask for the forms. -cherchez la femme- (look for the woman) has become a by-word in criminal investigations. So -cherchez les forms- must become your by-word. All forms involved in a system reveal how it functions, or, as the evidence may also reveal, malfunctions. If you are to simplify a system it is the paperwork, that must undergo simplification.- A statement which will be elaborated upon in the following chapters.

2. THE FIELD OF OFFICE METHODS, SYSTEMS AND PROCEDURES

In many respects the office may be compared to the factory. The problems of management and supervision are comparable such as materials, machines, personnel and costs. An efficient office demands

the application of the same dynamic principles of scientific management as are required in factory administration. The ultimate objective in both cases are to produce as efficiently as possible with the ultimate objective of company continuation and maximum contribution to company profits.

The basic difference between the office and the factory is that materials are processed and converted to saleable articles in the factory whereas business papers are processed and finalized in the office.

The difference is therefore a question of degree.

In order to improve efficiency, the attention of top management was first of all focussed on the factory where the technique of work study was developed. As business undertakings progressed and administration became more complex, management realised that the office became another important field where savings can be effected by improved efficiency. In this regard R.N. LEHRER (-The management of improvement - concepts, organisation and strategy-, Chapman and Hall Ltd., London p.116) says : -are we attacking the wrong end of the paper dragon.? In a sense, yes. More improvement effort is needed at top management or total system level if we are to achieve a substantial reduction or streamlining in paperwork requirements.- This statement will be further scrutinised in the following chapters.

The concepts of work study viz. methods study and work measurement were transferred from the factory to the office. Work measurement falls outside the scope of this study and will not be commented on. Methods study will be described as follows :-

- a. the basic problem
- b. the objectives

- c. the elements
- d. desired accomplishments

The points enumerated in a - d will now be scrutinized more closely.

a. The basic problem

There are usually many ways of doing a job. One of the techniques of distinguishing the most efficient method from the others is by methods study.

Office methods study can be defined as the intelligent selection of the superior method from the various possible ways the job can be done. This selection of the most effective solution is based on facts obtained by organised research, investigation and analysis. In practise the facts required for conclusions are obtained by :-

- (1) consultation
- (2) observation
- (3) research

Before any project of office methods study is undertaken the objectives should be formulated, the project being studied, thoroughly comprehended and the accomplishments pre-determined.

b. The objectives

The objectives of office methods work are as follows :-

- (1) eliminate
- (2) combine
- (3) simplify
- (4) improve

Everything not absolutely necessary should be eliminated. If the entire subject cannot be eliminated the unnecessary details should be eliminated. If no further elimination can be done, the next objective will be to combine. In combining, details will usually be eliminated, resulting in a simplified and improved method. Methods can be simplified by :-

- (1) changing the sequence of operation
- (2) re-arranging the work place
- (3) re-designing the form

c. The elements

The fundamental elements in office work are :-

- (1) procedure
- (2) record form
- (3) report and communication
- (4) filing
- (5) equipment - machines and special devices
- (6) workplace
- (7) personnel

These basic elements are so closely related to each other that a change in one may require revision in one or more other elements in order to achieve the desired result.

d. Desired accomplishments

In office methods work like in all betterment work, the desired accomplishments are :-

- (1) the best improved system giving maximum information
- (2) with the least amount of effort
- (3) in the shortest period of time

3. TERMS OF REFERENCE

The terms of reference regarding the investigation was approved by the management committee of the company and can be summarised as follows :

- a. To provide a system that will ensure better recording and safeguarding of inventories
- b. To provide a system that will ensure administrative cost savings through integration of functions and elimination of any duplication of effort

4. THE CASE

The case study is the result of an actual investigation at Importers Limited as stated in the terms of reference. The major portion of the business activity of Importers Limited (approximately 80% of R20 million), consists of imported agricultural machinery sold through a dealer organization comprising 120 retail outlets strategically situated throughout the Republic of South Africa and South West Africa. Due to transport cost savings, shortest possible delivery times and a uniform pricing policy of -f.o.r. coast-, warehousing is done at head office premises as well as the following six harbours viz :-

- a. Durban
- b. East London
- c. Port Elizabeth
- d. Cape Town
- e. Walvis Bay
- f. Lourenco Marques

Warehousing administration at the various harbours is undertaken by the company's shipping agents who are instructed from head office. An outline of the present organisation structure of Importers Limited is shown in A-1.

Annexures will be numbered A-1, A-2 etc. and referred to as A-2, A-3 etc.

5. METHOD

The basic method of investigation that will be followed is :-

- a. consultation by means of personal interview with the relevant personnel involved
- b. observation of current methods, procedures and systems
- c. research

6. CLASSIFICATION OF THE STUDY

Chapter 1 will be devoted to a factual description of the present methods used for receiving, warehousing, despatching and invoicing of commodities. The methods in each department will be discussed

viz :-

- a. traffic and shipping department
- b. planning and procurement department
- c. machines distribution department
- d. inventory control department

Chapter 2 will cover an examination of the facts, including the pointing out of weaknesses and the lack of management information.

Chapter 3 will be devoted to the development of improved methods. In order to improve clarity and facilitate comprehension, each method will be described, the advantages outlined and the estimated cost savings enumerated, viz :

- a. receiving and warehousing
- b. despatch and invoicing
- c. -original equipment- tyres and batteries
- d. inventory recording
- e. recording outstanding machine orders
- f. summary of anticipated cost savings

As a final thought consideration will be given in the Epilogue to the logical and psychological approach in implementing the change.

CHAPTER 1

A FACTUAL DESCRIPTION OF THE CURRENT METHODS

1. INTRODUCTION

In the Problem Definition, reference was made to the organization structure in which the relevant departments for the purpose of this study are clearly indicated.

In this chapter the current procedures in operation in each department will be considered separately. The procedures in the traffic and shipping department, the basic responsibility of which is to receive, warehouse and despatch, must be considered first.

The second section will be devoted to description of the procedures in the programme planning department which takes care of the despatch administration and recording of inventory.

This will be followed by a description of the procedures in the machines distribution department responsible for receiving of dealer orders and invoicing.

Finally the procedures in the inventory control department will be considered.

2. TRAFFIC AND SHIPPING DEPARTMENT

a. Introduction

Before the actual procedures are described, a brief outline will be given of the responsibilities of the traffic and shipping manager followed by an enumeration of the various documents processed and prepared by this department.

b. The traffic and shipping manager is responsible for :-

- (1) receiving, warehousing and physical despatch of machines
- (2) communication with and direction of shipping agents regarding landing and forwarding of shipments
- (3) collection and preparation of complete sets of shipping documents for forwarding to the overseas creditors department in the controller's division
- (4) liaison with the programme planning manager and the machines distribution manager regarding despatches

c. The following list indicates the relevant documents processed and prepared by this department :-

- | | |
|-------------------------------------|-------------|
| (1) bill of lading | |
| (2) supplier's invoice | |
| (3) debit note from shipping agents | |
| (4) despatch instruction (D/I) | (E - 1) * |
| (5) transfer instruction (T/I) | (E - 2) |
| (6) goods received voucher (G.R.V.) | (E - 3) |
| (7) import shipping register | (E - 4) |
| (8) S.A.R. goods consignment note | (E - 5) |

*All exhibits will be numbered E-1, E-2, etc. and referred to as E-2, E-3, etc.

d. Receiving procedure

Upon receipt of a bill of lading a shipment number is assigned to the shipment and the relative information entered in the import shipping register.

Copies of the bill of lading are then forwarded to programme planning department and to the shipping agents. One copy is retained and filed temporarily in a separate file (shipping file) for each shipment; awaiting the receipt of the supplier's invoice, debit note from shipping agents and the goods received voucher (will be known as G.R.V.). Forwarding of shipping files to the controllers division for payment, are often delayed due to the irregular or late receiving of the latter documents.

When the supplier's invoice is received the invoice number is recorded in the import shipping register and the quantities and descriptions compared with the bill of lading; prices and extensions are also checked. Discrepancies are recorded and followed up with the supplier. Copies of the supplier's invoice are then forwarded to the programme planning department and the shipping agents, while one copy is filed in the shipping file.

G.R.V.'s are issued by the shipping agents for all goods that are received, irrespective of whether items are :-

- (1) warehoused at the shipping agent's warehouse
- (2) railed direct ex docks
- (3) forwarded to head office warehouse

G.R.V.'s are issued before the commodities are railed from the docks at the various harbours and great difficulty is often experienced

in the identification of the various items to be recorded.

Transfers between warehouses are initiated by transfer instructions followed by a G.R.V. issued by the receiving warehouse.

