

விருட்சம்

VIRUTCHAM



வணிக மாணவர் மன்றம்

முகாமைத்துவ கற்கைகள்

வணிக பீடம்

யாழ்ப்பாணப் பல்கலைக்கழகம்

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We also want to thank our senior lecturer Mr. E. R. Ramesh who has been very helpful.

We also want to thank all the teachers and students who have helped us in this project.

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We also want to thank Mr. R. R. Ramesh who has been very helpful in this project.

We also want to thank all the people who have helped us in this project.

Thank you

Mr. R. R. Ramesh
Mr. E. R. Ramesh
Mr. H. R. Ramesh

VIRUTCHAM

VOLUME - 8

Co - Editors

Mr. S. Selvanayagam

Miss. B. Ahilakala



**COMMERCE STUDENTS' UNION,
UNIVERSITY OF JAFFNA,
THIRUNELVELY,
SRI LANKA**



வ்ருட்சம்

புதிய தொகுதி

இதழ் - 08

இணை இதழாசிரியர்கள்

செல்வன் S. செல்வநாயகம்

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வணிக மாணவர் மன்றம்,

யாழ். பல்கலைக்கழகம்,

திருநெல்வேலி,

யாழ்ப்பாணம்.

VIRUTCHAM

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Sri Lanka.

MESSAGE FROM THE VICE – CHANCELLOR



It's a great pleasure to write this message to the 8th issue of Virucham launched by the Commerce students Union of the University of Jaffna.

The Commerce students Union is one of the best academic organizations in the University. The course disciplines such as Commerce, Management and accounting are developing in the University. Hence this journal seems to be a good guide for students following similar courses in Teachers Colleges, Teachers Training Colleges and other Institutions. I trust this issue will be enriched with academically sound articles like the previous issues. A remarkable feature of this issue is the addition of greater number of students' articles like the previous issues.

The journal becomes a good source to promote the academic flavour personality and confidence of students.

Separate rooms are allocated in the students complex for the smooth functioning of the students organizations. This arrangement would be much helpful for the progress of such organizations.

Prof. S. Moganathas
Vice - Chancellor,
University of Jaffna.



MESSAGE FROM THE DEAN

I express my great pleasure on the occasion of releasing the 8th issue of Virutcham published by the University of Jaffna.

Globalization is a popular concept commended by all in today's world. It's undeniable that Commerce has contributed immensely to the successful process of globalization. Many students option

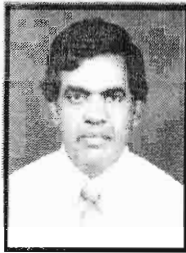
to study Commerce oriented courses due to their merit and need. Thus it's obligatory for Commerce Volumes in the same discipline.

My best wishes to the Commerce students Union which has endeavored to launch the issue of this year.

M. Nadarajasundaram

Dean

Faculty of Management Studies and Commerce,
University of Jaffna.



MESSAGE FROM THE HEAD OF THE DEPARTMENT OF COMMERCE

I am very much delighted in sending this message to the 8th issue of Virutcham published by the commerce Students Union of the University of Jaffna.

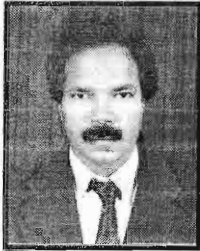
The Commerce sector has developed tremendously in an unprecedented manner in the current world. This sector uncorpotates disciplines like Accounting, Management, Information Technology etc. The journal Virutcham is released annually with the intention of fulfilling the needs arising in this discipline, for students and officers who are interested in the field. The issue contains for students and officers who are intrested in their field articles by students and lecturers.

The belated release of the journal this year is due to the unavoidable circumstances faced by the union. The final year students deserve appreciation indeed for their enthusiasm in bringing out the issue amidst examination constraints. May the god almighty show his pressings for the continuance of the publication of the journal in future as well.

Mr. K.Thevarajah

Head

Department of Commerce,
University of Jaffna



FELICITATION NOTE FROM THE SENIOR TREASURER.

I am pleased to observe that the annual publication of the journal Virutcham by the Commerce Students Union of the University of Jaffna reflects the current ideologies and principles in the commerce discipline.

The journal appears to be a repository of articles contributed by lecturers and students. The remarkable feature of the journal is that may useful to internal and external degree students, students of higher Technical institutes in acquiring knowledge and preparing for examinations. The Commerce students Union should be Commended for its commitment in bringing out this issue.

It's my fervent hope that journal would achieve further progress in future and my best wishes are due to all those concerned in the release of this issue.

E. Ratnam
Senior Treasurer,
Commerce Students' Union
University of Jaffna.



PRESIDENT'S NOTE

I have immense pleasure in conveying my congratulatory message to the 8th issue of Virutcham brought out by the Commerce students Union.

Matters related to Commerce and information technology gain significance in today's fast growing world. Every person is expected to have a broad knowledge in these disciplines. This journal contributes considerably to achieve this objective.

The journal bears articles written by both students and lecturers. It affords access to students to display their talents and to elevate their research initiative.

I am very grateful to the Vice – Chancellor, the Dean, the Head of the department, the Senior Treasurer and the Lecturers of our Department for releasing this issue perfectly. I owe great thanks to Commerce students.

Who have assisted us in raising funds, Committee members of the Commerce students Union and all others who have rendered their wholehearted support in our Commitment. My best wishes to everyone.

Mr. K. Kengatharan

President.

Commerce Students' Union

University of Jaffna.

MESSAGE FROM THE SECRETARY

It gives me great pleasure and feel in sending this message to the souvenir "Virutcham – New volume 08". Due to unavoidable circumstances we could not publish our souvenir early this year. We hope this issue will satisfy all your expectation.

For the purpose of publishing this magazine, we collected the fund with the help of exhibition that was held by our union. We also extend our sincere thanks to Dean the faculty of Management Students & Commerce Students, head of the department, senior treasurer, lecturers and students who gave articles for this magazine. Our thank also go to those who have contributed to this magazine.

I wish our Commerce Students' Union and expect that the succeeding Commerce Students' Union will enhance its activities and keep our Commerce Students' Union as leading one in future also.

Thanks

Mr. Suganthan,
Secretary,
Commerce Students' Union.

Co – EDITORS

As Co-Editors of the Virutcham, the Jurna; published by
Commerce Students' Union, University of Jaffna.

We wish to express our deep sense of gratitude a Dean
of the faculty, head of the department. Senior treasurer and
all staff members for their sound advice and guidance at all
times. We also expend our sincere thanks to lecturers and
students who gave articles for this magazine.

Who contributed articles and although who help to make
the exhibition held last year as success.

We look forward to your continue co-operation in the
future.

Thank you,

Co-Editors

Mr. S. Selvanayagam,

Miss. B. Ahilakala

2001/ 2002

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MANAGERS FOR THE NEW MILLENNIUM

MANAGEMENT A DYNAMIC PROCESS

Management is a dynamic process that is ever changing and evolving. Many of the managerial concepts that were proposed only a few years ago cannot and will not work in today's environment. People have changed and have become sophisticated, organizational environments have changed, governments have changed, the world economy has changed from stability to instability and the resource scarcity has worsened, especially the valuable resource of skilled and unskilled talented labour. In the business world, management is almost viewed in terms of productivity. This is because productivity is the key success of the organization.

A new recipe for the management of business organizations is required at present. The present century business environments are characterized by change and more significantly discontinuous change. The modern organizations have no alternative other than to accept the change. This is the reason for the emergence of the new concept of change management. No longer its size and scale of operations are going to be important but the responsiveness and speed of transaction is going to be vital. In modern organization the leadership is expected from every body. This will result in empowerment of staff, delegation of tasks etc.... The challenges today among organizations is to create competitive advantages which can be firstly sustained, and secondly constantly reinvented.

The organization structures are expected to be permanently flexible of management is required in order to face the challenges of the 21st century business environment. The present organizations have to be manage by

vision and values, but in the past rules, regulations and procedures were used to manage organizations. It is the responsibility of the top management to control the vision and values of the organization. The respective organizations are expected to create and complete for tomorrow's markets in the age of the digital revolution and the mindset of the people should be changes from guarding information to sharing information with competition or mutual benefits.

INTELLECTUAL CAPITAL

The growing demand for knowledged based products and service is changing the general structure of the economy. The role of knowledge in achieving competitive advantage is becoming and important management issue in all sectors of the economy. Its valuation, transformation and accumulation lie at the hard of intellectual capital management.

The term has many complex connotations and is often used synonymously with intellectual assets and knowledge assets. As such intellectual capital can be both the result of a knowledge transformation processor the knowledge itself is transform into intellectual property or intellectual assets of the firm. He/ She should be able to translate an idea into a product or service. Any organization should be able to create a value.

OLD MANAGEMENT MODEL & NEW MANAGEMENT MODEL

Old Management model	New Management model
* Man as an extension of the machine	* Man as a resource to be developed
* Worker expectation of security	* Worker expectation of personnel growth
* Work by individuals	* Work by teams
* Maximum task breakdowns	* Optimum task grouping
* Simple narrow skills	* Multiple broad skills
* External controls (Supervisors etc)	* Internal controls (self-regulating etc)
* Tall organization chart	* Flat organization chart
* Autocratic style	* Participant style
* Profit focus	* Customer focus
* Cost advantage	* Time advantage
* Self serving motivation	* Realistic altruism
* Domestic market orientation	* Global market orientation

INFORMATION AGE ECONOMY

The move to the information age from industrial age spawns transformation at all levels of governance.

	Industrial Age	Information Age
Democracy	Representative	Participative
Citizens	Passive consumer	Active partners
Politics	Broad cast, mass, polarized	One – to – one
States	National, mono cultural	Global, local, virtual and Multi cultural

We are now living through one of the most exciting periods of change in history. Virtually every thing we do in our daily lives, in our work and our students, is experiencing as will soon experience – fonder – mental transformation. This is called the information age revolution.

CHALLENGES

In the new millennium Managers, Management Science and Management Culture will have to naturally change to meet

these interesting and daunting challenges facing mankind. These new challenges will also provide unlimited opportunities for growth and development in every sphere and will hopefully improve the quality of life of human beings universally. The most important factors affecting the world at large in the new millennium are: - a.) Globalization b.) New concept information communication technology c.) The extensive use of World Wide Web or the internet as a communication channel d.) Growth of Genetic Engineering e.) The use of robotics in industry and for domestic purposes.

Globalization which has devolved with dismantling of great barriers following the W.T.O agreement is being further encouraged by the developed world. It is projected that oneday the whole world will be one global village in the not too distant future. The development of information communication technology has also made tremendous impact on bring the world together and eliminating physical and man made boundaries, given rise to entirely new vistas of accessibility unknown to the world before. The internet is by far the fastest growing communication medium known to man kind today. It is belief more than one hundred million computers are interconnected in the world wide web providing unlimited opportunities for access of information for all purposes. Genetic engineering has progressed rapidly and a dramatic break through as been achieved by human chromosomes have been mapped accurately, thereby providing direct accesses to the genetic code of human being. Further this will make possible for the replacement of defective genes causing various hereditary defect. The use robots for a verity of purposes is rapidly evolving specially in Japan and developed countries. The most sophisticated technological process can now be handled by these ingenious machines.

FUTURE MANAGERS

The managers organization are expected to play a major role in the new millennium. They have to work in a competitive and turbulent environment to achieve their objectives and goals. As a result, what type managers we must produce in the future? We must identify important characteristics that the private sector as well as public sector would expect from a graduate passing out from an academic institution.

1. Information Technology (IT) – One of the essential prerequisites for the future Manager is not simply computer literacy but being computer savvy. i.e. being able to use the computer effectively to enhance business opportunities. In other words, a Manager must be familiar with all the modern frequently used software programmes and be able to utilize the information available via the internet and other communication channels to develop and fine – tune his decision making process.

2. Language Proficiency – The most internationally recognized language in the world in trade and commerce in English and an excellent working knowledge of English is a tremendous asset in Management. A basic working knowledge is not sufficient. The future Manager should be articulate in verbal and oral skills. Being articulate is important as marketing and even the other disciplines in Management requires Managers to make presentations with the use of their computer skills in order to make effective sales or promotional campaigns. Written skills are equally important as the ability to report comprehensively but precisely is an asset when limitation of time makes it impossible for top management to peruse unnecessary verbiage in important reports submitted for decision making purposes.

3. Time Management – The value of time which is an unrenovable resource is becoming more and more critical in the modern world. Even in a country like Sri Lanka where we were used to moving around in Colombo very rapidly, traffic congestion is taking its toll and much unproductive time is spent in vehicles going from place to place. Management of time has become a vital necessity. The mobile telephone has become a useful tool in gainfully spending time during transit and with the added connectivity to e – mail and fax being available integrated into the mobile communication network, travel time can be utilized to attend to many important matters. In addition, the fundamentals involved in time management will have to be scrupulously followed if we are to be effective managers in the new millennium.

4. Customer Orientation – Considerable lip service has been given in management of the importance customer. Customer is king, Customer is always right were the catch phrases used in the past. The marketing people have now even gone further in using the cliché “To delight the Customer” which implies that the product or service supplier delivers by more than fulfilling the customer’s expectations. Satisfying the customer is no longer something special. As every competitor is endeavoring to satisfy his/her customer and therefore, one must do something better to maintain the competitive edge. On the other hand, customers have become more and more sophisticated and are demanding more and more from their suppliers. Just in time delivery, bonus packages, incentive programmers, and many other innovative strategies are being continuously evolved to delight the customer. On the other hand dissatisfying a customer can result in almost irreversible damage to the reputation of a supplier. Research has revealed that every dissatisfied customer conveys his

dissatisfaction to about 10 to 12 people and the price that the supplier has to pay for one dissatisfied customer is multiplied 10 fold or over. Thus the customer has to be treated with much care and consideration. It is said that the demands of some customers are so great that a new type of customer is evolving, namely, 'the never satisfied customer'. This type of customer is definitely that has to be handled with all resources available to a manager in a marketing organization.

5. Holistic Approach to Management –

Specialization may have been the focus in the 20th century. However, it is clear that a more holistic approach is needed in the new millennium. Specialization in a particular field is certainly an asset in an organization. But over specialization without a broad understanding of all disciplines of management can have a negative impact on an organization. A simple example would be a Marketing Specialist who does not understand the financial implications of his marketing decisions. Or a Financial Manager who does not appreciate the markets for the products his company is manufacturing.

6. Team Work – Working as a team member is becoming more and more important. Many of the complex problems and challenges confronted by Management in modern times requires complex multi disciplinary approaches in finding solutions. Team work and synergy achieved by such teams is a sine qua non in modern management.

7. Innovation – Peter Drucker in one of his latest publications stated that 2 of the most important ingredients in Management are marketing and innovation. It has been observed that creativity in a person decreases with age and that in structured organizations,

creativity has been stifled due to the inherent needs for standardization and benchmarking, especially in larger organizations. Entrepreneurship is less and less prevalent in conservative organizations. Without innovation and entrepreneurship, no organization can succeed in a rapidly changing world. In fact, a word was coined about 10 years ago to describe the entrepreneur skills required in structured organizations, which was referred to as "Intrapreneurship", which implies entrepreneurship within an organization. A modern Manager should always be able to think differently "think out of the box" and not simply follow accepted past practices merely because they have been successful in the past. New ways of implementing even routine procedures should always be evolved using innovative skills.

The word 'Innovation' almost automatically connotes the creation of a new product or service. However, as Peter Drucker refers to, in his brilliant example using the much quoted statement to express something that is impossible or very difficult "like selling a Refrigerator to an Eskimo" is far from an impossibility. A salesman who can convince an Eskimo that using a refrigerator will enable him to store his meat at a constant temperatures so that it is not too deep frozen, to be conveniently used, has certainly a winning innovation. Peter Drucker states that it is not a technical innovation of a new product but an innovative use of an existing product, which he classifies as an economic innovation.

STRATEGIC PLANNING

Strategic planning is one the most important tools that help managers develop new skills and procedures for dealing with tomorrow's business. Its greatest contribution is in dealing with change, the change from today's business to future business. The Strategic Planning can

be viewed as the process of selecting the best path between 2 points. If the business point today is point (A) and business in the future is point (B) strategic planning is the analysis of the most feasible routes between these two points. So that the optimum route may be selected. In fact, good planning goes beyond this point because it also helps to establish the location of A x B. This exercise of strategic planning compels one to think and plan for tomorrow whilst handling today's problems. Further managing in the new millennium involves more than mere strategic planning.

INDUSTRIAL AGE AND INFORMATION AGE

The most successful leaders in the industrial age in the early days were builders and not competitors. The companies known as second wave companies are built for growth with more of the same attitude, not an appreciation for change. In most of the corporation in the 60s and 70s there were very few things managers

had to "But to mind the store" while growth simply happened. In a second wave company the Top Executive Officer presides over this closed system like an emperor. Eg. Pepsicola. These companies lack flexibility, creativity and innovation. These are the ingredients that will determine the success in the information age. All are hampered because each level of hierarchy in a second wave company is a filter.

In the information age third wave companies are emerging from not only for high tech companies but for all institutions including education. The source of their future lies in change in the ability to transform their products and organization in response to changes in the economy in social habits, in customer interest. The comparison of companies given below in the industrial age (Second Wave) and information age (Third Wave) will give an indication what type of management will be relevant for the 21st century when the third wave companies predominate over the second wave companies.

Characteristics	Second Wave	Third
Organization	Hierarchy	Net Work
Output	Market Share	Market Creation
Focus	Institution	Individual
Style	Structured	Flexible
Source of Strength	Stability	Change
Structure	self Sufficiency	Independence
Culture	Tradition	Genetic Code
Mission	Goals/Strategic Plans	Identity / Direction / Values
Leadership	Dogmatic	Inspiration
Quality	Affordable	No compromise
Expectations	Security	Personal growth
Status	Title and Rank	Making a Difference
Resource	Cash	Information
Advantage	Better Sameness	Meaningful Differences
Motivation	To Compete	To Build

CONCLUSION

Peter Drucker predicts increasing the productivity of knowledge and service works will be the biggest challenges facing managers for decades to come. One other most important resources of the future will be information and knowledge that comes within. The **information wave** will play a far more important role in that 21st century. Any manager of tomorrow will have to be a person who familiar with it and handle knowledge to the best advantage of his organization. The type of manager who are required in a new millennium have to be people who are computer savvy, articulate in verbal and oral especially in English and additionally in another international languages. They should have a multidisciplinary approach without over specialization, be entrepreneurial and innovative in being able to think 'out of the box' to be able to be effective managers in the future.

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M. NADARAJASUNDARAM

DEAN

FACULTY OF MANAGEMENT STUDIES
& COMMERCE

UNIVERSITY OF JAFFNA

இலங்கையில் உற்பத்தித்திறன் அபிவிருத்தி Productivity Development in Sri Lanka

1.0 அறிமுகம்

வறுமை ஒழிப்பு ஊடாக இலங்கையின் உற்பத்தித்திறன் அதிகரிப்பைப் பெறவேண்டும் என்ற கருத்து அண்மைக் காலத்தில் வலுப்பெற்று வருகின்றது. வறுமையை ஒழிப்பதற்கென இலங்கை அரசாங்கம் உருவாக்கிய ஜனசக்தித் திட்டமானது ஓரளவு வெற்றியடைந்து வந்துள்ளது. இதன் மூலம் உருவாக்கப்பட்ட "சமுர்த்தி வங்கிச் சங்கம்" அங்கத்தவர் களுக்கிடையே சேமிப்பைத் திரட்டுவதிலும் முதலீட்டுக்கான நிதியை வழங்குவதிலும் வெற்றி கண்டிருப்பதனால் இலங்கையின் உற்பத்தித்திறன் விருத்தி கண்டுள்ளது. மக்களிடையே குழுக்களாக இயங்கும் பண்பினையும் சேமிப்புப் பழக்கத்தையும் அறிமுகப்படுத்துவதில் வெற்றிகண்ட சமுர்த்தி வங்கிச் சங்கமானது உற்பத்தித்திறன் அதிகரிப்புக்கு உதவும் என்பதில் ஐயமில்லை.

எந்தவொரு நாடும் விரைவாக வளர்ச்சியடைவதற்கு அதன் உற்பத்தித்திறன் அதிகரிப்பை உயர்த்திக்கொள்ள வேண்டும் என்பது முக்கிய விடயமாகும். இரண்டாவது உலகமகாயுத்தம் முடிவடைந்ததும் அமெரிக்காவும் ஐரோப்பிய நாடுகளும் உற்பத்தித்திறன் அதிகரிப்பில் அக்கறை காட்டத்தொடங்கின. இதனைத் தொடர்ந்து 1955 இல் ஜப்பான், ஐக்கிய அமெரிக்காவிலிருந்து நிதியுதவியையும், தொழில்நுட்ப உதவியையும் பெற்று உற்பத்தித்திறன் அதிகரிப்பில் ஈடுபடலாயிற்று. இதன் ஊடாகவே 1964 இல் "ஆசிய உற்பத்தித்திறன் நிறுவனம் (APO)" என்ற ஒன்று உருவாக்கப்பட்டது. அந்த வரிசையிலேயே இலங்கை ஜப்பானிய அரசாங்கத்துடன் செய்துகொண்ட ஒப்பந்தத்தின் பிரகாரம் 1966 ஆம் ஆண்டிலும்,

இந்தோனேசியா 1968 ஆம் ஆண்டிலும், சிங்கப்பூர் 1969 இலும் மலேசியா 1983 இலுமாக ஆசிய உற்பத்தித்திறன் மையத்தில் இணைந்து கொண்டன. இலங்கை ஆசிய உற்பத்தித்திறன் நிறுவனத்தில் இணைந்துகொண்டாலும் ஏனைய நாடுகளைவிட உற்பத்தித்திறன் அதிகரிப்பில் பின்நிற்பதாகவே கொள்ளமுடியும். வழமையில் ஒரு ஊழியருக்கான சராசரி வெளியீட்டை நாம் உற்பத்தித்திறன் எனக் கொள்வதனால் இந்த உற்பத்தித்திறன் அதிகரிப்பு நம் நாட்டில் ஏற்படவில்லையென்றே குறிப்பிடலாம். இதன் காரணமாகவே இலங்கை அரசாங்கம் உற்பத்தித்திறன் தசாப்தம் 1996-2006 என்ற ஊக்குவிப்பு நடவடிக்கையை ஆரம்பித்துள்ளது. ஆதலால் புதிய 21ம் நூற்றாண்டை உற்பத்தித்திறன் அதிகரிப்புக்கான ஆண்டாக இலங்கை மக்கள் கைக்கொள்ள வேண்டும். இது இலங்கையின் உற்பத்தித்திறன் உயர்வுக்கான நடவடிக்கையாக அமையும்.

2.0 இலங்கை தேசிய உற்பத்தித்திறன்

நிறுவனம்

உலக நாடுகளில் இருப்பது போன்றே இலங்கையிலும் தேசிய உற்பத்தித்திறன் அமைப்பு (NPO) உருவாக்கப்பட வேண்டும் என விரும்பப்பட்டது. இதன் காரணமாக 1968 இல் ஐக்கிய நாடுகளின் அபிவிருத்தித்திட்டம் பிரிவு (UNDP) "தேசிய வியாபார முகாமைத்துவ நிலையம்" இணைந்த இலங்கை தேசிய உற்பத்தித்திறன் நிறுவனம் அமைக்கப்பட்டது. இந்த நிறுவனமே இலங்கையின் உற்பத்தித்திறன் அதிகரிப்புக்கான தேசிய அமைப்பாகவும் காணப்படுகின்றது. இந்நிறுவனம் ஆரம்பத்தில் முகாமைத்துவ பயிற்சியையும் கணனிப் பயிற்சியையும்

கொண்டிருப்பதன் ஊடாக விளைதிறன் அதிகரிப்பை நாட்டில் கொண்டுவரலாம் என உத்தேசித்தது. ஆனால் அது மட்டும் உற்பத்தித்திறன் அதிகரிப்பைக் கொண்டுவர மாட்டாதென மிக விரைவில் அறிந்துகொண்டது. அதன் காரணமாக உற்பத்தித்திறன் உயர்வுக்கு வசதியாக தேசிய வியாபார நிறுவனம் 1993 இலிருந்து மூன்று நிகழ்ச்சித் திட்டங்களை அறிமுகப்படுத்தியது. அவை,

1. கைத் தொழில் துறைக்கான தேசிய உற்பத்தித்திறன் விருது வழங்கல்
2. பாடசாலைப் பிள்ளைகளுக்கான உற்பத்தித்திறன் விழிப்புணர்ச்சித் திட்டம்
3. தேசிய உற்பத்தித்திறன் உடன்படிக்கைகள் என்பவற்றின் ஊடாக இலங்கையின் உற்பத்தித்திறன் அதிகரிப்புக்கு நடவடிக்கை எடுக்கப்பட்டது.

இலங்கை போன்ற குறைவிருத்தி நாடு வளர்ச்சியடைவதற்கு உற்பத்தித்திறன் உயர்வடைவது மிக அவசியமாகும். அதன் காரணமாகவே இத்திட்டத்திற்கு அரசாங்க ஆதரவு வழங்கப்பட்டுள்ளது. அதன் காரணமாகவே 1995 இல், தொழிற்சங்கங்கள், வேலைகொள்வோர், கல்வியியலாளர்கள் ஆகியோரை உள்ளடக்கிய மாநாடொன்றை நடாத்தியது. இதன் பிரகாரம் ஒரு துறையில் மட்டுமன்றி விவசாயம், கைத்தொழில், கடற்றொழில், காட்டுத்தொழில், கால்நடை வளர்ப்பு, பெருந்தோட்டம், வங்கித்துறை, போக்குவரத்து, சுகாதாரம், விடுதி, பாடசாலைகள் போன்ற எல்லா இடங்களிலும் உற்பத்தித்திறன் அதிகரிப்புக்கு அரசாங்கம் நடவடிக்கை எடுத்துவருகின்றது.

3.0 உற்பத்தித்திறன் அதிகரிப்புக்கான நடவடிக்கைகள்

இலங்கையில் உற்பத்தித்திறன் அதிகரிக்கப்படுதல் தொடர்பாக அரசாங்கம் அதிக அக்கறை காட்டிவருகின்றது. அதன்

காரணமாக அரசால் பல்வேறு நடவடிக்கைகள் எடுக்கப்பட்டு வருகின்றன. அவற்றுள் பின்வருவன முக்கியம்பெறும்.

3.1 தேசிய உற்பத்தித்திறன் நிறுவனம்

உலகின் பல நாடுகளில் உற்பத்தித்திறன் அதிகரிப்பை நோக்காகக் கொண்டு நிறுவனங்களை உருவாக்கியிருப்பது போன்றே இலங்கையும் இதற்கென தேசிய வியாபார முகாமைத்துவ நிறுவனத்தை உருவாக்கியுள்ளது. இது முகாமைத்துவ அபிவிருத்தியையும் தொழில்நுட்ப அபிவிருத்தியையும் நோக்காகக் கொண்டு இயங்கிவருகின்றது. மனிதவள மேம்பாடு பொது முகாமைத்துவ அபிவிருத்தி, தகவல் சேவைகளின் அபிவிருத்திக்காக அது உதவி வருவதனால் அரசு, தனியார் நிறுவனங்களின் உற்பத்தித்திறன் உயர்வடைய உதவியுள்ளது.

3.2 உற்பத்தித்திறன் தசாப்தம்

உற்பத்தித்திறன் உயர்த்துதல் குறுங் காலத்தில் இடம்பெற முடியாது என்பதனால் 1996-2006 கால இடைவெளியில் இலங்கையின் எல்லாத் துறைகளிலும் உற்பத்தித்திறன் அபிவிருத்தி செய்ய அரசு தீர்மானித்துள்ளது. இதற்கென தனியான உற்பத்தித்திறன் செயலகம் என்ற ஒன்று உருவாக்க அரசு தீர்மானித்து உள்ளது. சிங்கப்பூரில் உள்ள இத்தகைய செயலகம், சிங்கப்பூர் முதலாளிமார் சம்மேளனம், சிங்கப்பூர் உற்பத்தியாளர் கழகம், சிங்கப்பூர் சில்லறை வியாபாரிகள் கழகம் என்பன காலத்துக்கு காலம் உற்பத்தித்திறன் உயர்த்தப்பட உதவியுள்ளன. இதேபோல் இலங்கை அரசாங்கமும் விளைதிறன் செயலகம் ஒன்றை உருவாக்குவதன் மூலம் விளைதிறன் அதிகரிப்புக்கு உதவமுடியும்.

3.3 ஆர்வத்தினை அதிகரித்தல்

தேசிய ரீதியில் விளைதிறன் சம்பந்தமான விருது வழங்கும் திட்டத்தினை அறிமுகப்படுத்திய

செயற்பாடு விளைதிறன். இதன் அடிப்படையிலேயே வெளிநாட்டில் பயன்படுத்தும் தொழில்நுட்பங்கள் எல்லாம் எமது நாட்டிலும் அறிமுகப்படுத்தப்பட்டால் உற்பத்தித்திறன் அதிகரிப்பது நிச்சயமாகும். இதன் காரணமாகவே வெளிநாட்டு நிறுவனங்களின் முதலீடுகள் இலங்கை அரசால் வரவேற்கப்படுகின்றன. இலங்கை முதலீட்டுச்சபையால் அறிமுகப்படுத்தப் பட்ட பல வெளிநாட்டு நிறுவனங்கள் உயர்த்த உற்பத்தித்திறன் கொண்டவையாகக் காணப்படுகின்றது.

3.4. தொழிற்நுப்தியை அதிகரித்தல்

வேலையில் பாதுகாப்பையும் நல்ல வேலைச்சூழ்நிலையையும் வழங்குவதனுடாக ஊழியர்களது தொழிற்நுப்தியை அதிகரிக்க முடியும். ஊழியர்கள் வேலையில் ஊக்குவிக்கப்படுவதற்கு தொழிற் திருப்தியே அடிப்படையில் அமைவதுடன் அது மறுபுறத்தில் ஊழியர்களின் உற்பத்தித் திறனை உயர்த்துவதாகவும் இருக்கும். ஊழியர்கள் உள்ளார்ந்த ரீதியில் ஊக்குவிக்கப்பட்டால் அவர்கள் தாமதமாகவே உற்பத்தியை உயர்த்துவார்கள். இது நிறுவனங்களினது உற்பத்தித்திறன், குழுவின் உற்பத்தித்திறன் தனிப்பட்டவரது உற்பத்தித்திறன் என்பவற்றை உயர்த்துவதற்கு வகை செய்யும். எனவே தான் நாடளாவிய ரீதியில் உற்பத்தித்திறன் உயர்த்தப்படுவதற்கு தொழிற் திருப்தி ஏற்படுத்தப்படல் வேண்டும். இதற்காகவே பல சட்டங்களை இயற்றிய அரசாங்கம் நல்ல வேலைச் சூழ்நிலைகள், சுகாதார ரீதியான பாதுகாப்புகள், விபத்துக்களிலிருந்து பாதுகாப்புகள் என்பவற்றை ஏற்பதாக கொடுத்துள்ளது. இது உற்பத்தித்திறன் உயர்வுக்கு வகைசெய்துள்ளது.

4.0 முடிவுரை

உற்பத்தி திறன் போட்டிப் பொருளாதாச் சூழலில் முக்கியம் பெறும் விடயமாகும். இலங்கை எழுபதுகளின் பிற்பகுதி தாராள பொருளாதார்க் கொள்கையைக் கடைப்பிடிக்கத் தொடங்கியமை காரணமாக உற்பத்தித்திறன் அதிகரிப்பென்பது முக்கியம் பெறுகின்றது. நிறுவனங்களும் தனிநபர்களும் குறைந்த வளங்களைப் பயன்படுத்தி கூடிய பெறுபேற்றினைப் பெற முயல்வதனால் அவற்றுக்கான விளைதிறன் அதிகரிப்பு முக்கியம் பெறுகின்றது. அதுவும் கடந்த காலம். நிகழ்காலம் என்பவற்றைவிட எதிர்காலத்திலேயே பெரிதும் வேண்டப் படுகின்றது. உயர்மட்ட முகாமையின் பங்களிப்பிலேயே விளைதிறனின் வளர்ச்சி தங்கியுள்ளமையால் நடுத்தரமட்ட, கீழ்மட்ட முகாமையை விட உயர்மட்ட முகாமை விளைதிறன் விருத்தியில் அக்கறை காட்டுதல் வேண்டும். தொழில் நிறுவனங்கள் நிலைத்திருப்பதும், நாட்டின் முன்னேற்றமும் விளைதிறனில் தங்கியிருப்பதனால் இலங்கையின் துரிதமான வளர்ச்சிக்கு விளைதிறன் அதிகரிப்புக்கான நடவடிக்கை அவசியமாகும். அதன் அடிப்படையில் நாடளாவிய ரீதியில் விளைதிறன் அபிவிருத்திக்கான பகிரங்கப்படுத்தலை அரசாங்கம் கையாளல் வேண்டும்.

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Foreign Market Entry Decision

- A strategic Perspective -

1. Introduction

In current business world, many organizations of developed as well as developing countries compete to get large market share in the international market. The term 'international marketing' concerns itself with the application of marketing operation across national frontiers. Thus, entering into the international market and doing marketing in that is not a trivial matter. Some of the companies are making decision to go to international for the first time; other companies seek to expand their share of world market. A foreign market entry or expansion strategy must begin with careful analysis of each possible market/s because this decision relates with resources and survival of the firms. As far as a firm is concerned some of the environmental factors or internal factors induce or pull it to go to foreign market. At the same time if the reasons to go to international market are good enough and also the entry made is situationally best we can expect the firm will perform in a good manner.

Even though there are many entry methods practicing by the firms, this article considers only direct exporting activities and indirect entry methods.

2. Why do organizations go to international market?

In practice most of the companies would prefer to remain domestic, if their domestic market were large enough. Managers would not need to learn other languages and laws, deal with volatile currencies, face political and

legal uncertainties, or redesign their products to suit different customer needs and expectations. Business would be easier and safer. Yet several factors are drawing more and more companies into the international arena. **Kotler** states the following reasons for going to international.

1. Global firms offering better products and lower prices can attack to company's domestic market. The company might want to counter attack these competitors in their home market.
2. The company discovers that some foreign market present higher profit opportunities than the domestic market.
3. The company needs a larger customer base to achieve economics of scale.
4. The company wants to reduce its dependence on any one market.
5. The company's customers are going abroad and require international servicing

Staley Paliwoda indicates some other additional reasons:-

1. Excess capacity utilization
A firm may have additional capacity fulfill than domestic demand. A situation like this may induce the firm to go to foreign market
2. Geographical diversification
3. Potential population and purchasing power.
4. Product trade cycle

Even though there may be number of reasons stated to rationalize the foreign market entry, every organization should remember that before making a market entry decision it must weigh several risks. Among that some of them are given below:

- i. The company might not understand foreign customer preference and fail to offer a competitively attractive product.
- ii. The company might not understand the foreign country's business culture or know how to deal effectively with foreign nationals.
- iii. The company might under estimate foreign regulations and incur unexpected costs.
- iv. The company might realize that it lacks managers with international experience.
- v. The foreign country might change its commerce al laws, devalue its currency or under go a political revolution and expropriate foreign property.

In order to do better international marketing, an organization may have different corporate strategy. This strategy may guide the firm in the international market arena.

The following may be corporate strategy of a firm

- ❖ growth
- ❖ profitability and economies of scale
- ❖ new product for existing markets
- ❖ new market for existing products
- ❖ new products from new markets
- ❖ foreign earnings from existing products
- ❖ reducing vulnerability to domestic economic downturns
- ❖ access to foreign production inputs
- ❖ Increased total potential market size over which to spread R&D costs.