G.R.V.'s are distributed as follows :-

- (1) 1 copy to overseas creditors department
- (2) 1 copy to programme planning department
- (3) 1 copy to inventory control department
- (4) 1 copy to traffic and shipping department
- (5) 1 copy retained by originator

Upon receipt of the G.R.V. the G.R.V. number is entered in the import shipping register and the quantities and descriptions compared with the supplier's invoice. Any discrepancies are taken up with the shipping agents.

As soon as the debit note from the shipping agent is received for landing, handling and clearing charges, the various charges are checked and the debit note filed in the shipping file. Completed shipping files are forwarded to the overseas creditors department daily.

e. Despatch procedure

(1) Despatch instructions - head office warehouse

Upon receipt of a set of despatch instructions, known as D/I's, (two copies) from programme planning department, commodity code numbers are checked against descriptions.

One copy is forwarded to the warehouse foreman and the second copy is retained as a permanent record of outstanding (i.e. D/I's awaiting execution) and executed D/I's.

The warehouse foreman selects the relevant commodities and forward the various items together with the D/I to the despatch foreman. The despatch foreman prepares a consignment note in triplicate; two copies are to accompany the goods and one copy together with the completed D/I is forwarded to the traffic and shipping office. To complete the D/I the following information is entered by the despatch foreman :-

- (a) signature of authorised representative
- (b) case/serial number(s)
- (c) consignment note number(s)
- (d) truck number(s)

The traffic and shipping office transcribes the consignment note number onto the permanent filing copy of the D/I and transfers the latter to the -D/I's executed- file. The D/I together with the consignment note is then forwarded to the machines distribution department for invoicing.

(2) Despatch instructions - coastal warehouses

Same as e(1)

(3) Transfer instructions

A despatch instruction is an instruction to forward certain commodities to a customer, whereas a transfer

instruction is an instruction to forward certain commodities to another warehouse. The despatch procedure therefore remains unchanged to that outlined in e(1) except that the final set of documents are forwarded to programme planning department for availability and inventory recording instead of machines distribution department for invoicing.

3. PROGRAMME PLANNING DEPARTMENT

a. Introduction

Before the actual procedures are described, a brief outline will be given of the responsibilities of the programme planning manager, followed by an enumeration of the documents processed and prepared by this department.

b. The programme planning manager is responsible for :-

- (1) scheduling and placing of orders on overseas suppliers and certain local suppliers of accessories to machines
- (2) liaison with the machines distribution manager regarding changes in sales forecasts
- (3) maintaining commodity availability records per inventory location
- (4) communication with the various inventory locations regarding instructions for despatch

c. Apart from the documents already mentioned in 2(c) the following

addisitional documents are processed and originated by this department :-

- | | |
|--------------------------------|------------|
| (1) availability record card | (E - 6) |
| (2) back order record card | (E - 7) |
| (3) import register | (E - 8) |
| (4) back order allocation slip | (E - 9) |
| (5) pre-printed telex forms | (E - 10) |

d. Compilation of import register

The import register kept by this department serves as a reference for communications with inventory locations. This is a complete duplication of the import shipping register kept by traffic and shipping department and is compiled in the same manner from copies of the same documents.

e. Despatch instruction procedure

Upon receipt of a machine order, known as an M/O, from machines distribution department, commodity code numbers are checked against descriptions, and the relative availability record card consulted for availability and inventory location of each specific commodity. If the commodity is available a D/I number is allocated and entered on the M/O. If the commodity is not available the specific item is back ordered and marked -B/O- on the machine order.

It is the policy of the company to keep inventory levels as low as possible. Orders are placed strictly in accordance with sales forecasts. Consequently the back order procedure comes into operation quite frequently.

A set of despatch instructions (1 + 6 copies) is now prepared from the details on the machine order.

Despatch instructions are typed on N.C.R. paper (i.e. no carbon required) and before distribution each set is checked by the section supervisor who also signs them. Distribution is as follows :-

- (1) original and 1 copy to supplying warehouse
- (2) 2 copies to traffic and shipping department
- (3) 1 copy to dealer
- (4) 1 copy to inventory control department
- (5) 1 copy retained by programme planning department

At this stage I would like to explain a complication regarding the prepreparation of D/I's.

The present commodity code number consists of a basic code number indicating the type of machine plus a suffix indicating the size and type of tyres and batteries for machines which require the latter. In order to keep inventory levels at a minimum, tyres and batteries are purchased locally on a blanket order basis.

A blanket order is an order which is placed with a supplier to supply these items upon receipt of a despatch instruction as and when required.

The full commodity code appears on the machine order, and, instead of one D/I originating from a specific line on a machine order, it can easily happen that three D/I's will have to be prepared - one for the basic machine and one each for tyres and battery. Dealers also have the option to request specific makes of tyres and batteries, which further complicates matters.

Occasionally it happens that the dealer, before receiving his shipment, lodges a request to have the make of tyres or battery changed. The marketing director insists that requests from dealers are met wherever possible, and consequently it can happen that an additional D/I is issued, even if it is too late to cancel the previous one. If consideration is given to the fact that invoicing, which will be discussed in paragraph 4e, is done on the basis of complete units only, it will be realised that a dealer can easily receive two sets of tyres and batteries and only be charged for one set. A special control system is operated by the inventory control department in order to prevent losses to the company. This will be discussed in more detail in paragraph 5.e.(2).

f. Transfer instruction procedure

Transfer instructions, known as T/I's, are issued for transfers between inventory locations. The information appearing on the T/I is identical to that of the D/I.

Although this department is responsible for the preparation of T/I's, the actual request may originate from various sources, such as the individual warehouses, the sales department, machines distribution department, etc. No formal document for conveying these requests is in existence. Communication is done personally, per telephone, per telex and various other haphazard methods.

Distribution of T/I's is :-

- (1) original plus 1 copy to supplying warehouse
- (2) 2 copies to receiving warehouse
- (3) 1 copy retained by programme planning department

g. Back order procedure

(1) Recording back orders

Back orders are recorded on back order record cards, which are kept per commodity. As soon as D/I's are issued for all the available items on a machine order, the latter is passed to a back order record clerk who enters the information on the back order record card for each item marked -B/O- :-

The following details appear :-

- (a) machine order date
- (b) machine order number
- (c) dealer
- (d) quantity back ordered

The machine order is then returned to machines distribution department where they are filed per dealer in date order.

(2) Executing back orders

Before describing the actual procedure I would like to give an outline of the general policy environment in which the procedure operates.

Due to the additional costs and the time involved, it is company policy to despatch direct ex docks (i.e. before commodities are taken into the warehouse) as many items as possible. In order to achieve this objective, the shipping agents insist on having full instructions regarding despatches three days before the ship docks. Shipments

on cargo ships usually pose no problem, because shipping documents are available long before the arrival of the boat. Shipments on mail ships, however, often cause trouble, because of the time factor involved in the availability of advance information.

As soon as a bill of lading is received, it is compared with the back order record cards, in order to ascertain whether it will be necessary to affect despatches - direct ex docks -. If back orders exist for the specific commodities indicated on the bill of lading, the following procedure comes into operation.

The current information on the back order record card is transcribed onto a note book sheet in duplicate. A copy of the latter, together with the bill of lading, is forwarded to the machine distribution manager, who allocates each commodity on the bill of lading to the various dealers concerned.

Upon receipt of the allocation slips, together with the relevant machine orders from the machines distribution department, the quantities allocated, are entered on the back order record card and the balance still outstanding, brought forward. Despatch instructions are then telexed to the various inventory locations and confirmed.

When the information on the bill of lading is proved incorrect, in the sense that the actual items off-loaded from the ship, differ from the quantities stated on the bill of lading, the programme planning manager is immediately

advised (telex) by the shipping agents. This results in the cancellation of all relevant documents issued so far, and the reversing of all relevant entries made on record cards.

It must be remembered that 3 days have passed in the meantime.

The entire procedure is then started all over again.

No formal document exists for an orderly cancellation, the latter being done by telephone, telex, inter office memorandum or other emergency methods.

h. Updating commodity availability record cards

Commodity availability record cards are kept per commodity, indicating both total and individual availability per location. Posting to cards is effected through a keyboard accounting machine.

(1) Receipts

The basic document for recording receipts is a copy of the goods received voucher (G.R.V.) prepared by the various inventory locations. Two runs of G.R.V.'s are posted daily in order to have the availability information as up to date as possible. The accounting machine automatically does the necessary arithmetic and also ensures that, provided it is operated correctly, entries are not effected to the wrong commodity card.

In the case of shipments -direct ex docks-, D/I's are

actually issued before G.R.V.'s are received and consequently -pro forma- G.R.V.'s are generated internally to prevent the availability record from showing credit balances. As soon as the actual G.R.V. is received, it is compared with the -pro forma- G.R.V. and filed with the latter. Any discrepancy is followed up and corrected immediately.