5. Deciding how to enter the market.

Selection of market entry mode has an important bearing on strategy, and can later

prove to be a severe constraint on future intended international expansion unless due care and attention has been exercised in terms of any contractual arrangements. Before selecting an entry method the following factors should be taken into consideration.

1. *Speed of market entry desired*

Speed is required, the firm should select a method which confirms immediate entrance licensing or use of an agent / distributor will be the fast mode and likely way to ensure access to distribution in the foreign market.

2. *Costs to include direct and indirect costs.*

As far as costs is concerned, savings may be out weighted by indirect costs such as freight, strikes or disruptions to output, lack of continuity with the power supply, or irregularity in the supply of raw materials. Against this, the cost of doing nothing has to be considered; this may be higher than the attendant risks of moving into a relatively unknown market.

3. *Flexibility required*

The law of a country exists to protect that country's nationals. There is as yet no such thing as international law exceptionally UNCITRAL, the extra territoriality of us Law, and within the ED, Articles 36, 85 and 86 as they affect trade within the European union. In disputes between two countries the domestic law of a neutral third country is often called on, so that domestic law then becomes used for a purpose for which it was never designed.

4. *Risk factors*

Risk factors include political risk and economic as well as competitive risk. In a

dynamic market, time is of essence. No product remains 'new' forever. Getting the product to market is important but so, too is avoiding the creation of competitor, a common criticism of licensing. Risk may be diminished by minimizing the investment stake in the company by accepting a local joint – venture partner. Equally, investment activity in one market may lead to reprisals for the company elsewhere as has often been seen in the part with companies trading with Israel and then finding themselves subject to an Arab boycott

5. Investment Payback period

Shorter term payback may be realized from licensing and franchising deals, where as joint ventures or wholly owned subsidiaries will tie up capital for a number of years.

6. Long – term profit objectives

This is also a very important factor because the mode of entry may affect long-term profit and growth of market share in a foreign market.

In addition to these criteria, five market characteristics should be taken into consideration, which are size, accessible group of people, ability to buy, a suitable product or service offerings and legality of consumption.

Further, firms can enter into the foreign market directly or indirectly. To begin with, it has to be emphasized that there is no one, single universal best strategy. The firm should consider all alternative channels. Strategies when entering each market. The best strategy will be the one, which is situationally best: it is optimal in that it satisfies – with regard to conflicting pressures of the foreign and

domestic environment, industry structure marketing strategy.

Indirect market entry methods involve the use of intermediaries who handle all documentation, physical movements of goods, and channel of distribution for sales. In direct exports may take place either with or without the knowledge of the manufacturer himself. In direct market occur in number of ways.

1. An Export House

Export houses will buy directly from manufacturer on behalf of a foreign principal in which case the sale will be a purely domestic one with the export house arranging the export the goods.

2. The Trading Company

This is a quite different category. During the colonial period the Great Britain had more strength in international trading because of the trading companies.

E.g :- East India Company

Hudson Bay Company

3. Piggybacking

Piggybacking uses the distribution channel of another company, and in this respect, overlaps with agents but complementarily sought of distribution outlets and product carried. Returns are achieved by means of commission or outright sales of goods by are multinational to another.

Direct exporting activities begin where the company may be actively involved in foreign sales, but perhaps due to inexperience, arranges for all documentation and physical

distribution to be handled on its behalf by a freight forwarder

1. Agents

Agents are the most common form of low cost direct involvement in foreign markets, because they are paid commission only sales. This method has number of disadvantages.

- ❖ Although foreign embassies and national trade associations are able to supply fairly complete lists of agents, it is often difficult for them to give any qualitative assessment or evaluation or to recommend specific agents, perhaps out of a need for impartiality rather than fear of libel.
- ❖ Agents may represent a number separate companies and product lines, this may be a problem. Meanwhile, the company holds responsibility for whatever unsold inventory is held by the agent, while at the same time being virtually deprived of market information.
- ❖ No agent will willingly expose himself to the risk of being supplanted by a branch of the company's own sales organization. If the organization faces slow growth situation, it may be difficult to determine exactly why this has arisen on the other hand, where there is high market growth, this creates pressures within the company to take over the foreign market from the agent. This may often require compensating the agent handsomely, especially where local legislation exists to protect his position. Elsewhere, the situation may arise where the company wishes to expand its product line or else diversify into a quite different product, and

the local agent finds himself unable to meet this new expansion but still holds a company agreement to exclusivity of sales territory.

2. Distributors

Distributors are another method of low cost foreign market entry. They usually seek exclusive rights to specific sales territories. The difference between the distribution and the agent is that the distributor and the agent is that the distributor will, like the foreign buying office, be placing an order in that the responsibility for the condition and sales of goods will end at some point to be agreed in the distribution channel between producer and distributor. The distributor actually takes title – i.e., owns the inventory, which he carries and represents the manufacturer in the sales and service of the products which carries. Thus, in return for his capital investment, he will usually seek exclusivity of supply and sales territory plus a reasonable turnover rate of the products handled.

3. Management Contracts

Management contracts are quite different again in that they often subsume some other form of relationship such as licensing, franchising strategic business alliance or joint equity venture. Management contracts emphasize the more using importance of service, and know how as a saleable asset in international trade. Based on the contractual form, it will concern the transferal of management control system and know – how involving personnel training.

4. Franchising

Franchising is a marketing – oriented method of selling a business service, often to small independent investors with working capital but little or no prior business experience. Franchising transfers the legal right to a third party to use a company's registered trade name, trade marks, and logo, products, packaging and business system.

5. Licensing

Licensing confers only a right to use a company specific and patent protected process in manufacturing. This right is conveyed in the transferal of original blue print and design operational experience. In production of the licensed technology is usually a separately negotiable item, as will be any subsequent modification to the product transferred, unless this has specially been contracted and does not constitute 'new' technology. In its simplest form, then, it may involve, the transmittal of original designs increasingly, though, use is being made of additional know – how agreements which will include on – site training of supervisory staff plus an experience transferal in the operations of handling the licensed technology. The following disadvantages are indicated about this entry method.

1. Creation of a potential competitor without the designation of specific sales territories.
2. Difficulties maintaining control or leverage over the licensee to avoid damage to trade marks or brand names as a result of the licensee's inferior quality control, after sales service etc.
3. Increasing production by the licensee may result in lower royalties where there is a sliding scale in operation.

4. The licensor is ceding certain sales territories to the licensee for the duration of the contract – should he fail to live up to expectations – renegotiation may be expensive.
5. Problems involved in the transfer of funds.
E.g.:- exchange control restrictions, exchange parties plus of course, the refusal to pay

Conclusion

Even through there are many entry methods in practice; selection of a method certainly is different to organization to organization. The reasons are obviously PEST factors of the market and SWOT factors of the company. The best way should ensure the survival in foreign markets as well as profitability of the organization.

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Microfinance and Its Loan Pricing

1.0 What is Micro finance?

Many researchers and institutions have defined the term of microfinance in several ways. Some of them are as follow: Microfinance refers to small scale financial services to both credits and deposits that are provided to people who form or fish; operate small or micro enterprises where goods are produced, recycled, repaired, or traded, provided, services, work for wages or commissions, gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools, and to other individual and local groups in developing countries, in both rural and urban areas (Robinson, 1998: 53).

Micrifinance refers to the provision of financial services to low-income clients, including the self-employed. Financial services generally include savings and credit; however, some microfinance organizations also provide insurance and payment services. In addition to financial intermediation, many microfinance institutions provide social intermediation services such as group formation, development of self-confidence, and training in financial literacy and management capabilities among members of a group. Thus, the definition of microfinance often includes both financial intermediation and social intermediation. Microfinance is not simply banking it is a development tool.

The Asian Development Bank has defined microfinance as "the provision of a broad range of financial services that includes services such as deposits, loans, payment services and insurance to poor and low income households and their micro enterprises" (ADB, 2000).

Typically, microfinance services are provided through three sources, these are:

- Formal institutions, such as banks, rural banks, government projects and co-operatives;
- Semi formal institutions, such as NGOs; and,
- Informal sources, such as moneylenders and shopkeepers.

Institutional microfinance is thus defined to include microfinance services provided by formal and semi-formal institutions while microfinance institutions are defined as institutions "whose major business is the provision of microfinance services."

Microfinance provides credit and savings services to the self-employed poor, to enable them to start-up or expand small income generating activities. The poor in the developing world are, and have always been on the margins of their national economies. They often operate on a cash-only basis, so their transactions go unrecorded by the government. Their hardwork is thus classified as "informal." It doesn't really count. Though they know what hardwork is the poor have no collateral, no official business history, and no bankable worth. They are therefore denied access to resources, which might enable them to expand, increase efficiency, or diversify their sources of income. Through delivering credit and savings services tailored to the needs of micro-entrepreneurs, microfinance sends a tangible message to the poor that they do count, they are important, and that their hardwork can pay off. It offers opportunities for the poor to make choices, plan for the future, and create a more secure financial base for their families.

Microfinance activities usually involve:

- Small loans, typically for working capital.
- Informal appraisal of borrowers and investments
- Collateral substitutes, such as group grantees or compulsory savings.
- Access to repeat and larger loans, based on repayment performance.
- Streamlined loan disbursement and monitoring.
- Secure savings products

Although some microfinance institutions provide enterprise development services, such as skills training and marketing and social services, such as literacy training and health care, these are not generally included in the definition of microfinance.

2.0 How does microfinance work?

It addresses the key issues of collateral and risk in unconventional ways. When a commercial bank lends money, the borrower is normally required to put up collateral. The poor have no collateral of significant value, which shuts them out of the commercial credit market. Microfinance institutions lend against alternative forms of collateral, which have proven around the world to be extremely effective credit guarantees. Forms of alternative collateral used by Microfinance Institutions.

2.1 Social collateral

Social collateral is the most common alternative, and is used in two main types of lending schemes: village banking, and solidarity group lending, both of which typically offer small, short-term working capital loans. Prompt repayment is rewarded by access to higher

loan amounts. Many programs also require participation in a structured savings program, which requires a percentage of the borrowed amount to be kept in savings as an additional guarantee.

Village Banking:

“A Village Banking group is a group of 25-30 people who guarantee each other’s loans and run a democratic organization. Meetings are highly participatory: members elect their own leaders, design their own bylaws, keep the books, manage the funds, and are fully responsible for loan supervision, including enforcing penalties for non-compliance.”

Solidarity Groups:

Solidarity group lending is less formalized, involving groups of typically 3-10 people who guarantee each other’s loans. Each group member’s performance affects the others in the group — if one member is late or doesn’t pay the whole group are often penalized according to standard rules and policies established and enforced by the Microfinance Institutions.

2.2. Chattel collateral:

Some micro-lending programs lend relatively higher amounts of investment capital to individuals for the start-up of businesses. Most of these do not use social collateral, but require “chattel items” to be put up against the loan. A chattel item is something, which may not have a high value in terms of money, but has a high personal value to the individual in the context of her/his economic activity. Examples might include a tailor’s sewing

machine, a miller's grinding machine, or a restaurant's tables and chairs.

3.0 How do Microfinance manage their risk?

Most Microfinance Institutions use a combination of the following risk management tools to further reduce the risks involved in unsecured lending:

Small loan sizes, typically starting at around Rs.5,000.

Short term lending, usually for periods of 3 - 12 months.

Rewards for on-time repayment in the form of future access to higher amounts

Required savings deposits, in proportion to the amount borrowed

Regular group meetings, where payments are normally made in front of the group

Penalties for late payment, such as fees, denial of higher loan amounts, or waiting periods

Training for borrowers in financial and business management techniques

Interest rates, which have a higher risk factor built in.

4.0 Are savings services important?

The importance of savings services tailored to the needs of the poor is an issue demanding more and more attention in the microfinance field. In addition to the importance of required savings as a risk management tool for Microfinance Institutions, it is increasingly recognized that savings services can offer important benefits to the poor, and also to the economy at large.

4.1 Personal savings management:

Without a safe place to put their savings, the poor tend to invest it in "assets" such as livestock, small appliances or other items, which can be sold in times of need. This way of saving is extremely inefficient, since a family may be forced to sell a cow worth Rs. 6,000 when they only need Rs.3, 000 to solve an immediate problem. Since cash on hand is otherwise scarce, the extra Rs.3, 000 will quickly disappear into food, clothing, or other immediate necessities, meaning that those savings are lost. Moreover, the maintenance of these assets also requires money, and over time they will lose some of their value. Accessible savings services enable the poor to use their money more efficiently.

4.2 Developing good savings habits:

Commercial banking account fees tend to be at least as high in developing countries as they are in richer countries, but the amounts that the poor deposit in savings tend to be much smaller. If a family deposits Rs.100 per week in savings, then a monthly fee of Rs.400 could represent a loss of over 100%! Thus, the commercial banking sector offers no incentives for the poor to save. Several initiatives in microfinance are working to develop ways in which Microfinance Institutions can offer savings incentives, which instead of eating up a poor family's money through fees can make it grow. This will encourage good saving habits among the poor, making it easier for them to manage both their family finances and their business growth.

4.3. Bringing savings into the national economy:

Commercial banks use the money deposited in savings for lending to others who invest it somehow. Each time that happens, economic growth is stimulated. While the amounts that poor people save individually may be small, together (since the poor constitute the majority of the population) they represent an enormous amount of money, which is currently not being used to stimulate economic growth in any way.

5.0 Is microfinance the answer to alleviating poverty?

While microfinance addresses a number of important issues, which have long stood in the way of the alleviation of poverty, microfinance alone cannot eradicate the terrible conditions in which poor populations often live. Microfinance does not improve roads and communications, it does not provide electricity and water supply infrastructure, and it does not improve the quality of education. Several Microfinance Institutions are finding ways to play a role in the financing of health care services, but microfinance alone cannot ensure the quality of health care services accessible to poor people. The alleviation of poverty is a complex struggle, which requires cooperation and cohesion between Governments, development institutions, and the poor themselves.

Perhaps the greatest contribution of microfinance is that it empowers the poor, giving them both the increased confidence and the financial means to play a larger role in controlling their own destinies. Instead of waiting for governments and development institutions to improve their lives for them, the

beneficiaries of microfinance can start to improve their lives themselves. It gives them the chance to make the best of what they have, and move out of the vicious cycle of poverty along a path they create for themselves.

6.0 Do Microfinance Institutions charge interest?

Most Microfinance Institutions charge interest rates which are higher than commercial rates. The administration of many small loans, including the processing and tracking of frequent small payments, is a costly exercise. To cover these costs, as well as their risk, microfinance Institutions typically charge interest rates, which are higher than what commercial banks charge. Questions over the "fairness" of charging high interest rates to the poor must be seen in their proper context:

6.1 Sustainability

If Microfinance Institutions are to make a lasting impact, they cannot remain dependent on donor funding. They must become self-sufficient in all ways, or they will collapse and their impact will end as soon as donor support is no longer available. The interest rates microfinance Institutions charge must cover all their operational costs.

6.2 Viability

The credibility of microfinance in the world financial markets demands that Microfinance Institutions become viable financial institutions. If Microfinance Institutions can prove to the world at large that microfinance is financially viable, then private investors will start to take more interest in the world's poor majority as an emerging financial market with enormous potential.

6.3 Availability

Loans to the poor at lower interest rates are simply not available anywhere else. Nobody is forced to take out a loan — people who borrow are making a choice to pay the cost, which they clearly feel is a better option than having no access to credit at all.

7.0 Loan pricing

Pricing loans is an important aspect of loan product design. A balance must be reached between what clients can afford and what the lending organization needs to earn to cover all of its costs. Generally, microfinance clients are not interest rate sensitive. That is, micro entrepreneurs have not appeared to borrow more or less in reaction to an increase or decrease in interest rates. For the most part, an interest rate for above commercial bank rates is acceptable because the borrowers have such limited access to credit. However, an microfinance institution must ensure that its operations are as efficient as possible so that undue burden is not put on its clients in the form of high interest rates and fees.

Microfinance institutions can determine the interest rate they need to charge on loans based on their cost structure. Microfinance institutions incur four different types of costs.

- Financing costs
- Operating costs
- Loan loss provision
- Cost of capital

In general, an microfinance institution incurs relatively low financing costs if it funds its loan portfolio primarily with donated funds. However, if compulsory savings are used to fund the loan portfolio, they can affect the

average financing costs of microfinance institution many microfinance institution do not pay an interest on compulsory savings, and if this is the case the cost of funds for the compulsory savings is zero. If a microfinance institution funds its loan portfolio with borrowed money from a bank, for example, at 12 percent and with client savings at 6 percent, the higher the portion of the portfolio funded with client savings, the lower the overall cost of funding.

For example, with a 1,000,000 loan portfolio funded by 300,000 saving (at 6 percent) and 700,000 borrowed funds (at 12 percent), the average annual cost of funds;
= 10.2%

If the compulsory savings component is increased to 500,000 the average cost of funds is reduced. Using the above example, with a 1,000,000 loan portfolio funded by 500,000 saving (at 6 percent) and 500,000 borrowed funds (at 12 percent), the average annual cost of funds is,

$$\frac{(500,000 \times 6\%) + (500,000 \times 12\%)}{1,000,000} = 9\%$$

Operating costs include salaries, rent, travel and transportation, administration, depreciation, and so forth. Loan loss provisions vary depending on the quality of the loan portfolio and capital costs vary depends on the market rate of interest and the inflation rate in the country.

7.1 Calculating Interest Rate

There are several ways to calculate interest on a loan of which two methods are most common : the declining balance method and the flat (face-value) method.

The Declining Balance Method

This method calculates interest as a percentage of the amount outstanding over the loan term. Interest calculated on the declining balance means that interest is charged only on the amount that the borrower still owes.

The Flat Method

This method calculates interest as a percentage of the initial loan amount rather than the amount outstanding (declining) during the loan term. Using the flat method means that interest is always calculated on the total amount of the loan initially disbursed, even though periodic payments cause the outstanding principal to decline.

7.2 Calculating Effective Rate of Interest

Effective rate of interest refers to the inclusion of all direct financial costs of a loan in one interest rate. The effective interest rates differ from nominal rates of interest by incorporating interest, fees the interest calculation method and other loan requirements into the financial cost of the loan. The effective rate should also include the cost of forced savings or group fund contributions by the borrower, because these are financial costs. It does not consider transaction costs (the financial and non-financial costs incurred by the borrower to access the loan such as opening a bank account, transportation, opportunity costs) in calculation of the effective rate because these can vary significantly depending on the market place. However, it is important to design the delivery of credit and savings product in a way that minimizes transaction costs for both the client and the microfinance institution.

Variables of micro loans that influence the effective rate include:

- Nominal interest rate
- Method of interest calculation
- Payment of interest
- Service fees
- Contribution to guarantee, insurance or group fund
- Payment frequency
- Payment term
- Loan amount

Two methods of calculating the effective rate of interest are estimation method and internal rate of return method. The estimation method considers the amount the borrower pays in interest and fees over the loan term. The estimation method can be used to determine the effect of the internal rate calculation method, the loan term, and the loan fee. An estimation of the effective rate is calculated as follows:

$$\text{Effective cost} = \frac{\text{Amount paid in interest and fees}}{\text{Average principal amount outstanding}}$$

Average principal amount outstanding

$$= \frac{(\text{sum of principal amounts outstanding})}{\text{Number of payments}}$$

Effective rate estimate, declining balance

Loan amount : 1000

Loan term : 12 months

Interest rate : 20%

Fee : 3%

Month	Payments	Principal	Interest	Outstanding balance
0	-	-	-	1000.00
1	100	83.33	16.67	916.67
2	100	83.33	16.67	833.34
3	100	83.33	16.67	750.01
4	100	83.33	16.67	666.68
5	100	83.33	16.67	583.35
6	100	83.33	16.67	500.02
7	100	83.33	16.67	416.69
8	100	83.33	16.67	333.36
9	100	83.33	16.67	250.03
10	100	83.33	16.67	166.70
11	100	83.33	16.67	83.37
12	100	83.33	16.67	0.00
	<u>1200</u>	<u>1000</u>	<u>200.00</u>	<u>6500.22</u>

$$\begin{aligned}
 \text{Effective rate} &= \frac{(200 + 30)}{6500.22 \div 12} \\
 &= \frac{230}{541.69} \\
 &= 42\% \\
 &= 3.5\% \text{ per month}
 \end{aligned}$$

Internal rate of return is defined as the special interest rate by which the sequence of installments must be discounted to obtain an amount equal to the internal credit amount.

7.3 Sustainable Interest Rate

Microfinance institutions can determine the rate necessary to charge on loans based on their cost structure. The following is one method of approximating the effective interest rate that an microfinance institution will need to charge on its loans to cover all of its costs and thus be sustainable. This method answers that a nature microfinance institution with relatively stable costs, that is, start-up costs have already been amortized and the

microfinance institution is operating at full capacity.

The annualized effective yield (R) charged on loans is a function of five element, each expressed as a percentage of average expenses (AE), the cost of funds (CF), loan losses (LL), the desired capitalization rate (k), and investment income (II).

$$R = \frac{AE + CF + LL + K}{1 - LL} - II$$

Each variable in this equation should be expressed as a decimal fraction. Thus, administrative expenses of 200,000 on an average loan portfolio of 800,000 would yield a value of 0.25 for the AE rate. All calculation should be done in level currency, except in the unusual case where an microfinance institution quotes its interest rates in foreign currency.

Administrative expenses include all annual recurrent costs except the cost of funds and loan losses including salaries, benefits, rent, utilities and depreciation. Also included are the value of any donated commodities or services,

such as training or technical assistance that the microfinance organization will have to pay for in the future as it grows independent of donor subsidies. Administrative expenses of efficient nature organizations tend to range between 10 and 25 percent of their average loan portfolio.

7.4 Loan Loss Rate

This element is the annual loss due to uncollectable loans. Past loan loss experience is an important indicator of this rate. The loan loss rate may be considerably lower than the delinquency rate the former reflects loans that must actually be written off, while the latter reflects loans that are not paid on time – many of which will eventually be recovered. Microfinance organizations with loan loss rates greater than 5 percent tend not to be viable. Many good organizations run at about 1 to 2 percent of average outstanding portfolio.

7.5 Cost of Fund

The cost of funds (CF) rate takes into account the actual cost of funds of the organization when it funds its portfolio with savings and commercial department. When a microfinance also benefits from concessional funding, the calculation must include an estimation of the funding costs it were replaced with commercial department and equity. Prior to determining the cost of funds rate, an estimation of the financial assets (excluding fixed assets) and the proportion of debt and equity to fund these assets needs to be determined, based on future funding policies. Once this is done, two methods are suggested to determine the cost of funds:

- The estimation method: multiple the financial assets by the higher of the rate that local banks charge medium – quality commercial borrowers or the inflation rate projected for the planning period.
- The weighted average cost of capital: based on the sources used to fund the financial assets, including loans to the organization, deposits if licensed to collect and equity.

7.6 Capitalization Rate

The capitalization rate (k) represents the net real profit that the organization would like to achieve, expressed as a percentage of the average loan portfolio (not of equity or of total assets). Accumulating such profit is important. The amount of outside funding the microfinance organization can safely borrow is limited by the amount of its equity. Once the institution reaches that limit, any further growth requires an increase in its equity base. The best source for such equity growth is internally generated profits. The rate of real profit the microfinance organization targets depends on how aggressively its board and management want to grow. To support long-term growth, a capitalization rate of at least 5 to 15 percent of a average outstanding loan portfolio is arguably advisable.

7.7 Investment income rate

Investment income rate (II) is the income expected to be generated by the organizations' financial assets excluding the loan portfolio. Some of these such as cash, checking deposits, and legal reserves, will yield little or no interest;

others, such as percentage of the loan portfolio, is entered as a reduction in the pricing equation.

For example, if an organization has operating expenses of 25 percent of its average loan portfolio, 23.75 percent cost of funds, loan losses of 2 percent, a desired capitalization rate of 15 percent, and investment income of 15 percent, the resulting effective annual interest rate is:

$$R = \frac{AE + CF + LL + K}{1 - LL} - II$$

$$R = \frac{0.25 + 23.75 + 0.02 + 0.15}{1 - 0.02} - 0.15$$

$$= 65.6$$

8.0 Microfinance in Sri Lanka

A group of people have surveyed the microfinance activities in Sri Lanka. Here are some findings of them.

Key Characteristics of the Supply of Microfinance

- ❖ Broad-based coverage of microfinance activity throughout most of the country.
- ❖ High levels of supply relative to the overall population.
- ❖ High levels of supply in the Southern Province and the districts of Kurunegala, and Puttalam.
- ❖ Low levels of supply in the North & East Region.

Key Characteristics of Microfinance Savings Activity

- ❖ High levels of savings mobilisation relative to the overall population.
- ❖ High levels of savings collateralisation relative to the number of loans disbursed.

- ❖ Increased levels of savings mobilisation among the poorest.

Key Characteristics of Microfinance Loan Activity

High levels of loan uptake relative to the overall population.

Broad range of different types of loan activity. Significant levels of loans for enterprise development purposes.

Key Characteristics of Service Provider Activity

- ❖ Wide range of service providers.
- ❖ Wide range of microfinance products.

Key Characteristics of the Funding of Microfinance Activity

Most micro credit activity is funded through savings. There is a need for widespread technical assistance funding throughout much of the country. There is little need for large-scale direct grant in aid funding of 'hard' financial instruments other than in the North and East region and possibly second tier wholesale organizations. There is an urgent need for a range of economic recovery initiatives encompassing both 'hard' and 'soft' policy instruments that focus on wide scale enterprise development to be funded in the North and East region. Broad based community targeting should be accompanied by the funding of schemes that specifically target 'special' groups such as, demobilized soldiers, those incapacitated by conflict, widows, female-headed households and youth. There are a number of key issues and themes that are central to the practice of microfinance in Sri Lanka. The long-term sustainability of present microfinance schemes

is of the greatest concern throughout the country as whole. Issues of 'political capture' of microfinance services in Sri Lanka is widespread, reaching through government managed programmes, the cooperative movement and the state controlled increased competition in the market place in the last five years. Increased niche marketing, commercial banking sector. Most of the sector remains highly subsidized. Most microfinance enterprise development schemes operate on too short a time scale, are badly planned and have inadequate monitoring and evaluation, and financial management systems. There is a need for externally accredited microfinance training in Sri Lanka. Targeting of women has been a

key component of microfinance since its inception and most microfinance schemes in Sri Lanka target women to a significant degree.

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கூட்டங்கள் MEETINGS

சில நோக்கங்களை நிறைவேற்றுவதற்காக ஒன்றுக்கு மேற்பட்டவர்கள் ஓரிடத்தில் ஒன்றுகூடும் போது அது கூட்டங்கள் எனப்படுகின்றது. இது சட்டத்தேவையினை பூர்த்தி செய்வதற்காக அல்லது நிர்வாகத் தேவையினை பூர்த்தி செய்வதற்காக கூட்டப்படலாம். பின்வரும் விடயங்களை கருத்தில் கொண்டு சரியானதொரு கூட்டம் கூட்டப்பட வேண்டும்.

1. சரியான நோக்கம் தீர்மானிக்கப்பட வேண்டும்.

கூட்டத்தினை ஒழுங்கு செய்பவரும், கூட்டத்தில் கலந்து கொள்பவரும் எந்த நோக்கத்திற்கு கூட்டம் கூட்டப்பட்டது என்பதை தெளிவாக அறிந்து கொள்ள வேண்டும். கூட்டச் செயற்பாடுகளை கூட்டத்தின் நோக்கத்தை மையமாகக் கொண்டு மேற்கொள்ள வேண்டும்.

2. சரியானவர்கள் கலந்து கொள்ளல்.

கூட்டத்துடன் தொடர்புடையவர்கள் பங்குபற்ற வேண்டும். கூட்டத்தில் வரையறுக்கப்பட்ட எண்ணிக்கையுடையவர்கள் கலந்து கொள்ளும்போதே தகவல்களை சரியான முறையில் பரிமாற்றி சிறந்ததொரு தீர்மானத்தினை மேற்கொள்ள முடியும்.

3. சரியான நேரத்தில் கூட்டம் கூட்டப்பட வேண்டும். கூட்டத்தில் பங்கு பற்றுபவர்கள் யாவரும் பங்கு பற்றக் கூடியதான குழ்நிலையிலேயே கூட்டம் கூட்டப்படுதல் வேண்டும். அத்துடன் கூட்டம் உரிய நேரத்தில் திட்டமிட்டதன் பிரகாரம் கூட்டப்பட வேண்டும். அப்போதுதான் சரியான நேரத்திற்கு கூட்டத்தில் பங்குபற்றுவோர் கலந்து கொள்வர். குறுகிய நேரத்தில் கூட்டம் கூட்டப்படலாம். அதே வேளை நீண்ட

நேரம் கூட்டம் நடைபெறுகின்ற சந்தர்ப்பத்தில் இடைவேளைகள் ஒதுக்கப்பட வேண்டும். கூட்டத்தில் மேற்கொள்ளப் படுகின்ற தீர்மானங்களின் தன்மைக்கேற்ப நேரம் ஒதுக்கப்பட வேண்டும்.

4. கூட்டமும் நிகழ்ச்சி நிரலும்

கூட்டத்தில் நடைபெற இருக்கின்ற விடயங்களை முற்கூட்டியே எழுத்துருவில் தயாரிக்கப்படின் அதனையே கூட்ட நிகழ்ச்சி நிரல் என்பர். இந்நிகழ்ச்சி நிரலில் கூட்டம் நடாத்தப்படுவதற்கான நோக்கமும், கூட்டத்தில் நடைபெற இருக்கின்ற விடயமும், அதன் நேர ஒதுக்குதலும் குறிக்கப் பட்டிருக்கும். கூட்டத்தில் ஆலோசிக்கப்பட உள்ள விடயங்களின் சுருக்கம் இதில் தெரிவிக்கப் படுகின்றமையால் கலந்து கொள்வோர் விவாதிப்பதற்கு தயாரான நிலையில் சமூகமளிப்பார்கள். நிகழ்ச்சி நிரலில் இறுதி விடயமாக ஏனைய விடயம் குறிக்கப்பட்டிருக்கும். இதில் நிகழ்ச்சி நிரலில் குறிக்கப்படாத முக்கிய விடயங்கள் கருத்திற் கொள்ளப்பட்டு தீர்மானங்கள் மேற்கொள்ளப்படும். இந் நிகழ்ச்சி நிரல் சட்டம், நிறுவனவிதி ஆகியன குறிப்பிடுகின்ற கால இடைவெளிக்கு கூட்டத்தின் தன்மையைப் பொறுத்து பங்குபற்றுவோருக்கு அனுப்பப்பட வேண்டும். நிகழ்ச்சி நிரலில் கூட்டம் நடைபெறுகின்ற நேரம், இடம், தலைமை வகிப்போர் பெயர் போன்ற விபரங்கள் தெரிவிக்கப்பட்டு இருக்கும்.

கூட்டச் செயற்பாட்டுச் சுருக்கக் குறிப்பு (Minutes)

கூட்டத்தில் மேற்கொள்ளப் பட்ட தீர்மானங்கள் அதற்கெனவுள்ள ஆவணத்தில்

எழுத்துருவில் ஆக்கப்படுவதே இதுவாகும். தீர்மானங்கள் விவாதிக்கப்பட்டு முடிவுகள் மேற்கொள்ளப்படும். இத்தீர்மானங்கள் தொடர் இலக்கம் இடப்பட்டதாகவும், முன்மொழிந்தவர், வழிமொழிந்தவர் போன்ற விபரத்தை கொண்டதாகவும் அல்லது ஏகோதித்த தீர்மானம் என்ற அடிப்படையில் இது அமைந்திருக்கும்.

இதில் கூட்டத்தின் பெயர், கூட்டம் நடைபெற்ற இடம், திகதி, நேரம், தலைமை வகிப்போர் பெயர், கலந்து கொண்டோர் பெயர், ஆகிய விபரங்களை உள்ளடக்கியதாக நிகழ்ச்சி நிரல் அமைந்திருக்கும். கூட்டம் முடிந்த பின் தலைமை வகிப்போர் மேற்கொள்ளப்பட்ட தீர்மானங்களை வாசித்துக் காட்டுவர். பின் பங்குபற்றியோர் கையொப்பமிடுவர். இவற்றினை தலைமை வகிப்போர் கையொப்பமிட்டு உறுதிப்படுத்துவர். இதன்பின் சட்ட ரீதியான தீர்மானமாகவும், ஆவணமாகவும் அமைந்துவிடும்.

கூட்டம் நடாத்தும் முறை

நிகழ்ச்சி நிரலின் பிரகாரம் குறிப்பிட்ட நேரத்தில், குறிப்பிட்ட இடத்தில், ஒழுங்கமைக்கப்பட்ட முறையில், சரியான பங்குபற்றல் வடிவில் கூட்டம் ஆரம்பித்தல் வேண்டும். பொதுவாக ஒரு கூட்டத்தினை கூட்டும் போது பின்வரும் அம்சங்கள் கருத்திற் கொள்ள வேண்டும்.

- கூட்டத்தினை குறிப்பிட்ட நேரத்திற்கு ஆரம்பித்தல்.
- கூட்டத்தில் பங்குபற்றுவோரை வரவேற்றல்
- புதியவர்கள் பங்குபற்றும் போது ஏனையோருக்கு அறிமுகப்படுத்தல்
- சரியான நடைமுறை விதிகளை பின்பற்றுதல்
- கூட்டத்தில் ஒழுங்கு, அமைதி பேணுதல்
- நிகழ்ச்சி நிரலின் ஒழுங்கின் படி கூட்டத்தினை நடத்துதல்

- ஒரு நேரத்தில் ஒரு விடயத்தை மட்டும் விவாதத்திற்கு எடுத்தல்
- கருத்துக் கூறுவதற்கு யாவருக்கும் சந்தர்ப்பம் அளித்தல்
- குறிப்பிட்ட விடயம் தொடர்பாக விவாத முடிவில் தொகுப்புரையினை தலைவர் வழங்குதல்
- மேற்கொள்ளப்பட தீர்மானங்களை வாசித்து காட்டுதல்
- உரிய நேரத்தில் கூட்டத்தினை முடித்தல்
- நன்றி கூறி கூட்டத்தினை முடித்தல்

கூட்டம் தோல்வியடைவதற்கான காரணம்

நிறுவனங்களில் மேற்கொள்ளப் படுகின்ற கூட்டங்கள் சில சந்தர்ப்பங்களில் எதிர்பார்த்த திறனான தீர்மானங்களை மேற்கொள் முடியாமல் தோல்வியடைவதும் உண்டு. இத்தகைய தோல்வி நிலமைக்கு பின்வரும் காரணங்களை குறிப்பிடலாம்.