(2) Issues

The basic document for recording issues is a copy of the despatch instruction generated internally. Similar to G.R.V.'s, D/I's are posted twice daily, just after the G.R.V. run has been completed.

(3) Transfers

The basic document for recording transfer, is a transfer instruction, generated internally. Posting is done twice daily and has the effect of reducing availability at any one location, and increasing the quantity in transit. As soon as a G.R.V. relating to a T/I is posted, this has the effect of reducing the quantity in transit and increasing the availability at the receiving warehouse. This interim (-in transit-) stage prevents the issuing of D/I's for items which are still on their way between warehouses.

This procedure, however, gives rise to the situation where one G.R.V. can indicate a genuine receipt, which will increase total availability, whereas another G.R.V. may form part of a transfer, which only indicates a movement from one location to another.

(4) Reservation of inventory

In order to be able to tender for certain government and other contracts, a procedure exists whereby certain commodities can be reserved for these tenders.

No document for recording this information is in existence and communication is normally done by inter office memoranda. Posting of this information on the commodity availability card has the effect of reducing availability at any one or more locations, and increasing the availability in the -reserved for tenders- column. D/I's for tenders are marked -tender- with a rubber stamp, which results in a special operation by the machine operator, in order to reduce the quantity in the -reserved for tenders- column.

i. Availability and activity report

The programme planning department produces a monthly availability and activity report showing total availability, receipts and issues (called sales) per commodity for the month.

Due to the way in which the procedure operates, the information on this report never corresponds with the financial information from the controller's division, where receipts are only recorded when commodities are physically received, and sales are recorded from copies of customers' invoices. This report is used as the basis for the planning of future orders and inventory levels.

4. MACHINES DISTRIBUTION DEPARTMENT

a. Introduction

Before the actual procedures are described, a brief outline will be

given of the responsibilities of the machine distribution manager, followed by an enumeration of the various documents processed and prepared by this department.

b. The machines distribution manager is responsible for :-

- (1) receiving of all orders from dealers
- (2) keeping record of outstanding orders
- (3) invoicing
- (4) allocation of back orders
- (5) communication with dealers regarding orders,
invoices and despatches

c. Apart from the documents already mentioned in previous paragraphs, the following additional documents are processed and originated by this department :-

- | | |
|--------------------------------|------------|
| (1) machines distribution card | (E - 12) |
| (2) invoice | (E - 13) |
| (3) debit note | (E - 14) |
| (4) credit note | (E - 15) |

d. Machine order procedure

Orders are received by mail or per telephone. Mail orders are on pre-printed machine order forms, whereas telephone orders are taken down on a notebook and transcribed onto a standard machine

order form.

All machine orders are scrutinised for correctness and completeness regarding the following :-

- (1) dealer code number
- (2) commodity code number and description
- (3) delivery date
- (4) method of despatch (special attention to road motor service)
- (5) destination

After ensuring completeness of the M/O, it is forwarded to the credit control manager for credit approval and upon return from the latter, entered on the machines distribution card showing:-

- (1) dealer name
- (2) machine order number (company no. and dealer no.)
- (3) quantity ordered

The machine order is then forwarded to programme planning department for arrangement of despatch. Executed orders from programme planning department are filed per dealer.

Upon receipt of back order allocation slips, M/O's are plucked from the files and forwarded to programme planning department again for further processing.

No distinction is made in the filing system between completed and uncompleted orders although items supplied are marked with the date and D/I number.

e. Invoicing procedure

The basic information for invoicing is acquired from the set of documents (i.e. completed D/I plus consignment note) described in paragraph 2e(1). Upon receipt of these documents from the various inventory locations, they are first of all scrutinised for completeness regarding signatures, truck and serial numbers, etc.

Prices and extensions are then inserted on the D/I and documents forwarded to a typist who prepares the invoice on a typewriter.

Before distribution all invoices are checked for :-

- (1) dealer's code number
- (2) pricing errors
- (3) extension errors
- (4) general typing errors

Distribution of invoices is as follows :-

- (1) original plus 1 copy to dealer
- (2) 1 copy to inventory control department
- (3) 1 copy to controller's division
- (4) 1 copy retained by machines distribution department

The copy of the invoice retained by machines distribution department is now used to update the machines distribution card; invoice number and quantity supplied, is entered against each order number.

The machines distribution card is used to establish a complete history of outstanding orders and also a sales analysis per machine, and is used to a large extent for short and long term planning.

f. Basis of allocation of back orders

No basis for allocating back orders is in operation. This matter is left entirely to the discretion of the machines distribution manager who allocates back orders according to his latest information about the most pressing needs.

g. Debit and credit note procedure

All miscellaneous charges and adjustments on dealers' accounts are made by means of debit or credit notes. Apart from the procedure for tyres and batteries, this procedure falls outside the scope of this exercise - the latter will be discussed under inventory control in paragraph 5.(e).

5. INVENTORY CONTROL DEPARTMENT

a. Introduction

Before the actual procedures are described, a brief outline will be given of the responsibilities of the programme planning manager, followed by an enumeration of the documents processed and prepared by this department.

b. The inventory control manager is responsible for :-

- (1) planning and controlling of inventory levels

- (2) preparation for, and administration of annual and interim inventory counts.
- (3) maintenance of internal control and safeguarding of inventories.

c. Apart from the documents mentioned previously, the following additional documents are processed and originated by this department :-

- (1) supplier's invoice
- (2) control book (E - 16)

d. The planning and controlling of inventory levels, and the preparation and administration of annual and interim inventory counts, fall outside the scope of this script.

e. Despatches not invoiced

The following procedure ensures that every despatch is invoiced :-

- (1) control book - machines

D/I numbers are pre-entered in the control book in numerical sequence. As soon as D/I's are received from programme planning department, a tick (✓) is made in the D/I issued column. Outstanding numbers are followed up periodically, thus ensuring a complete sequence of D/I's.

Upon receipt of invoices from machines distribution department, each invoice is compared in detail with the relevant D/I and the invoice number inserted in the -invoice compared- column. Discrepancies are immediately

advised to the machines distribution manager, who ensures the preparation of the necessary debit or credit note.

D/I numbers for basic machines as well as
D/I numbers for tyres and batteries are
cross referenced on invoices.

(2) control book - tyres and batteries

A separate control book is kept for tyres and batteries. D/I numbers are pre-entered in the control book. As soon as D/I's are received from programme planning department, a tick (✓) is made in the -D/I issued- column. Invoices are compared with D/I's, and the invoice number inserted in the -invoice compared- column. As soon as the supplier's invoice (tyres and batteries), which is cross referenced with the relevant D/I number, is received, it is compared with the D/I, and the invoice number inserted in the -supplier's invoice- column.

Supplier's invoices, which are in agreement with D/I's, are approved for payment by the inventory control manager and forwarded to the local creditors department for payment. Discrepancies are followed up with the supplier and the necessary adjustments made.

From time to time (normally monthly) D/I's for which the supplier's invoice has already been recorded but no internal invoice yet, are advised to the machines distribution manager who ensures the preparation of the necessary debit notes.

6. CONCLUSION

The procedures outlined in this chapter, prove to produce fairly accurate results but also very cumbersome to operate.

CHAPTER 2

A CRITICAL EXAMINATION OF THE FACTS

1. INTRODUCTION

In chapter 1 the methods in operation in each department have been described. Upon analysing these methods the following basic classification can be established :-

- a. Receiving and warehousing
- b. Despatch and invoicing
- c. -Original equipment- tyres and batteries
- d. Record keeping - inventory
- e. Recording of outstanding machine orders

In this chapter each method will be considered separately. Discrepancies and inefficiencies will be pointed out with particular regard to recording and safeguarding of inventory and duplication of administrative effort.

2. RECEIVING AND WAREHOUSING

a. Recording and safeguarding of inventory

(1) Reconciliation per shipment

The present system is designed to accumulate basic information per incoming shipment. This is a very logical and effective method of first entry because all relevant basic documents such as bills of lading, supplier's invoices, debit notes from shipping agents and G.R.V.'s may easily

be related to a specific shipment. However, certain advantages regarding inventory control are lost, because the system is not concluded properly, namely dealers' invoices are not related to a specific shipment.

(2) Incorrect information on bill of lading

No provision is made in the present system to deal with incorrect information on a bill of lading. Any emergency method is used which often leads to incorrect recording and possible loss of inventory.

(3) Incorrect information on goods received voucher

Goods received vouchers (G.R.V.'s) are issued for every commodity on a shipment. Many despatches are effected direct ex docks where proper identification is almost impossible. Basic documents, instead of actual inspection of cases, are used to prepare G.R.V.'s which often leads to incorrect information and complete lack of control over what has actually landed.

b. Administrative inefficiencies

- (1) As the system makes no provision for an organised method of communication between departments, two identical import registers are maintained. This obviously results in unproductive clerical labour.
- (2) The shipping agents do not follow a standard line of communication because the responsibilities of each department are not properly identified. This results in delays of vital information reaching the required action centre.