1. கூட்டத்தில் பங்கு பற்றுவோருக்கு கூட்டத்தினை நோக்கத்தினை சரியாக தெளிவு படுத்தாமை.
2. பொருத்தமற்றவர்கள் கூட்டத்தில் பங்குகொள்ளுதல்
3. தேவையற்ற உரையாடல்களை மேற்கொள்வதன் மூலம் கூட்டங்களை திசைதிருப்புதல்
4. சரியான நேரத்தில் ஆரம்பிக்கப்படாமை
5. தலைவர் நிகழ்ச்சி நிரலில் நின்று கூட்டத்தினை தவற விடுதல்
6. நீண்ட நேரம் கூட்டத்தினை நடாத்துவதனால் பங்குபற்றுவோருக்கு அக்கறை இன்மை ஏற்படுதல்
7. தலைவர் கூட்டத்தினை சரியான முறையில் வழிப்படுத்தி கூட்டத்தினை நடாத்துதல்

8. ஒரு சிலருக்கு கூடிய நேரங்களை அனுமதிப்பதனால் ஏனையோர் விலகிச் செல்லுகின்ற தன்மை ஏற்படுதல்.
9. கூட்டத்தில் அமைதி பேணாமை.
10. குறிப்பிட்ட விடயத்திற்கு குறிப்பிட்ட நேரத்தினை செலவு செய்யாமை.
11. தலைமை வகிப்போர் சரியான கருத்தினைத் தொகுத்துக்கூறி திறனான முடிவுகள் மேற்கொள்வதற்கு வலியுறுத்தாமை.
12. தலைமை வகிப்போர் அக்கறையற்று விழிப்புணர்ச்சியின்றி நிறுவனங்களாயின் திறனான முகாமைக்கு இத்தகைய கூட்டங்கள் முக்கியம் பெறுவதனை நிறுவனத் தலைவர்கள் உணர்ந்து கொள்ள வேண்டும்.

தொடர்பாடல்

ஒரு நிறுவனத்தின் முகாமைக்கும் ஊழியர்களுக்குமிடையில், முகாமைக்கும் பொதுமக்களுக்குமிடையில், ஊழியர்களுக்கும் ஊழியர்களுக்குமிடையில் ஊழியர்களுக்கும் பொதுமக்களுக்குமிடையில் தகவல்கள் பரிமாற்றப்படுகின்றன. இரு பகுதிகளுக்கும் இடையில் தகவல் பரிமாற்றப்படுவதனையே தொடர்பாடல் என்பர். பொதுவாக திறனான தொடர்பாடலுக்கு பின்வரும் விடயங்கள் கருத்திற் கொள்ள வேண்டும்.

1. தகவல் வழங்குவதற்கு முன் மனதில் சிந்தித்து பகுப்பாய்வு செய்த பின்னரே வெளியிடுதல் வேண்டும்.
2. வழங்கப்படுகின்ற தகவலால் ஏற்படக்கூடிய விளைவினை முற்கூட்டியே மதிப்பிட வேண்டும்.
3. தகவல் முழுமையானதாக அமைந்து இருத்தல் வேண்டும்.
4. சுருக்கமானதாகவும், தெளிவானதாகவும் தகவல் இருத்தல் வேண்டும்.

5. தகவல் வழங்கக் கூடிய சரியான நேரத்தினை இனங்கண்டு கொள்ளுதல் வேண்டும்.
6. வழங்கப்பட்ட தகவல் வழங்கிய நோக்கத்திற்கமைவாக தகவல் பெறுனருக்கு சென்றடைந்துள்ளதா என்பதனை உறுதிப்படுத்திக் கொள்ளுதல்
7. தாக்கமுள்ள தொடர்பாடலாக அமைவதற்கு உளவியல் நிலமைகளை கருத்திற் கொள்ளுதல்
8. தகவலுக்கும் சைகளுக்கும் தொடர்புடையதாக இருத்தல்
9. உணர்ச்சி வசப்படாத தகவலாக இருத்தல் வேண்டும்.

தகவலை வழங்குவோர் பொதுவாக பின்வரும் விடயங்களை கருத்திற் கொள்ளுதல் வேண்டும்.

1. தகவல்களை வழங்குவோர் இதமாகப் பேசுதல் வேண்டும். அதே வேளை அழுத்திக் கூறுதல் வேண்டும்.
2. விடயத்திற்கு நேரடியாக வருதல்
3. சரியான தகவலைச் சிந்தித்து வழங்குதல்
4. உண்மைத் தன்மை உடையதாக இருத்தல்
5. நடுநிலைமையுடன் கூறுதல்
6. தெரியாத விடயங்களை அல்லது அதிகாரம் இல்லாத விடயங்களை பரிமாற்றக் கூடாது.
7. வேறுபட்ட அர்த்தங்களைக் கொடுக்கக் கூடிய சொற்களின் பரிமாற்றத்தை குறைத்தல்
8. நேர்முறை பதில்களை சாதகமாகக் கூறுதல்

தகவல் பெறுனர் பொதுவாக பின்வரும் அம்சங்களை கருத்திற் கொள்ள வேண்டும்.

1. கருத்துக்கள் கூறிமுடிக்கும் வரை பொறுமையாக இருந்து கேட்டல்

2. தகவல் வழங்குனருடைய தகவல்களை அவதானத்துடன் கேட்டறிதல்
3. தகவல் விளங்காதபோது மீளக்கேட்டறிதல்
4. கிரகிக்கும் ஆற்றலை விருத்தி செய்தல்

ஊழியர்களை வழிநடாத்தும்போது கருத்திற் கொள்ளும் அம்சம்

ஒரு நிறுவனத்தில் நிறைவேற்று அதிகாரத்தில் உள்ளவர்கள், அல்லது ஒரு குழுவின் தலைவர்கள் தன் கீழ் பணிபுரிகின்றவர்களை தாமாகவே முன்வந்து முழுவினைத்திறனையும் வழங்குவதற்கான சூழ்நிலையை உருவாக்குதல் வேண்டும். தகமை, அனுபவம் அறிவு ஆளுமை உடையவராக இருந்தாலும் பின்வரும் விடயங்களில் கவனம் செலுத்துதல் வேண்டும்.

1. நிறுவனம் தனது பகுதி திறமையாகச் செயற்பட வேண்டும் என்ற அக்கறை உடையவராக இருத்தல் வேண்டும்.
2. முகாமைத் திறனில் ஆற்றல் உடையவராக இருத்தல் வேண்டும்.
3. திறனான தொடர்பாடல் திறன் கொண்டவராக இருத்தல் வேண்டும்.
4. மனித நடத்தைகளை புரிந்தவராக இருத்தல் வேண்டும்.
5. பணியாளர்களின் பலம், பலவீனங்களை அறிந்தவராக இருத்தல் வேண்டும். இதற்கேற்ப பலவீனங்களை பலமாக மாற்றுகின்ற திறனுடையவராக இருத்தல் வேண்டும்.
6. நிறுவனத்தின், அல்லது பகுதியின் முழுச் செயற்பாடுகளையும் அறிந்தவராக இருத்தல் வேண்டும்.
7. ஏனையோருடைய கருத்திற்கும் மதிப்பளிப்பவராக இருத்தல் வேண்டும்.
8. நெருக்கடியான நேரங்களில் அமைதி, பொறுமை பேணுபவராக இருத்தல் வேண்டும்.

9. நன்மைகளை மட்டுமல்ல ஆபத்துக்களை ஏற்கின்ற மனோபக்குவமுடையவராக இருத்தல் வேண்டும்.
10. பணியாளர்கள் மீது அன்பு காட்டுபவர்களாக இருக்க வேண்டும்.
11. நடுநிலமைப்பண்புடையவராக இருத்தல் வேண்டும்.
12. ஊழியர்களை சுதந்திரமாக சிந்திக்க, செயற்பட அனுமதிப்பவராக இருக்க வேண்டும்.
13. ஊழியர்களுக்கு பணரீதியான, பணரீதியற்ற ஊக்குவிப்புக்களை மனமுவந்து வழங்குதல்
14. ஊழியர்களின் திறமைகள் பகிரங்கமாகவும், தவறுகள் தனிமையிலும் சுட்டிக் காட்டுபவராக இருக்க வேண்டும்.
15. ஊழியர்களின் தவறினை பொதுவாக அன்றி குறிப்பாக தெரிவித்தல்
16. கட்டளைகளை வேண்டுகோள்களாகப் பயன்படுத்தல்
17. ஊழியர்களின் பிரச்சினைகளை தன்னிலையில் நின்று உணர்ந்து தீர்த்தல்
18. திறமைக்கேற்பப் பொறுப்புக்களை பணியாளர்களிடம் ஒப்படைத்தல்
19. வேலைகள் வழங்கும்போது கால எல்லையினை விதித்தல்
20. வேலைக்குரிய நியமங்களை வகுத்து ஒப்படைத்தல்
21. ஊழியர்களுக்கு ஒப்படைக்கின்ற பொறுப்புக்கேற்ற அதிகாரத்தினை அளித்தல் வேண்டும்.
22. நிறுவனச் சொத்துக்களை தனிப்பட்ட நோக்கத்திற்கு பயன்படுத்தலாகாது.
23. ஊழியர்களிடமிருந்து அன்பளிப்புக்களையோ, சலுகைகளையோ பெறக்கூடாது
24. நிறுவனம் தொடர்பான விதிகளை முழுமையாக பின்பற்ற வேண்டும்.

பொதுசனத் தொடர்பு

ஒவ்வொரு நிறுவனங்களும் வாடிக்கையாளர் மத்திலும் நிறுவனங்கள் மத்தியிலும், சமூகத்தின் மத்தியிலும் நன்மதிப்புடனேயே செயற்பட விரும்புகின்றது. இதனால் இன்று ஒரு நிறுவனத்தின் பணியாளர்கள் மக்களுக்கு சேவையாற்றுவதனையே பிரதான நோக்கமாகக் கொண்டுள்ளனர். பொதுமக்கள் நேர்மையான திறனான இலகுவாகப் பெறக் கூடிய சேவையினை ஊழியர்களிடமிருந்து பெற விரும்புகின்றனர். ஒரு நிறுவனத்தில் பணிபுரிகின்ற பணியாளர்களுடைய செயற்பாட்டே அந்த நிறுவனத்தினுடைய நீண்ட கால இலாபகரமான நன்மதிப்புள்ள செயற்பாட்டுக்கு அடிப்படையானது. ஆகவே பணியாளர்கள் பின்வரும் விடயங்களை கருத்திற் கொள்ளுதல் வேண்டும்.

1. பொதுமக்களுக்குச் சேவையாற்றுவதனையே எண்ணமாகக் கொண்டிருத்தல்
2. அலுவலகத்திற்கு வருவோரை அன்புடன் வரவேற்றல்
3. அன்பான அணுகு முறையினைக் கொண்டிருத்தல் வேண்டும்.
4. பொதுமக்கள் கூறுகின்ற விடயங்களை அவதானமாகக் கேட்டறிதல்
5. காலம் தாழ்த்தாது விடயங்களை நிறைவேற்ற பொதுமக்களுக்கு முன்வருதல்
6. உடன் நிறைவேற்ற முடியாத விடயங்களுக்கு உரிய காரணங்களை தெரிவித்தல்
7. பொதுமக்களை சரியான காரணங்களை கூறி இணங்க வைத்தல்
8. விதிகளை முழுமையாக பின்பற்றும் அதேவேளை அன்பான அணுகுமுறையை கொண்டிருத்தல்
9. ஆள்சார தொடர்பினை நடுநிலமையுடன் மேற்கொள்ளுதல்
10. வேலைகளை பின் போடாது நிறைவேற்றுவதற்கு முனைதல்

11. வேலைகளை எவ்வாறு சிறப்பாக நிறைவேற்றுதல் எனத் திட்டமிட்டு விசுவாசத் துடன் மனச்சாட்சியின் அடிப்படையில் சேவை வழங்க முன்வருதல்

12. நேர்மையாக நடந்து கொள்ளுதல்

13. ஒரு நிறுவனத்தின் பணியாளர்கள் தனது ஆளுமையை அபிவிருத்தி செய்யக் கூடியதாக இருக்க வேண்டும்.

மேற்கூறிய விடயங்களை பொதுமக்கள் தொடர்பில் கருத்திற் கொள்ளப்பவராக பணியாளர்கள் செயற்படுதல் வேண்டும்.

ஊழியர்கள் வரவின்மை

ஒரு நிறுவனத்தினுடைய நோக்கத்தினை அடைவதற்கும் பொதுமக்களுக்கான திறனான சேவையினை வழங்குவதற்கும் ஊழியர்கள் ஒழுங்கான முறையில் வேலை இடத்திற்கு வருதல் வேண்டும். ஊழியர்களுடைய ஒழுங்கானமான வரவு வழங்குகின்ற சேவையினை அல்லது வெளியிடுகின்ற உற்பத்திகள் பாதிப்பது மட்டுமன்றி ஏனைய ஊழியர்களின் செயல்பாடுகளையும் பாதிப்பதாக அம்மந்திருக்கும். ஊழியர்களுடைய வரவின்மைக்கு பொதுவாக பின்வரும் காரணங்களைக் குறிப்பிடலாம்.

1. சுகபிணங்கள்
2. சமூகத்தில் இடம் பெறுகின்ற சமூக நிகழ்வுகளில் பங்கு கொள்ள வேண்டியிருத்தல்
3. மேலதிகமான வருமானத்தினை பெறுவதற்காக வேறு வேலைகளில் ஈடுபடுதல்.
4. குடும்பப் பெறுப்புக் காரணமாக சிலர் நடவடிக்கைகளில் ஈடுபட வேண்டியிருத்தல்
5. வேலையில் போதியளவு பயிற்சி இன்மை
6. வேலைகளில் அக்கறை இன்மை
7. வேறு வேலைகளை தேடுகின்ற எண்ணம்.

8. அதிகார ரீதியான அணுகுமுறையும் மேற்பார்வையும்.
9. வேலை நிபந்தனைகள் அதிகமாக விதித்தல்
10. பணரீதியான பணரீதியற்ற ஊக்குவிப்புகள் வழங்காமையினால் நிறுவனத்தின் மீது விகிதாசமின்மை.

ஊழியர்களின் வரவின்மையை குறைப்பதற்கு பொதுவாக பின்வரும் நடவடிக்கைகளை மேற்கொள்ள வேண்டும்.

1. ஊழியர்களுக்கு, தொழில் மீது, நிறுவனத்தின் மீது அக்கறையினை மேற்கொள்ளுதல்
2. தொழில் நிறைவேற்றலாடாகத் திருப்தி அடையும் பண்பினை வளர்த்தல்
3. ஊழியர்களுக்கு போதியளவு பயிற்சி அளித்தல்
4. அன்பான அணுகுமுறையினை முகாமை மேற்கொள்ளுதல்
5. நிறைவேற்றக் கூடிய பொறுப்புகளை ஒப்படைத்தல்

6. ஊழியர்களுக்கு நியாயமான சம்பளமும் ஏனைய பணரீதியற்ற ஊக்குவிப்புகளும் வழங்குதல்
7. ஒழுங்காக வருபவர்களுக்கு பகிரங்கமாகப் பாராட்டி பரிசில்களையும் வழங்குதல்
8. ஊழியர்களின் திறமைக் கேற்ப பொறுப்புகளை ஒப்படைத்தலும் அதிகாரத்தை கையளித்தலும்
9. முகாமை திறனான வழிநடத்தலுக்கான தலைமைத் துவப் பண்புகளைக் கொண்டிருத்தல்
10. நிறுவனம் தவிர்ந்த ஏனைய நிறுவன வேலைகளை ஊழியர்கள் பங்கு கொள்ளாதா குழ்நிலையை ஏற்படுத்தல்.
11. பதவியுயர் வின் போது ஒழுங்கான வரவினையும் கருத்திற் கொள்ளுதல்

இ. இரட்னம்
சீரேஷ்ட விரிவுரையாளர்
வணிகத்துறை,
யாழ். பல்கலைக்கழகம்

இலங்கை வங்கியும் வாடிக்கையாளர் சேமிப்புக் கணக்குகளும்

இலங்கை வங்கியில் உள்ள நாட்டு நாணயமான ரூபாவில் சேமிப்புக்கணக்குகளும் நடைமுறைக் கணக்குகளும், வெளிநாட்டு நாணயங்களிலும் சேமிப்பு கணக்குகளும் காணப்படுகின்றது. இதில் நபர் கணக்குகள் எனும் போது

- 1) சாதாரண சேமிப்புக் கணக்கு
- 2) சிறுவர் சேமிப்புக் கணக்கு
- 3) மகளிர் பொற்கணக்கு
- 4) 18+ கணக்கு
- 5) ஊழியர் கணக்கு
- 6) நிலையான சேமிப்புக் கணக்கு F.D.
- 7) நடைமுறைக் கணக்கு
- 8) 7 Days Call என காணப்படுகின்றது.

சாதாரண கணக்கு

இது ஆகக்குறைந்த அனுமதிக்கப்பட்ட வைப்புத் தொகையை வைப்பிலிட்டு ஆரம்பிக்கப்படலாம். இதற்கான வட்டி வீதம் தற்போது 4.4% ஆகும். இக் கணக்கை கூட்டு கணக் காகவோ அல்லது தனிநபர் கணக்காகவோ ஆரம்பிக்கலாம். இக்கணக்கு ஆரம்பிக்கும் போது அதற்குரிய விண்ணப்பப் படிவத்தை பூர்த்தி செய்து வங்கி உத்தியோகத்தரால் அவரை உறுதி செய்து கணக்கு ஆரம்பிக்கப்படும். இக்கணக்கு சேமிப்பு கணக்கு வைப்பேடு என்ற ஒரு புத்தகம் பேணப்படும்.

உதாரணமாக இலங்கை மேற்கு கிளையில் ஆகக் குறைந்தது 500 ரூபா வைப்புப் பணமாக இட்டு கணக்கு ஆரம்பிக்கப்படும். இது கிளைகளுக்கு கிளை வேறுபட்ட தொகையாகக் காணப்படும்.

சேமிப்பு வைப்பு கணக்கிற்குரிய விதிகள்

- 1) சேமிப்பு கணக்குகளை ஆரம்பிப்பதற்கான தொடக்க வைப்புப் பணம், அதன் பின்னர்

உள்ள ஆகக்குறைந்த வைப்பு வட்டி வீதம் வரவில் வங்கியின் தற்போதைய விதி நிபந்தனைகளுக்கு இணங்க வைக்கப்படும்.

- 2) விதிகள், நிபந்தனைகள் எந்த நேரத்திலும் மாற்ற வங்கிக்கு உரிமையுண்டு.
- 3) பண வைப்பை எந்தக் கிளையிலும் மேற்கொள்ளலாம். அவை கணக்கு வைத்திருக்கும் கிளைக்கு எந்த பண அறவீடும் இன்றி இலவசமாக மாற்றப்படும்.
- 4) சேமிப்பு கணக்கில் காசோலை இலங்கை வங்கி கிளை திரு/திருமதி சேமிப்பு க/கு இல கு செலுத்துக என வரைந்தால் மட்டுமே வைப்புக்கு ஏற்றுக் கொள்ளப்படும்.
- 5) இரண்டு அல்லது மேற்பட்டோர் கூட்டு கணக்கு ஆரம்பித்து அவர்களில் எவரேனும் ஒருவர் அல்லது எல்லோரும் கணக்குகளை செயற்படுத்த முடியும்.
- 6) வைப்புச் செய்தவர் பணக்கையேட்டை நேரடியாக கையளிப்பு மீளப் பெறுதலை மேற்கொள்ளலாம். 3ம் பகுதியிருக்கு மீளப் பெறுதல் அனுமதிக்கப்படவில்லை.
- 7) குறிப்பிட்ட ஒரு மாதத்தில் நான்கு தடவைக்கு மேல் பணம் மீளப் பெற்றால் அம்மாதத்திற்கு வட்டி செலுத்தப்பட மாட்டாது.
- 8) வங்கியுடன் கொடுக்கல் வாங்கல் மேற்கொண்ட வாடிக்கையாளர் வங்கியை விட்டுச் செல்லமுன் பணக்கையேட்டில் நிறைவேற்றிய பதிவு சரியானதா என்பதை உறுதிப்படுத்தி வெளியேற வேண்டும்.
- 9) பணக்கையேடு தொலைந்தால் அல்லது பழுதடைந்தால் அவை தொடர்பான விளக்கமும் காப்பீடும் திருப்திகரமானவை என வங்கி ஏற்பின் இருக்கும் நிலுவையை புரிய கணக்கு மாற்றம் செய்து வைப்புச் செய்தவருக்கு புதிய கையேடு

வழங்கப்படும். இப்புதிய கையேட்டுக்கு கட்டணம் அறவிடப்படும்.

10) வங்கி நம்பிக்கை நிதியங்களை அங்கிரிப்பதில்லை.

கணனி மயப்படுத்தப்பட்ட வங்கிகளின் கணக்கு இலக்கம் கிளை இலக்கம், கணக்கின் வகை, கணக்கு தொடர் இலக்கம் என்ற ஒழுங்கில் அமைந்திருக்கும். சேமிப்புக் கணக்கின் வகை எனும் போது அதற்குரிய குறிகள் வருமாறு

சாதாரண சேமிப்புக் கணக்கு	21
18+ சேமிப்புக் கணக்கு	22
ஊழியர் சேமிப்புக் கணக்கு	23
R.F.G	25
K.R.G	26

உதாரணமாக கணனி மயப்படுத்தப்பட்ட வங்கிகளின் கணக்கு இலக்கம் பின்வருமாறு அமையும்.

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↑ ↑ ↑ ↑

கிளை கணக்குவகை 'கணக்கின் தொடரிலக்கம் இவ்வாறு அமையும்.

18+ கணக்கு

இக் கணக்கு 18 வயதிற்கும் 25 வயதிற்கும் இடைப்பட்ட இளைஞர்களும் யுவதிகளும் ஆரம்பிக்கலாம். இக் கணக்கு தனிக் கணக்காகவே ஆரம்பிக்கப்படும். இக்கணக்கு ஆரம்பிக்கும் போது அதற்குரிய விண்ணப்ப படிவத்தை பூர்த்தி செய்து வங்கி உத்தியோகத்தரால் உறுதிப்படுத்தி கணக்கு ஆரம்பிக்கப்படும். அத்துடன் சிறுவர் சேமிப்புக் கணக்குகளில் 18 வயதையடையும் பிள்ளைகளின் கணக்குகளும் இக்கணக்கிற்கு மாற்றப்படும்.

இக் கணக்கின் அலுவலம்

❖ 18 - 25 வயதுக்குட்பட்ட இளைஞர் யுவதிகள் கணக்குகளை ஆரம்பிக்கலாம்.

35 வயது வரை இக்கணக்கின் மூலம் நன்மைகளைப் பெறலாம்.

- ❖ கூட்டுக்கணக்கு ஆரம்பிக்கப்பட மாட்டாது.
- ❖ நடைமுறையில் உள்ள சிறுவர் பொன் அரும்புக் கணக்குகள் வைத்திருப்போர் 35 வயது வரை இவ்விசேட கணக்குகளாக அவற்றை மாற்றிக் கொள்ளலாம். அதற்கான படிவங்கள் பூர்த்தி செய்யப்பட வேண்டும்.
- ❖ தேசிய அடையாள அட்டையுடன் கணக்குகளை ஆரம்பிக்கலாம்.
- ❖ ஆரம்ப வைப்பு ஆகக் குறைந்தது 500/- (கிளைகளுக்கு கிளைகள் வேறுபடும்)
- ❖ சாதாரண சேமிப்புக் கணக்குகளைவிட 0.5% கூடிய வட்டி வழங்கப்படும்.

விசேட நன்மைகள்

- சம்பவ தினத்திற்கு முன் குறைந்தது 06 மாதகாலத்திற்கு 10,000/- வைப்பிலிருந்தால்,
- ❖ பத்து மடங்கு (ரூபா. 100,000/-) இறப்பு அல்லது நிரந்தர இயலாமைக்கான இலவச ஆயுட் காப்புறுதி.
- ❖ ஐந்து மடங்கு (ரூபா. 50,000/-) நிரந்தர சிறு பாதிப்புக் கணக்கு இலவச ஆயுட்காப்புறுதி.
- ❖ இலவசக் காப்புறுதி உச்ச எல்லை ரூபா. 500,000/-

சாதாரண கடன் வசதிகள்

- ❖ 30.06.2004 வரை இலவசமாக வழங்கப்படும் தன்னிக்க பொறி மூலம் (A.T.M Card) எந்த நேரத்திலும் பணம் பெறும் வசதி.
- ❖ திருமண அன்பளிப்பு :- ரூபா 25,000/- திருமணத்திற்கு 12 மாதங்களுக்கு வைப்பில் இருந்தால் திருமணத்தன்று ஒரு தங்கப்பவுண் வங்கியால் அன்பளிப்பாக வழங்கப்படும்.
- ❖ விசேட பொன் அரும்புக் கணக்குகள் :- ரூபா 10,000/- குழந்தை பிறப்பதற்கு முன் மாதங்களுக்கு வைப்பில் இருந்தால் முதலாவது குழந்தைக்கு ரூபா 500/- சிறுவர் பொன் அரும்புக் கணக்கின் வைப்பிலிடப்படும்.

- ◆ புலமைப் பரிசில் :- ரூபா 5,000/- 12 மாதங்களுக்கு வைப்பிலிருந்தால் பரிசில் வழங்கப்படும்.

ஊழியர் சேமிப்புக் கணக்கு

இக் கணக்கை இலங்கை வங்கி ஊழியர்கள் மட்டுமே இக்கணக்கை ஆரம்பிக்கலாம். இக்கணக்கின் சேமிப்பு கணக்கிற்கு ஊழிய உற்பத்திக் குறி 23 ஆகக் காணப்படும். உதாரணமாக இலங்கை வங்கி யாழ்ப்பாண மேந்தரக்கிளை ஊழியரின் கணக்கிலக்கம் பின்வமாறு அமையும்.

0005	-	23	-	0000234	-	1
↑		↑		↑		↑
கிளை		குறி		கணக்கின்		தொடரிலக்கம்

சிறுவர் சேமிப்புக் கணக்கு

சிறுவர் சேமிப்புக் கணக்கு பெற்றோர் அல்லது பாதுகாவலரால் தமது பிள்ளைகளின் நலன் கருதி ஆரம்பிக்கப்படும். இக்கணக்கை ஆரம்பிக்கும்போது பிறப்புச் சான்றிதழ் பிரதியுடன் கணக்கு ஆரம்பிக்கப்படும். இக் கணக்கில் நிபந்தனைகளும் விதிகளும் வருமாறு:

- 1) இது தனிப்பட்ட கணக்குகள் மட்டுமே ஆரம்பிக்கலாம்.
- 2) தகுதியுள்ள சட்டப்படி சிறுவர் (16-18 வயது) தாமாகவே ஆவணங்களை பூர்த்தி செய்து தமது கணக்கை ஆரம்பிக்கலாம்.
- 3) 16 வயதுக்கு குறைந்த சிறுவர்களுக்கு பெற்றோர் / பாதுகாவலர் கணக்கு ஆரம்பிக்கலாம்.
- 4) 18 வயதை அடைந்ததும் கணக்கை சாதாரண சேமிப்பு கணக்கிற்கு மாற்றம் செய்து மீளப் பெறுதலுக்கு தேவையான ஒப்ப அட்டை பூர்த்தி செய்யப்பட வேண்டும்.
- 5) மீளப் பெறுதல் 18 வயதுக்கு பின்னரே அனுமதிக்கப்படும். ஆனால் விசேட காரணங்களுக்குப் பெறலாம்.

உ-ம் : சுகயீனம், கல்வி (கணக்கு வைத்திருப்பவரின்) என்பவற்றுக்காக பாதுகாவலர் / பெற்றோர் மீளப்பெற அனுமதிக்கப்படுவார்கள்.

- 6) எந்தக் கிளையிலும் பணத்தை வைப்பிலிட்டு கட்டளையின்றி மாற்ற முடியும்.
- 7) பிறப்புச் சான்றிதழ் பிரதி ஒப்படைக்க வேண்டும். ஏனெனில் 18 வயதடைந்து சாதாரண சேமிப்புக் கணக்கு மாற்றி பதிவு அறிவுறுத்தப்படுகிறது.
- 8) பணக்கையேட்டிலிருக்கும் பதிவுகளை வங்கியை விட்டு செல்ல முன் சரியாக இருக்கின்றதா என்பதை பரிசீலனை செய்யலாம்.
- 9) வங்கிக்கு விதிகள், வட்டி வீதம் மாற்ற உரிமையுண்டு.

மகளிர் பொற்கணக்கு

இது பெண்களின் சேமிப்பை ஊக்குவிக்கும் வகையில் இக்கணக்கு ஆரம்பிக்கப்பட்டது. இக்கணக்கை 10000 ரூபாவை வைப்பிலிட்டு ஆரம்பிக்கலாம். இக்குறிப்பிட்ட நிலுவை கணக்கில் பேணப்பட வேண்டும். அவ்வாறு பேணப்பட்டாது இருப்பின் அது சாதாரண சேமிப்பு கணக்கிற்கு மாற்றப்படும் வைப்பு இழிவுத் தொகை வங்கிகளுக்கு ஏற்ப வேறுபட்டுக் காணப்படும்.

நடைமுறைக்கணக்கு

நடைமுறைக் கணக்கு என்பது காசோலை வரைவதன் மூலம் கொடுக்கல் வாங்கல் மேற்கொள்ளப்படும். இக் கணக்கு

1. தனியார் நடைமுறைக் கணக்கு
2. வர்த்தக நடைமுறைக் கணக்கு
3. அரசாங்க நடைமுறைக் கணக்கு
4. சங்கம், கழகம், கூட்டுறவு நடைமுறைக் கணக்கு

என வகைப்படும்.

வதியாதோர் வெளிநாட்டு நாணய சேமிப்புக் கணக்கு

இக்கணக்கு வெளிநாட்டில் தொழில் புரியும் இலங்கையர் எமது நாட்டில் வெளிநாட்டு நாணயத்தில் சேமிப்புக் கணக்கு ஆரம்பிப்பதைக் குறிக்கும். இது அவர்களுக்கு உயர் வருமானத்தை ஈட்டிக் கொடுக்கின்றது.

வதியாதோர் வெளிநாட்டு நாணயக் கணக்கு ஆரம்பிக்கும் போது பின்வரும் தகமைகள் இருத்தல் வேண்டும்.

- 1) வெளிநாட்டில் தொழில் புரிபவர் அல்லது வெளிநாட்டிலிருந்து இலங்கைக்கு திரும்பி 90 நாட்களுக்கு மேற்படாததாக இருத்தல் வேண்டும்.
- 2) இலங்கைக்கு வெளியே வசிக்கும் இலங்கையில் பிறந்த இலங்கை பிரஜைகள் அல்லாதவர்கள் ஆக இருக்கலாம்.
- 3) இக்கணக்கு தனிக்கணக்கோ அல்லது கூட்டுக் கணக்காகவோ ஆரம்பிக்கலாம்.
- 4) கணவன் அல்லது மனைவி இருவரில் ஒருவர் வெளிநாட்டில் தொழில் புரிவதோடு இருவரும் வெளிநாட்டில் வசிப்பவர்களேயானால் இருவர் பெயரிலும் கூட்டுக் கணக்கு ஆரம்பிக்கலாம்.

இக் கணக்குகள் ஆரம்பிப்பதற்கு அனுமதிக்கப்பட்ட நாணயங்களாக பின்வருவன வற்றைக் குறிப்பிடலாம்.

- 1) யூரோ நாணயம்
- 2) யு.எஸ். டாலர்
- 3) சுவிஸ் பிராங்
- 4) டொயிஸ் மார்க்
- 5) அவுஸ்திரேலிய டாலர்
- 6) ஜப்பானிய யென்
- 7) பிரான்ஸ் பிராங்
- 8) இங்கிலாந்து ஸ்டர்லிங் பவுன்
- 9) சிங்கப்பூர் டாலர்
- 10) கனடா டாலர்

இவ் வதியாதோர் வெளிநாட்டு நாணயக் கணக்குகளில் சேமிப்புக் கணக்கு, நிலையான

சேமிப்புக் கணக்கு என இரு வகையாக நோக்கலாம்.

சாதாரண சேமிப்புக் கணக்கு என்றால் குறைந்தது 50\$ அல்லது 25 பிராங் க்கு அல்லது இதற்கு சமமான அனுமதிக்கப்பட்ட நாணயங்களைக் கொண்டு ஆரம்பிக்கப்படும்.

இக் கணக்கு ஆரம்பிக்கும் போது அதற்குரிய விண்ணப்ப படிவத்தை பூர்த்தி செய்து கடவுச் சீட்டின் பெயர் விபரங்கள் குறிக்கப்பட்டிருக்கும். பக்கங்களில் போட்டோர் பிரதிகளுடனும் குறைந்த வைப்புப் பணத்துடனும் ஒப்படைக்க வேண்டும். இக் கணக்கிற்கான ஆரம்ப வைப்புத் தொகை குறைந்தது. 50\$ அல்லது 25 ஸ்ரேலிங் பவுன்ஸ் 25 பிராங் அல்லது அதற்கு சமமான ஏனைய அனுமதிக்கப்பட்ட நாணயங்களில் வைப்பிடலாம்.

இச் சேமிப்புக் கணக்கிற்கு மாதாந்த வட்டியும் கணக்கிடப்பட்டு ஒவ்வொரு வருடமும் டிசம்பர் மாத இறுதியில் வரவு வைக்கப்படும் இவ் வட்டி வீதம் மாதத்திற்கு மாதம் மாற்றமடையும்.

நிலையான வைப்புக்கள் எனும் போது 200\$ அல்லது 1000 பிராங் அதற்கு சமமான ஏனைய அனுமதிக்கப்பட்ட நாணயங்கள் கொண்டு ஆரம்பிக்கப்படும். வைப்புக் கணக்கு 1, 3, 6, 12 மாத முதிர்வைக் கொண்டு காணப்படும். இக்கணக்கின் முதிர்வின் போது உயர்ந்த வட்டி வீதம் கொடுக்கப்படும்.

அனுமதிக்கப்பட்ட வைப்புக்கள்

உடனுண்டியல், தபால், தந்தி மாற்றல்கள், சுவிப்ட் ஆகியவற்றின் மூலமாக அனுப்பப்பட்ட உள்ளகப் பண அனுப்பீடுகளினால் கிடைத்த அந்நிய செலாவணி

- ◆ பயணிகள் காசோலைகள் அல்லது வெளிநாட்டு நாணயத்தாள்கள் மூலமாக கணக்கு வைத்திருப்பவரினால் கொண்டுவரப்பட்ட அந்நிய நாணயம்

- ◆ ஒரு வதியாதோர் வெளிநாட்டு நாணயக் கணக்கிலிருந்து வேறொரு வதியாதோர் வெளிநாட்டுக் நாணயக் கணக்கிற்கு செய்யப்படும் மாற்றுதல்கள்

வதியாதோர் வெளிநாட்டு நாணய சேமிப்புக் கணக்கிலிருந்து பணத்தை மீள்பெறும் முறை

❖ **இலங்கை ரூபாவில்**

- 1) ஆள் அடையாளம் காட்டியபின் கரும பீடத்திலேயே இலங்கை ரூபாவில் மீள் எடுக்கலாம்.
- 2) கணக்கு வைப்பவர்களினால் விநியோகிக்கப் பட்ட எழுத்த மூல அறிவுறுத்தல்களினால் 3ம் நபரின் கணக்குக்கோ அல்லது கணக்கு வைத்திருப்பவரின் கணக்கு களுக்கோ மாற்றலாம்.

❖ **வெளிநாட்டு நாணயத்தில்**

- 1) கணக்கு வைத்திருப்பவர்களின் எழுத்து மூலம் பெற்ற அறிவுறுத்தலின் பேரில் பணத்தை உலகத்தின் எப்பாகத்திற்கும் அனுப்பலாம். இம்மாற்றம் உள்ளே செலாவணிக் கட்டுப்பாட்டிலிருந்து விலக்கப்பட்டுள்ளன.
- 2) இலங்கையில் நடத்தப்படும் கணக்கு ஒன்றிற்கு வெளிநாட்டு நாணய பணத்தை மாற்றலாம்.
- 3) பணத்தை அந்நிய நாணயத்தில் வழங்கப்படும் வங்கி உண்டியல்கள் மூலமாகவும் மீள் எடுக்கலாம்.
- 4) வெளிநாட்டு பயணங்களில் தேவைப்படும் பயணிகள் காசோலை, அந்நிய நாணயத் தாள்கள் என்பவற்றை உறுதிப்படுத்தப்பட்ட விமானச் சீட்டை காண்பிப்பதன் மூலம் கணக்கு வைத்திருப்பவர்கள் பெற்றுக் கொள்ளலாம்.

விசேட சலுகைகள்

- 1) ரூ. 100,000 முதல் 1 மில்லியன் வரையிலான இலவச ஆயுட் காப்புறுதிகள்.

- 2) வெளிநாட்டில் பயணம் செய்யும் போது காணாமல் போன பொதிகளுக்கு ரூ. 50,000 வரை நட்டஈடு வழங்கப்படும்.
- 3) கணக்கு வைத்திருப்பவர் இறந்த பின் தனது கணக்கில் உள்ள நிலுவையை பெற்றுக் கொள்வதற்கு தாம் விரும்பிய ஒருவரை நியமிக்கலாம்.
- 4) சலுகையுடன் கூடிய வட்டி வீதத்தில் வீடமைப்புக் கடன்கள் வழங்கப்படும்.
- 5) வதியாதோர் வெளிநாட்டுக் நாணயக் கணக்கில் நிலுவைகளின் படி ரூபாய் கடன்களும் மேலதிக பற்றுக்களும் சலுகை வட்டி வீதங்களில் வதியாதோர் வெளிநாட்டு நாணய வைப்புக் கணக்கின் ரூபாய் பெறுமதியில் 90% வரை வழங்கப்படும்.
- 6) வதியாதோர் வெளிநாட்டு நாணயக் கணக்குகள் யூ.எஸ். டாலர் 1000 அல்லது அதற்கு சமமான அல்லது ஏனைய அனுமதிக்கப்பட்ட நாணயத்தில் நிலுவை உடையவர்கள் வருடாந்தம் நடைபெறும் “ரன் கஹவனு வாசனா” சீட்டிடிப்பில் 53 இலட்சத்திற்கும் அதிக பெறுமதியான பரிசுகளை வெவ்வுவதற்கு தகுதியுடையவர்கள் ஆவார்கள்.

தனக்குத் தேவையான பணத்தை ஆட்டோமெற்றிக் டெல்லர் மெஷின் மூலம் மீள் பெறும் வசதி

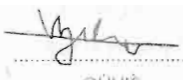
- 7) சர்வதேச வீஸர் கார்ட் பெற்றுக் கொள்ளும் வசதி
- 8) “ரன்சவிய” கடன் திட்டத்தின் கீழ் சுமாரான வட்டியுடன் சுயதொழில் புரிய கடன் வசதிகள்

உங்களுக்கு அருகில் உள்ள இலங்கை வங்கிக் கிளையில் ஒரு வதியாதோர் வெளிநாட்டு நாணயக் கணக்கை ஆரம்பிப்பதன் மூலம் உங்களுடைய வெளிநாட்டு நாணய சேமிப்புக்கு ஒரு சீரான வருவாயை பெற முடியும்.

பிற நன்மைகள்

- ❖ வதியாதோர் வெளிநாட்டு நாணய வைப்புக் கணக்கிலிருந்து பெறப்படும் வட்டி வருமானம் வரியிலிருந்து விலக்கப் பட்டுள்ளது.
- ❖ இக் கணக்கில் பெரிய வைப்புத் தொகைக்கு விசேட வட்டி வீதம் கொடுக்கப்படும்.
- ❖ இலங்கை வங்கி தலமை அலுவலகத்தில் உதவி, சிநேகித பூர்வமான ஊழியர்களுடன் இலங்கை வங்கியில் திட்டங்கள் தயாரிப்புகள் சேவைகள் மக்கள் தொடர்பு உதவிகள் உட்பட எல்ல விதமான தகவல்களையும் வழங்கும்.

சேமிப்புக் கணக்குகளில் இருந்து பணத்தை மீளப் பெறும்போது சேமிப்பு பண மீளல் படிவம் பூர்த்தி செய்யப்பட்டு பணம் மீளப் பெற்றுக் கொள்ளலாம். அல்லது பண அட்டை தன்னியக்க கொடுக்கல் வாங்கல் இயந்திரம் மூலம் பணம் மீளப் பெறலாம். படிவம் பூர்த்தி செய்யப்படும் முறை கீழே காட்டப்பட்டுள்ளது

கிளை யாழ்ப்பாணம் சேமிப்பு பண மீளல் திகதி 10.03.2004			
கணக்கின் பெயர் கணக்கு இலக்கம்			
விஜித்தா வாமதேவன் 0005 - 21 - 20220003 - 1			
முத்திரை	தொகை எழுத்தில் ஆயிரத்து ஐநூறு ரூபா மட்டும்.		
 ஒப்பம்	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"> அடையாள அட்டை இலக்கம் 69 755 0208 V </td> <td style="width: 40%;"> தொகை ரூ 1500.00 </td> </tr> </table>	அடையாள அட்டை இலக்கம் 69 755 0208 V	தொகை ரூ 1500.00
அடையாள அட்டை இலக்கம் 69 755 0208 V	தொகை ரூ 1500.00		
யந்திர அச்சு அதிகார ஒப்பத்தில் செல்லுபடியாகும்			

(இங்கு தடித்த எழுத்தில் உள்ள விபரங்கள் மாதிரியே படிவம் பூர்த்தி செய்யப்பட வேண்டும்.)



தன்னியக்க கொடுக்கல்வாங்கல் இயந்திரம் மூலம் வாடிக்கையாளர் ஒருவர் வங்கிக் கிளையில் பெற்றுக் கொள்ளக்கூடிய அநேக சேவைகளைப் பொற்றுக் கொள்ளலாம். குறித்த இயந்திரம் மூலம் வாடிக்கையாளர் வங்கிக்கு வெளியே எந்நேரமும் பணத்தை பெற்றுக்கொள்ளலாம். அத்துடன் எக்கிளையில் கணக்கு இருந்தாலும் இவ்வியந்திரம் மூலம் எந்தஇடத்திலும் பணத்தை பெற்றுக்கொள்ளக்கூடியதாக உள்ளது.

செல்வி . சு. சுஜித்தா B.COM (HONS)
 இலங்கை வங்கி ,
 யாழ்ப்பாணம்

DEMAND DEPENDENCY

Demand dependency is an important consideration in choosing between reactive and planning systems with independent demand for one item is unrelated to the demand for others. In the dependent demand situation, if we know the demand for one item. We can deduce the demand for one or more related items. If, for example, the demand for an end product is known, we can calculate how many of its subcomponents are needed, because their demand is directly dependent on the end – item demand.

In the past, industry used reactive inventory control systems as the mainstay ignoring the distinction between dependent and independent demand. More recently, however, we've learned that inventory planning systems such as MRP are more beneficial than reactive systems for dependent demand items. We don't need large safety stocks for dependent demand items because we usually know exactly how many will be needed. Further more, we don't need to accumulate excessive cycle stocks of dependent demand items in advance of when items are needed. Our MRP systems use accurate information about components as a substitute for excessive inventories of those components.

A) MRP objectives and methods

MRP provides the following

1. Inventory reduction

MRP determines how many of a component are needed and when, in order to meet the master schedule. MRP enables the manager to procure that component as it is

needed thereby avoiding costs of excessive inventory.

2. Reduction in production and delivery lead times.

MRP identifies materials and components quantities, timings, availabilities, and procurement and production actions required to meet delivery dead lines. By coordinating inventories, procurement and production decision, MRP helps avoid delays in production. It prioritizes production activities by putting due dates on customer job orders.

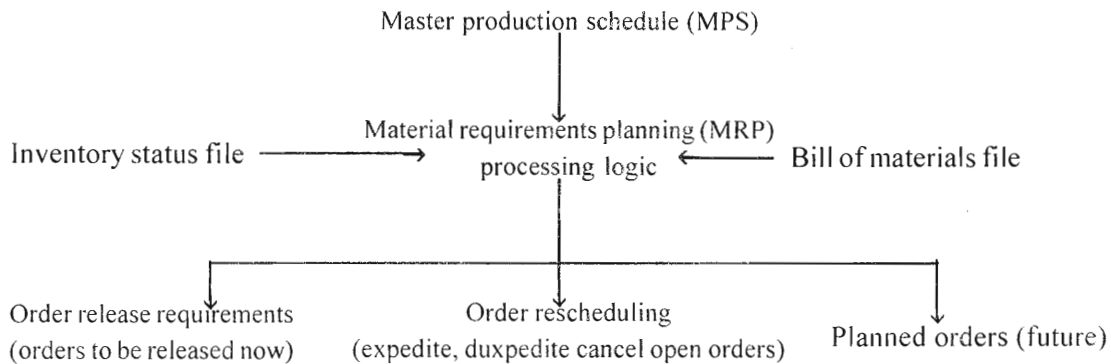
3. Realistic commitments

Realistic delivery promises can enhance customer satisfaction. By using MRP, production can give marketing timely information about likely delivery times to prospective customers. Potential new customer orders can be added to the system to show the manager how the revised total load can be handled with existing capacity. The result can be a more realistic delivery date.

4. Increased efficiency

MRP provides close coordination among various work centers as products progress through them. Consequently, production can proceed with fewer indirect personnel, such as materials expeditors, and with fewer unplanned interruptions because MRP focuses on having all components available at appropriately scheduled times. The information provided by MRP encourages production efficiencies.

Figure 1.1 Material Requirements Planning system.



Source :- Everett. E. Adem, Jr. Ronald J. Ebert Page No : 525

MRP System components

Figure 1.1 shows the basic components of an MRP system. Three major sources of information are mandatory in the MRP system.

A master product schedule, inventory status file, and a Bill of materials file. Using these three information sources, the MRP processing logic (computer program) provides three kinds of information output for each product component: order release requirements, order rescheduling, and planned orders. Let's examine each of these information sources and outputs in more detail.

The Master Production Schedule (MPS)

The master production schedule (MPS) is a series of time-phased quantities for each item that a company produces, indicating how many are to be produced and when the time period in which the quantity of an item appears means that this quantity is to be completed through the final operation in that particular period.

Development of a good master schedule is a key ingredient in manufacturing planning and control both. Productive capacity and materials must be available before the production process can begin; companies must also make efficient use of both these valuable resources. The objective of aggregate planning or rough-cut capacity evaluation is to ensure that the company has developed a master schedule that efficiently utilizes the company's capacity yet one that can be realistically achieved within the capacity limitations of the company and its vendors. After a good MPS is developed, MRP can be used to ensure that all the necessary materials will be available so that the MPS can be achieved. The MPS is the driving input to MRP that tells the program what the company intends to produce.

Inventory Status File

The MRP system must retain an up-to-date file of the inventory status of each item in the product structure. This file provides accurate information about the availability of every item controlled by the

MRP system which can then maintain an accurate accounting of all inventory transactions, both actual and planned. The inventory status file contains the identification number, quantity on hand, safety stock level, quantity disbursed (allocated), and procurement lead time of every item.

Bill of Materials (BOM)

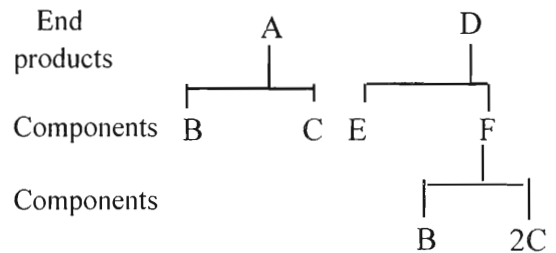
The bill of materials (BOM) identifies how each end product is manufactured, specifying all subcomponent items, their sequence of buildup, their quantity in each finished unit, and the work centers performing the buildup sequence. This information is obtained from product design documents, work flow analysis, and other standard manufacturing and industrial engineering documentation.

The primary information to MRP from the BOM is the product structure, an example of which is shown in figure 1.2 one unit of end product A requires one unit each components B and C. One unit of end product D requires one unit of component E and one unit of component F, which in turn requires one unit of component B and two units of component C.

In MRP terminology, A and D are upper – level – end items; the components are lower level items. By precisely identifying the levels in the product structure, we clearly show the relationships among the component items in all our end products. Each item in the product structure is given a unique identification number. Subsequently, by knowing the master schedule for end items, MRP can schedule and time – phase the orders for the correct lower level component items in the product structure.

Figure 1.2

Product Structures for two assembled products.



Benefits from the use of MRP.

MRP is a decision support system or management information system which provides timely and valuable information to people who make the decisions and who make a company run.

When it is properly developed and is implemented in an appropriate setting MRP can provide numerous benefits to several parts of a company. Some of these benefits are listed below, with the part of a company that might most directly profit identified in each case, most of these elements of the organization also must provide accurate information to the system to keep MRP operating properly.

1) Inventory

MRP provides information to better coordinate orders for components with plans for parent times so that the average amount of inventory for dependent – demand items (work in process and raw materials) can be reduced. The company can have only what is needed instead of having plenty of everything.

2) Production

Human and capital resources [capacity] can be better utilized, because information from MRP will show the need to delay or some components if other necessary components are

not available. Better delivery performance is possible because of more accurate priority information. MRP can also improve work flow, resulting in reduced elapsed time between the start and finish of jobs.

3) Sales

MRP tells ahead of time if desired delivery dates appear achievable, it improves the company's ability to react to changes in customer orders, improves customer service by helping production meet assembly dates, and helps cut delivery lead times.

4) Engineering

MRP helps plan the timing of design releases and changes and aids in their implementation.

5) Planning

MRP can simulate changes in the master schedule for evaluation, and it facilitates systems that provide a picture of equipment and facility requirements, work force planning and procurement expenditures, based on a proposed master schedule.

6) Purchasing

MRP recommends changes [to expedite or de expedite] in due dates for orders. The company can improve vendor relations because it knows the real priorities.

7) Scheduling

MRP allows better scheduling through better knowledge of priorities.

8) Finance

MRP can facilitate better planning of cash – flow requirements. It can lead to

identification of true capacity constraints, resulting in better capital investment decisions.

9) To ensure that materials and components are available in right quantity at right time.

10) Improved customer service because of the adherence of the schedules.

11) Quicker response to the change in demand.

12) Better machine utilization, hence greater productivity and economy.

Material Requirement Planning and Manufacturing Resource Planning

In Introduction

Inventory is the important part of operations management. It is the supply of raw materials, partially finished goods and finished goods an organization maintains to meet its operational needs. If managers keep too much inventory on hand, they will waste money storing it and lose money if inventories are damaged or stolen. To minimize these costs and maintain inventories at optimum level, numerous mathematical and computer based inventory models have been developed to help operations manager decide when and how much inventory to order. Three important methods used in inventory system. They are MRP I, MRP II and just in time inventory. MRP system helps to reduce unnecessary inventory or excess inventory. Material requirements planning A system of planning and scheduling the time – phased materials requirements for production operations. The broader use of the MRP techniques such as MRP I and MRP II are discussed in this Article.

What is MRP

Materials requirement planning (MRP) has become a centerpiece for all manufacturing systems. The key to successful production and operations. Management in a manufacturing company is the balancing of requirements and capacities. It's that simple and yet very challenging.

The abbreviation MRP may be used at times to refer to any one of three separate but related aspects of manufacturing planning and control. MRP may refer to the basic calculations used to determine components requirements from end item requirements. It may also refer to a broader information system that uses the dependence relationship to plan and control manufacturing operations. An even broader information system, with the abbreviation MRP II that examines requirements for human and financial resources also uses these initials. Before we proceed, let's look further at these three facets of MRP.

The methods in the previous section can operate quite simply and satisfactorily when orders for finished goods are being received at a constant or at least smoothly and slowly varying rate, and this is reflected in the work in progress and raw materials requirements. However, when demand for the finished product is lumpy or erratic, then these methods may involve holding stock of work – in – progress or raw materials for excessively long periods of time. Under these circumstances it can be desirable to use some form of control of purchasing and manufacturing which is derived from an examination of the orders received for the finished goods. One such form of control is known as material requirements planning or MRP, and since the control depends upon the order for the finished products, this procedure is said to be one of “Dependent demand”

Limitation of MRP

There are many problems with the MRP system. They related with organizational and behavioural factors.

The following major causes have been identified:

- 1) Before implementing the plan, which should be faced to support production situation with that knowledge regarding computer project is also important.
- 2) Production structure should be assembly oriented.
- 3) Depend on credibility of data.
Incredible data related to stock transactions obtaining from shop – floor level could affect the operation of MRP.
- 4) Trained employees can correctly maintain files and records unless it makes difficulty to implement MRP successfully.
- 5) The lack of top management commitment.
- 6) The failure to recognize that MRP is only a software tool that needs to be used correctly.
- 7) Computer is necessary for processing
- 8) Bills of materials and inventory status information must be assembled and computerized.
- 9) Data must integrity unreliability can wreck a well planned MRP system.
- 10) The integration of MRP and JIT
- 11) MRP II does not consider the whole business plan.
- 12) A valid master schedule must exist.

Manufacturing Resource Planning (MRP II)

Manufacturing resources planning also known as MRP II or closed loop MRP is an integrated information system that steps beyond first generation MRP to synchronize all aspects of the business. It (MRP II) coordinates sales, purchasing, manufacturing, finance and engineering by adopting a focal production plan

and by using one unified data base to plan and update the activities in all the systems of business.

This means the MRP II involves developing a production plan from the business to specify monthly production levels since the production is then expected to produce this committed level, sales department to sell at these levels, and the finance department to ensure adequate financial resources for these levels, all these functional departments develop these production levels by consensus.

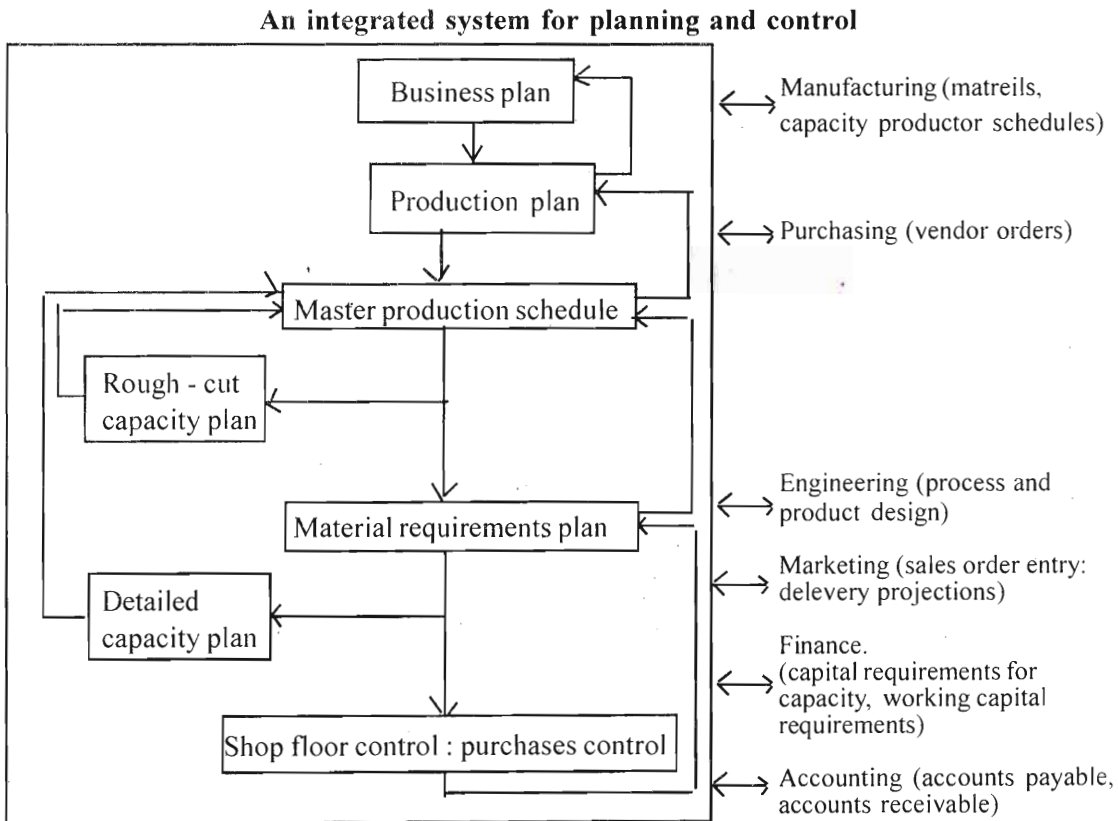
Marketing manager, production manager and finance manager may meet monthly to update

sales for casts and revise the master schedule. Top managers of all these three departments decide the product mix, aggregate production plans, financial requirements, and pricing strategies.

There fore, MRP II provides help for coordinating the efforts of manufacturing finance, marketing. Engineering and personnel departments towards the common business plan. Managers of these departments also analyses the problems, determines the alternative solutions, and take a final decision they also evaluate the implication of their decisions.

Figure 1.3

MRP II



Source:- Everent E Adem Jr. Ronld J. Ebert Page 544

One use of the MRP II system is to evaluate various business proposals. If, for example the output of product X increases by 20 percent in weeks 15 to 20 and that of Y decreases by 15 percent in weeks 10 to 15, how would operations and profitability be affected, the system can simulate how purchases and, hence, accounts, payable are affected, when deliveries to customers and accounts receivable occur, what capacity revisions are needed and so on. The company – wide implications of the proposed change can be evaluated, and various departments can be coordinated according to a common purpose.

Summary

This Article introduced material requirements planning (MRP) as an information system that enables managers to improve the efficiency of operations, shorten delivery lead times to customers, and reduce inventory levels in many organizations today. MRP is applicable in environments where end items are produced from many demand – dependent components, assemblies, and materials with a known and stable sequence of product buildup. With information from bills of material, inventory status files, and the master production schedule, the MRP processing logic provides time – phased plans for procuring and utilizing materials. For each component in the product structure, MRP shows current and planned activities open shop orders, planned order releases, scheduled receipts – for each period in the planning horizon.

MRP is especially useful in complex operations where new customer orders are arriving for a variety of products and where shop orders for various components are in different stages of completion. These numerous

transactions are accommodated through periodic system updating with accurate shop states data.

So the high volume professional service and other processes are likely to use MRP system in future.

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CUSTOMER FOCUS

Customer, customer, customer would be a good slogan for marketing oriented organization the importance of Retaining customers is at the heart of every thing they do they do. This is the prevailing culture.

Key skills for marketing practitioners include inter personal skills to help them develop strong working relationship with people & agencies inside and outside their organization.

To satisfy customer needs organization need to collect the right information and make it available to the right people at the right time. Excellence in customer service can enable companies to gain and sustain their competitive advantages.

CUSTOMER FOCUS

Marketers must interact at all levels within an organization to ensure consistent objective and adequate resources. Many people working in a business environment are drawn to a career in marketing. They are often already familiar with some fundamental concepts such as the important of identifying customer, satisfaction. They understand that quality and meeting customer needs and measuring and customer satisfaction. They understand that quality and customer care are vital to success in any business environment and they want to know more about the total concept of customer focus and marketing orientation.

Large organization and many Smaller once recognize the role that marketing plays in business success so it is represented at board level. As a strategic function, marketing sets objectives that are

in line with the overall business objectives and in consultation with the other functions and of the organization to ensure that consistent objectives are set and that plans take into account the total organizational resources that are required for achievement. Resources include people, time, equipment, materials and information.

A good example of this is the design and distribution of an in house company news letter. The marketing executive responsible for over seeing this project need to communicate with all departments to organising editing and printing.

Developing a culture that encourages customer focus and the building of long-term relationship with customer is essential for organizations that are marketing oriented. The factors that influences the prevailing culture of companies are shown in figure.



(Factors influencing organizational culture)

Culture is the way things are done around here so any interventions that are designed to change behaviour norms also impact on culture.

The prevailing culture is maintained by stifling initiative, maintaining the status quo and recruiting like-minded people.

In contract companies that are customer focused are continuously questioning their ability to meet customer needs and to go on doing so into the future. The customer is at the heart of every thing they do. The culture is one where initiative and creativity is encouraged and people are empowered to solve customer problems.

Keep the customer satisfied

Communicating with customers to find out what they want from the organization and taking steps to implement it is also important. When the royal bank of Scotland (RBS) found that business customers. Liked to deal with the same person it implemented an initiative that gave managers a four year tenure in addition newly appointed staff were in the shoes of the customer and experienced service from their "Side of the Desk".

Delivering effective customer service is an essential part of gaining and sustaining competitive advantage.

eg:- Fast food chains seek to improve product by changing the menus to reflect changing tastes.

McDonald's adds vegetarian options and recognises consumers preference for spicy foods by including Mexican/Indian meal deals on their UK. Menu however the business it is in is delivering food fast so speed of service and reliability is what customers are looking for in addition to a tasty meal.

Therefore efficiency of operation and personal service are key to achieving market leadership and enhancing customer retention.

Organizations that pay attention to detail can differentiate themselves from others in the customers mind. Family diners are an important target group for every fast food

restaurants so consideration is given to the whole experience it must be past so children and parents are not waiting long for the food but there are other factors that will be important to the customer including.

- Cleanliness
- Comfort
- Pleasing environment / decoration
- Facilities

Company vision and values.

This is recognized by training companies which uses dramatic presentation to engage with delegates and communicate messages to its audience company vision and values reflects the importance that they place upon getting it right for the customer and on time. Everyone in the organization is prepared to do what ever is necessary to meet deadlines and ensure the customer gets what they want when they want it that might mean every one getting involved and helping out. However this should not just be the case during busy periods. The culture demand that people fulfil their own company role plus sharing responsibility for the work commitment of the whole company. In a larger organization this might be compared to the responsibility of team members to take mutual accountability for achievement of common purpose and team goals.

In order to respond effectively to existing and changing customer needs and to measure that they are providing satisfaction organization need information should be considered as important as cash to business because without it companies cannot function.

Collecting information about customers is carried out by organization through research Useful sources include.

1) Customers :

Via survey and focus groups for example most of us are familiar with customer

satisfaction surveys where by an interviewer may contacts us by questionnaire to check if we are happy with our purchase and the service received.

2) Frontline Employees :

Who interface directly with customers these people in the organization have a unique relationship with those who buy and their views opinions and ideas needs to be collected and validated in - business to business market sales people develop long-term relationship with customers during the buying process so they get to know them very well.

3) Company Records & Report :-

From sale figures to customer complaints.

4) External directorates, Market research, Reports and forecast.

We can view the seven Cs as having a customer focus.

Customer / consumer focus.

Choice Customer sees range of goods / services from which one needs to be selected.

Cost Customers see aspects of cost other than price their own perspective many differ from that of the marketer.

Convenience Customers know that promotional tools are being used to persuade them. As consumer sophistication increases communication Rather than persuasion is sought by customers.

Care Customers feel the care that the organization shows when doing all parts of its business, including the efforts of backroom staff such as accounting departments and cleaner etc. All people within an organization should understand how the care that they put into their role will play a part in deterring the brand promise.

Corporate Competence

Customers are only really concerned that an organization does what it promises it will do either than how it achieves this. This it is important for marketers to never fall into the trap of telling customers about the process but to concentrate on how this will deliver the require and expected level of product service performance & satisfaction.

Consistency

Customers will expect one product / service experience to be like another, so all your physical cues have to be consistent so that they know what to look out for as well as your delivery being consistent too. A bad experience well lead a customer to expect a bad experience. Next time, so always aim for positive delivery.

The scope to collect information is enormous and time consuming. Once the right information has been collected it must be stored and readily accessible. Technology has improved storage and retrieval over the past decade.

The development of sophisticated customer databases means that organizations can target individuals / specific groups of customers with special offers and information about the launch of new products that would provide relevant benefits.

Into days business world marketing is recognized as providing a significant contribution to over all business success. Previously perhaps regarded as a service it is now strategically and has spanned new industries such corporate communications and Pr. direct and C Event. organization.

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RISK ASSESSMENT AND INTERNAL CONTROL

1.1 Purpose

Establish standards provide guidance on obtaining an understanding of accounting and internal control system and audit risk and its components. The auditor should obtain an understanding of the accounting and internal control systems. Sufficient to plan the audit and develop an effective audit approach

The auditor should use his is professional judgement to assess audit risk and to design procedures to reduce it to an acceptable low level.

Audit risk

Risk that the auditor gives an appropriate audit opinion when financial statements are materiality misstated following are components.

Audit risk is 03 types

1. Inherent risk :- Risk that a material misstatement could exist due to the nature of the transaction provided that no internal control exists.

2. Control risk :- Risk that a material misstatement will not be detected / prevented on a timely basis by the systems, of internal / accounting control.

3. Detection risk :- Risk that a material misstatement will not be detected due to auditor's substantive procedures, (from substantive procedures)

1.2 Accounting systems

The series of tasks and records of an entity by which transaction, are processed in order to maintain proper financial records.

They identify assemble, analyse, calculate, classify, record and summarize transaction / events.

Internal control system

All policies and procedures adopted by the management of an entity to ensure,

1. Adherence to management policies, safeguard of assets.
2. Prevention and detection of fraud and error.
3. Accuracy and completeness of accounting records.
4. Timely preparation of reliable financial information.
5. Orderly efficient conduct of the business.

1.3 Control environment

Overall attitude awareness and actions of owners, directors and top management regarding internal control system and its importance to the entity.

This includes,

1. Function of BOD and its committees.
2. Management philosophy and operating style.
3. Entity's organizational structure and methods of assigning authority and responsibilities.
4. Management control system,
 - Internal audit function
 - Personnel policies.
 - Segregation of duties.

1.4 Control procedures

A strong control environment complement the specific control procedures.

Policies and procedures in addition to control environment the management has established to achieve the entity specific objectives control procedures include,

1. Reporting reviewing and approving reconciliation.
2. Checking arithmetical accuracy of the records.
3. Establish control over changes to computer programs and access to data files (computerized information system)
4. Maintaining and reviewing control a/c. trial balances.
5. Approving and controlling of documents.
6. Comparing internal data with external source of information.
7. Limiting direct physical access to assets and records.
8. Comparing and analyzing the financial results with budgeted amounts.
9. Comparing physically verified amounts with book balances.

The knowledge about internal control and accounting enables the auditor to –

1. Identify types of potential material misstatements that occur in financial statements.
2. Consider the factors that affect the risk of material misstatements.
3. Design appropriate audit procedures.

1.5 Inherent risk

In developing the overall audit plan, the auditor should assess inherent risk at the financial statement level. In doing so following factors should be considered.

- ❖ Integrity of management.
- ❖ Management knowledge, expertise and changes in management during the period.
- ❖ Unusual pressures on management

❖ Nature of business :-

1. Technological obsolescence.
2. Complexity of its capital structure.
3. Significance of related parties.
4. No of locations and geographical spread.

❖ Features affecting industry :-

1. Financial trends and ratios.
2. Changes in technology.
3. Consumer demand
4. accounting parties.

Afterwards when developing the audit programme he should relate this inherent risk to individual material a/c balances and classes of transaction or assume inherent risk is high.

Transaction that are susceptible to misstatement [accounts which required adjustment in prior periods a high degree of estimation]

- ❖ The complexity of underlying transaction / events.
- ❖ The degree of judgement
- ❖ The vulnerability of assets to loss / misappropriation.
- ❖ The completion of unusual and complex transaction towards the end of year.
- ❖ Transaction not subject to ordinary processing

1.6 Accounting and internal control system

Aim of internal control if accounting system.

1. Ensure that transaction are executed with management authorization.
2. Ensure that all transaction are recorded at the correct a/c amount, period, to ensure that financial statements are prepared in accordance with SLAS.

3. Access to assets and records are restricted.
4. Physical assets are compared with records and appropriate action is taken regarding difference.
2. This is done ensure that the auditor has correctly understand the control system.
3. Inquires from the manager / supervisor / employees I.C.Q.
4. Inspection of documents and records produced by accounting and internal control system.
5. Observation of entity's activities and operations.
6. Previous year document action in permanent file.

1.7 Limitation of internal control

1. Cost of internal control should not exceed benefits.
2. Non routine transaction are not covered.
3. Potential for human error due to carelessness distraction mistake in judgement.
4. Can be overridden by collusion.
5. A person responsible for exercising internal controls over ride them.
6. In adequacy due to periodical changes.

1.8 Understanding the accounting and internal control system.

The auditor should obtain an understanding about the design and operation of accounting and internal control system that is sufficient to plan the audit.

Procedure performed.

- 1) Size and complexity of the entity.
- 2) Nature complexity of entity's computer system.
- 3) Materiality consideration.
- 4) Type of internal controls involved.
- 5) Nature of entities documentation of internal control.
- 6) Auditors assessment of risk.
- 7) The degree to which key accounting control financial statements are incorporated to computer programs.

Methods of obtaining the understanding

1. Walk through test – tracing a few transaction thought the accounting system.

1.9 Accounting system

The auditor should obtain an understanding of accounting system sufficient to identify / understand.

- ❖ Major classes of transactions.
- ❖ How transactions are initiated.

Significant accounting records, supporting documents and accounts in financial statements.

Accounting and financial reporting process from initiation of significant transactions to the inclusion financial statements.

1.10 Control environment

The auditor should obtain an understanding of control environment sufficient to assess director and management attitudes, awareness and auditors regarding internal controls and their importance to the entity.

1.11 Control procedures

The auditor should obtain an understanding of control procedures sufficient to develop an audit plan.

1.12 Control risk

After obtain an understanding of the accounting system and control environment if the auditor expects to reduce substantive procedure relying on the assessment of control risk he should.

1.13 Preliminary assessment of control risk

The procedure of evaluating the effectiveness of the entity's accounting and internal control system is preventing detecting and correcting material misstatements.

- 1) Make and preliminary assessment of control risk of material financial statements assertion.
- 2) Plan to perform test of control to support his assessment.

If the likelihood, of prevention and detection is high the auditor plans to perform supporting tests of control the risk less than high and substance procedures can be reduced.

If the auditor doesn't expects to reduce substance procedures relying on of control risk due to,

- ❖ Entity's accounting and internal control systems are not effective or,
- ❖ Evaluating the effectiveness of the entity's accounting and internal control system would not be efficient.

There is not any necessity for such procedure and the auditor assessment that control risk in high the auditor should perform extensive substance procedures.

Documentation

Following should be documented in the working paper.

- a) Understanding about entity's accounting and internal control system.
- b) The preliminary assignment of control risk.

- c) If the risk considered, to be less than high, the basis of the conclusion.

Methods of documentation

1. Narrative description.
2. Questionnaires.
3. Check lists.

Advantage

- 1) Even in matters are brought to the consideration.
- 2) Auditor need not to be present
- 3) Disadvantage overall view is difficult to be obtained and auditor may be mislead.
- 4) Flow charts symbolic diagrammatic representation of client documents and their sequential flow in the organization.

Documentation method depends on

1. Size and complex of the entity
2. Nature of entity's accounting and internal control system.

Advantage

1. Very easy understand than a narrative.
2. Easy to trace from origin to inclusion in financial statements.
3. Indicate control procedures.

Tests of control

Tests that are performed to obtain audit evidence about the,

- ❖ Suitability of design of the accounting and internal control system.
- ❖ Effectiveness of operation of the internal controls through out the period.

Final assessment

Before the conclusion of the audit the auditor should consider whether the assessment on control risk is based correct on the results of substantive tests. If proved wrong assessment of CR should be revised and nature / timing and extent of audit procedures should be modified accordingly.