- (3) The telex machine is used for routine communication instead of in exceptional cases only.
- (4) Inaccurate information on G.R.V.'s not only causes additional work but also leads to wrong decisions being taken on availability and subsequent delivery.

3. DESPATCH AND INVOICING

a. Recording and safeguarding of inventory

- (1) Duplication of identical information on despatch instruction, consignment note and invoice

Basic information originating from the dealer order is transcribed onto a D/I and copied from there onto a goods consignment note, from where it is finally copied onto an invoice. This results in numerous errors such as incorrect machines being despatched and incorrect invoices being issued.

- (2) Control book - machines

Because three individual sets of documents are prepared by three different departments a special control system is in operation to ensure that an invoice is prepared for every item despatched. This system is dependent upon human judgment and provides no automatic safeguard against items supplied but not invoiced.

b. Administrative inefficiencies

- (1) Duplication of identical information

As explained in 3.a.(1) above, identical information is

re-written three times. This obviously results in unproductive clerical labour not only in writing but also in checking, typing and cross referencing.

(2) Control book - machines

The clerical work involved in maintaining this system is the result of an after thought to improve an overall inefficient system and should be eliminated completely.

(3) Reconciliation with financial books of account and physical inventory counts

The establishment of an accurate -cut off- point for reconciliation purposes is almost impossible due to the difficulty to establish which D/I's have not been invoiced. This often causes many hours of unproductive labour for senior personnel.

4. -ORIGINAL EQUIPMENT- TYRES AND BATTERIES

a. Recording and safeguarding of inventory

(1) Commodities supplied but not invoiced

The system described in chapter 1, paragraph 3.e. lends itself to commodities being supplied without being invoiced which can result in heavy losses to the company. The control system described in chapter 1, paragraph 5.e(2) is still dependent upon human judgment and provides no automatic safeguard against this fallacy.

b. Administrative inefficiencies

(1) The present method whereby more than one document may

originate from one line on a machine order, results in many mistakes, mainly omissions, and should be improved by providing a system which will automatically eliminate this problem.

(2) The practice of dealers being allowed to change original specifications also results in many mistakes, mainly supplying duplicate requirements, and should be curbed as far as possible.

(3) Same as 3.b.(2) above.

5. RECORD KEEPING - INVENTORY

a. Recording and safeguarding of inventory

(1) Availability record used as inventory record

In very much the same way as the record per shipment described in paragraph 2.a.(1), the present availability record is not concluded to give maximum advantages. The availability record may easily be modified to provide a proper inventory record by the addition of a further basic document viz. the invoice. A proper unit inventory record is presently non-existent. This results in misleading information regarding planning for inventory purchases and also inaccurate reporting regarding despatches and sales.

(2) Reconciliation of unit records with value records

Monthly reconciliation of unit records with value records is impossible as a monthly routine - largely due to the abnormal volume of adjustments to be made between D/I's issued and

commodities actually despatched and invoiced.

(3) Comparison with sales forecast

The present systems lends itself to easy comparison with sales forecasts but this is simply not done at present. D/I's issued are erroneously regarded as sales and reported as such in the monthly report. This report may largely be improved if actual sales are reported and compared to the sales forecast.

b. Administrative inefficiencies

- (1) The capacity on the accounting machine is only partly utilised.
- (2) Reconciliation between unit records, value records and physical counts is a major task, consuming many productive hours of senior personnel.

6. RECORDING OF OUTSTANDING MACHINE ORDERS

a. Recording and safeguarding of inventory

(1) Record of orders on hand

Although the outstanding machine orders are recorded both on the machines distribution card and the back order record card, it is not summarised in such a manner as to supply significant information for management. It is used for reference and operating purposes only whereas it should be a source of basic information for short term planning.

(2) Service to dealers

The present system is too clumsy and unworkable to form the

basis of a proper feedback of information to dealers.

b. Administrative inefficiencies

(1) Duplication of records

Outstanding machine orders are recorded on the back order record card whereas the same information is also available from the machines distribution card.

7. CONCLUSION

The imperfections of the present system are summarised as follows :-

a. Lack of co-ordination and integration between departments

Because procedures were allowed to develop in an unplanared manner, as and when required, departments developed into -seperate empires-. This resulted in :-

- (1) documents being designed to serve the purpose of each department without realising the overall objective
- (2) the installation of additional procedures to correct the imperfections of current procedures
- (3) both people and machines working below maximum capacity
- (4) the recording of similar information in more than one department

b. Procedures not properly concluded

The effectiveness of procedures, which may basically be completely

sound, is hampered, and in many instances very valuable controls are sacrificed, because the concluding stage of the specific procedure is omitted.

c. Lack of management information

Although most of the information required by management is recorded in some or other form, meaningful management reports are almost non-existent.

d. Procedures not flexible enough to cope with non-standard situations

Because no provision is made to handle non-standard situations, use is made of emergency and often haphazard methods.

e. Lines of communication not properly defined

Vital information is often delayed or even lost because standard lines of communication are not defined.

CHAPTER 3

DEVELOPMENT OF IMPROVED METHODS

1. INTRODUCTION

In this chapter an improved procedure will be outlined for each of the basic methods enumerated in chapter 2 viz :-

- a. Receiving and warehousing
- b. Despatch and invoicing
- c. -Original equipment- tyres and batteries
- d. Record keeping - inventory
- e. Recording of outstanding machine orders

The advantages of each procedure will be indicated, followed by a summary of anticipated annual direct cost savings.

Due to the abnormal high volume of detailed calculations resulting from time studies and analysis of historical figures, only summaries of anticipated savings are shown in the script.

2. RECEIVING AND WAREHOUSING

a. Purpose

To set forth a procedure, the administration of which will be under the direction of the general planning and procurement manager, for the control of inventory per shipment.

b. Traffic and shipping department - first source of information

Upon receipt of a bill of lading the traffic and shipping manager

shall ensure :-

- (1) Preparation of a shipment and inventory reconciliation sheet (E-17) for each type of commodity on the shipment, showing :-
 - (a) name of vessel
 - (b) shipment number
 - (c) port of discharge
 - (d) anticipated arrival date
 - (e) importer's order number and quantity ordered
 - (f) V.O. (supplier) order number
 - (g) date of issue
 - (h) description and commodity code of machine
 - (i) quantity as per bill of lading
 - (j) quantity as per supplier's invoice and invoice number(s) (if available at this stage)
- (2) Preparation of a shipping file comprising all relevant documents of a specific shipment.
- (3) Forwarding of two copies of the shipment and inventory reconciliation sheet completed as under 2.b.(1) to the programme planning department.

c. Programme planning department

The programme planning manager shall ensure :-

- (1) Advice to machines distribution department of availability of machines as per shipment and inventory reconciliation sheet received from traffic and shipping department.
- (2) Allocation by machines distribution department of machines

which are to be railed direct ex docks.

- (3) Preparation of the necessary invoice packs as described in paragraph 3.c.(3).
- (4) Daily forwarding of despatch instructions by airfreight to the various despatch locations.
- (5) Completion of shipment and inventory reconciliation sheet showing :-
 - (a) quantity railed to dealers ex docks
 - (b) quantity forwarded to warehouse
 - (c) machine order number(s)
 - (d) dealer name(s)
 - (e) invoice pack number(s) and quantity
- (6) Forwarding of one copy of the completed shipment and inventory reconciliation sheet to traffic and shipping department.
- (7) Posting of total quantity received as per shipment and inventory reconciliation sheet on availability and inventory record card.

d. The shipping agent(s) shall ensure :-

- (1) Preparation of G.R.V.'s only for those items that are physically moved into a warehouse.
- (2) Marking of cases going into warehouses with relative shipment numbers issued by traffic and shipping department.

- (3) Forwarding of two copies of each G.R.V. to traffic and shipping department.