Detection risk

Detection risk depends on substantive procedures performed. The auditor should design the nature, extent and timing of audit procedures so as to reduce the detection risk and accordingly the overall audit risk.

There is an inverse relationship between the combined level of inherent and control risk and detection risk in order to maintain AAR at a low level i.e. When the combined level is high the auditor performs more procedures which reduce detection risk and vice versa this is essential to maintain the audit risk at an acceptable low level.

As said earlier when the combined level of inherent and control risk high the auditor perform more and more procedures and gather evidence to reduce the detection risk. However

if the detection risk cant be reduced regarding a material a/c balance the auditor should modify his opinion other wise with draw from the engagement.

Conclusion :-

This activities are basis for re- check the transactions and excellent functions of the firm. Also, internal control system use the resources efficiency to achieve the goal of the firm.

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FINAL YEAR
COMMERCE

ORGANIZING

1.0 Introduction

The organization can be defined as two or more people working together in a coordinated manner to achieve the common goals. The organization has set objectives, the relative arrangement of people and physical resources, a set of rules and regulations and a hierarchical structure of authority with formal lines of communications.

Organization has been formally defined in a number of different ways.

According to Davis :

Organization is a group of people, who are cooperating under the direction of leadership for the accomplishment of a common end.

According to Sheldon :

Organization is the process of so combining the work, which individuals or groups have to perform with the facilities necessary for its execution that the duties so performed provide the best channels for the efficient, systematic, positive and coordinated application of the available effort.

Organization has become an integral and an important part of human life. According to Etzioni, without well run organizations, our standing of living, our level of culture, and our democratic life, could not be maintained. We are born in organizations, and most of us spend much of our time working for organization.

2.0 Principles of Organization.

There are some principles common to all organization that are established in a classical form. The classical form means an organizational structure where there is a hierarchy of power and responsibility and it

flows from the top management to the lower level of workers through its different ranks. These principles are described below.

1) The lines of authority should be clearly stated and should run from the top to the bottom of the organization. This principle is known as the scalar principle, and this line of command is referred to as chain of command.

2) Each person in the organization should report to only one boss.

This is the principle of "Unity of command" and each person should know whom he reports to and who reports to him.

This process eliminates ambiguity and confusion that can be caused, when a person has to report to more than one superior.

3) The responsibility and authority of each supervisor should be established clearly and in writing.

This will clarify the exact role of the supervisor as to limits to his authority.

Authority is defined as "The formal right to require action from others". Responsibility is the accountability of that authority.

With clearly defined authority and responsibilities, it will be easier for the supervisor to trace and handle problems and make quick decisions when necessary.

4) The higher authority are responsible for the acts of their subordinates. The executive cannot dissociate himself from the acts of his subordinates. Hence he must be accountable for the acts of his subordinates.

- 5) The authority and responsibility should be delegated as far down the hierarchical line as objectively possible.

This will place the decision making power near the actual operations. This gives the top management more free time to devote into planning and overall policy making. This is specially necessary in large complex organizations. This is known as decentralization of power as against centralized power where all decisions are made at the top.

- 6) The number of levels of authority should be as few as possible.

This would make the communication easier and clear and the decision making faster. A longer chain of command generally results in run around. According to Gill more, most organizations do not need more than six levels of supervision including the levels of the president.

- 7) The principles of specialization should be applied wherever possible.

Precise division of work facilitates specialization. Every person should be assigned a single function whenever possible. This rule applies to individuals as well as the departments. The specialized work will lead to efficiency and quality. However each area of specialization must be inter related to the total integrated system by means of coordination of all activities of all departments.

- 8) The line functions and the staff functions should be kept separate.

This line functions are those that are directly involved with the operations that result in the achievement of company objectives.

Staff functions are auxiliary to the line function and offer assistance and advice. For example, legal and public relations and promotional functions are all staff functions. Proper relative emphasis should be put on all these functions, and all these functions should be coordinated wherever necessary.

- 9) The span of control should be reasonable and well established.

The span of control determines the number of positions that can be coordinated by a single executive. The span of control could be narrow, which means that there are relatively few individuals who report to the same manager or this span of control could be wide where many individuals are under the supervision of the same manager.

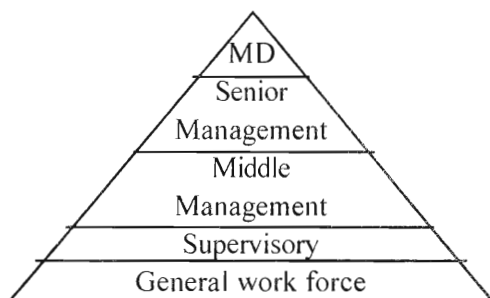
- 10) The organization should be simple and flexible. It should be simple because it is easier to manage and flexible because it can quickly adapt to changing conditions. It should be such that it can easily be expanded or reduced as the times demand simplicity would make the communication much easier.

3.0 Organizational pyramid

This structure or design may be applied to many different kinds of organizations and is typically known as a hierarchy. Not all organizations have the same extended hierarchy. Some will have a narrower base line and be even taller, whilst others will tend to be flatter, having only a limited hierarchy (i.e. most staff will share the same or a limited number of ranks or grades).

The organizational pyramid is a straightforward description in that at the top of the pyramid the boss presides as the overall leader whilst a

variety of tasks are distributed down wards throughout the organization.



As the pyramid opens out towards the base, more individuals occupy similar, complementary or even low grade identical roles. Conversely, as the pyramid narrowss and gains height towards the apex there apex there is the suggestion of a rarefied and lonely existence for "The man at the top". In the last resort it is the supreme boss who alone is in complete charge of the formal legal executive, all staff are ultimately accountable to him.

4.0 Process of organization.

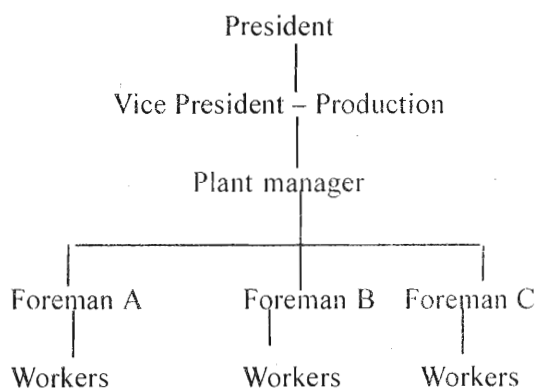
- Determining. grouping and structuring activities.
- Devising and allocating roles arising from the grouping and structuring of activities..
- Assigning accountability for result to both groups and individuals.
- Determining detailed rules and systems of working including those for communication. decision- making and conflict resolution.

5.0 Type of organizational structure.

1. Line organization.

This is the type of organization where the authority is embedded in the hierarchial structure, and it flows in a direct line from the top of the managerial hierarchy down to different levels of managers and subordinates and down tothe operative level of workers. It clearly identifies authority, responsibility, and accountability at each level. These relationships in the hierarchy connect the position and tasks of each level with those above and below it. There is clear unity of command so that a person at each level is independent of any other man at the same level but only is responsible to the person above him. The line personnel are directly involved in achieving the objectives of the company.

This type of organizational structure is specially use ful when the company is small in size and the employed have a sense of belonging and they become involved. Also, the decision making process is easier and quicker. A simple line structure is given below.



Advantages of line organization.

- The line organization is simple to understand and simple to operate.

- 2) Responsibility, authority and accountability are all clear-cut, easily assignable and traceable.
- 3) Communication is fast and easy and feedback can be acted, upon faster.
- 4) Due to small structural size, discipline among all can be maintained easily and effective control can be easily exercised.
- 5) As usually the companies with line type of organization are small in size, people get to know each other better, and tend to feel close to each other.

Disadvantage of line organization.

- 1) It is rigid and inflexible form of organization and there is a tendency for line authority to become dictatorial.
- 2) As the firm grows larger and the executives become overburdened with many duties, a purely line type of organization becomes less effective.
- 3) Line officers being too involved in day – to – day operations, have little time for systematic and strategic planning.
- 4) Due to strict accountability, different departments may be more interested in their self interests, rather than over all organizational interests and welfare.
- 5) There is no provision for specialists and specialization which is essential for growth and optimization.

2. Line and staff organization.

In this type of organization, the functional specialists are added to the line. Giving the line the advantages of specialists. This type of organization is most common in our business economy and specially among large enterprises. Staff is basically

advisory in nature and usually doesnot posses any command authority over line managers. This staff consists of two types.

1) General Staff

This group has a general background, which is usually similar to executives and serves as assistants to top management. They are not specialists and have generally no authority or responsibility of their own.

They may be known as special assistants, assistant managers, or deputy chair persons.

2) Specialized staff.

Unlike the general staff, who assist only one line executive, the specialized staff provides expert staff advice and service to all on a company wide basis. This roup has a specialized background in some functional areas and it could serve in any of the following capacities. Such as advisory capacity service capacity and control capacity.

This type of organization uses the expertise of specialists without diluting the unity of command. With this advise, the line managers also become more scientific and tend to develop a sense of objective analysis of business problems. According to salt on staff, a member may serve as a coach, diagnostician, policy planner, coordinator, trainee, strategist etc.

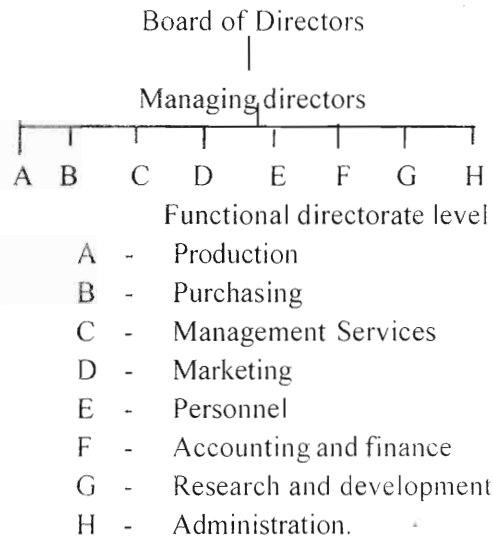
Conflicts between line and staff organization.

1. Since the staff generally advises and the line decides and acts, the staff often feels power less.

2. Staff employees may be resented because of their specialized knowledge and expertise.
3. Staff has generally easier access to top management, which is resented by the line management.
4. Staff is generally younger and more educated and did not go through the run of the mill and hence their ideas may be more theoretical and academic rather than practical.
5. There is a conflict about the degree of importance between the line and staff as far as the contribution towards the growth of the company is concerned.
6. The line usually complains that if things go right then the staff takes the credit and if things go wrong then the line gets the blame for it.

3. Functional organization.

functional structure is based on an executive or management team with each manager having functional authority "across the organization". Policy is determined by functional managers on the basis of corporate or collective decision making. Control of the critical functions of the organization are thus highly centralized often located at head office. The actual title given to each of the directors will depend on the nature and type of organization. Illustrates a functional directorate of a manufacturing organization.



4. Project Organization

These are temporary organizational structures formed for specific projects for a specific period of time and are dismantled, once the goal is achieved. For eg. the goal may be to develop a new automobile for this project, the specialists from different functional departments will be drawn to work together. These functional departments are production, engineering, quality control, marketing research etc. When the project is completed, these specialists go back to their respective duties. The specialists are selected primarily on the basis of task related skills and expertise rather than decision making experience or planning ability.

These structures are very useful.

- 1) The project is clearly defined in terms of objectives to be achieved and the target date for completion of the project for eg. The project to build a new airport.

- 2) The project must be separate and unique and not be a part of daily work routine of the organization.
- 3) There must be different types of activities which require skills and specialization and these must be coordinated to achieve the desired goal.
- 4) The project must be temporary in nature and not extended into other related projects.

5. Matrix organization

The development of this form of structure is based on a problem – solving approach, where by the different and often disparate functions of an organization are brought together in an attempt to provide a solution. This form of design originated in the North American space Agency (NASA) Which had initially one specific over all objective to land a man on the moon.

Every one working for NASA had specific skills or knowledge and expertise instead of being assigned to a department or section, individuals were assigned to the programme. Staff moved around the 'project' according to the needs of the programme as it developed. for eg.

An expert in fabrics would be assigned to different teams dealing with different fabric problems- space suits, seating interior design and so on sometimes the expert would be a project or team leader, at another time simply a member of a team.

Disadvantages and weaknesses of matrix organization.

The matrix structure of organization suffers from some of the following weaknesses.

1) Violation of unity of command principle:

Since there is more than one supervisor for each worker, it causes confusion and conflict and reduces effective control. To avoid this problem, frequent and comprehensive communication among project and functional managers is necessary.

2) Administrative Cost:

There is continuous communication both vertically as well as horizontally, which increases paper work and costs. Unlike the simpler authority structure, there are more meetings and more discussions at the cost of the actual productive paper work, thus further increasing the administrative costs.

3) Pressure of job:

The individuals have too many demands placed on them. For in addition to their regular responsibilities, they are involved in additional meetings and paper work which may put additional demands upon them. Also due to excessive interdependence and inter communications there is a role conflict as well as role ambiguity. Role conflict is difficult to be avoided since they are all specialists. and they have to report to more than one supervisor and these different supervisors may have conflicting demands and expectations.

4) Balance :

It is difficult to achieve a balance between the projects technical and administrative aspects. It is difficult to get highly technical engineers and scientists to accept the administrative cost restraints. Also a balance has to be achieved between the

authority of project heads and functional managers and their respective responsibilities, which may be difficult.

Benefits of a good organization

- 1) A good organization facilitates attainment of objectives through proper coordination of all activities. It has a built in system of "checks and balances" so that the progress towards the attainment of objectives is evaluated along the way and any new decisions required are taken.
- 2) In a good organization, the conflicts between individuals over jurisdiction are kept to minimum. Since each person is assigned a particular job to perform, the responsibility of performing that job rests solely with him. Hence, the interdependency is reduced to a minimum.
- 3) It eliminates overlapping and duplication of work. Duplication only exists when the work distribution is not clearly identified and the work is performed in a haphazard and disorganized way. Since a good organization demands that the duties be clearly assigned, such duplication of work is eliminated.
- 4) It aids in wage and salary administration. A fair and equitable wage and salary schedule is based on the premise that jobs with similar requirements should have similar benefits. If these be clearly established and the yearly increments of cost of living increment for each type of job is properly understood then compensation administration policies are easier to apply.
- 5) Communication is easier at all levels of the organizational hierarchy. Since the lines of communication and the flow of authority is quite clear in the organizational chart, the inter communication is both clearer and easier and it eliminates ambiguity.
- 6) Since good organization is basis for effective planning in the short run as well as in the long run, such planning has the provision to permit changes to be made in the right direction including expansion and contraction of operations and activities when necessary.

KALAIVANI VADIVALE
2ND YEAR
COMMERCE

RELATIONSHIP MARKETING

1.0 Evaluation of Relationship Marketing

The term "Relationship Marketing" was introduced during the 1980's and is a relatively new and evolving concept. An early definition is provided by Leonared Berry, relationship marketing is the attraction, maintaining and .. in multi service organization ... enhancing customer relationships.

In the early 1990's interest in the concept of relationship marketing began to grow rapidly. Many organizations began to realize that success in highly competitive and mature markets is more likely to be achieved by devoting a greater part of their resources to retaining existing customers than to attracting new ones. Relationship marketing involves an extension of traditional marketing. The key feature of relationship marketing are a change in the nature of relationship with customers.

The basis of the relationship marketing philosophy is that the attraction of new customers is merely the first step in the marketing process; the important element is the retention of those customers. Relationship marketing is concerned with creating, developing and enhancing relationship with selected customer segment overtime. This involves gaining a detailed understanding of the needs and behaviour of key customer segments who they change over their life cycles.

Current interest in the concept of relationship marketing can be traced back to research carried out in the USA and Europe

in the early 1980's. During this period reserches in both industrial marketing and services marketing began to purse studies on the potential of relationships marketing.

The theories and concepts of relationship marketing drawn upon a number of distinct areas including service quality, service marketing, customer retention economics and network interaction theory of the IMP (International Marketing and Purchasing) group coote (1994) has identify three broad approach to relationship marketing.

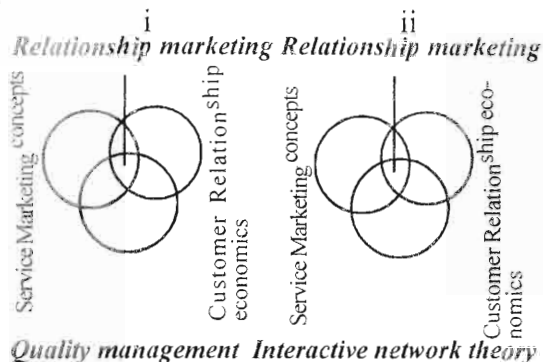
The first approach the "Anglo Australian Approach", derived from the work of Christopher and emphasizes quality management, service marketing concepts and customer relationship economics.

The second approach is the "Nordic approach" derived from the work of Scandinavian others including Gronoors and Hummesson. The foundation of the Nordic approach emphasizes the interactive network theory of industrial marketing, service marketing concepts and customer relationship economics.

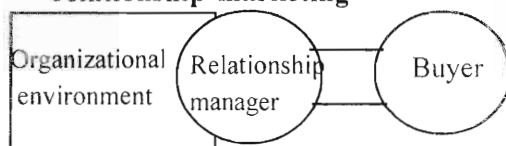
The third approach to relationship marketing is characterized by the work of Berry and levitt and focuses on the relationship between the buyer and seller. These three approaches are shown by following figures.

Alternative Schools of relationship marketing

- i) Anglo – Australian to relationship marketing
- ii) Nordic approach to relationship marketing



iii. North American approach to relationship marketing



As can be judged from the brief description of the evolution of relationship marketing give above the topic is an extremely broad one with different writers and researchers placing significantly different emphases on specific aspect.

Four of the most important themes in relationship marketing are

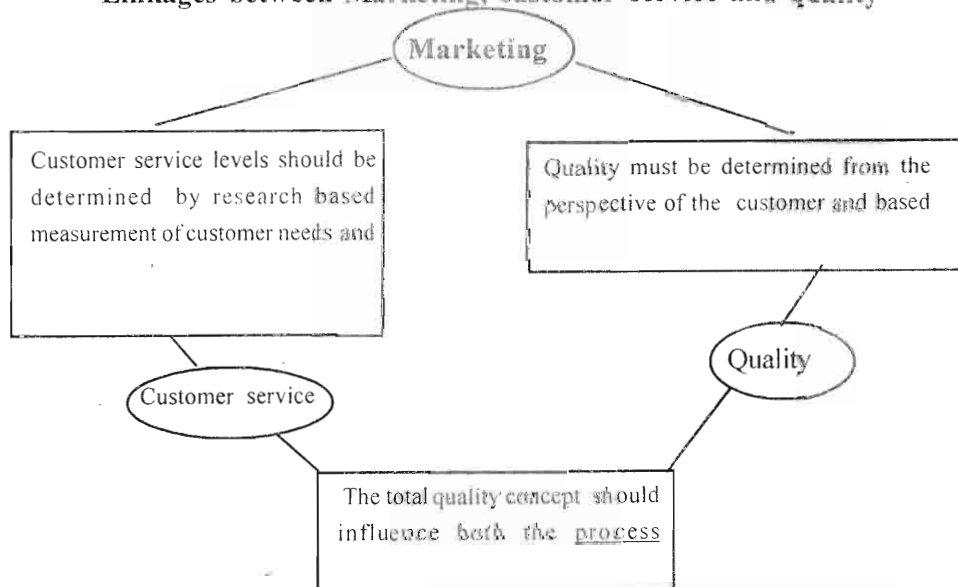
1. The integration of quality customer service and marketing
2. A broad view of what constitutes a 'Market'
3. Understanding levels of customer loyalty
4. The economic benefits of customer retention

1.1 Relationship marketing integration quality service and marketing

The first theme is concerned with creating superior relationship through the integration of quality customer service and marketing with respect to quality, the traditional "Conformance to specification" concept which is derived from the production function is giving way to a market oriented view of quality which is based on customer perceptions of quality.

Similarly, customer service is now being seen in a broader organizational context as a cross - function coordination issue which impacts on relationship with specific markets across the whole range of the company's activities.

Linkages between Marketing, customer service and quality

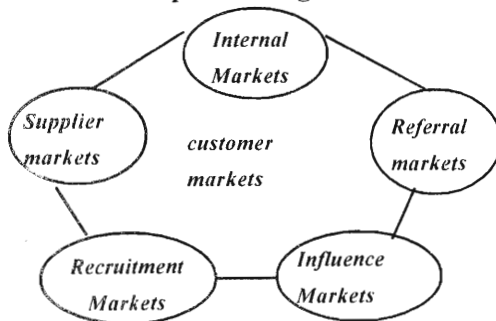


Marketing is concerned with exchange relationship between the organization and its customers. While a relationship building focus is present in the marketing activities of many firms, it is by no means widespread. Relationship marketing seeks to change this perspective by managing the competing interests of customers, staff, share holders and other stake holders. This suggest that relationship marketing has a key role in broadening the impact of the marketing in a wide range of market domains. The role that quality, customer service and marketing have in building relationships with customers is shown below.

1.2 A broader view of what constitutes a "Market"

The principles of marketing can be applied to a number of different "Markets". The relationship marketing philosophy suggest that, at a macro level, organization should consider their impact across a broad range of markets but also employee or recruitment, markets, supply markets, internal markets, referral markets, and influence markets are shown in below.

The relationship marketing six market model



1. Customer markets

Customers must remain the prime focus for marketing activity, but emphasis needs to

be less on transactions and more on relationship building.

2. Internal markets

Internal marketing has several aspects. These include the concept that every employee and every department in an organization is both an internal customer or an internal supplier. Organization thus need to ensure that operations are optimize by marketing certain that every individual and department provides and receive high standard of service. The alignment of internal and external marketing ensures coherent relationship marketing.

3. Referral Markets

There are two broad types of referral markets, existing customers and referral sources. Referral from existing customers are an effective source of new business, and creating referrals through strong word – of mouth marketing is an important way of developing new relationships. So, marketing to such referral markets represents a powerful way of building the business.

4. Supplier Markets.

The relationship between organization and their suppliers has gone through significant changes in recent years. Marketing to supplier markets aims at developing close cooperation between the customer and supplier with mutual concentration on quality, commitment to flexibility low costs mutual benefits and resulting long term relationships.

5. Recruitment markets

Increasingly people are being recognized as perhaps the most crucial key resource in business. Marketing to employee market, involves both creating an appropriate

organizational climate and communicating the benefits of the organization in such a way as to attract high quality people to it. In particular the organization seeks to attract and retain employees who share the values of that organization and will make a major contribution to its future success.

6. Influence markets

Influence markets include individuals or organization which may have either a positive or negative impacts on the activities of the organization. Industry bodies regulatory authorities and government are further example of influence markets to whom organizations may need to direct marketing activities.

These six – markets – customers, referral, supplier, recruitment, influence and internal each need to be considered by every organization.

1.3 Understanding levels of customer loyalty

Customers' levels of loyalty to an organization can be depicted as a ladder, showing the progression of relationship that customers can have with the organization.

The first step on the ladder is a "prospect" the first marketing task is to convert the prospect into a "customer" described here in the narrow sense as some one who has done business with the organization only once. The next marketing task is to generate repeat business with that customer, who at this point becomes a "client" someone who is neutral to, or possibly has negative feelings towards the organization.

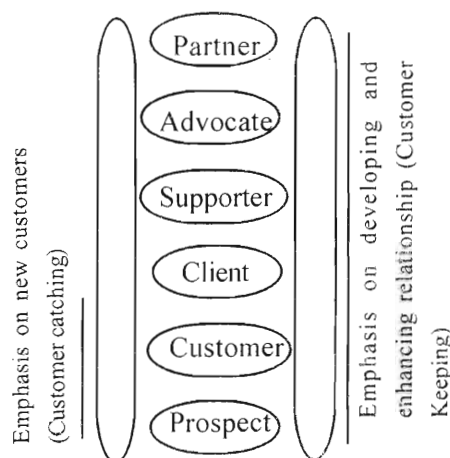
The distinction between a "client" and a "supporter" the next step on the ladder can be illustrated with reference to a bank. A 'client'

may have been doing business with a bank for years but may not be particularly happy with it, or may even have a negative attitude towards it. A "supporter" of the bank on the other hand will be positively disposed towards it and quite happy with the bank's services. However a supporter is typically passive and not outspoken about the bank's performance.

At the next level an "advocate" is someone who is pleased with the services or products being received and will actively recommend them to others.

The final step on the ladder is a 'partner' this represents a situation where a very close and long term relationship has been developed between a supplier and customer based on satisfaction of mutual needs. This last step is particularly applicable in business – to – business relationships.

While new customers are important they should not be the only focus of marketing efforts. The relationship marketing ladder illustrates that there are two main marketing tasks; attracting new customers and retaining existing ones. To achieve success, it is essential to balance scarce marketing resources between the two in an optimal manner.



1.4 Economic benefits of customer retention

There is a high correlation between customer relation and company profitability. Recent research shows that a five percentage point increase in customer retention can lead to a considerable increase in the net present value profitability. Further customers typically generate increasingly more profits each year that they stay with the company retaining customers allow the company to develop a deeper relationship with them and encourages repeated and encourages repeated and increasingly frequent buying activity.

Customer retention also helps predict the profitability of the company and is therefore an excellent management tool for considering the success of quality and customer service programmes.

Conclusion.

Many of the aspects of relationship marketing mentioned above are closely related. Marketing customer service and quality are often managed separately but if they are to perform fully they need to be much better coordinated. There is also a close link between perceived quality, customer loyalty, retention and profitability. Achievement of success requires attention to other 'markets' in order ultimately to be successful with the customer market.

Relationship marketing involves establishing building and maintaining relationships with selected customers and customer groups. It relies on organization gaining a detailed understanding of their customers' needs and behaviour this is essential to enable the organization to modify its products and customer service to suit specific needs. As markets continue to mature relationship marketing strategies will become increasingly important differentiating successful companies and taking priority over strategies for seeking new customers.

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MISS. A. BALASANTHIRAN
98 / C / 01

ECONOMIC GLOBALISATION AND SRI LANKA

1.1 Introduction

Globalization and globalizing began in the 1960's Globalisation is the process which embodies a transformation in the world organization of social relations and transactions. It generates transcontinental flows and net work of activity, interaction and the exercise of power. In this process national economics are arranged around a centre. In this arrangement a combination of nation states and a growth of their inter dependency can be seen. However today's economy seems to depend on the flow of capital, in a world in which capital has become the deciding factor of growth and development. Under globalization a capital flow continues from the developed ones to the developing ones. Globalization is more extensive as it consists of all social, economic and political life.

Economists state that economic globalization is the process by which the international markets extend their products to meet the demands of their countries. As a preliminary step the countries involved in globalization take part in importing and exporting products easing international connections making necessary steps to nationalize and reinforce economic reformation. In this way we can look into the factors that enhance globalization, the benefits and challenges it faces.

In Sri Lanka unemployment, unequal income, financial insufficiency are a challenge to the rapid development of the economy. In order to be free from economic crisis, and to raise the standard of living Sri Lanka has been undertaking huge reformations for the last three decades regarding globalization as the best solution.

1.2 The following are the factors for globalization.

- 1) The control of multinational corporation : These are responsible for the world wide factors, these incorporated firms minimize over production decrease production expenses, decrease the numbers of employees and maintain competition. They open the world market for their production under pressure of the government and thus have control over the international economy.
- 2) The new invention :- These are the rapid development in the system of communication, computerization and internet.
- 3) The activities of IMF, world bank, and world trade organization - These have become a challenge to the world countries' economic policy and have stressed these countries to set-right their economic policy and to join with the world economy.
- 4) The interference of the government lessened and the organization of the developing countries decreased to commerce and investments connected and sponsored self industry.
- 5) The introducing of Euro currency in the world market and its creation of new financial state will lead to globalization.

1.3 The following are the advantages of economic globalization.

- 1) Due to the delaying of time and distance the economy loss during the past years can be avoided.

- 2) As new types of industries have been introduced, many of the developing countries have developed a lot.
- 3) This will assist in reducing the problems among the nations and provide a long development.
- 4) Instead of compaction this provides a new aspect in co-operation and brings a practical understanding.
- 5) As technical development are spread to developing countries, they provide a modernization among them.

1.4 The challenges due to globalization

- 1) The weakness arising from economic resources depending on each other.
- 2) Increases the way to income increase and or decrease.
- 3) There is a change of inequality arising among the countries due to informatics techniques.
- 4) The control of international companies, commerce, investments and techniques are a hindrance to national development in the economy of a country.
- 5) The globalization is very intensive in stabilizing centres for economic development.
- 6) In the competition of globalization, when there is no profit, great loss will have to be faced.

1.5 Advantage and disadvantages with special reference to Sri Lanka

- 1) An increase in trade has succeeded neither in increasing productivity nor decreasing unemployment in Sri Lanka on the other hand it has decreased.
- 2) Saving investment gap remains at 5-6 a social cost has to be born. There is a vast inequality in income distribution.
- 3) There is an opportunity for increased foreign direct investment.

1.6 Conclusion.

Being a developing country Sri Lanka would face problems in adapting to the international economic system. The lack of co-operation between ethnic group may limit the advantages the globalization brings. More emphasis must be given to environment and national resources conservation.

Reference:

Development
 "Globalization and Sri Lanka"
 Prasanna Perera
 [University of Peradeniya]

<p>MS. DHANUSHANTHINI YOGANATHAN 2ND YEAR COMMERCE</p>
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INFORMATION AND INFORMATION SYSTEM IN BASIC CONCEPTS

1. Introduction

The resources of an organization are sometimes described as four Ms. materials, machines, men and money. These resources are inputs to which processes are applied to produce outputs. Information is the key to harnessing the traditional resources and is now frequently seen as a resource in its own right.

Information is a resource – an asset – of the organization and that it needs to be managed as such. The emphasis is moved away from the idea of management of information technology or even of information systems to the concept of the management of information.

2. Data and Information

Data is the raw material for data processing. Data consist of numbers, letters and symbols and related to facts, events and transactions.

Information is data that has been processed in such a way as to be meaningful to the person who receive it. The resulting interpretation (or information) is used as the basis for making decisions.

Examples of data are the registration numbers of cars passing under a bridge, the account balances of a company's debtors or a list of house address and their values in a certain area by classifying or sorting the house data by value one set of information that might be derived from data is that a certain road contains a majority of high value home.

3. The qualities of good information

The qualities of good information can be summarized in the mnemonic ACCURATE they are outlined in the following.

A	-	Accurate
C	-	Complete
C	-	Cost beneficial
U	-	User target
R	-	Relevant
A	-	Authoritative
T	-	Timely
E	-	Easy to use

4. Information for decision making

4.1 Operational information

Operational information is used to ensure that specific operations are planned and carried out properly within a factory or office.

In the payroll officer for example operational information might include the hours worked each week by each employee, his rate of pay per hour, details of his deductions, and for the purpose of wages analysis, details of the time each person spent on individual jobs during the week operational information is

- Derived almost entirely from internal sources.
- Highly detailed, being the processing of raw data
- Relates to the immediate term
- Task specific
- Prepared constantly or very frequently
- Largely quantitative

4.2 Tactical information

Tactical information is used to decide how the resources of the business should be employed, and to monitor how they are being, and have been employed.

Such information includes productivity measurements budgetary control or variance analysis reports and cash flow forecasts, manning levels and profit result within a particular department of the organization, labour turnover statistics within a department and short term purchasing requirements.

- Tactical information is therefore.
- Primarily generated from internal sources
- Summarized at a lower level
- Relevant to the short and medium term
- Describes or analysis activities or departments.
- Prepared routinely and regularly
- Based on quantitative measures

4.3 Strategic information

Strategic information is used to plan the objectives of the organization and to assess whether information includes overall profitability, the profitability of different segments of the business future market prospects, the availability and cost of raisins new funds, total cash needs total manning levels and capital equipment needs

Strategic information

- Derived form both internal and external sources
- Summarized at a high level.
- Relevant to the long term
- Concerned with the whole organization
- Often prepared on an 'adroc' basis
- Both quantitative and qualitative
- Incapable of providing complete certainty, as the future cannot predicted.

5. Information system.

An information system is a collection of components that collect, process, source, analysis and transferring information for a specific purpose like any other system. An

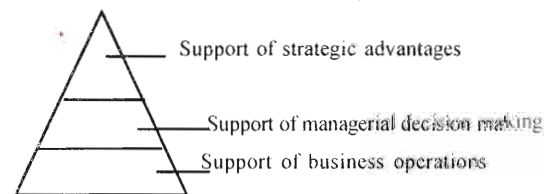
information system includes inputs that is data and instruction and outputs that is reports and calculations an information system process the inputs and produce an outputs that are sent to the users or other system an information system operates within an environment. Information system can be manual or computer based sometimes information system are partially computer based.

An information system can be formal or informal. Formal system includes agreed upon procedures standard inputs and outputs and fixed definition informal system take any shapes ranging from an officer gossip network to a group of friends exchanging letters electronically.

A computer based information system is an information system that uses computer technology to perform some or all of its intended tasks.

The information system performs three vital roles in any type of organization.

Figure 1 : Three vital roles



6. Types of information system

6.2 Transaction processing system (TPS)

Transaction processing system or data processing systems could be said to represent the lowest level in an organization's use of information systems. They are used for routine tasks in which data items or transactions must be processed so that operations can continue. Handling sales orders purchase orders, pay roll items and stock records are typical examples.

Most organizations generate a large volume of transactions which need to be processed efficiently and effectively. Computerized TPS have clear cost and performance advantages over manual systems for all but the most trivial applications. Even small businesses are now using PCs to provide three functions just as larger companies earlier acquired mainframe computers for these purposes.

TPs provide the raw material which is often used more extensively by management information systems, database or decision support systems. In other words, TPSs might be used to produce management information, such as reports on cumulative sales figures to date, total amount owed to suppliers or owed by debtors, total stock turnover to date, value of current stock in hand and so on, but the main purpose of TPS is operational as an integral part of day to day operations.

6.2 Management information system (MIS)

Organizations need not only information, but an information system to provide it. The term management information system (MIS) can be defined as follows.

A system to convert data from internal and external sources into information and to communicate that information, in an appropriate form, to managers at all levels in all functions to enable them to make timely and effective decisions for planning, directing and controlling the activities for which they are responsible.

The purpose of an MIS, potentially, is to satisfy all the informational needs of management whether this is possible will depend to some degree on the nature and type of information provided.

An MIS is good at providing regular formal information gleaned from normal commercial

data. For example, an MIS relating to sales could provide managers with information on the following.

- a) Gross profit margins of particular products
- b) Success in particular information
- c) Credit control information

6.3 Decision support system (DSS)

Decision support systems (DSS) are a form of management information system. DSSs are used by management to assist in making.

Unstructured decisions on issues do not allow the easy application of many of the techniques or systems developed for more well defined problems or activities. DSS are intended to provide a wide range of alternative tools with a major emphasis upon flexibility and user friendliness.

DSS do not make decisions; the objective is to allow the manager to evaluate them under a variety of potential conditions. A key element in the usefulness of these systems is their ability to function interactively. This is a feature, for example, of spreadsheets.

Some decision support computer systems are composed of three elements.

- a) A language subsystem used by the manager to communicate interactively with the DSS
- b) A problem processing subsystem which provides analytical techniques and presentation capabilities.
- c) A knowledge subsystem which holds internal data and can access any needed external data.

6.4 Executive information system (EIS)

'Rockert and Delong' defined as an executive information system is a computer based system that serves the information needs of top executives. It provides rapid access to timely information and direct access to management reports EIS is very user – friendly is supported by graphics and provides exemptions reporting and drill down capabilities it is also easily connected with online information services and electronic mails.

6.5 Executive support system (ESS)

Rockert and Delong defined as an executive support system is a comprehensive support system that was beyond EIS to include analysis support communication officer automation and intelligence.

Senior managers use the category of information system said ESS to make decisions. ESS address unstructured decisions and create a generalize computing and communications environment rather than providing any fixed application or specific applications ESSs are designed to incorporate data about external events such new fax laws or competitors but they also draw environment, TPS, MIS and DSS.

6.6 Expert system

Expert system are a form of DSS that allow users to benefit from expert knowledge and information the system will consist of a database holding specialized data and rules about what to do in, or how to interpret, a given set of circumstances for example many financial institutions now use expert system to process straight forward loan application.

Three are many other business applications of expert system.

- a) Legal advice
- b) Tax advice
- c) Project management
- d) Education and training
- e) Credit scoring systems used to access loan application.

7. Conclusion

This article covered mainly information. qualities of information. Information for decision making information system and types of information system information is the meaningful interpretation which is obtained after applying specific process to raw facts or to facts which have been subjected to some other processing. It is important for decision making in the organization.

Reference

- 1) Information system ICOSA
- 2) Management information system CIMA
- 3) Managing information system ICOSA

MISS. R. KATHIRGAMATHAMBY FINAL YEAR COMMERCE

STANDARD COSTING AND VARIANCE ANALYSIS

(MATERIAL AND LABOUR)

1.01

Standard costing is one of the most important tools to control costs. In this system, all cost are pre-determined. Standard cost is a carefully pre-determined estimated unit cost. Such pre-determined cost are compared with the actual costs and pre-determined costs, known as variances.

STANDARD COST;

A standard cost is carefully pre-determined estimated unit cost. It usually a standard cost per unit of production or per unit of service rendered but it is possible to have a standard cost per routine task completed, or a standard cost per 1 of sale.

HISTORICAL COSTING;

As against standard costing, in historical costing only actual cost are ascertained. Historical cost are the actual cost which have been incurred in the past. Such cost are ascertained only after these have been incurred.

1.1.1 ADVANTAGES OF STANDARD COSTING

- 1) Carefully planned standards are an aid to more accurate budgeting.
- 2) Standard cost provide a yardstick against which actual costs can be measured.
- 3) The setting of standard involved determining the best materials and methods which lead to economies.
- 4) A target of efficiency is set for employees to reach and cost consciousness is stimulated.
- 5) Facilitates coordination.

- 6) Provide delegation of authority.
- 7) To motivates staff and management by the provision of challenging targets.
- 8) To facilitates a prediction of future costs to be used in decision – making situation.
- 9) To value stocks and cost production for cost accounting purposes.

1.1.2 LIMITATIONS OF STANDARD COSTING

Standard costing system has some following certain drawback. The possible drawback are

- 1) The system may not be appropriate to the business.
- 2) The staff may not be capable of operating the system.
- 3) A business mat not be able to keep standards up to date.
- 4) Operation of the standard costing system is a costly affair and small firms cannot afford it.

1.1.3 BRAWBACK OF HISTORICAL

A system of historical costing suffers from the following limitation.

- 1) No basis for cost control :- Historical cost can not be used for the purpose of control.
- 2) No yardstick for measuring efficiency :- Historical costs do not provide any yardstick against which efficie4ncy can be measured. It only indicates the actual cost which is of little value in measuring performance efficiency.
- 3) Delay in availability of information.
- 4) Expensive system.

STANDARD COSTING

Following definition reforest to standard costing :-

The CIMA official terminology (London) defined standard costing is

‘A control technique which compares standard costs and reveries with actual results to obtain variances which are sued to stimulate improved performances’ and anther ; Brown and Howard have defined it “as techniques of cost accounting which compares the standard cost of each products or service with actual costs, to determine the efficiency of the operations so that any remedial action may be taken immediately”.

STEPS ; standard costing system involves the following steps

- a) The setting of standard costs fro different elements of cost, i.e. material, labour and overhead.
- b) Ascertaining actual costs.
- c) Comparing standard with actual costs to determine the differences between the two, known as “variances”
- d) Analyzing variances for ascertaining reason thereof.
- e) Reporting of these variances and analysis thereof management for appropriat action, where necessary.

TYPES OF STANDARDS:

Standard may be divided into two main types. They are

- 1) Basic standard
- 2) Current standard
 - a. Ideal standar
 - b. attainable standard.

Basic standard :-

These are standard which are kept unaltered over a long period time, and may be out of date. They are used to show changes in efficiency of performance over a long period of time. Variances from basic standards show trends of deviations of the actual cost. However, basic standard are of no practical utility from the point of view of cost control.

Current standard :-

These are standard based on current working conditions. such current wastages, current inefficiencies these standard are revised at regular interval. The importance disadvantage of current standard is that the do not attempt to improve on current levels of efficiency.

Attainable standard :-

These are based on the hope that a standard amount work will be carried out efficiency, machines property operated or materials property used. Some allowance is made for wastage and inefficiencies. If well –set they provide a useful psychological incentive by giving employees a realistic, but challenging target of efficiency.

Ideal standard :-

These are based on perfect operating condition; no wastage, no spoilage, no inefficiencies, no idle time, no breakdowns.

VARIANCE

According to CIMA London, terminology, a variance is the “difference between planned, budget, or standard cost and actual cost and similarly for revenue. Variance analysis is the process by which the total difference between standard and actual results is analyzed is

known as variance analysis. In variance analysis, the terms favourable and unfavourable take importance role. Favourable mean that where the actual cost is less than standard cost, it is called as favourable or 'credit' variance. On the other hand, where the actual costs is more than standard costs, it is known as unfavourable, adverse (A), or debit.

1.2.1 VARIANCES FOR EACH ELEMENT OF COST.

Direct material cost variances :-

This is the difference between the standard cost of direct materials specified for the output achieved and the actual cost of direct materials used. It is calculated as;

*** Material cost variance = standard cost of actual output actual cost

$$MCV = SC - AC$$

OR

$$MCV = (SQ * SP) - (AQ * AP)$$

Direct material cost variances can be divided into tow sub – variances.

- 1) The direct material price variance
- 2) The Direct material usage variance.

The direct material price variance :-

This is “ that portion of the material cost variance which is due to the difference between the standard price specified and actual price paid”. It is calculated by the following formula ;

This is difference between standard price and actual price multiplied by actual quality.

$$MPC = (SO - AP) * AQ$$

Example : product ‘p’ has a standard direct material cost as follows :-

5Kg of material ‘y’ at 20 ru per Kilogram. during period, 1000 units of were manufactured, using 5850 Kg of material “y” which cost RS. 98,600.

1. Direct material cost variance

$$= (SP * SQ) - (AP * AQ)$$

$$= (20 * 5 * 1000) - (98600)$$

$$= 1400(F)$$
2. Price variance

$$= (SP * AQ) - (AP * AQ)$$

$$= (20 * 5850) - (98600)$$

$$= 18400(F)$$

Direct material usage variance :-

This is “That portion of the material cost variance which due to the difference between the standerd quantity specified and actual quantity used” Its formula is.

Material usage variance = [standard quantity for actual output – actual quantity] * SP Thus this is the difference between standard quantity and actual quantity multiplied by

Example :-

$$MUV = [SP * SQ] - [SP * AQ]$$

$$MUV = [50 * 5 * 1000] - [20 * 5850]$$

$$= 100,000 - 117,000$$

$$= 17,000(A)$$

This variance may be divided into two types. they are

- a) mix variance
- b) yield variance

Mix variance :-

This is sub – variance of material usage variance. It arise only where more than one type of material is used for producing the finis. material mix variance is defined as that portion of the material usage variance which is due to the difference between standard and actual composition of materials. This variance is calculated with the help of the following formula; $MMV = [Revised standard quantity - actual quantity] * SP$

The revised standard quantity is actual quantities of all the materials. This is nothing but the standard proportion of total of calculated as under :-

$$\text{Revised standard quantity} = \frac{\text{standard quantity of one material}}{\text{quantities}} * \text{total of actual}$$

Total of standard quantities of all materials – of all. M

Illustration :

Material	Standard for 10 units			Actual for 10 units		
	Qty Units	Rate Rs	Amount Rs	Qty Units	Rate RS	Amount Rs
A	600	15	9000	640	17.50	11,200
B	800	20	16,000	950	18.00	17,100
C	1,000	25	25,000	870	27.50	23,925
	2,400		50,000	2460		52,225

SOLUTION : - Revised standard quantity is calculated as follows :

$$\text{Material ... A} = \frac{460 * 600}{2400} = 615 \text{ units}$$

$$\text{Material... B} = \frac{2460 * 800}{2400} = 820 \text{ units}$$

$$\text{Material... C} = \frac{2460 * 1,000}{2400} = 1,025 \text{ units}$$

1) Material mix variance = [Revised st. qty – Actual Qty]* standard price

$$\begin{aligned} \text{Material A} &= [625 - 640] * 15 = \text{RS. 375 (A)} \\ \text{Material B} &= [820 - 950] * 20 = \text{RS. 2600(A)} \\ \text{Material C} &= [1,025 - 870] * 25 = \text{RS. 3875 (F)} \\ \text{MMV} &= 900 \text{ (F)} \end{aligned}$$

Material yield variance :-

This is also a sub variance of material usage variance. thus material yield variance is that portion of the material usage variance which is due to the difference between standard yield specified and actual yield obtained.

2) Fro yield variance, certain basic calculation have to be made as follows :-

$$\text{Standard yield} = \frac{\text{Actual usage of materials}}{\text{Standard usage per unit of output}}$$

$$= \frac{2460}{240} = 10.25 \text{ units}$$

Material yield variance

$$= [\text{actual yield} - \text{standard yield}] * \text{standard output price}$$

$$\text{MYV} = [\text{AY} - \text{SY}] * \text{SOP}$$

$$\begin{aligned} \text{SOP} &= \text{RS. 50,000} / 10 \text{ Units} = \text{Rs. 5,000} \\ \text{Material yield variance} & \end{aligned}$$

$$= [AY - SY] * SOP$$

$$MYV = (10 - 10.25) * 5000 = \text{RS } 1,250 \text{ (A)}$$

Reasons for material price variance :- this variance usually arises due to the following reasons

- 1) Change in the market prices of materials
- 2) Failure to purchase the specified quality, thereby resulting in a different price being paid
- 3) Inefficient purchasing.
- 4) Change in delivery costs
- 5) Rush purchases.
- 6) Not availing cash discounts, when standard set took into account such discounts.

Reasons for material usage variance :-

The material usage variance may be caused by some or all of the following reason:-

- 1) use of defective or sub - standard materials.
- 2) Carelessness in the use of materials
- 3) Poor workmanship
- 4) Use of substitute materials
- 5) Change in the quality of materials.

LABOUR VARIANCES

This is the difference between the standard direct labour cost specified for the activity achieved and the actual direct labour cost incurred. It is calculated as under.

Labour cost variance

= st. labour cost of actual output - actual labour cost

$$LCV = [SC - AC]$$

OR

Labour cost variance :

$$= [\text{st. hours for actual output} \\ * \text{st. rate per hour}] - [\text{actual hours} \\ * \text{actual rate per hour}] \text{ per hour}$$

$$LCV = (SH * SR) - (AH * AR)$$

Example : the following information is given;

Standard hours per units 15

Standard rate RS. 4 per hour

Actual Data;

Actual production 1000 units

Actual hours 15300 hours

Actual rate RS 3.9 per hours

1) labour cost variance

$$= [SH \text{ for actual output } SR] - [AH * AR]$$

$$= [1000 * 15 * 4] - [15300 * 3.90]$$

$$= \text{RS } 330 \text{ (f)}$$

Labour rate variance

This is that portion of the labour cost variance which is due to the difference between the standard rate specified and the actual rate paid. Its formula is:

Labour rate variance

$$= [\text{standard rate} - \text{actual rate}] * \text{actual hours.}$$

$$= [SR - AR] * AH$$

Thus this is the difference between standard and actual rates of wages, multiplied by actual hours.

Example : using the data give in above example;

$$LRV = [SR - AR] * AH$$

$$= [4 - 3.90] * 15300$$

$$= \text{RS. } 1530 \text{ (F)}$$

Reasons for labour rate variance. Usual reasons are;

1. Change in the basic wages rates.
2. Use of a difference method of wages payment
3. Unscheduled overtime
4. New workers not being paid at full rates

REFERENCE;

- 1) Lucey. T Costing, 5th edition
- 2) CIMA Study text - (London)
- 3) M.N Arora Cost Accounting 7th edition.



VOUCHING IN AUDIT

Vouching

It is one of the audits of the auditor to see that all the receipts and payments are properly accounted for and that no fraudulent payments are recorded in the books of account.

Vouching is an inspection by an auditor of documentary evidence supporting and substantiating transaction. The aim of vouching is to establish that all the receipts and payments are properly accounted for and that no fraudulent payments are recorded.

Vouching is defined "as the examination of the evidence offered in substantiation of entries in the books, including in such examination the proof, so far as possible, that no entries have been omitted from the books" [Taylor and perry in principles of auditing]

In other words, to vouch means to examine the evidence in support of any transaction OR any entry.

The purpose of vouching is to determine the:-

- 1) Authenticity
- 2) Accuracy of the amount recorded
- 3) Proper classification of the account
- 4) Ownership

Objectives of vouching

The basic objectives of vouching are as following

- I) To see that all the transactions and entries are properly accounted for in the appropriate books of account.
- II) To see that no transaction or entry which does not relate to the business, is recorded in the books of account.
- III) To see that no fraudulent transaction are recorded in the books of account.

IV) To see that all the entries and transaction are supported by necessary evidence.

V) To see that these entries and transactions are properly authenticated by responsible persons.

Importance of vouching in auditing

Vouching is an important process in the audit work. Unless this important process is properly looked after, the subsequent processes will not be proper passing of entries in the original books of account is very important. If the basis is wrong or defective, further work will be equally wrong or defective. The same reasons also apply to the importance of vouching in the process of auditing. The purpose of checking each entry is to see that all the entries are supported by proper evidences, that they are properly accounted for, the amount is accurately entered, that the transaction are properly classified under appropriate heads of account and that they are authenticated by responsible persons.

The importance of Vouching are as following.

- Unless the auditor checks the vouching, he cannot say that books of account are correct and the entries are correctly recorded. The importance of vouching unless the auditor vouches all the transactions, he cannot say that they are properly and correctly recorded in the appropriate books of account.
- The auditor should be care full while vouching the transactions and entries of the books of account. It is the backbone of the auditing process as a whole. As a matter of fact, the success of audit

depends on vouching also. It vouching is done with care, and with a proper imagination, it can go a long way in establishing the reliability of the financial statements. But if done mechanically, the results would be other wise

- Auditor may have to prove the circumstances of transactions to understand them fully. How deep to go will, of course, depend on the internal control in existence. Vouching may be a lengthy process in many a big organization. The auditor may adopt test checks depending upon the internal control in the organization.

The voucher

Eric L. tohler defines a voucher as!

- 1) "A document which serves as an evidence of the disbursement of cash"
Examples :- a receipted bill, a cancelled check, a petty – cash receipt; the Carbon copy of a check.
- 2) A document serving as evidence of the authority to disburse cash.
Example :- an approved invoice from a supplier, a payroll.
- 3) The written evidence of a business or accounting transaction sometimes contained in a single document without attachments.

Example :- a journal voucher.

Type of voucher

Voucher are two types

- 1) Primary vouchers, and
- 2) Collateral vouchers.

Primary vouchers :- All written evidences in original are the primary vouchers. A purchase invoice or cash memo for a cash purchase are illustrations of primary vouchers.

Collateral vouchers :- Carbon copies of sales invoices, of receipts issued, a copy of the resolution passed at the board meeting are Examples of collateral vouchers.

Examples of vouchers

❖ For cash payments

Cash memos for cash purchase, pay sheets, agreement, receipts received from the parties, etc, are illustrations of vouchers for cash payment.

❖ For cash received

Counter foil copies or carbon copies of receipts issued, cash sale memos, etc, are illustrations of vouchers for cash received.

❖ For sales

Copies of invoices or cash memos, correspondence, goods outward register, etc, are illustrations of vouchers for the purposes of checking sales.

❖ For purchases

The original copy of the invoice received from the party, goods inward register, receipted challans, correspondence, etc, are illustrations of vouchers for the purposes of checking purchases.

Vouching of the debt side (i-e, the receipt side) of the cash book as follows.

All the received are recorded on the debt side of the cash book received may be

- 1) The opening balance (debt balance)
- 2) The cash sales
- 3) The receipts from debtors
- 4) Bills receivable
- 5) a) Loans received
b) The return of loans by others

- 6) a) Share capital
b) The capital of partners
- 7) The sale of fixed assets
- 8) The sales of investments
- 9) The income from hire – purchase agreements
- 10) Interest and dividend received
- 11) The rent received
- 12) The commission received
- 13) The bad debts recovery
- 14) Insurance claims
- 15) Royalty received
- 16) Miscellaneous received

Vouching of the credit side (I.e, the payment side) of the cash book.

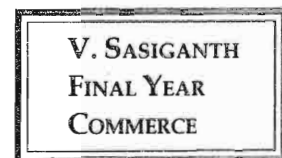
All the payments are recorded on the credit side of the cash book payments may be

- 1) Opening balance [credit balance]
- 2) Cash purchases
- 3) Payment to creditors
- 4) Bills payable
- 5) Bills receivable discounted but dishonoured
- 6) Loans
- 7) The return of loans taken
- 8) Purchase of investments
- 9) Free hold and lease hold property and buildings

- 10) Plant and machinery
- 11) Copyrights and patents
- 12) Payment under hire – purchase agreements or investment agreements
- 13) Partners' drawings
- 14) The payment of wages
- 15) Payment of salaries
- 16) The agent's commission
- 17) The commission to the traveling salesman
- 18) The traveling expenses
- 19) The directors traveling expenses
- 20) The insurance premium
- 21) The freight and carriage charges
- 22) The customs duty
- 23) Advertisement
- 24) Rates and taxes
- 25) Donations paid

Reference:-

Auditing Principles and practice
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வரிக்கணப்படின்போது ஊழிய வருமானம்

EMPLOYMENT INCOME

ஊழிய வருமானம் என்பது ஊழியர் ஒருவர் தொழிலில் ஆற்றிய சேவைக்காக கிடைக்கும் இலாபங்கள், நன்மைகள் எனக் கொள்ளப்படும். ஊழியர் ஒருவர் பின்வருமாறு இலாபங்களையும், நன்மைகளையும் பெற்றுக்கொள்ள முடியும்.

1. தொழில் தருனரிடம் இருந்து அல்லது வேறு ஒருவரிடமிருந்து பெறுகின்ற வருமானங்கள்.
 - a) ஊழியர் தமது ஊழியத்தின் போது பெறுகின்ற சம்பளம், கூலி, படிகள், லீவுகால வேதனங்கள், தரகுப் பணம், மிகையூதியம், பணிக்கொடை போன்றன.
 - b) ஏதேனும் விடுமுறை ஆணைச்சீட்டில் பெறுமதி அல்லது பணச்செலவின் பெறுமதி உட்பட ஊழியரால் அல்லது வாழ்க்கைத் துணையால் அல்லது பிள்ளைகளால், பெற்றோரால் பெறப்படும் எவையேனும் பெறுமதி
 - c) ஊழியரின் அல்லது வாழ்க்கை துணையின் அல்லது பெற்றோரின் நன்மைக்காக வேறு எவரேனும் ஆட்களிற்கு செய்யப்படும் கொடுப்பனவு.

2. தொழில் தருனர் ஒருவரினால் ஊழிருக்குக் கட்டணம் எதுவுமின்றி வளங்கப்படும் ஏதேனும் போக்குவரத்து சாதனத்தின் பெறுமதி அல்லது போக்குவரத்து சாதனத்தைக் கொள்வனவு செய்வதற்காக ஊழியருக்கு வழங்கப்படும் பணத்தொகை போன்றன.

குறிப்பு :- வாகனத்தைக் கொள்வனவு செய்வதற்கு வழங்கப்படும் கடன் ஊழிய வருமானமாக அமையாது.

3. இளைப்பாறு நேரத்தில் கிடைக்கப் பெறுகின்ற ஏதேனும் இளைப்பாற்று பணிக் கொடை அல்லது ஏதேனும் பணத்தொகை அல்லது ஊழிய சேமலாப

நிதியம் அல்லது ஊழியர் நம்பிக்கை நிதியம் என்பவற்றிலிருந்து பெறப்படும் தொகை.

மேலும் ஏதேனும் பதவியை அல்லது ஊழியத்தை இழந்தமைக் காக கிடைக்கப்பெற்று ஏதேனும் பணத்தொகை ஊழிய வருமானமாகப் கொள்ளப்படும்.

4. தொழில் தருனரினால் வாடகை இன்றி ஏற்படுத்திக் கொள்ளப்படும். ஏதேனும் வதிவிடத்தின் வாடகைப் பெறுமதி அல்லது வாடகைப் பெறுமதிக்கு குறைவான வதிவிடம் ஒன்று தொழில் தருனரினால் ஏற்பாடு செய்யப்பட்டிருப்பின் அத்தகைய வாடகையிலும் பார்க்க வாடகைப் பெறுமதி எவ்வளவு தொகையால் கூடுதலாக உள்ளதோ அத்தொகை.

குறிப்பு :- மேற்படி வரைவிலக்கணத்தின்படி பின்வருவனவும் ஊழிய வருமானமாகக் கருதப்படும்.

- i) இயக்குனர் கட்டணம் பிரயாண உபசரிப்பு படிகள்
- ii) சட்ட ரீதியான, சட்ட ரீதியற்ற முறையிலும் பெறப்பட்ட பரிசில்கள் (லஞ்சம், வெகுமதி) ஊழிய வருமானமாகும்.

பிரயாணபடி, உபசரிப்புப் படி போன்றவற்றிற்கும் எவ்வளவு தொகை வழங்கப்பட்டுள்ளதோ அவ்வளவு தொகையும் வருமானமாகும். மாறாக செலவு செய்யப்பட்ட தொகை கருதப்படமாட்டா.

உ-ம் :-

1 பிரயாண படி	5000
செலவு செய்த பிரயாணபடி	<u>(3000)</u>
	2000

இங்கு ரூபா 5000 வழங்கப்பட்ட போதும் ரூபா 3000 மட்டுமே செலவுசெய்யப்பட்டுள்ளது. ஆனால் வருமான

வரி மதிப்பு நோக்கத்திற்காக வழங்கப்பட்ட முழுத்தொகையும் (ரூபா 5000) ஊழிய வருமானமாக கருதப்படும்.

வரி பொறுப்பிற்குரிய ஆண்டு - Period of Liability

1. சம்பளம், கூலி, படிகள், தரகுகள், இலாபப்பங்கு போன்றன அட்டுறு அடிப்படையில் வரிவிதிக்கப்படும். அதாவது இவை எந்த வருடத்தில் உள்ளடக்கப்பட்டனவோ அந்த வருடத்தின் வரி விதிப்பாண்டின் வருமானமாக கருதப்படும்.

உ-ம் :- 2003 மார்ச் வழங்கிய சேவைக்காக சம்பளம் ரூபா 5000. 2003 ஏப்பிரலில் பெற்றார். இது உண்மையில் 2002/2003 ஆண்டிற்கான வருமானமாகக் கொள்ளப்பட வேண்டும்.

2. மிகையுதியத்தைப் பொறுத்த வரையில் எந்தவருட இலாபத்திலிருந்து கொடுக்கப் பட்டாலும் அது எந்த வரி மதிப்பாண்டில் பெறப்படுகிறதோ அந்த வரி மதிப்பாண்டில் வருமானமாகக் கொள்ளப்படல் வேண்டும்.

வதிவிடத்தின் வாடகைப் பெறுமதி

Renter Value of the Residence

1. தொழில்துறர் நிறுவனத்திற்கு சொந்தமான வதிவிடத்தை இலவசமாக குடியிருக்கும் நோக்கத்திற்காக ஊழியருக்கு வழங்கப்படுமாயின் அதனை வாடகைப் பெறுமதி என்பர். இது பின்வருமாறு கணிப்பீடு செய்யப்படும்.

வாடகைப் பெறுமதி = தேறிய ஆண்டுப் பெறுமதி + வீதவரி + 1/3 தேறிய ஆண்டுப் பெறுமதி

$$RV = NAV + \text{Ratio} + 1/3 \text{ NAV}$$

உ-ம் :- 3

தொழில் துணரால் ஊழியருக்கு வதிவிட நோக்கத்திற்காக வீடு ஒன்று ஏற்படுத்திக் கொடுக்கப்பட்டுள்ளது. இதன் ஆண்டுப் பெறுமதி ரூபா. 100,000 வீதவரி 20%, வீத வரியும், பழுதுபார்த்தல் செலவும், தொழில் துணரால்

ஏற்கப்படுகிறது.

ஊழியரின் வருமானத்தின் பாகமாக அமையும் இலவச வதிவிடத்தின் வாடகைப் பெறுமதி யாது?

ஆண்டுப் பெறுமதி ரூபா. 100 000

25% திருத்த செலவு ரூபா (25 000)
தேறிய ஆண்டுப் பெறுமதி (NAV) ரூபா. 75 000

வீதவரி (Ratio) $100\ 000 \times 20\% =$ ரூபா 20 000

வாடகைப் பெறுமதி (RV)

$$= NAV + \text{Ratio} + 1/3 \text{ NAV}$$

$$= 75\ 000 + 20\ 000 + 25\ 000$$

$$= \text{ரூபா } 120\ 000$$

∴ ரூபா 12 000 ஊழியரின்

வருமானத்தில் ஒரு பாகமாக கொள்ளப்படும்.

2. சில சந்தர்ப்பங்களிவ் தொழில்துறாரின் வதிவிடங்களை பிறரிடமிருந்து வாடகைக்கு எடுத்து ஊழியருக்கு வழங்கலாம். இந்நிலையில் வதிவிடத்தின் வாடகைப் பெறுமதி பின்வருமாறு அமையும்.

செலுத்திய மொத்த வாடகை, அவ்வீட்டின் கணிப்பீடு செய்யப்பட்ட வாடகைப் பெறுமதி இவற்றில் எது கூடவோ அது ஊழியரின் வருமானத்தின் பாகமாகக் கொள்ளப்படும். எனினும் இத்தொகை அரசு விதிக்கும் வரியில் எல்லையாக ரூபா. 120,000 நிர்ணயிக்கப் பட்டுள்ளது.

உ-ம் :- 4

AB கம்பனி ஊழியர் ஒருவருக்கு மாதாந்தம் ரூபா. 6000 வாடகையில் வதிவிடத்தினை ஏற்படுத்திக் கொடுத்துள்ளது. இவ்வீட்டின் ஆண்டுப் பெறுமதி ரூபா. 60,000, வீத வரி 20% எனக் கொண்டு ஊழியரின் வருமானத்தினை கணிக்க.

ஆண்டுப் பெறுமதி (AV) ரூபா. 60 000

25% பழுதுபார்த்தல் செலவு ரூபா. (15 000)

தேறிய ஆண்டுப் பெறுமதி (NAV) ரூபா. 45 000

$$\begin{aligned} RV &= NAV + Ratio + 1/3 NAV \\ &= 45\,000 + 12\,000 + 15\,000 \\ &= \text{ரூபா } 72\,000 \end{aligned}$$

$$\begin{aligned} \text{மொத்த வாடகை [G.R]} &6000 \times 12 \\ &= \text{ரூபா } 72\,000 \end{aligned}$$

$$\therefore RV \text{ ரூபா } 72\,000$$

$$\begin{aligned} GR &\text{ ரூபா } 72\,000 \\ &72000 \end{aligned}$$

$$\text{உச்ச எல்லை [limited]} 120\,000$$

\therefore ஊழியரின் வருமானத்தின் ஓர் பாகமாக ரூபா 72,000 கொள்ளப்படும்.

$$\text{உ-ம் :- } 5$$

ஊழியர் ஒருவருக்கு தொழில் தருனரால் மாதாந்தம் ரூபா 12,000 வாடகையில் வதிவிடம் ஒன்று ஏற்படுத்திக் கொடுக்கப்பட்டுள்ளது. இவ்வதிவிடத்தின் ஆண்டுப்பெறுமதி ரூபா 40,000 வீத வரி 20% எனக் கொண்டு ஊழியரின் வருமானத்தைக் கணிப்பிடுக.

$$\begin{aligned} \text{ஆண்டுப் பெறுமதி (AV)} &\text{ ரூபா } 40\,000 \\ 25\% \text{ பழுதுபார்த்தல் செலவு} &\text{ ரூபா } (10\,000) \\ \text{தேறிய ஆண்டுப் பெறுமதி (NAV)} &\text{ ரூபா } 30\,000 \end{aligned}$$

$$\begin{aligned} RV &= NAV + \text{வீதவரி} + 1/3 NAV \\ RV &= 30\,000 + 8\,000 + 10\,000 \\ &= \text{ரூபா } 48\,000 \end{aligned}$$

$$\text{மொத்த வாடகை [G.R]} 12\,000 \times 12 = \text{ரூபா } 144\,000$$

$$RV \text{ ரூபா } 48\,000$$

$$GR \text{ ரூபா } 144\,000$$

$$\text{உச்ச எல்லை [limited]} 120\,000$$

\therefore ஊழியரின் வருமானமாக ரூபா 120,000 கொள்ளப்படும்.

குறிப்பு :- ஊழியரால் குறைந்தளவான வாடகை பொறுப்பேற்கப்படுமாயின் அதாவது ஊழியரிடமிருந்து குறைந்தளவு வாடகை அறவிடப்படுமாயின் பொதுவாக ஊழிய

வருமானத்தினை கணிப்பீடு செய்யப்பட்டு அதிலிருந்து ஊழியரிடமிருந்து அறவிடப்பட்ட மொத்த வாடகையைக் கழிப்பதன் மூலம் ஊழியரின் வருமானத்தைக் கணித்துக் கொள்ள முடியும்.

$$\text{உ-ம் :- } 6$$

உ-ம் 5 ஐ அடிப்படையாகக் கொண்டு ஊழியர் குறைந்த வாடகையாக மாதாந்தம் ரூபா 3000 செலுத்துவாராயின் அவரது ஊழிய வருமானம் யாது?

$$\begin{aligned} \text{ஆண்டுப் பெறுமதி (AV)} &\text{ ரூபா. } 40\,000 \\ 25\% \text{ பழுதுபார்த்தல் செலவு} &\text{ ரூபா. } (10\,000) \\ \text{தேறிய ஆண்டுப் பெறுமதி (NAV)} &\text{ ரூபா. } 30\,000 \end{aligned}$$

$$\begin{aligned} RV &= NAV + \text{வீதவரி} + 1/3 NAV \\ RV &= 30\,000 + 8\,000 + 10\,000 \\ RV &= \text{ரூபா } 48\,000 \end{aligned}$$

$$\begin{aligned} \text{மொத்த வாடகை [G.R]} &12000 \times 12 = \text{ரூபா } 144\,000 \\ \text{ஊழியரிடமிருந்து அறவிடப்பட்ட வாடகை} &\end{aligned}$$

$$\begin{aligned} \text{ரூபா } 3000 \times 12 &= \text{ரூபா } 36\,000 \\ RV &\text{ ரூபா } 48\,000 \\ GR &\text{ ரூபா } 144\,000 \end{aligned}$$

$$\text{உச்ச எல்லை [limited]} 120\,000$$

$$\begin{aligned} \therefore \text{ ஊழிய வருமானம்} &= 120\,000 - 36\,000 \\ &= \text{ரூபா } 84\,000 \end{aligned}$$

தொழில் தருனரால் ஊழியருக்கு வழங்கப்படும் நன்மைகள்

ஊழியரால் பெறப்பட்ட நன்மைகளை பொறுத்தவரை அவை பணமாக மாற்றப்படுவதால் பெறப்படும் தொகையை மதிப்பீட்டிற்கு எடுத்துக் கொள்ளப்படும். இந்த நன்மைகளின் பெறுமதி பின்வரும் அடிப்படைகளில் கணிப்பீடு செய்யப்படும்.

1. சந்தை விலையினை அடிப்படையாகக் கொண்டு
2. சந்தை விலையினை மதிப்பிட முடியாத சந்தர்ப்பத்தில் வேறு நபரினால் அத்தகைய நன்மையைப் பெற ஏற்பட்ட கிரயமே மதிப்பீட்டிற்காக எடுத்துக் கொள்ளப்படும்.

ஊழியர் பெறுகின்ற நன்மைகளாக,

1. மருத்துவ நன்மை

ஒருவர் தனது கடமைகளைச் செய்யும் போது ஏற்படும் விபத்து அல்லது சுகயீனம் தொடர்பாக தொழில்துறனரால் ஏற்றுக் கொள்ளப்பட்ட அல்லது மீளளிப்பு செய்யப்பட்ட மருத்துவ செலவுகள் வரி மதிப்பீட்டிற்கு எடுத்துக் கொள்ளப்படமாட்டாது. ஆனால் ஏனைய சந்தர்ப்பங்களில் பெறப்படுகின்ற மருத்துவ நன்மைகள் வரிமதிப்பீட்டிற்கு வருமானமாக எடுத்துக் கொள்ளப்படும்.

உடம் :- மருத்துவ காப்புறுதி

தொழில்துறனரால் ஊழியர் ஒருவர் சார்பில் ஒரு மருத்துவ அல்லது சுகாதார காப்புறுதி திட்டத்திற்கு செலுத்தப்படும் தவணைக்கட்டணம் அந்தந்த வரி மதிப்பீட்டு ஆண்டில் வருமானமாகக் கொள்ளப்படும். ஆனால் தொழில்துறனரால் எல்லா எல்லா ஊழியருக்கும் ஒரு பொதுவான காப்புறுதி திட்டத்திற்கு பங்களிப்பு செய்திருக்கும் போது அத்தகைய காப்புறுதி திட்டத்தின் மூலமாக குறிப்பிட்ட ஊழியர் ஏதாவது நட்டசட்டினை பெறும் போது மட்டுமே அத்தகைய நட்டசட்டித்தொகை ஊழியரின் வருமானமாகக் கருதப்படும். அதாவது ஊழியருக்கு மீளளிப்பு செய்யப்பட்ட உண்மையான தொகையே ஊழியரின் நன்மையின் பெறுமதியாகும். இதுவே அவரின் வருமானமாகக் கருதப்பட்டு வரிவிதிப்பிற்கு உட்படும்.

2. ஊழியரின் பிரயாண வசதி

i) தொழில் துறனரால் ஏற்படுத்திக் கொடுக்கப்பட்ட மோட்டோ கோச் [motor coach] சில் ஊழியர் ஒருவர் தனது வதிவிடத்திற்கும் தொழில்செய்யும் இடத்திற்கும் இலவசமாக பிரயாணம் செய்வதனால் ஏற்படும் நன்மையின் பெறுமதி வரி விலக்குப் பெறும். ஆனால் motor coach தவிரந்த வேறு வாகனங்கள் பயன்படுத்தப்படின் அது வரிவிலக்குப் பெறமாட்டாது. மாறாக வருமானமாக கொள்ளப்படும்.

ii) ஊழியர் ஒருவர் தனது வேலை தொடர்பாக வெளிநாட்டிற்கு பயணம் மேற்கொள்ளும் போது அவை தொடர்பாக அவரிடமிருந்து வழங்கப்படும் போக்குவரத்து, உணவு, தங்குமிட வசதிகள் போன்றவற்றிற்கான பிரயாண படிகள் வரிவிலக்குப் பெறும். ஆனால் உள்நாட்டிற்கு மேற்கொள்ளப்பட்ட பிரயாணப்படிகள் வரிக்குட்படும்.