All relevant documents from shipping agent(s) are to be airfreighted to traffic and shipping department daily.

e. Traffic and shipping department - completed feedback

- (1) Upon receipt of the relevant documents viz :- G.R.V.'s and executed D/I's together with consignment notes from the shipping agent(s), completed dealer invoices from machines distribution department and supplier's invoices, the traffic and shipping manager shall :-
- (a) enter the relative information on the shipment and inventory reconciliation sheet
 - (b) compare and follow up any discrepancy between the supplier's invoice, the bill of lading and the total quantity received
 - (c) forward one copy of the G.R.V. to programme planning department
 - (d) approve for payment all supplier's invoices as well as shipping agent(s) invoices. (numerical accuracy will be checked by controllers division)
 - (e) forward shipping file to overseas creditors department in controllers division
- (2) If no discrepancies are uncovered in e.(1) the traffic

and shipping manager shall approve and ensure the removal of the shipment and inventory reconciliation sheet from the -pending file- and the transfer of same to a -completed shipments file-.

f. Exceptions - incorrect information on bill of lading

(1) Discrepancies causing impossibility of execution of despatch instructions :-

- (a) the shipping agent(s) shall advise traffic and shipping department telegraphically - furnishing details of what has actually landed
- (b) the traffic and shipping manager shall ensure :-
 - (i) immediate telephonic advice to programme planning department
 - (ii) cancellation of relative current shipment and inventory reconciliation sheet by issuing a new shipment and inventory reconciliation sheet with credit quantities (credit indicated by (^)) and over stamped -CREDIT-, properly cross referenced to the original shipment and inventory reconciliation sheet
 - (iii) preparation of amended shipment and inventory reconciliation sheet
- (c) the programme planning manager shall ensure :-
 - (i) telegraphic advice of altered D/I's to shipping agent(s) and suppliers of accessories

- (ii) cancellation and advice to those concerned of existing D/I's by means of a D/I / T/I cancellation voucher (E-18)
 - (iii) preparation of altered invoice pack(s)
 - (iv) posting of cancelled shipment and inventory reconciliation sheet, altered shipment and inventory reconciliation sheet, D/I / T/I cancellation voucher and altered invoice pack(s) on availability and inventory record card
- (2) Excess cargo which does not affect despatches direct ex docks
- (a) the traffic and shipping manager shall ensure :-
 - (i) preparation of additional shipment and inventory reconciliation sheet for excess quantity, properly cross referenced to original shipment and inventory reconciliation sheet
 - (ii) same routing as in 2.b.(3)
- (3) Short shipments which does not affect despatches direct ex docks
- (a) same as 2.f.(2)(a) except that credit quantities will be shown and over stamped -CREDIT-

g. Advantages

- (1) Better recording and safeguarding of inventory :-

- (a) complete reconciliation of inventory movement per shipment from supplier through to end-user
 - (b) proper procedure for dealing with incorrect advance information on bill of lading
 - (c) ensuring correct information on G.R.V.'s which are now issued only for items entering the respective warehouses where individual items may be properly identified
- (2) Integration of functions and elimination of administrative effort :-
- (a) elimination of the shipping register in programme planning department
 - (b) elimination of an average of 82% of G.R.V.'s
 - (c) elimination of an average of 73% of all related telex messages - documents are airfreighted to reach shipping agent(s) in time
 - (d) shipping agent(s) are forced to communicate as follows :-
 - (i) receiving and warehousing - traffic and shipping department
 - (ii) despatching - programme planning department

(3) Summary of anticipated annual direct cost savings :-

(a)	improved inventory control		R10,000
(b)	salaries and wages		
	- shipping register	R 360	
	- G.R.V.'s	1,530	1,890
(c)	stationery		125
(d)	telex messages, less airfreight charges		1,720
	Total :		R 13,735

3. DESPATCH AND INVOICING

a. Purpose

To set forth a procedure, the administration of which will be under the direction of the machines distribution manager (invoicing) and the general planning and procurement manager (despatch), for the despatch and invoicing of machines.

b. Machines distribution department - machine order

Upon receipt of a machine order from a dealer the machines distribution manager shall ensure :-

(1) The scrutinising of the machine order for accuracy of :-

- (a) dealer name and address and account code
- (b) destination of goods
- (c) method of transport
- (d) commodity codes for machines

(2) Forwarding of machine order to programme planning department.

c. Programme planning department

Upon receipt of the machine order from machines distribution department the programme planning manager shall ensure :-

- (1) The ascertainment of availability from the availability and inventory record card.
- (2) Recording of the invoice pack number on the machine order next to the items that are available and the marks -B/O- (back order) against items that are not available.
- (3) Preparation of invoice pack (E-19(a), E-19(b) and E-19(c)).

(a) items despatched ex head office premises :-

(i) the invoice pack shall consist of :-

- set of 3 S.A.R. goods consignment notes (E-19(a))
- set of 4 invoices (E-19(b))
- set of 4 despatch instructions (E-19(c))

(ii) in printing the stationery (invoice packs) it must be noted that sensitised paper (no carbon required) is to be used for all copies except for the S.A.R. goods consignment notes which are to be interleaved with one-time carbon sheets. This procedure will comply with the regulations of the railway authorities who do not accept sensitised paper for their documents; and at the same time enable 11 copies being produced on a typewriter

(iii) the preparation of invoice packs will have to be in such a manner that it is acceptable not only for inventory recording and invoicing but also for the South African Railways Administration

(iv) distribution shall be as follows :-

(a.1) S.A.R. goods consignment note :-

- complete set to traffic and shipping department

(a.2) invoice :-

- complete set to machines distribution department

(a.3) despatch instruction :-

- 1 copy to dealer
- 2 copies to traffic and shipping department
- 1 copy retained in inventory updating file in programme planning department

(b) items despatched ex other locations :-

(i) the invoice pack shall consist of :-

- set of 4 invoices
- set of 5 despatch instructions

(ii) distribution shall be as follows :-

(b.1) invoice :-

- complete set to machines distribution department

(b.2) despatch instruction :-

- 1 copy to dealer
- 2 copies to supplying warehouse
- 1 copy to traffic and shipping department
- 1 copy retained in inventory updating file in programme planning department

(4) Return of machine order to machines distribution department.

d. Feed back - despatches

As soon as despatches are effected :-

(1) The traffic and shipping manager shall forward one copy of the D/I in c.(3)(a)(iv) to machines distribution department, clearly indicating :-

- (i) truck number
- (ii) shipment number
- (iii) date of despatch

(2) The shipping agent(s) shall forward 1 copy of the D/I in c.(3)(b)(ii) together with a copy of the relevant S.A.R. goods consignment note to traffic and shipping department, clearly indicating :-

- (i) truck number

- (ii) shipment number
- (iii) date of despatch

- (3) The traffic and shipping manager shall ensure marking off despatches on pending file of D/I's in c.(3)(b)(ii) and forward documents in d.(2) to machines distribution department.

e. Machines distribution department - invoicing

Upon receipt of the documents in d above, the machines distribution manager shall ensure :-

- (1) Pricing and extension of prices of all commodities - using the signed copy of the D/I.
- (2) Checking of prices and extensions.
- (3) Typing of sets of invoices (only prices and extensions).
- (4) Distribution of invoices as follows :-
 - (i) 1 copy to dealer
 - (ii) 1 copy to programme planning department for updating of availability and inventory record card and forwarding to traffic and shipping department for updating of shipment and inventory reconciliation sheet
 - (iii) 1 copy to controller's division - accounts receivable department
 - (iv) 1 copy retained in master file in machines distribution department

f. Cancellation of invoice packs

Cancellation of invoice packs shall only be effected by means of a cancellation voucher.

g. Reconciliation -cut off-

At any time before a reconciliation can be effected the processing stage of the 3 files of invoices within the organisation will have to be compared to ensure a uniform -cut off-, viz :-

- (1) machines distribution department
- (2) accounts receivable department
- (3) traffic and shipping department

h. Back orders

Despatches of items on back order shall originate from the shipment and inventory reconciliation sheet and follow the same procedure as those originating from a machine order.

i. Advantages

- (1) Better recording and safeguarding of inventory :-
 - (a) automatic and complete agreement of basic information on despatch instructions, goods consignment notes and invoices
 - (b) ensuring that every item despatched is charged
 - (c) elimination of transcription errors

- (d) proper procedure for recording cancellation of invoice packs
 - (e) proper feed back of information to shipment and inventory reconciliation sheet and availability and inventory record card
- (2) Integration of functions and elimination of administrative effort :-
- (a) complete elimination of preparation of S.A.R. goods consignment notes at head office
 - (b) elimination of checking basic information from D/I to S.A.R. goods consignment note to invoice
 - (c) elimination of 68% of related typing in machines distribution department
 - (d) improved information for reconciliation purposes
- file of partly prepared invoices in machines distribution department represents uninvoiced D/I's
 - (e) elimination of cross referencing of documents' reference numbers -every set of documents carries an identical preprinted number.
 - (f) complete elimination of control book machines (chapter 2 paragraph 4.d.(1)).

(3) Summary of anticipated annual direct cost savings :-

(a) improved inventory control			
- items supplied not invoiced	R12,500		
- incorrect basic information due to transcription errors	6,000	R18,500	
(b) salaries and wages			
consignment notes	1,900		
elimination of checking	780		
elimination of typing	2,200		
cross referencing and recon- ciliation	630		
elimination of control book - machines	3,100	8,610	
(c) stationery			
additional cost due to more expensive paper			(75)
Total :		R 27,035	

4. -ORIGINAL EQUIPMENT- TYRES AND BATTERIES

a. Introduction

The procedure which is set out below originated from the concept of supplying a dealer with a voucher which will enable him to obtain certain specified articles from the official supplier - without any further administration by the company issuing the voucher.

b. Purpose

To set forth a procedure, the administration of which will be under the direction of the machines distribution manager, for the control over supplying -original equipment- direct from suppliers.

c. Machines distribution department

Upon receipt of an invoice pack from programme planning department the machines distribution manager shall ensure :-

- (1) The preparation of an original equipment voucher (E - 20) showing :-

- (a) dealer name and address
- (b) supplier name and address
- (c) commodity code
- (d) quantity
- (e) description
- (f) invoice pack number
- (g) signature of duly authorised person

- (2) Distribution of original equipment voucher as follows :-

- (a) original to dealer
- (b) 1 copy to supplier
- (c) 1 copy to accounts payable (local creditors) department in controller's division
- (d) 1 copy retained in master file in machines distribution department

d. Accounts payable (local creditors) department

The accounts payable department will maintain a working file of original equipment vouchers and will, upon receipt of the supplier's

invoice, compare and attach the relevant voucher to the invoice. This will serve as an automatic authorisation for payment.

e. The supplier

Upon receipt of an original equipment voucher from the dealer the supplier will :-

- (1) Supply the dealer with the commodities as stated thereon.
- (2) Issue an invoice at -original equipment- prices to Importers Limited - always quoting the relevant voucher number(s) .

No payment of supplier's invoices will be effected unless voucher number(s) are quoted on the invoices.

f. Internal control and safety measures

- (1) Once a voucher is issued no alterations will be effected.
- (2) If vouchers are lost in transit or made out incorrectly the machines distribution manager shall ensure :-
 - (a) the preparation of an original equipment cancellation voucher (E - 21), showing the same information as in 4.c.(1) above
 - (b) distribution of the original equipment cancellation voucher in the same manner as in 4.c.(2) above
- (3) The same precautions are to be taken with stationery as

with blank cheque forms.

- (4) The same precautions are to be taken with signing powers as with the signing of cheques.

g. Advantages

- (1) Better recording and safeguarding of inventory :-

(a) vouchers can only be issued after invoice packs have already been completed and therefore the possibility of forwarding more than one set of tyres and batteries is eliminated completely

(b) suppliers' invoices are compared with vouchers before payment is made

- (2) Integration of functions and elimination of administrative effort :-

(a) complete elimination of control book tyres and batteries

(b) automatic authorisation for payment of suppliers' invoices

(c) elimination of preparation of D/I's for tyres and batteries

(d) direct communication between dealer and supplier after vouchers have been issued

- (e) positive and direct control over items supplied via master file in machines distribution department

(3) Summary of anticipated annual direct cost savings :-

(a) improved inventory control		
- items supplied not invoiced		R6,500
(b) salaries and wages		
- elimination of control book		
- tyres and batteries	R4,150	
- preparation of D/I's less preparation of original equipment vouchers	475	
- direct communication - dealer/supplier	890	5,515
(c) <u>stationery</u>		
additional cost due to increased cost of printing		(95)
Total :		<u>R 11,920</u>

5. RECORD KEEPING - INVENTORY

a. Introduction

The procedure which is set out below is basically a further development of the present availability record card.

b. Purpose

To set forth a procedure, the administration of which will be under the direction of the programme planning manager, for the establishment of a comprehensive inventory record.

c. Programme planning department

From the various basic documents affecting inventory movement the programme planning manager shall ensure :-

(1) The preparation and maintenance of an availability and inventory record per commodity (E - 22).

(2) The preparation of a monthly inventory report (E - 23).

(3) Daily recording of the following basic documents :-

(a) receipts

- (i) shipment and inventory reconciliation sheets
- (ii) fully completed transfer instructions
- (iii) D/I / T/I cancellation vouchers
- (iv) goods received vouchers - returns from dealers

(b) issues

- (i) despatch instructions - to establish availability
- (ii) invoices - to establish inventory
- (iii) transfer instructions - to effect transfers
- (iv) shipment and inventory reconciliation sheets (credit)

(c) reservations

requests for reservation of inventory (E - 24)

(4) Monthly reconciliation of :-

- (a) uninvoiced D/I's as per inventory report with master file of incompleted invoices in machines distribution department

- (b) actual sales as per inventory report with general ledger balances in controller's division

d. Advantages

- (1) Better recording and safeguarding of inventory :-
 - (a) introduction of a proper unit inventory record per commodity in addition to the present availability record which is also assumed to be an inventory record
 - (b) the establishment of the number of uninvoiced D/I's which serves as an indication of the effectiveness of the whole procedure of despatching and invoicing
 - (c) comparisons against sales forecasts
 - (d) synchronising of unit and value records
- (2) Integration of functions and elimination of administrative effort :-
 - (a) utilisation of surplus capacity of accounting machine and machine operator
 - (b) almost complete elimination of reconciliation between actual inventory counts and bookrecords

(3) Summary of anticipated annual direct cost savings :-

(a) improved inventory control		
- reduction in average inventory carry @ 8% interest	R30,500	
- improved -inventory mix-, previous loss of profit on possible sales	14,500	R45,000
(b) utilisation of surplus capacity		
- machine rental (indirect)	640	
- salaries (indirect)	550	1,190
(c) overtime - annual inventory count		
		920
Total :		<u><u>R 47,110</u></u>

6. RECORD OF OUTSTANDING MACHINE ORDERS

a. Introduction

The present cost of sales report used by the controller's division is prepared by data processing department and involves the punching of all basic information on dealer's invoices.

b. Purpose

To set forth a procedure, the administration of which will be under the direction of the machine distribution manager (preparation of basic information) and the data processing manager (processing), for the preparation of a report on outstanding machine orders.

c. Machines distribution department

Upon receipt of machine orders from programme planning department the machines distribution manager shall ensure :-

- (1) The -pre-listing- of machine orders, both quantities and

a -hash total- of commodity codes.

- (2) Forwarding of pre-listed batches of machine orders to data processing department.

d. Data processing department

The data processing manager shall ensure :-

- (1) Punching and verifying of basic information viz :-
 - (a) dealer code
 - (b) dealer order number
 - (c) commodity code and quantity
- (2) Sorting and colating of information in d.(1) above together with basic information for the production of the cost of sales report in above viz :-
 - (a) dealer code
 - (b) invoice pack number
 - (c) commodity code and quantity
- (3) Production of a report on outstanding machine orders :-
 - (a) per commodity per dealer (E - 25(a))
 - (b) per dealer per machine order (E - 25(b))

e. Advantages

- (1) Better recording and safeguarding of inventory :-

- (a) improved short term sales forecasting
 - (b) improved service to dealers
 - (c) utilisation of surplus capacity on data processing machines
- (2) Integration of functions and elimination of administrative effort :-
- (a) elimination of machines distribution and back order record cards
 - (b) introduction of a report on outstanding machine orders (new)
 - (i) per commodity per dealer
 - (ii) per dealer per machine order
- (3) Summary of anticipated annual direct cost savings :-

(a) salaries		
- elimination of machines distribution and back order record cards	R1,200	
- elimination of related dealer queries	580	1,780
(b) utilisation of surplus capacity in data processing department		340
Total :		R 2,120

7. CONCLUSION

a. The procedures outlined in this chapter clearly indicate that properly integrated and co-ordinated systems assisted by well designed forms will result in :-

- (1) Administrative cost savings through elimination of duplication and the proper employment of human resources as well as machines.
- (2) Improved control with regard to both physical inventory and payments to creditors.
- (3) Valuable management reports not only for day to day management but also for long term planning.

b. In the process of developing improved methods great care was taken to maintain sound existing methods in order to minimise dislocation of staff and also to maintain continuity of operation - a problem which will be discussed in the epilogue.

c. Serious consideration was given to the employment of data processing equipment to prepare availability and inventory records but due to the fact that information must be up to date as frequently as possible and the relative low volume of individual runs this consideration was discarded.

d. An overall summary of the anticipated annual direct cost saving expressed as a % to profit before tax is given in A - 2.

EPILOGUE

1. INTRODUCTION

Methods can be described as the organised manner in which personnel are instructed to perform certain duties in order to achieve a desired result. Without the co-operation and loyalty of the personnel applying the methods no system can be maintained successfully and efficiently.

In making changes or installing new procedures it is of the utmost importance :-

- a. to take into consideration the human relations aspect of such a change.