3. இலவச உணவு உடை

இலவச உணவைப் பொறுத்தவரை நுகரப்படும் இலவச உணவு பணப்பெறுமதிக்கு மாற்றப்படாத வரை வரிவிலக்குப் பெறும். ஆனால் உணவை நுகராது கொள்வனவு செய்வதற்காக வவுச்சர்கள் அல்லது வேறு பத்திரங்கள் ஊடாகப் பெறப்படுமாயின் வரிவிதிப்பிற்குட்படும்.

இலவச சீருடையைப் பொறுத்தவரை வேலை செய்யும் நேரத்தில் அணியப்படும் உடைகள் அல்லது சீருடைக்காகப் பெறப்படும் பணம் வரிவிதிப்பிற்கு உட்படமாட்டாது.

4. தொழில் துறனரால் ஊழியர் ஊழியர் சார்பாக வரி செலுத்தப்படல்.

சில சந்தர்ப்பங்களில் தொழில்துறனர் ஊழியரின் ஊழிய வருமானத்தின் மீது செலுத்த வேண்டிய வருமான வரியினை தான் செலுத்துவதாக பொறுப்பேற்றுக் கொண்டால் தொழில் துறனரால் செலுத்தப்படும் வருமானவரி ஊழியரின் வருமானமாகக் கருதப்பட்டு அதற்கு வரி அறவிடப்படும். இந்த வருமான வரி எந்த வரி மதிப்பாண்டினை அடிப்படையாகக் கொண்டு செலுத்தப்படுகிறதோ அந்த வரி மதிப்பீட்டு ஆண்டிலேயே ஊழியருக்கு வருமானம் கிடைத்ததாக கருதப்படும்.

5. இளைப்பாறு நன்மை

ஊழியர் இளைப்பாறுகின்ற போது ஒரேயொரு தடவை மட்டும் பெறப்படுகின்ற வருமானங்களும் ஊழிய வருமானத்தின் பாகமாக கருதப்படும். அத்தகைய வருமானங்கள் மீது விசேட

வரிவீதத்தில் வரி விதிக்கப்படும்.

பின்வருவன இளைப்பாறு நன்மைக்காக கருதப்படும்

- i) இழைப்பாற்று பணிக்கொடை
- ii) திரட்டிய ஓய்வூதியம்
- iii) அலுவலக இழப்புக்கான நட்டஈடு அல்லது பதவி இழப்பு அல்லது ஊழியர் இழப்பு நட்ட ஈடாகக் கொடுக்கப்படும். அதாவது பணத்தொகை.
- iv) அங்கீகரிக்கப்பட்ட ஊழிய சேமலாப நிதியிலிருந்து (EPF) அல்லது ஏதாவது ஒழுங்குபடுத்தப்பட்ட சேமலாப நிதியிலிருந்து பெறப்படும் தொகை 1.4.54ற்கு பின்னர் ஊழியர் செலுத்திய தொகைகள் உள்ளடக்கப்பட மாட்டாது. மேலும் சேமலாப நிதியை முதலீடு செய்வதன் மூலம் வருமானம் உழைக்கப் படுமாயின் அத்தகைய முதலீட்டில் பெறப்படும் வருமானமானது 1.4.87 ற்குப் பின்னர் பெறப்படுமாயின் இது வரி விலக்குப் பெறும்.
- v) ஊழிய நம்பிக்கை நிதியத் (ETF)திலிருந்தான பெறுவனவுகள் இவ்வாறு ஒரே தடவையில் மட்டும் பெறப்படும் வருமானங்களிற்கு மட்டும் (இழைப்பாறு பணிக்கொடை தவிரந்த சலுகை அடிப்படையிலான வீதங்கள் ஏற்படையது)

குறிப்பு :-

- i) இளைப்பாறு பணிக் கொடையைப் பொறுத்தவரை 1.8m ரூபாவிற்கு கூடிய தொகையை அல்லது இறுதி 3 ஆண்டுகளின் ஊழியர் சம்பளத்தில் மாதாந்த சராசரியை செலவு செய்த ஆண்டுகளின் தொகையினால் பெருகிவரும் தொகை இவற்றிற்கு மேலதிகமாக கிடைக்கும் பணிக்கொடை சாதாரண வரிவீதத்தில் வரி விதிக்கப்படும்.
- ii) இளைப்பாறு நன்மைகள் எந்த

வரிமதிப்பீட்டு ஆண்டில் வருமானமாக கிடைக்கிறதோ அந்த வருடத்தின் ஊழிய வருமானமாக கருதப்படும்.

- iii) ஒரு கம்பனி ஒழுங்குமுறையாக ஒரு பொதுவான அடிப்படையால் கொடுப்பனவு செய்யாமல் இளைப்பாறும் போது கொடுக்கப்படும் நன்மைகள் ஒவ்வொன்றும் ஊழியருக்கு நினைத்த மாதிரி கொடுப்பனவு செய்யப் பட்டிருந்தால் அத்தகைய நன்மைகள் சாதாரண வரி வீதத்தில் வரி விதிக்கப்படும்.

ஆனாலும் வேலை இழந்தமைக்காக கொடுக்கப்படும் நட்டஈடு மேற்கூறியவாறு ஒழுங்கு இல்லாமல் இருந்தால் அக் கொடுப்பனவுகள் மூலதன இலாபமாக கொள்ளப்படும்.

- iv) ஒரு கம்பனி கூட்டுத்தாபனமாக அல்லது அரசினால் சுவீகரிக்கப்பட்ட நிறுவனமாக இருந்து அதன் ஊழியர் விலகும் போது கொடுக்கப்படும் தொகைக்கு மேற்கூறிய வரி விதிப்பு இல்லை.
- v) கப்பலில் ஊழியராக வேலை செய்யும் ஒருவர் இளைப்பாறும் போது கிடைக்கும் பயன்கள் வரிவிலக்குப் பெறும். இதில் பின்வரும் விடயங்களை கருத்திற் கொள்ள வேண்டும்.
 - a) இலங்கை கம்பனியால் சொந்தமாக கப்பல் நடாத்தப்பட வேண்டும்.
 - b) கம்பனியில் 17ம் இலக்கச் சட்டத்தின் கீழ் அக்கப்பலை குத்தகைக்கு எடுக்கும் கம்பனி இலங்கையில் பதிவு செய்திருத்தல் வேண்டும்.

ஊழிய வருமானத்திற்கு வரிவிலக்கு

- a) பின்வரும் ஊழியருடைய உத்தியோக பூர்வமான வேனதங்களும் இறுதி நலன்களும் ஓய்வூதியங்களும் அல்லது ஏதேனும் இலாபங்களும் வரிவிலக்குப் பெறும்.

- வேதனங்களும்,
- ii) ஏதேனும் பொதுக் கூட்டுத்தாபனம் ஒன்றில் ஊழியருக்கு செலுத்தும் ஊழியம் அல்லது ஓய்வூதியங்கள் அல்லது அத்தகைய இலாபங்கள் அல்லது திரட்டு நிதியிலிருந்து அத்தகைய கூட்டுத்தாபனத்திற்கு பாராளுமன்றத்தினால் வருடாந்தம் ஒதுக்கீடு செய்யப்பட்ட முழுத் தொகையிலிருந்து அல்லது பகுதியிலிருந்து செலுத்தப்படும் வருமானங்கள் வரிவிலக்குப் பெறும்.
 - iii) மாகாண ஆளுனர்
 - iv) ஏதாவது மாகாணசபை ஒன்றின் அங்கத்துவருக்கு வழங்கப்படும் ஊதியம்.
 - v) உள்ளூர் அதிகாரசபை அங்கத்துவர் ஒருவருக்கு வழங்கப்படும் ஊதியம்.
 - vi) இலங்கை கொள்கைகள் கற்கை வேதனத்தின் ஏதேனும் ஊழியருக்கு வழங்கப்படும் ஊதியம்.
- b) இலங்கையில் வதியும் தனியாள் ஒருவர் அல்லது தனியாருக்கு,
- i) ஏதேனும் வரிமதிப்பீட்டு ஆண்டில் அவரால் புரியப்பட்ட சேவைகள் தொடர்பில்
 - ii) அல்லது அவரால் அல்லது அவரது வாழ்க்கைத் துணையால் நடாத்தப்படும்

அல்லது பிரயோகிக்கப்படும் ஏதேனும் ஊழியத்தின் போது அந்த வரிமதிப்பீட்டு ஆண்டில் இலங்கைக்கு வெளியே வெளிநாட்டு செலாவணியில் சம்பாதிக்கப் பட்ட வேதனம் அல்லது எழுகின்ற ஓய்வூதியம் அவருக்க இலங்கையில் செலுத்தப்பட்டிருப்பின் அல்லது அத்தகைய வேதனங்கள் ஓய்வூதியர்கள் அங்கீகரிக்கப் பட்ட நியாயமான செலவுகளை கழித்த பின்னர் அவரால் இலங்கைக்கு அனுப்பப்பட்டிருப்பின் அத்தகைய வேதனம்

- c) வேறு வருமானங்கள் 4800/- விற்கு மேற்படாதவிடத்து ஊழிய வருமானம் பெறுபவருக்கு அத்தகைய வருமானம் வரிவிலக்கு பெறும்.

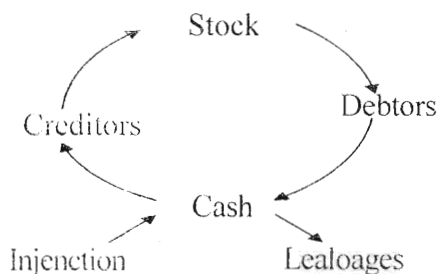
அ. குகதாஸ்
3ம் வகுடம்,
வணிகத்துறை

HOW TO HELP A BUSINESS TO MAINTAIN LIQUIDITY AND GROW

An enterprising eight-year-old, on a weekend visit to the cash-and-carry, browed Rs. 50 from his father, brought 25 packets of potato crisps costing Rs. 2 each and sold them all on Monday morning for Rs. 2.40 each, undercutting the school shop by Rs. 2 on each packet. On Monday evening he was able to return the Rs. 50, with the promise from his father that the deal could be repeated the following weekend.

After five weeks the boy no longer needed external finance and by the time he left school was well on his way to starting his own shop, having failed his examinations through pressure of business commitments. His business grew, yet it remained liquid. Why should any business find problems in maintaining growth and liquidity?

One obvious factor is that our eight-years-old did not experience recession in the market for crisps. His customers appeared to find no difficulty in providing a steady source of demand for the product. It may be instructive to commence this analysis by considering the flow of funds in a business, in order to examine the particular problems which recession imposes.



The conventional working capital cycle shows the acquisition of trading stock, its sale on credit terms producing debtors, the gradual receipt of cash from debtors and the payments of cash to creditors to allow the acquisition of more trading stock. Growth is assured if the stock

is sold at a profit and the new wealth created eventually produces increased liquid funds for recycling.

Leakages and injections of liquid funds are introduced into this closed loop. Leakages include payments of taxation and dividends, purchase of fixed assets and investments, and loan repayments. Injections come from sales of fixed assets, new capital of all kinds, transfers from other companies within a group and government grants.

In recession, it becomes difficult to find or maintain a market for goods, which places a strain on profitability and causes the movements of trading stocks to slow down. Both factors tend to reduce liquidity. The effect is enhanced by the problems which customers face in paying their debts, while on the other hand suppliers are pressing more earnestly for early payment.

The immediate reaction is to work even harder on improving profitability, perhaps by reducing prices and attempting to increase volume of sales in the hope that price elasticity of demand will result in greater overall revenue despite lower prices. This will achieve growth in profit terms but the benefits for liquidity may be lost through increases in stock and debtors which are not matched by increases in trade creditors.

At this point the instinctive reaction is to place a damper on any threatened explosion in current assets and suddenly the business finds it is working against itself. Production and sales departments are trying to control costs and boost sales. While stock controller and credit controller are trying to hold down the concomitant increase in stock and debtors.

Arbitrary attempts to minimize the amount of liquid funds tied up in stocks and debtors may be administratively convenient but are unlikely to

produce the best policy in the overall interests of the organization. A 'best' solution will only be found by considering the constraints acting from all directions. It will not be a truly optimal solution, since that could only be achieved in the absence of all constraints, but it will be the best solution in the circumstances.

This 'best' solution must be found by negotiation and the following analysis seeks to show that the negotiation must involve all aspects of operations and of working capital management.

Let us suppose that market research has been carried out and it has been estimated that, despite recession, the business can increase its share of the market by a price reduction in such a way that sales will increase from Rs. 18m to Rs. 25m per annum. Costs of sales will increase from Rs. 12m to Rs. 18m, giving a net increase in profit of Rs. 1m. At present on average stocks are held for three month's, while one month's credit is given to debtors and is provided by suppliers. Assume credit purchase are equal to cost of sales. Looking at the working capital, (a) the averages stock held will increase by Rs. 1.5m (from Rs. 3m to Rs. 4.5m), (b) the average debtors will increase by Rs. 0.6m (from Rs. 1.5m to Rs. 2.1m) and (c) the average creditors will increase by Rs. 0.5m (from Rs. 1m to Rs. 1.5m)

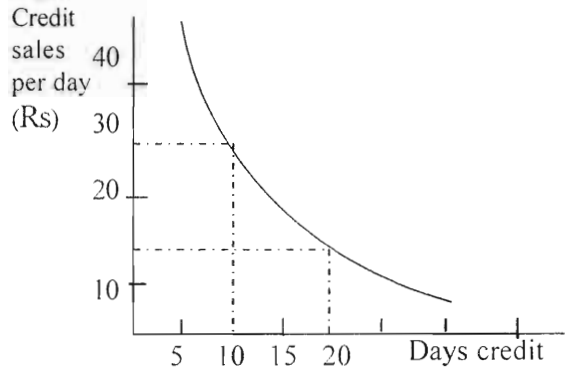
Overall the working capital requirements will increase by Rs. 1.6m compared with only a Rs. 1m improvement in liquidity derived from profits. The growth in profits will be achieved at the expense of worsening liquidity. How would negotiation improve the picture? It will be assumed that where internal management actions is required, the greatest scope for manoeuvre lies in the area of debtors and stock.

Debtors

Two factors determine the average level of debtors – the average credit sales per day and the

average period of credit allowed to customers. These may be combined in graphical form to show all combinations of the two factors which could produce the same level of total debtors. For instance, debtors of Rs. 300,000 might arise from sales of 30,000 per day with a ten-day credit period, or from sales of Rs. 15,000 per day with a 20 – day credit period

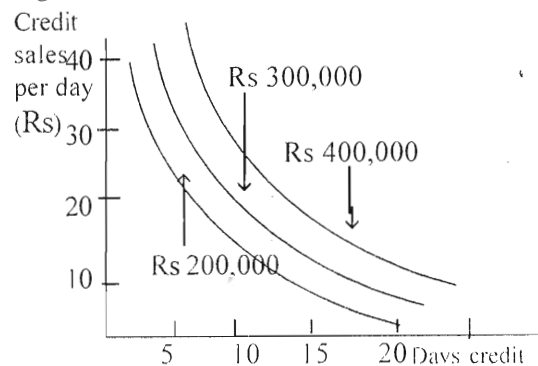
Figure1



The curve in the graph (figure 1) joins all possible combinations of credit sales per day and credit period which could give rise to debtors of Rs. 300,000.

A family of similar curves may be derived in the same manner. Each curve represents a chosen level of debtors and any point on that curve could be selected as the appropriate combination of sales and credit period for the business.

Figure 2

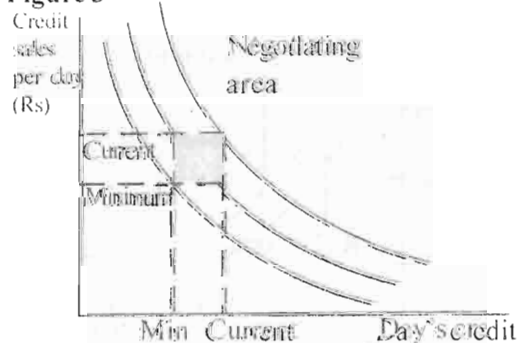


Two movements are possible on this graph. One is a 'Slide' up or down the same curve, while the other is a 'jump' from one curve to another of greater or lesser value. If the business wishes to reduce the level of debtors it must jump to a curve of lower value. If there is a desire to increase the credit sales per day but maintain the same average debtors, there will be slide along the curve to a reduced credit period when sales per day increased would result in an automatic jump to a higher level of debtors.

The graph may be used in negotiation between different departments of an organization. Suppose that an increase in profitability has been achieved by increasing the credit sales of the business. At the same time the credit controller, aware of a liquidity problem, has been attempting to reduce the credit period allowed. He may find that instead of jumping to a lower curve he is merely sliding round the same curve because his efforts are exactly balanced by the increase in credit sales per day.

To ensure that the two aspects of the operations are working together, limits could be set within which each would have to operate. In figure 3 these limits are shown as a range of credit sales and a range of credit periods. The maximum reduction in debtors could be achieved by minimizing both variables but an acceptable reduction in debtors might be achieved by taking a compromise within the shaded area. The two parties could see from the graph the way in which their respective actions interact in terms of liquidity.

Figure 3



One of the problems of reducing the period of credit enjoyed by customers is the adverse effect on sales. If sales is a decision to reduce the average level of debtors and the credit period is reduced to the full extent necessary, the additional effect of reduced sales may result in an overall decrease in debtors which is greater than is necessary. Consideration beforehand of the decrease in sales expected for each day's reduction in the credit period would allow the correct credit reduction to be selected using the graph.

The benefits of specialist sources of finance, such as factoring of debts, are also illustrated by the graph. Factoring provides a bridge by reducing the credit period from the point of view of the business, while not disturbing the credit period enjoyed by the customer.

Turnover of stock

The average stock held at any point in time is measured by the cost of goods sold per day and the number of days for which stocks are held. Thus the graph of equal values which was used for debtors may also be used for stocks, with a suitable change of axes. In the case of a manufacturing business, the rate of turnover of stock is probably most usefully split into separate elements of raw materials, work-in-progress and finished goods.

A reduction in the level of stocks must be achieved either by reducing the period of stockholding or by reducing the cost of goods sold. Cost reducing, in the context of a retail trade, would entail buying lower-cost goods, but in the case of a manufacturing business would involve reduction of cost of manufacture. The pressure to maintain adequate stocks of goods for resale will tend to come from the selling department, anxious to satisfy customers demands, while the pressure to maintain raw

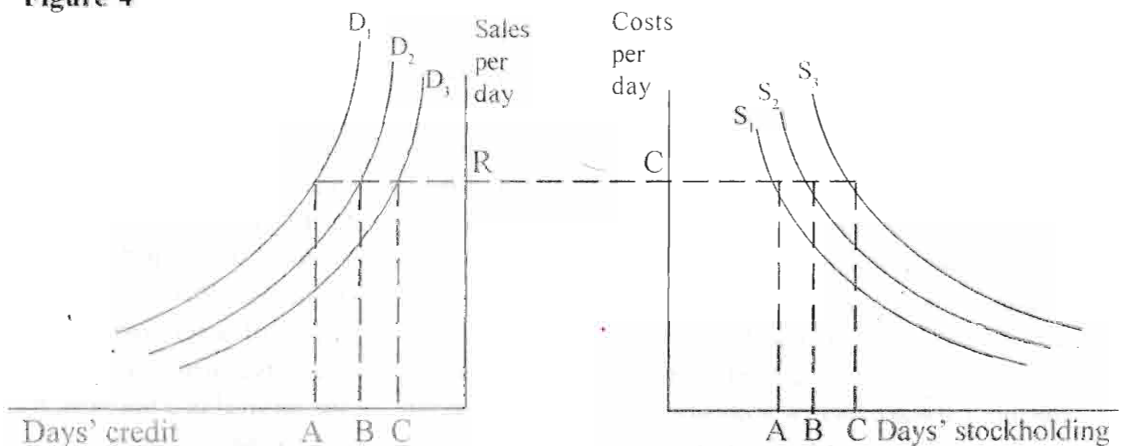
materials stocks will come from production departments. The graph relating cost of goods sold to stockholding period will show the relevant department that cost control can have an effect on liquidity as well as profitability, and that by controlling costs they are assisting in asset management.

Interrelationships.

The negotiation process does not end by considering debtors and stocks separately, since decisions about the one may have implication for the other. Suppose it is decided to reduce the credit period for debtors, with the result that credit sales are affected. The reduction in sales will mean that lower stock levels will be required and, unless there is co-ordination, it may be that attempts to maintain liquidity through controlling debtors will have an effect on stocks so that the overall reduction is greater than was originally intended.

To show the combined effects of managing debtors and managing stocks, the two graphs must be matched in such a way that the sales on the vertical axis of one correspond to the cost of sales on the vertical axis of the other.

Figure 4



On each graph are shown three curves of equal value, such that the desired total of stocks and debtors could be achieved in three ways, by choosing D_1 with S_3 , D_2 with S_2 , or D_3 with S_1 .

Suppose the desired level of profit has been specified in terms of sales per day of R and costs per day of C. From the graph this could be achieved by combining a fairly liberal credit control policy with a short stockholding period, using curves S_1 and D_3 . These points are labeled a on each graph.

A more liberal stockholding period could be combined with a stricter credit period using the curves S_2 and D_2 , and the points labelled B. The longest stockholding period and the shortest credit period would be found using curves S_3 and D_1 , at the points labelled C in each graph.

The graphs could be used in other ways. A credit period could be specified, and a range of profit examined, dependent on the permissible range of stockholding period. Alternatively, the stockholding period could be fixed and the period of credit given to debtors allowed to vary so that the effect of sales and profit could be considered.

The negotiating process

The mechanism for such negotiating process already exists within the budget context. The budget process requires co-ordination of the plans of different departments within an organisation and this emphasis on liquidity would be another factor to be added to the process of budget preparation. Responsibility for such co-ordination would probably lie in the field of corporate treasury, which appears to be emerging as a separate function within an organisation.

Injections and leakages

Attention has been devoted largely to the internal actions of the organisation because in a recession the business may be forced to look to its own resources rather than relying on outside help. It must however be looking also towards the upswing at the end of the recession and must have adequate capital on which to build when the upswing comes.

The business must have an adequate capital base in terms of operating capability, and while recession may not provide the opportunity for radical redesign of the asset base, it may be the time to look at existing assets which are no longer suitable and make for new acquisitions.

Acquisitions may be made, if they can be financed by suitable long-term borrowing but the temptation to increase short – term borrowing must be avoided because of the risk of mismatch of sources and uses of finance. While it is difficult to find theoretical justification for such rules of thumb, they are justified in practice in terms of hedging against the risk to the business which may result from using short – term borrowings to finance long-term operations.

Leakages from the system, to the extent that they are not matched by further borrowing, must place a strain on liquidity and increase still further

the reduction in debtors and stocks which must be achieved to keep liquidity at the desired level.

Is liquidity important?

This analysis has sought to answer the problem of maintaining liquidity while achieving growth but presupposes that the need for liquidity is fully understood. In fact there is no clear understanding of the value of liquidity. There are well developed theories of such subjects as the gearing of a company or its dividend policy but none on the liquidity of a business.

The Department of Industry survey of company liquidity has shown that in recent years companies as a whole have learned to live with lower levels of liquidity. Could this mean that maintenance of liquidity is not as serious a problem as might at first appear?

The technique of discriminant analysis, sometimes called 'Z – score', attempts to identify business which are in danger of liquidation by analysing accounting ratios. The ratios selected depend on the model used but they generally include capital gearing, efficiency in the use of assets and the mix of asset type, as well as liquidity. This suggests that although liquidity is important for the survival of a business, it is by no means the only significant factor.

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Management Accounting (Institute of Cost and Management Accounting) (October 1989)

A. BASKARAN
FINAL YEAR
COMMERCE

INVESTMENT APPRAISAL

1.0 An Introduction:

The managers of all business will find themselves faced, from time to time, by capital investment decisions. Most of these decisions will have a direct effect on future profitability either because they will result in an increase in revenue or because they will bring about an increase efficiency and a reduction in costs. Whatever level of management authorises a capital expenditure, the proposed investment should be properly evaluated, and found to be worthwhile, before the decision is taken to go ahead with the expenditure. The planning steps in the process of developing a new programme of capital investment are as follows :

- ❖ Identification of an investment opportunity
- ❖ Consideration of the alternatives to the project being evaluated
- ❖ Acquiring relevant information
- ❖ Detailed planning
- ❖ Taking the investment decision

The identification of an investment opportunity is the most difficult part of the capital investment process. Indeed, for many business, and particularly small ones, it is the only stage, projects are undertaken without any form of sophisticated investment appraisal. There are often two or more ways of getting a job done, or achieving an objective. The different investment alternative ought to be identified, and compared. Acquiring the relevant data to form the basis for an informed decision is one of the most important aspects in practice. Large capital investments that turn out to be unprofitable can usually be abandoned only at a substantial loss, and therefore the time and effort spent in market research and acquiring data about relevant costs and benefits is rarely

wasted. This activity helps to focus managers' minds on the reality of the projections as they are forecasting and so weed out poor projects at an early stage, before they are subjected to intensive financial scrutiny.

2.0 Importance of investment Appraisal

Investment decisions require special attention because of the following reasons :

- ❖ They influence the firm's growth in the long run
- ❖ They affect the risk of the firm
- ❖ They involve commitment of large amount of funds
- ❖ They are irreversible, or reversible at substantial loss
- ❖ They are among the most difficult decisions to make

2.1 Growth

The effects of investment decisions extend into the future and have to be endured for a longer period than the consequence of the current operating expenditure. A firm's decision to invest in long – term assets has a decisive influence on the rate and direction of its growth. A wrong decision can prove disastrous for the continued survival of the firm. Unwanted or unprofitable expansion of assets will result in heavy operating costs to the firm. On the other hand, inadequate investment in assets would make it difficult for the firm to compete successfully and maintain its market share

2.2 Risk

A long – term commitment of funds may also change the risk complexity of the firm. If the adoption of an investment increases average gain but causes frequent fluctuations in its earnings the firm will become more risky. Thus, investment decisions shape the basic character of a firm.

2.3 Funding

Investment decisions generally involve large amount of funds which make it imperative for the firm to plan its investment programmes very carefully and make an advance arrangement for procuring finances internally or externally.

2.4 Irreversibility

Most investment decisions are irreversible. It is difficult to find a market for such capital items once they have been acquired. The firm will incur heavy losses if such assets are scrapped.

2.5 Complexity

Investment decisions are among the firm's most difficult decisions. They are an assessment of future events which are difficult to predict. It is really a complex problem to correctly estimate the future cash flow of an investment. The uncertainty in cash flow is caused by economic, political, social and technological forces.

3.0 The Basic methods of evaluating capital Investment

The basic methods of evaluating capital projects are as follows :-

- * The return on investment method, or Accounting rate of return method [ARR]
- ❖ The payback method
- ❖ Discounted cash flow [DCF]

- i) The net present value method [NPV]
- ii) The internal rate of return method [IRR]

Of these, DCF should be by far the most important, although ARR and payback method are used more in practice by small and medium – sized firms.

3.1 The Accounting Rate, of Return method [ARR]

The accounting rate of return [ARR], also known as the return on investment [ROI] uses accounting information, as revealed by financial statements, to measure the profitability of an investment. The accounting rate of turn is found out by dividing the average after – tax profit by the average investment. The average investment would be equal to half of the original investment. The accounting rate of return, thus is an average rate and can be determined by the following equation.

$$ARR = \frac{\text{Average Profits}}{\text{Average investment}} \times 100\%$$

Acceptance rule :-

Accept if $ARR > \text{Minimum rate}$

Reject if $ARR < \text{Minimum rate}$

3.2 Payback method

The payback [PB] is one of the most popular and widely recognized traditional methods of evaluating investment proposals. It is defined as the number of years required to recover the original cash outlay invested in a project. If the project generates constant annual cash inflows, the payback period can be computed by dividing cash outlay by the annual cash inflow. That is;

$$\text{Payback} = \frac{\text{Initial investment}}{\text{Annual cash inflow}}$$

The number of years required to recover the initial outlay of the investment is called payback.

Acceptance rule :-

Accept if $PB < \text{Standard payback}$

Reject if $PB > \text{Standard payback}$

3.3 Discounted Cash Flow [DCF]

The ARR method of project evaluation ignores the timing of cash flow and the opportunity cost of capital tied up. Payback considers the time it takes to recover the original investment cost, but ignores total profits over a project's life. Discounted cash flow, or DCF for short, is an investment appraisal technique which takes into account both the time value of money and also total profitability over a project's life. DCF is therefore superior to both ARR and payback as a method of investment appraisal. There are two methods of using DCF to evaluate capital investments.

3.3.1 The Net present value [NPV]

Present value [PV] can be defined as the cash equivalent now of a sum of money receivable or payable at a stated future date, discounted at a specified rate of return. Net present value [NPV] is the value obtained by discounting all cash outflows and inflows of a capital investment project at a chosen target rate of return or "cost of capital". The PV of cash inflows minus the PV of cash out flows is the NPV

$$NPV = \left[\frac{C_1}{(1+k)^1} + \frac{C_2}{(1+k)^2} + \frac{C_3}{(1+k)^3} + \dots + \frac{C_n}{(1+k)^n} - C_0 \right]$$

Accept if $NPV > 0$ [i. e. NPV is positive]

Reject if $NPV < 0$ [i. e. NPV is Negative]

Project may be accepted if $NPV = 0$

3.3.2 The internal rate of, return [IRR] method or DCF yield method

The internal rate of return [IRR] method is another discounted cash flow technique which takes account of the magnitude and timing of cash flows. Other terms used to describe the IRR method are yield on an investment, marginal efficiency of capital, rate of return over cost, time adjusted rate of internal return and so on. The IRR method is calculating the formula :-

$$IRR = A + \frac{x}{(x - y)} (B - A)$$

Acceptance ruler:

Accept if $IRR > k$

Reject if $IRR < k$

Project may be accepted if $IRR = k$

4.0 Significance of the cost of capital

It should be recognized at the outset that the cost of capital is one of the most difficult and disputed topics in the finance theory. Financial experts express conflicting opinions as to the way in which the cost of capital can be measured. It should be noted that it is a concept of vital importance in the financial decision making. It is useful as a standard for:

- ❖ Evaluating investment decisions
- ❖ Designing a firm's debt policy and
- ❖ Appraising the financial performance of top management

The net present value method was pointed out that an essential requirement was a "cut-off rate" or a discount rate to be used in a capital investment appraisal. This cut-off rate is a form of substitute for the cost of capital to a company. If a company invests in a capital project and obtains a rate of return which is less than the cost of obtaining money. With

which to finance the project, then clearly the company is not making any progress in terms of growth. The company is using the cost of capital as a yardstick against which to measure its return on capital invested. This cost of capital can be regarded as the cost of funds raised by the company. In NPV terms, the discounted cash inflows must be greater than the discounted cash outflows or in IRR terms, the discounted rate of return of cash inflows must be greater than the cost of capital.

(Further, the cost of capital framework can be used to evaluate the financial performance of top management such an evaluation will involve a comparison of actual profitabilities of the investment projects undertaken by the firm with the projected overall cost of capital and the appraisal of the actual costs incurred by management in raising the required funds.)

5.0 Cost of capital

The cost of capital is difficult to ascertain and is almost as difficult to define, but a general definition could be "it is the weighted average cost of the constituent parts of capital employed in the company". The problem is to determine the cost of each constituent part,

when it is remembered that in the capital structure of a company

5.1 Component cost of capital

We will discuss the methods of computing the component costs of three major sources of capital.

1. Debt
2. Preference shares and
3. Equity shares

5.1.1 Cost of debt

This constituent part of the capital structure is relatively easy to evaluate; it is rather similar to preference shares discussed below, but it has the additional calculation of tax incidence. Dividends on preference shares are appropriations of profit so are subject to taxation, which is borne by the preference shareholders. However, interest on debt capital is a charge against profits, so the fact that under current taxation laws this is allowable as an expense of running the business, means that the tax payable is reduced. The effect of this, is that it is more economical for the company to raise funds through debt capital than through preference share capital as follows compute the cost of debt : Cost of debt [before tax]

i) Debt issued and redeemed at par / discount / premium

a) Principal repaid on maturity

$$B_0 = \frac{INT_1}{(1+kd)^1} + \frac{INT_2}{(1+kd)^2} + \dots + \frac{INT_n + B_n}{(1+kd)^n} = \sum_{t=1}^n \frac{INT_t}{(1+kd)^t} + \frac{B_n}{(1+kd)^n}$$

b) Principal repaid in installment

$$B_0 = \frac{INT_1 + B_1}{(1+kd)^1} + \frac{INT_2 + B_2}{(1+kd)^2} + \dots + \frac{INT_n + B_n}{(1+kd)^n} = \sum_{t=1}^n \frac{INT_t}{(1+kd)^t} + \frac{B_t}{(1+kd)^t}$$

ii) Debt issued and redeemed at par

$$B_0 = \frac{INT}{k_d}$$

$$k_d = \frac{INT}{B_0}$$

iii) After – tax cost of debt

$$K_d = (1 - T)$$

5.1.2 Cost of preference capital

This constituent part of the capital structure of a company is not difficult to evaluate to when a company issues preference shares, it agrees to pay a fixed dividend to shareholders, assuming of course that there are profits available for distribution. It may be unfortunate that this item with its inherent simplicity is currently an unpopular part of the capital structure of most companies, due to the fact that it is an expensive way of raising capital in contrast to an issue of debentures. The cost of capital for this item can be expressed as :-

Cost of preference capital [after – tax]

i) Redeemable preference capital

$$P_0 = \frac{PDIV_1}{(1+kp)^1} + \frac{PDIV_2}{(1+kp)^2} + \dots + \frac{PDIV_n}{(1+kp)^n} + \frac{P_n}{(1+kp)^n}$$

$$= \sum_{t=1}^n \frac{PDIV_t}{(1+kp)^t} + \frac{P_n}{(1+kp)^n}$$

ii) Irredeemable preference capital

$$P_0 = \frac{PDIV_1}{k_p}$$

$$k_p = \frac{PDIV_1}{P_0}$$

5.1.3 Cost of equity

This constituent part of the capital structure is difficult to evaluate, and much of the controversy over the cost of capital is centred around equity share capital and retained earnings. The fact that unlike preference shares, there is no fixed rate of interest, means

that there is no generally accepted method of evaluating the cost of equity capital. It can be argued that dividend yield is important to the shareholders. Who is relying on dividends as a means of obtaining income. It can also be argued that earnings yield is important to the shareholder who is looking for growth in

share value. There are two approaches for calculating the cost of equity

- ❖ The constant dividend – growth model
- ❖ The capital asset pricing model (CAPM)

The formula for calculating the cost of equity is as follows:

Cost of equity [after – tax]

i) Cost of internal equity (retained earnings)

$$P_0 = \frac{DIV_0 (1+g)}{(1+ke)} + \frac{DIV_0 (1+g)^2}{(1+ke)^2} + \dots + \frac{DIV_0 (1+g)^{n-\infty}}{(1+ke)^{n-\infty}}$$

$$= \sum_{t=1}^{n=\infty} \frac{DIV_0 (1+g)^n}{(1+ke)^n} = \frac{DIV_0 (1+g)}{ke - g} = \frac{DIV_1}{ke - g}$$

$$ke = \frac{DIV_1}{P_0} + g$$

ii) New issue of equity

$$I_0 = \frac{DIV_0 (1+g)}{(1+ke)} + \frac{DIV_0 (1+g)^2}{(1+ke)^2} + \dots + \frac{DIV_0 (1+g)^{n-\infty}}{(1+ke)^{n-\infty}}$$

$$= \sum_{t=1}^{n=\infty} \frac{DIV_0 (1+g)^n}{(1+ke)^n} = \frac{DIV_1}{ke - g}$$

$$ke = \frac{DIV_1}{I_0} + g$$

5.1.4 The capital Asset pricing model [CAPM] and investment appraisal

The CAPM can be used instead of the dividend valuation model to establish an equity cost of capital to use in investment appraisal. CAPM theory includes the following propositions.