In this regard A.J.E. SORGDRAGER (-The particularization of indirect cost in modern costing administration-, Pro Rege-Pers Beperk, Potchefstroom, 1964, p.135) states : -for everything a norm has to be established because inefficiency is difficult to ascertain in practice. There is constant strain and friction to overcome because the average person simply likes routine. The duty of top management is to organise working conditions in such a way that they are acceptable to the average labourer.-

So much has been written about employees' resistance to change that we are sometimes tempted to forget that they can also react favourably. They may in fact welcome the change if they are prepared for it in advance.

- b. to give consideration to the capabilities of the

personnel responsible for maintaining the system.

Procedures are often incorrectly blamed for inefficiencies; incapable personnel being the underlying reason. (A.J.E. Sorgdrager, lectures 1966)

2. MANAGING THE CHANGE

The difference between making a change and managing a change lies in the area of advance preparation. The principles underlying advance preparation can but be divided into :-

- a. the logical approach
- b. the psychological approach

a. The logical approach

The logical approach to change is based on an understanding of the company's philosophy, goals and objectives and a familiarity with the guiding policies on organisational change, work simplification and related areas. From these bases the change should be prepared for in the following sequence :-

- (1) Do we really need a change? Find out what - if anything - is wrong with the present situation. Judgment should be by fact and confirmation, not hearsay and speculation.
- (2) If there is something wrong, determine whether it is the fault of some condition or of some person, or of both. If it is a person, do not alter the entire set-up to correct the situation. Instead, try to correct whatever he is doing or not doing.

- (3) Discuss the situation with people you can rely on.
Determine whether it can be corrected by a minor, possibly informal re-arrangement or whether a formal and definite change is warranted.
- (4) Before selecting a course of action, be sure to consider the following points :-
 - (a) its advantages should considerably outweigh its disadvantages because disadvantages there are going to be, no matter what you do
 - (b) it should come within the framework of company policy and not conflict with it
 - (c) other managers and supervisors and outsiders who might be affected should be consulted
- (5) Consider the impact of the suggested change on other systems, procedures or operations, both within the department affected and outside.
- (6) Get the proposed course of action and strategy approved by top management.
- (7) Devise a time table for a trial run or pilot effort and the final installation.
- (8) Be sure to educate employees who will be affected in the why, what, how and when of the change.

- (9) Install the change.
- (10) Use formal or informal means to evaluate the before-and-after situation. Do whatever is necessary to get the bugs out of the new system.
- (11) Finally, re-affirm the responsibilities of those affiliated with the changed procedure and its performance.

b. The psychological approach

In addition to the logical approach and simultaneous with it, the psychological approach as outlined below should be used :-

- (1) Make sure that employees know that there is a condition that calls for correction or improvement. Show how the employees or the organisation's effectiveness is hampered by the existing set-up. Once employees are convinced that the problem is real and that there is a need for a solution they will co-operate towards a solution.
- (2) Tell personnel in advance about a change that will affect them; the shock of unannounced changes can seriously affect morale. If they hear about it indirectly, possibly receiving incorrect information, the chances for success will be seriously jeopardised.
- (3) If at all possible, cite the testimonials that show benefits derived from a similar change elsewhere in the company or in another organisation. Identification with success and desire to rise above a competitor are psychological factors that can

stimulate strong support for the objectives that are set.

- (4) Discuss the advantages to be derived from the change with the people to be affected by it. Acknowledge that there are pros and cons but point out reduction of workload pressures, better communications, greater opportunity for individual growth and development or any other expected advantages. In other words, try to show how the change will serve, not only the company, but also the needs of the individual.
- (5) Put the proposed change in writing to the various departmental managers and supervisors and invite their comments and suggestions. This will do much to dispel any belief that the change was planned from outside from the very beginning and will motivate them to do a good job of communicating the change to their subordinates.
- (6) Appeal to the openmindedness of the employees by suggesting a period of experimental operation under the changed policy or procedure. People are usually quick to demonstrate their sense of fair play, their willingness to give something a try, and their desire to innovate. If these reactions can be capitalised on the experimental period can be a useful bridge between plans and final installation.
- (7) Avoid stating the proposal in a way that gives the impression that it is unduly restrictive. Restraint breeds resentment and resistance. People should not feel that they are being monitored or policed while they are busy with a change-over. Observe, make mental notes, and discuss what is taking place,

but be wary of imposing formal controls too quickly.

- (8) Allow plenty of time for human adjustments. It takes time to develop new skills, depart from old habits and settings, establish new relationships or even to orient oneself to familiar situations which have a new twist.
- (9) Get the green light from top management to go ahead with the final installation. Top management must be assured that the necessary steps have been taken in preparing the people for the change and that there will be no flurry of grievances, protests and threats of resignations.
- (10) Be on the alert not only for unsatisfactory performance but also for open or subtle evidence of lingering resistance. When the change has been carried out successfully give the personnel affected as much credit as possible.

In conclusion, the application of these principles will prove that employees' resistance is not insurmountable. In fact, the very employees who would have resisted the change may become its most vocal advocates once they understand the reasons for it and are convinced of its benefits; not only for the company as a whole but also for them as individuals.

SUMMARY

Without systems no business undertaking can operate efficiently. As business concerns are growing in size and complexity, management are becoming more and more aware of the importance of systems and the resultant paperwork without which no system can operate.

The basic object of any system is to supply control data. In order to obtain the necessary information certain expenditure will necessarily have to be incurred. The purpose of this study will be to prove, with the aid of an actual case, how improved systems and procedures can assist in improving control data and also achieve a reduction in the cost incurred.

In chapter 1 a factual description is given of the current procedures used in each relative department for receiving, warehousing, despatching and invoicing of commodities.

Chapter 2 is devoted to a critical examination of the facts. Inefficiencies which are the result of lack of co-ordination and integration between departments, and incomplete procedures, are highlighted.

Chapter 3 gives a detailed description of new and improved procedures together with a summary of anticipated cost savings resulting from each change.

The Epilogue gives consideration to the all important aspect of human relations and quality of personnel with regard to the implementation and maintenance of systems.

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D.I. No. _____

Telephone: 554-7211.

Railage :

Our Order No.: _____ Date: _____

[illegible]

Confirmation of D.I. Phoned / Telexed -----

FOR USE BY TRAFFIC AND SHIPPING DEPT., SHIPPING AGENT OR SUPPLIER EXECUTING DESPATCH OF GOODS.

Despatch Authorised by :-

am				Despatch Authorised by :-	
Case Numbers / Serial Numbers	Consignment Note No.	Quantity	Truck : 12	Signature	
				Date: _____	
				Despatch Executed by :-	
				Signature of Suppliers Duly Authorised Representative	
				Date: _____	

T.I. No.

P.O BOX : 999
TELEPHONE : 859-1211.

MEANS OF CONVEYANCE :

CONFIRMATION OF T.I. PHONED/TELEXED ON

TO BE COMPLETED BY WAREHOUSE EXECUTING TRANSFER OF GOODS.

Date:-

IMPORTERS LIMITED
WHOLE GOODS RECEIVED VOUCHER

G.R.V. No: _____

PORT / LOCATION: _____

DATE RECEIVED: _____

RECEIVED FROM: _____

DELIVERED BY: _____

SHIPMENT OR
DEL. NOTE NO.: _____

NAME OF VESSEL
OR TRUCK NO.: _____

TRANSFER INSTRUCTION OR
AUTHORISATION REF. NO. _____

Item	Description	Case Marking	Marketing Code	Unit Qty.	Cased / Or Assembled	Condition / Remarks
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

RECEIVED AND INSPECTED BY :-

Signature

Date :

[illegible]

IMPORTERS LIMITED

EXHIBIT No. 4

501144

510 No.

Name of Consignee

Address of Consignee:

Destination Rail (or Road Motor)

arrange paid or to pay

Autonomy Reference

Unless this Consignment Note is endorsed to the contrary, the Goods hereon will be despatched by Goods Train

Loaded at Veracruz Siding 21 for Importers Limited.

to the South African Railways.

Time

Please receive and forward

Signature of Sender or his duly authorised representative

For IMPORTERS LIMITED.

FOR USE OF RAILWAY DEPARTMENT ONLY.

Rate _____

Truck No. and Owner

Loading Note No. _____

Carrying Capacity

Invoice No.

Checker

Time

Date _____

Remarks as to condition:

Signature of Railway Official

AVAILABILITY RECORD CARD

Card No.

Description	Quantity	Unit	Value	Total	Tax	Net	Gross	Net	Gross	Net	Gross	Net	Gross

Commodity Code: _____

[illegible]

IMPORTERS LIMITED

EXHIBIT No. 7

RECORD OF DEALER BACK ORDERS

Card No:

Description. _____

Code : _____

[illegible]

IMPORTERS LIMITED.

EXHIBIT No.

[illegible]

IMPORTERS LIMITED

Delete whichever not applicable.

JOHANNESBURG TELEX DATE

LT.

(Address)

Message - (typed or printed)

COL. (i.e. repeat all figures in address and message)

DEPARTMENT HEAD.

[illegible]

Telephone : 859 - 1211

Number

Date _____

Page No.

Charged to:-

Delivered to:-

Method of Despatch:

Dealer Code Order No:

Description	Commodity	Quantity			Retail Price		Net Price		Net Amount	
		Ordered	O/s.	Delvd.	R	c.	R	c.	R	c.

DEBIT NOTE

IMPORTERS LIMITED

PA Box : 999

No

Date:

CREDIT NOTE
IMPORTERS LIMITED

M _____

P.O. Box : 999

No. _____

Date: _____

IMPORTERS LIMITED.

CONTROL BOOK

D/I No.

D/I Issued

Invoice Compared

Suppliers Invoice

Debit Note No.

D.I. / T.I. CANCELLATION VOUCHER

IMPORTERS LIMITED

CV. No.

PO Box 677

Date

TO:.....
.....
.....

Please regard the following Despatch Instruction / Transfer Instruction as cancelled.

D.I. / T.I. NUMBER

DATE OF ISSUE

AUTHORISED BY :

CANCELLATION CONFIRMED

For IMPORTERS LIMITED

Signature of Supplier or
Duly Authorised Representative

[The page contains faint, illegible markings.]

1. The first part of the document is a title page. It contains the title "THE EFFECTS OF THE 1974-75 WINTER ON THE FISH AND WILDLIFE OF THE GREAT LAKES" and the author "J. R. H. WILSON".

100

Destination (Rail / Road Motor).

--	--	--

Charges

.....19.....

Time

FOR USE OF RAILWAY DEPARTMENT ONLY.

Carrying Capacity

Date _____

Signature of Railway Official

Date issued

IMPORTERS LIMITED.

Phone: 859-6211

Despatched From:

Dealer Code.

Consigned To:

Freight Paid or
To Pay

Destination (Rail / Road Motor)

Method of Despatch

Truck No(s)

Order No.

Importers Ltd

Dealer

Payment Due

Date of Invoice.

Machine Code

Marks

No. of Packages

Description

Quantity

Retail Price

Dealer Price

Amount

Serial Numbers / Case Numbers

Remarks.

Despatch Authorised By:

for IMPORTERS LIMITED

Despatch Executed by:

Signature of Supplier's
Duly Authorised Representative.

Date: _____

IMPORTERS LIMITED

P.O.Box : 999.

Phone : 899-1211.

ORIGINAL EQUIPMENT VOUCHER

DEALER

SUPPLIER

THIS VOUCHER AUTHORIZES YOU TO PURCHASE THE FOLLOWING ORIGINAL EQUIPMENT
ON OUR BEHALF

COMMODITY CODE	QUANTITY	DESCRIPTION

Date

Date

Signature of Dealer.

For and on Behalf of Importers Limited.

Invoice Pack No.

Machine Order No.

Dealer Order No.

Voucher No.

THIS INFORMATION MUST APPEAR ON ALL RELEVANT DOCUMENTATION.

EXHIBIT No. 21

IMPORTERS LIMITED

P.O.Box : 999

Phone : 899-1211

ORIGINAL EQUIPMENT CANCELLATION VOUCHER.

DEALER

SUPPLIER

THIS VOUCHER CANCELS YOUR AUTHORIZATION TO PURCHASE THE FOLLOWING ORIGINAL
EQUIPMENT ON OUR BEHALF.

COMMODITY CODE	QUANTITY	DESCRIPTION

Date

For and on Behalf of Importers Limited.

ORIGINAL EQUIPMENT VOUCHER NO.

Voucher No. V.

IMPORTERS LIMITED
INVENTORY REPORT.

For the month ended _____ 19 ____

[illegible]

No

REQUEST FOR RESERVATION OF INVENTORY
IMPORTERS LIMITED.

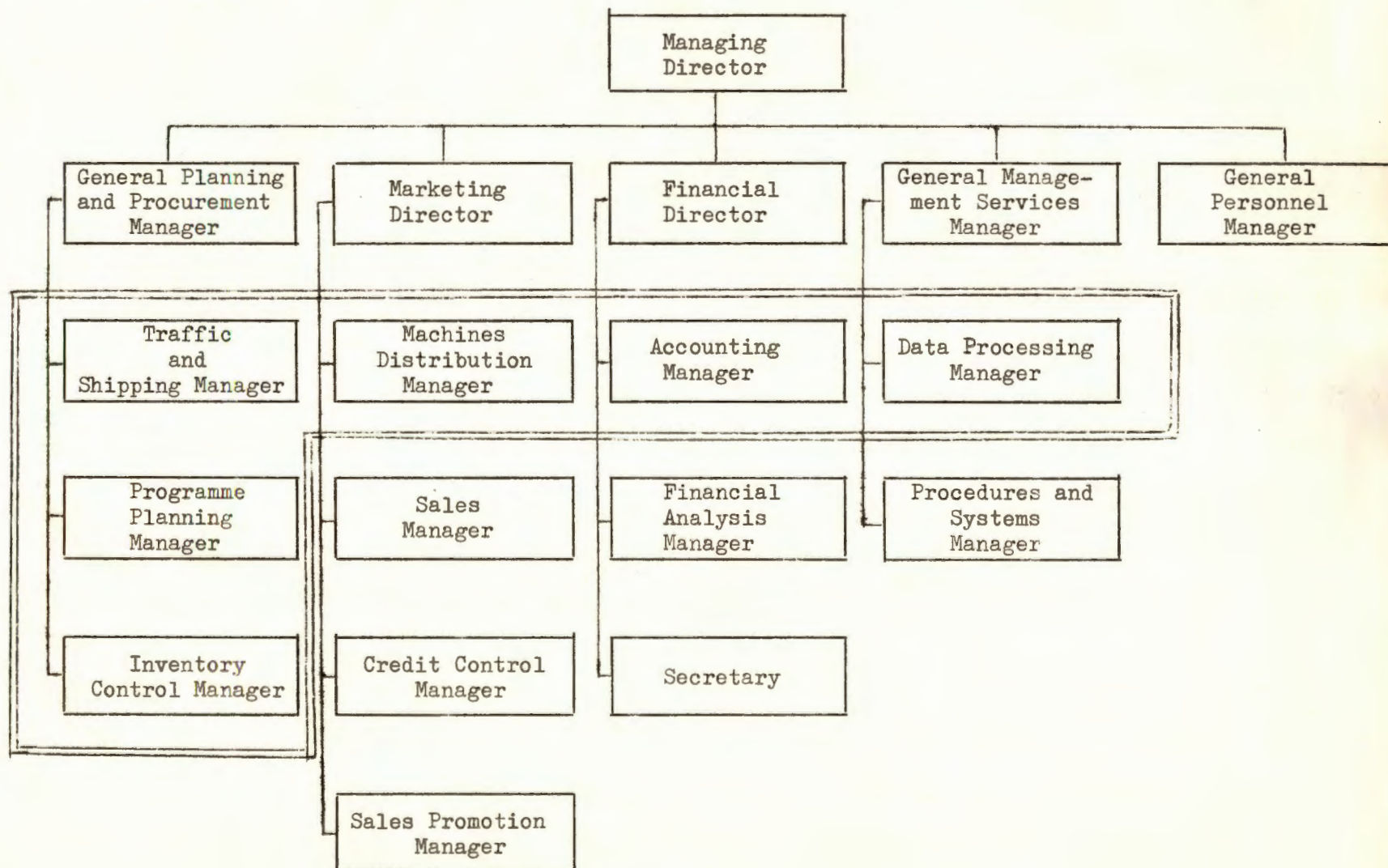
P.O. Box : 999

Description	Machine Code	Quantity	Purpose of Reservation.
			Requested by: ----- ----- Department
			Date. -----

CANDID NO 2567

* 2 In machine order number sequence

ORGANISATION STRUCTURE - IMPORTERS LIMITED



SUMMARY OF ANTICIPATED ANNUAL DIRECT COST SAVINGS

Item	Receiving and ware- housing	Despatch and in- voicing	Original equip- ment	Record keeping inven- tory	Recording of out- standing machine orders	Total
Improved Inventory Control	10,000	18,500	6,500	45,000	-	80,000
Salaries and Wages	1,890	8,610	5,515	-	1,780	17,795
Overtime	-	-	-	920	-	920
Stationery	125	(75)	(95)	-	-	(45)
Telex cost	1,720	-	-	-	-	1,720
Utilisation of Surplus Capacity	-	-	-	1,190	340	1,530
	R13,735	R27,035	R11,920	R47,110	R2,120	R101,920
% on profit before tax	1.14%	2.25%	.99%	3.92%	0.18%	8.49%