- ❖ Investors in shares require a return in excess of the risk – free rate, to compensate them for systematic risk.
- ❖ Investors should not require a premium for unsystematic risk, because this can be diversified away by holding a wide portfolio of investments.

- ❖ Because systematic risk – varies between companies, investors will require a higher return from shares in those companies where the systematic risk is greater.

Example for using the CAPM to estimate the cost of capital

X company is financed by a mixture of equity and debt capital, whose market values are in the ratio 3:1. The debt capital which is considered risk – free. Yields 10% before tax. The average stock market return on equity capital is 16%. The beta value of the company's equity capital is estimated as 0.95. The tax rate is 33%

What would be an appropriate cost of capital to be used for investment appraisal of new projects with the same systematic risk characteristics as the company's current investment portfolio?

Solution

An appropriate cost of capital to use, assuming no change in the company's financial gearing is its WACC. However, the CAPM can be used to estimate the cost of the company's equity.

$$K_e = R_f + \beta_e [R_m - R_f]$$

$$K_e = 10\% + 0.95 [16 - 10]\% \\ = 15.7\%$$

The after tax cost of debt is $0.67 \times 10\% = 6.7\%$

The WACC is therefore

$$[\frac{3}{4} \times 15.7\%] + [\frac{1}{4} \times 6.7\%] \\ = 13.45\%$$

The cost of capital to use in project appraisal is 13.45%. Using the different techniques for measuring the cost of equity will produce two different values for these reasons.

- ❖ The dividend valuation model uses expectations of actual dividends and current share values. Dividends may include extra or lower returns caused by unsystematic risk variations, as well as systematic risk. Share prices might not be in equilibrium.
- ❖ The CAPM considers systematic risk only, and assumes equilibrium in the stock market.

6.0 Weighted Average Cost of Capital (WAAC)

Once the component costs have been calculated, they are multiplied by the weights of the various sources of capital to obtain a weighted average cost of capital. The composite, or overall cost of capital is the weighted average of the costs of various sources of funds, weights being the proportion of each source of funds in the capital structure. It should be remembered that it is the weighted average concept not the simple average, which is relevant in calculating the overall cost of capital. The simple average cost of capital is not appropriate to use because firms hardly use various sources of funds equally in the capital structure. The following steps are involved to calculate the weighted average cost of capital :

- ❖ Calculate the cost of the specific sources of funds [i. e, cost of debt, cost of equity, cost of preference capital etc.]
- ❖ Multiply the cost of each source by its proportion in the capital structure.
- ❖ Add the weighted component costs to get the firm's weighted average cost of capital. In financial decision making, the cost of capital should be calculated on an after – tax basis. Therefore, the component cost to be used to measure the weighted

cost of capital should be the after – tax costs. If we assume that a firm has only debt and equity in its capital structure, then its weighted average cost of capital (K_o) will be :

$$K_o = k_d (1 - T) w_d + k_e w_e$$

$$K_o = k_d (1 - T) \frac{D}{D + S} + k_e \frac{S}{D + S}$$

Where k_o is the weighted average cost of capital, $k_d (1 - T)$ and k_e are respectively the after – tax cost of debt and equity, D is the amount of debt and S is the amount of equity. In a general form, the formula for calculating WACC can be written as follows :

$$K_o = k_1 w_1 + k_2 w_2 + k_3 w_3 + \dots$$

Where $k_1 = k_2 \dots$ are component cost and $w_1 = w_2 \dots$ weights of various types of capital employed by the company.

Example :-

The following is the capital structure of a firm :

Source of finance	Amount (Rs)	Proportion (%)
Equity [paid-up] share capital	450 000	45
Retained earnings [Reserves]	150 000	15
Preference share capital	100 000	10
Debt	300 000	30
	10 00 000	100

The firm's expected after – tax component costs of the various sources of finance are as follows:

Source	cost (%)
Equity capital	18.0
Retained earnings	18.0
Preference capital	11.0
Debt	8.0

The weighted average cost of capital of the firm, based on the existing capital structure is computed in below table :

Source	Amount	Proportion	After-tax cost	weighted cost
(1)	(2)	(3)	(4)	(5) = (3) x (4)
Equity capital	4,50 000	0.45	0.18	0.081
Retained earnings	1,50 000	0.15	0.18	0.027
Preference capital	1,00 000	0.10	0.11	0.011
Debt	<u>3,00 000</u>	<u>0.30</u>	<u>0.08</u>	<u>0.024</u>
	<u>10,00 000</u>	<u>1.00</u>		<u>0.143</u>

Weighted Average Cost of Capital $K_o = 14.3\%$

The weighted average cost of capital of the firm can alternatively be calculated as in below table :-

Source	Amount	After-tax cost	weighted cost
(1)	(2)	(4)	(5) = (3) x (4)
Equity capital	4,50 000	0.18	81,000
Retained earnings	1,50 000	0.18	27,000
Preference capital	1,00 000	0.11	11,000
Debt	<u>3,00 000</u>	<u>0.08</u>	<u>24,000</u>
	<u>10,00 000</u>		<u>143,000</u>

Weighted Average Cost of Capital

$$K_o = \frac{\text{Rs. } 1,43,000}{\text{Rs. } 10,00,000} \times 100 = 14.3\%$$

The weighted average cost of new, or incremental, capital is known as the marginal cost of capital. The marginal cost of capital is the weighted average. Cost of new capital using the marginal weights. The marginal weights represent the proportion of various funds the firm intends to employ.

7.0 WAAC and Investment Evaluation

In practice, firms undertake projects which have risk considerably different from the firm's average risk. Thus the use of the firm's WACC

to evaluate individual projects with different risk characteristics is inappropriate. As stated above, CAPM provides a logical framework for estimating a project's cost of capital. But there are some practical difficulties in estimating a project's beta. A simple practical approach to incorporate risk differences is to adjust WACC [upwards or down wards], and use the adjusted WACC to evaluate the investment project :

$$\text{Adjusted WACC} = \text{WACC} \pm \text{Risk adjustment}$$

factor

That is, a project's cost of capital is equal to the firm's weighted average cost of capital plus or minus a risk adjustment factor. The risk adjustment factor would be determined on the basis of the decision maker's past experience and judgement regarding the project's risk. It should be noted that adjusting WACC for risk differences is not theoretically a very sound method. However, this approach is better than simply using the firm's WACC for all projects without regard for their riskness.

Companies, in practice, may develop guidelines for roughly incorporating the project risk differences. One approach is to divide

projects into broad risk classes, and use different discount rates based on the decision marker's experience. For example, projects may be classified as :

- ❖ Low risk projects
- ❖ Medium risk projects
- ❖ High risk projects

Low risk projects include replacement and modernization projects. The decision maker can estimate the benefits [increase in revenue and / or reduction in costs] of replacement / modernization projects with relative accuracy. Medium risk projects include investment for expansion of the current business. Although revenue and cost estimates are relatively difficult to make, yet the decision maker is familiar with the nature of business. Therefore, using his experience and judgement, he can have a reasonable idea of the variability of cash flows. High risk projects include diversification into new business. As the decision maker has no or little idea of new business he would find greater difficulty in estimating cash flows. Cash flow could show high variability within each category, projects could be further subdivided below the figure illustrates the risk – adjusted discount rates for projects classified according to their perceived risk.

Required rate of return

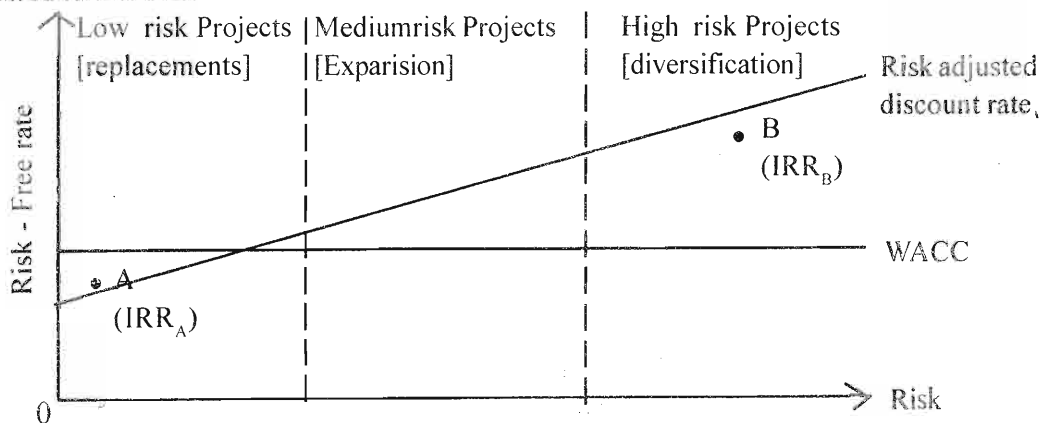


Figure indicates that projects' risk differ, and higher the project risk, the higher will be the risk – adjusted discount rate. Replacement projects are discounted at a lower rate than expansion or diversification projects. Since its risk is the lowest. Diversification projects involve high risk therefore, their cash flows are discounted at a high discount rate. It may be noted that WACC reflects “average risk”, therefore it is drawn as a horizontal line. It fails to distinguish between projects with different risk characteristics, and can mislead in the undertaking of projects. For example, consider projects A and B which respectively have internal rates of return, IRR_A and IRR_B . You can see from figure that if WACC criterion is used, project A will be rejected [because $IRR_A < WACC$] and project B will be accepted [because $IRR_B > WACC$]. However, if risk adjusted discount rates are used, then project A should be accepted while project B rejected. Note that discount rate must reflect risk of the project.

Conclusion :

The cost of capital is of vital significance in the financial decision making. Managers need to know the cost of capital. For their company for several reasons of particular interest to the management accountant is the cost of capital to be used for the purposes of investment appraisal.

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INFORMATION SYSTEMS AND INFORMATION TECHNOLOGY

What is a system?

A system is set of contracting components that work together to accomplish a given purpose. Component can be people, machines purpose order, computer, invoice, reports or other systems. It a component it is sell a system, is called a sub system.

A system exists to accomplish a purpose. For example, the purpose of a bank's ATM [Automated Teller Machine] system is to provide convenience to customers – to enable them to make deposits, transfers and with drawals at any time. The purpose also provides a reference point for an organization to measure its success.

Element of a system

A system has a boundary and an environment. The boundary separates the system from its environment, within the boundary, and organization normally has a great deal of control of its operations. However, outside the boundary, it has very little or no control.

A system receives from its environment and returns to the environment. Inputs may come in the form of purchase data, supplies economics indicators, government regulations and information on competition. Outputs are in the form of sales, payments to suppliers and creditors, and financial reports.

Inputs to a system (e.g, data, materials) are transformed [processed] in one or more steps by the system may become the input to another sub system.

The components of a system are usually connected to facilitate the flow data and

information as well as materials between them.

Figure 1

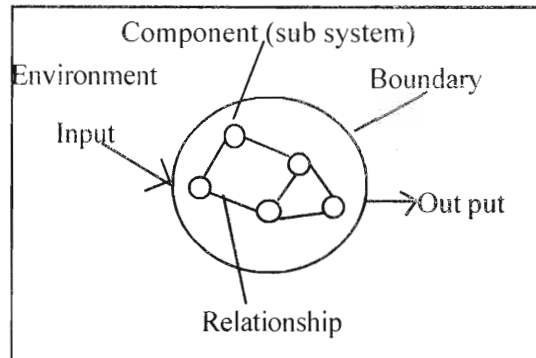


Figure 1 Illustrates the concept of a system. The system has an environment, boundary, components input and output. It accomplishes its goals by transforming inputs to outputs in one or more steps.

Closed and Open System

A closed system is one that does not interact with environment. That is, it does not receive input from environment nor does it send output to the environment. Furthermore it does not have any control and feed back or feed forward mechanism. A closed system can't adapt itself to the environment; it will eventually deteriorate (decay) environment. This deterioration process is called entropy.

Closed system exists only in theory. There are no true closed systems in real world practically all systems are open systems.

Open systems receive input from and send output to the environment. Examples of open systems are air conditioners and refrigerators. Both have feed back and control mechanisms. For example, of the temperature in the room

or refrigerator goes above the present value, the controlling system is automatically switched on. Some times the control may come the humans, for example, ceiling fan does not automatically reduce its speed if the air in the room gets colder (due to rain or cool breeze for example). You have to manually adjust the fan speed. That makes you a part of the system.

What is an information systems?

We are primarily concerned with computer – based information systems. The website dictionary of computer terms defines information system as a “collection of people, procedure and equipment designed, built, operated, and maintained to collect, records, process, store, retrieve and display information” examples of computer based information systems are transaction processing system (TPS), management information system (MIS), decision support system (DDS), executive support system (ESS), office automation system (OAS), accounting information system (AIS), financial information system (FIS), marketing information system, human resource information system (HRIS) and manufacturing information system.

Data, information & Decision Making.

Intelligent decision – making requires accurate, complete and timely information. This applies to all levels of management in an organization. Top executives need relevant information to make strategic or future – oriented decision. For example, they may require information on competitive forces, demographic patterns, consumer preferences, market trends, economic indicators, labour market and political alignments. Middle

management requires information for the purpose of monitoring and controlling business operations. They may require information such as availability of short – term. Labour, cash flow and product quality – tower management or operational personnel require information such as product, price and stock level.

Information Attributes

Information has value because it aids in decision making by reducing uncertainty and increasing the knowledge level of the above operations to improve efficiency and productivity.

Information has attributes or characteristic such as the following.

➤ Accuracy

This refers to the degree to which information is free from error. The more accurate the information, the better the effectiveness or quality of the decision made.

➤ Completeness

This refers to the degree to which it is free from omission.

➤ Relevance

It is focused or appropriate to the decision – making

➤ Timeliness

This refers to how current or up – to – date information is. The more recent it is the better the quality of the decision.

Decision – making

The decision making requires information. Data must be collected or gathered and processed in product relevant information for

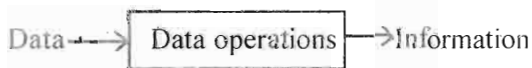
decision making. Complete, accurate, relevant & timely information is vitally important for making effective and quality decisions.

To process transaction. Thus different level of decision making require different types of information and corporate information system must be responsive to these needs.

Data Versus Information

Broadly speaking, data are number, characters, and text, images (graphics), sounds (audio) and video. They may or may not directly assist or contribute to decision making. Data becomes information when they are processed to forms that will help decision – making (figure 2). That is, information is valuable for decision making while data may to may not. In this sense, data are like the raw material while information is like the finished product.

Figure 2 Data to Information



Data operations

Information is produced from data performing one or more operation on the data. Typical data operations are :

- ✧ Capturing
- ✧ Validation
- ✧ Sorting
- ✧ Classifying
- ✧ Calculation
- ✧ Summarizing
- ✧ Storing
- ✧ Retrieving
- ✧ Reproducing
- ✧ Communication

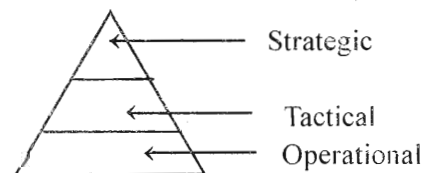
In this fast – paced highly competitive world, computers and related equipment are often required to perform the above operations to improve efficiency and productivity.

Decision making is an important function ‘at’ all levels of management in an organization.

The operations personnel typically requires detailed information to process their daily transaction (e.g sales and purchase information). This kind of information is usually readily available from internal sources (e.g within the organization). Also decision – making at this level is usually well structured or well defined – this decision – making process in such cases can usually automated.

Middle or supervisory personnel usually require filtered information (e.g less detailed information) for monitoring & control purposes. (cash flow & product quality) usually information for decision – making at this level is available from internal sources. Decision – making at this level is also quite structured and hence it can be automated to a large extent.

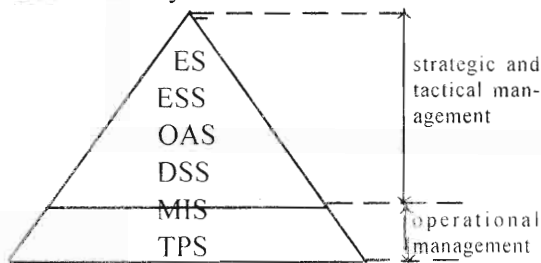
Top management or senior personnel often require filtered, summarized, future – oriented or strategic information such as information on market trends, demographic patterns, economic indicator and competition. Information for decision making at this level must come largely from external sources (e.g from out side the organization). Also decision making at this is usually less structured and there fore harder to automate. Mathematical modes are often use to predict and extrapolate future trends.



Various level of decision – making and the degree and structure of internal / external data required for decision – making and the level of automation possible.

Types of information systems

There are many types of information systems corresponding to various level of management or specific areas – some common information systems are transaction processing system, management information systems, decision support systems, executive information system, office automation system manufacturing information systems, financial information systems.



ES – Expert system

ESS – Executive system

OAS – Office automation system

DSS – Decision support system

MIS – Management information system

TPS – Transaction processing system

Transaction processing system (TPS)

Data is generated whenever a transaction takes place, e.g., when buying goods from supermarket, when withdrawing money from an ATM machine or when making a flight reservation at an airline office. An information system for processing transaction such as these is called a transaction processing system (TPS) or Data processing system (DPS). A TPS must capture all the relevant information related to a transaction. for example in an ATM transaction, it must capture data such as

PIN [personal identification number], time and type (e.g., deposit of transaction, location where the transaction took place and amount of money transacted.

Processing a transaction typically requires the following steps.

1. Data capture, e.g., checking for valid product code
2. Data validation, e.g., invalid product code
3. Exception reporting, e.g., calculating the total amount purchased
4. Date processing, e.g., updating sales master file
5. Report generation, e.g., proceeding sales invoices

The main characteristics of a TPS are

- It is function or file based
- It focuses on record keeping
- It follows standers procedures
- It adheres to strict production schedule (e.g., periodic)
- It produces action documents (e.g., sale invoice) and scheduled reports (e.g., total sales by items)

A TPS is usually very efficient at keeping records and thus it is suitable processing transaction that occurs routinely such as sales and purchases. In other words, it supports the data processing function at the operational level.

Procedures for handling such transaction are generally well defined and hence can be automated (programmed). All organizations, will used this type of information to perform their daily business operations.

A TPS, however lacks flexibility, it generally does not have the capability it extract enterprises – wide information (e.g., from several different applications of department)

Types of TPS System

	Sales/ Marketing system	Manufacturing/ Production system	Finance/ Accounting system	Human resources system	Other types (eg. University)
Major function of System	<ul style="list-style-type: none"> Sales management Market research Promotion Pricing New products 	<ul style="list-style-type: none"> Scheduling Purchasing Shipping/receiving Engineering Operation 	<ul style="list-style-type: none"> Budgeting General ledger Billing Cost accounting 	<ul style="list-style-type: none"> Personel records Benifits Compensation Labour relation Training 	<ul style="list-style-type: none"> - Admission - Grade records - Course records - Alumni
Major application System	<ul style="list-style-type: none"> - Sales order - Information system - Market research system - Pricing system 	<ul style="list-style-type: none"> - Materials resource planning system - Purchase order control system - Engineering system - Quality control system 	<ul style="list-style-type: none"> - General ledger - Accounts receivable/Payable - Budgeting - Funds management system 	<ul style="list-style-type: none"> Payroll Employee records Benefits Career path system 	<ul style="list-style-type: none"> Registration sytem Student transcript system Curriculum class control system Alumni hene factor system

Management Information system [MIS]

A management information system [MIS], build on a TPS by integrating the various functional area. It provides information for supporting transactions, planning, control and monitoring.

In addition to providing information for lower or operational – level management – it does this by integrating the data from several functional area. For examples It can extract data selectively from several functional areas (files) and process them to produce information need decision – making at technical and strategic levels. A MIS thus

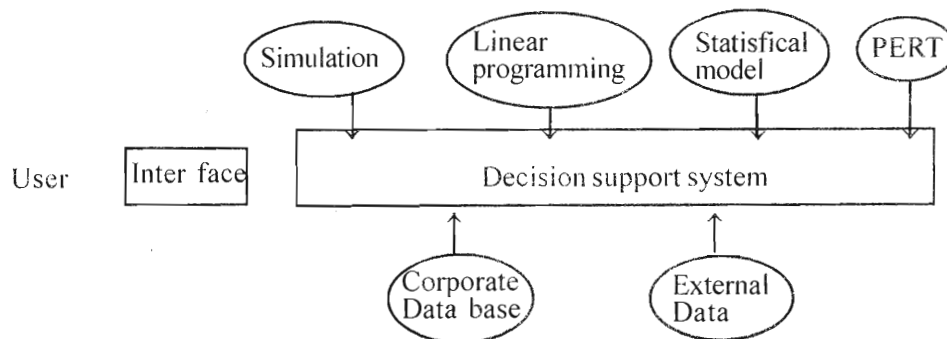
provides summarized, enterprise – wide information for decision making by middle and top management.

The main characteristics of a MIS are

- It supports TPS
- It address structured and semi – structured problem
- It uses an integrated data base
- It provide information for tactical and strategic level decision making
- It provides both scheduled & unscheduled reports.
- It allowed on – line or ad hoc inquires

Decision Support Systems [DSS]

A decision support system [DSS] as is name implies, is used to assist decision – making in an unstructured situation. It allows top and middle management to use appropriate models. (e.g., statistical, linear programming, network, queuing and simulation) and tools (e.g., spread sheet, graphics and 4 GL) to analyze both external data as well as internal data. The below figure illustrates a DSS



A MIS, however, does not have the capability to future oriented information such as predicating sales trends to perform “what if” analysis.

User a DSS an interactive system with a user-friendly graphical interface complete with menu system icons, push buttons and others features. It allows the user to display result in a variety of ways including graphical presentations such as line bar and pie charts.

The main characteristics of a DSS are

- ❖ It supports decision making at the technical and strategic levels.
- ❖ It address semi – structure and unstructured problems.
- ❖ It uses the modeling approaches
- ❖ It produce ad hoc or unstructured reports
- ❖ It is an interactive and user – friendly system.
- ❖ It is flexible and can be adapted to user’s style
- ❖ It can be adapted to any decision environment.

Executive Support System [ESS]

An executive support system [ESS] or executive information system [EIS], like the MIS, is an interactive system design to help executives to obtain the information they need for decision making and in the form that they need. It has a user friendly inter face (with menu, icons, etc) presentation format (e.g., tabular or graphical) and required level of detail.

The main characteristics of an ESS are :

- It allows an executive to understand a business situation quickly
- It allows an executive to access data rapidly
- It allows an executive to perform what if analysis

- It allows data to be presented in multiply formats
- It is interactive user – friendly

Expert system [ES]

An expert system [ES] is interactive software that mimics human expert in specialized field and assists the user in the decision making process. It will prompt the user for additional information or to seek further clarification. Based on information supplied and information stored internally in the knowledge based, it makes recommendations and thus generally assists the user in arriving at a decision.

ES has been developed to mimic doctors, financial analysis, tax experis, engineers, lawyers and geologists. User consults those build in “soft ware experts” (using PCs or workstations) for expert advice, opinion recommendations or solutions. An expert system thus enables the user to obtain the service of one or more real human experts without having to actually meet and consult them.

An ES has several benefits.

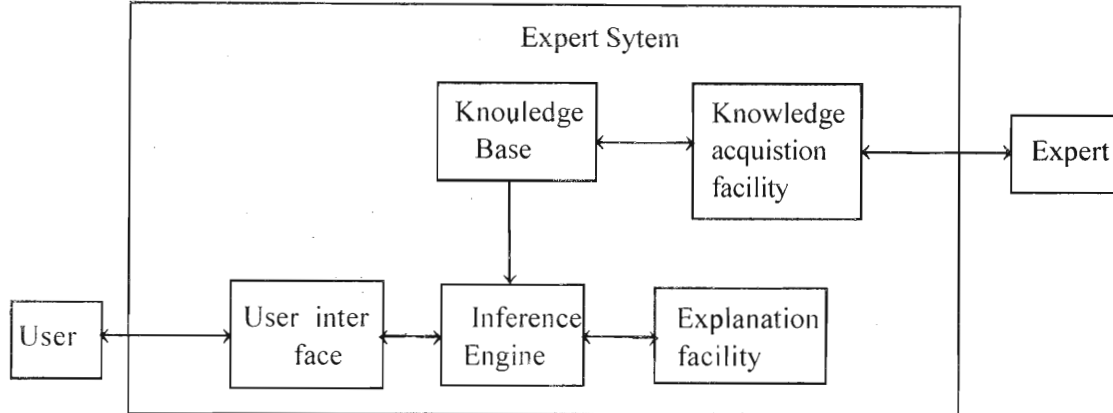
- It enables the knowledge of experts to be canned in a computer disk. That means valuable knowledge is still available even if the experts are not available (they may be on leave as retired) or their services to expensive (e.g., services of medical specialists or professional tax consultants).
- It enable users to seek expert advice or opinion without having to actually meet the experts (e.g., it is readily available)

It enables decision to be made

- In a consistent manner. Thus it can be an excellent training tool.

Component of an expert system shell

Expert system



- It is expensive compared to the change of human experts.

It raises the productivity of decision making as they can obtain instant answer to question. Thus gives them more time for other tasks.

An expert system shell is normally used to develop an expert system. This is a framework that a developer builds and uses an expert system application. It consists of a knowledge acquisition facility, knowledge base, inference engine, explanation facility, and user interface.

Knowledge Acquisition facility

The knowledge acquisition facility of an expert system shell allows a knowledge engineer to capture the knowledge of one or more human experts in a particular area of expertise and store knowledge in a knowledge base in the form of facts and rules.

Knowledge base

The knowledge base stores the information (in the form of facts and rules) obtained from the expert. It is like a database, but it's more

than that as it stores not only the facts but also the rules for arriving at the decision. These rules take the form of IF <condition> THEN <action> statements. A typical expert system may have hundreds of such rules.

Inference Engine

The inference engine is the core of the expert system software. It applies the rules contained in the knowledge base to reason through the problem and makes inferences. The two approaches commonly used to make inference are forward chaining (reasoning) and backward chaining (reasoning). Some expert systems also use a combination of both the approaches.

Explanation facility

The explanation facility tells the user how to arrive at a particular fact or why it asked a particular question. It either confirms the sequence of inferences that produced the conclusion or explains how a question may eventually lead to a conclusion.

User inter face

The user inter face allows users to interact with the expert system. It is typically a graphical user inter face (GUI) consisting of a set of easy – to – use icons, menus, tools, bars and other features to help users to interect with the experts system easily.

Office Automation system [OAS]

The purpose of an office automation system [OAS] is to improve the operation, performed in an office setting. Typically, the work performed in an office setting is unstructured.

It includes tools such as personnel productivity software, image processing software and telecommunication. OAS tools can be categorized into three types.

Personnel productivity soft ware

This includes word processing, spread sheets, data base, graphics and calendar management and scheduling system.

Image processing software

An OAS includes soft ware & hardware for capturing image and editing them using desk top publishing capabilities.

Communication software

This includes telephone, fax, e-mail, v-mail, computer tell and video conferencing.

Accounting Information System [AIS]

The accounting information system [AIS] also probably must widely used information system as practically every business will needs some kind of accounting system as practically every business will need some kind of accounting system. It usually comprises two groups of sub system the financial (operational) accounting and management accounting sub system.

The financial accounting system is based on the double – entry book - keeping concept.

The management accounting system is used primarily for planning and controlling.

The sub systems of an accounting information system usually include the following.

- Order processing
- Inventory control
- Accounts payable
- Accounts receivable
- Payroll
- General ledger

Financial Information Systems (FIS)

Many organizations also use financial information systems to help managers to make wise financial management decision. A typical financial information system consist of following sub systems,

- Cash management
- Capital budgeting
- Financial planning
- Financial forecasting

Marketing Information System.

The purpose of marketing information system is to help and enterprise to market its products effectively and efficiently. It support all aspects of the marketing function such staff market research, planning, advertising and promotion, sales and forecasting.

Human Resource Information Systems [HRIS]

When an organization employs large numbers of employees, a human resource information system [HRIS] can be very valuable. A HRIS details with all aspects of human resource management such as staff

planning, selection and recruitment, training and assessment, job placement, performance appraisals and administration.

Manufacturing Information System

This system supports the operation / production function of a typical manufacturing of firm. It includes planning and controlling the purchasing, manufacturing and distribution functions. It also includes computer integrated manufacturing [CIM], process and machine control, and robotics.

Strategic Information System [SIS]

One of important issues facing organizations today is business competition. In order to survive, they must continuously adopt appropriate strategies so that they can remain competitive in today's market place. To do this organization, can do information systems to

gain competitive advantage. Such information systems are called strategic information systems.

A SIS is any system that can provide competitive advantage to an organization. It can be a TPS, MIS, DSS, ESS, EIS, or ES.

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3RD YEAR

THE CONCEPT OF MULTIPLIER IN AN ECONOMIC ANALYSIS

1.0 Introduction

The concept of multiplier plays an important role in understanding the nature of cyclical fluctuations, the process of income propagation and policy making. The concept of multiplier was first developed by R.F. Kahn. Keynes borrowed this concept from Kahn and developed income / investment multiplier.

2.0 Keynesian income multiplier

1.1.0 Assumptions

Keynes' multiplier will operate successfully only under certain assumptions.

1. The first assumption is that the investment is kept in a continuous stream.
2. The working of multiplier depends upon MPC, which is assumed to remain constant.
3. Consumption is assumed to be a function of current income.
4. There is surplus capacity in consumer goods industries to meet the increased demand caused by a rise in income.
5. Consumer goods are available. When the income will increase due to an increase in investment and aggregate demand for goods and services increases.
6. Prices are assumed to be absent.
7. There is easy availability of factors of production and other resources within the economy.
8. The economy is an industrialized one in which the multiplier process works successfully.
9. There is less than full employment level of in the economy.
10. The accelerator effect on consumption on investment is ignored.

2.2.0 Definition

Keynesian income multiplier is an analysis in static equilibrium. The concept of investment multiplier expresses the relationship between an initial increase in investment and the final increase in national income. In other words, multiplier is the ratio of a change in income to a change in investment. In order to find out the final increase in income, the national increase in investment should be multiplied by the value of multiplier.

$$\text{i. e. } \Delta Y = k \Delta I$$

where Δ = change in something

Y = Income

k = Multiplier

I = Investment

The value of multiplier depends on marginal propensity to consume. The general formula for multiplier is

$$k = \frac{1}{1 - [\Delta C / \Delta Y]}$$

Where k = Multiplier

$\Delta C / \Delta Y$ = Marginal Propensity to consume (MPC)

2.3.0 Derivation of Multiplier

2.3.1 Arithmetical Derivation of the Multiplier

By using equation for the equilibrium level of income, we can derive the multiplier.

$$Y = C + I$$

There is a change in investment by ΔI will lead to a change in income by ΔY and to a change in consumption by ΔC . To recognize the given changes, equation 1 is changed into

$$Y + \Delta Y = C + \Delta C + I + \Delta I \dots\dots 2$$

To find out the change in income, equation

2 - equation 1

$$Y + \Delta Y = C + \Delta C + I + \Delta I \dots\dots 2$$

$$Y = C + I$$

$$2 - 1$$

$$\Delta Y = \Delta C + \Delta I \dots\dots 3$$

But the consumption function is

$$C = C_a + b y$$

Where C_a = autonomous consumption

which remains constant.

b = marginal propensity to consume

which change in income.

Therefore ΔC , must be induced by a change in income.

That is ΔC depends on the MPC ($b \Delta y$)

$$\Delta C = b \Delta y \dots\dots 4$$

The equation 4 is substituted into the equation 3

$$\Delta y = \Delta C + \Delta I \dots\dots 3$$

$$\Delta y = b \Delta y + \Delta I \dots\dots 5$$

$$\Delta y - b \Delta y = \Delta I$$

$$\Delta y (1 - b) = \Delta I$$

$$\Delta y = \Delta I - 1/(1 - b)$$

By definition

$$k = \Delta y / \Delta I$$

So Multiplier is

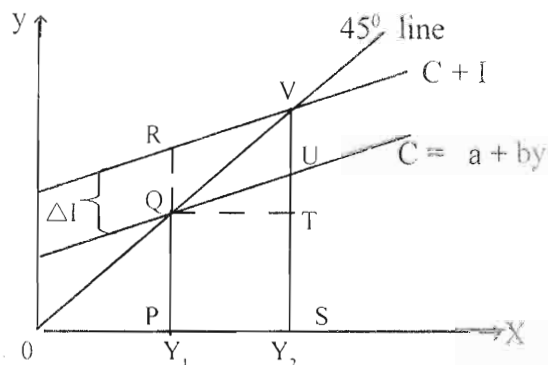
$$\Delta y / \Delta I = 1$$

$$k = \frac{1}{1 - b} = \frac{1}{1 - \text{MPC}} = \frac{1}{\text{MPS}}$$

Example: If the MPC is 2/3 the multiplier can be calculated as follows:

$$K = \frac{1}{1 - \text{MPC}} = \frac{1}{1 - 2/3} = 3$$

2.3.2 Geometrical Derivation of the Multiplier



When the aggregate demand for goods and services is $C = C_a + b y$. Therefore the initial income is determined at OY_1 at point P.

When, we increase investment by ΔI

$$\Delta I = RQ = VU$$

Therefore, the aggregate demand curve C shifts itself upward to $C + I$

Where MPC or slope of the $C + I$ curve is the same as that of $C = C_a + b y$ curve.

$$\text{MPC} = \frac{\Delta C}{\Delta Y} = \frac{QR}{QT}$$

As a result of increase in investment by ΔI income has increased. The new equilibrium level of income is determined at OY_2 at point S.

$$\text{By definition } k = \frac{\Delta Y}{\Delta I} = \frac{PS}{QR} \dots\dots 1$$

Divide the equation 1 by PS

$$\frac{PS / PS}{QR / PS} = \frac{1}{QR / PS}$$

Where $QR = UV$

$$\text{So, } K = \frac{1}{UV / PS}$$

$$= \frac{1}{\frac{TV - TU}{PS}}$$

$$= \frac{1}{TV / PS - TU / PS}$$

$$\text{Where } PS = QT \\ = \frac{1}{TV/QT - TU/QT}$$

$$\text{Where } TV/QT = \tan 45^\circ = 1 \text{ (TV = QT)} \\ \text{So } = \frac{1}{1 - TU/QT}$$

Where TU/QT is the slope of the curve or MPC.

$$\text{Therefore } K = \frac{1}{1 - MPC}$$

2.4.0 Leakages of Multiplier

Leakages refer to the diversions from income stream which weaken the multiplier effect. Leakages may take any form. It is useful to know how the initial investment may leak out of the income stream.

1. Saving

Saving constitutes an important leakage. Higher the propensity to save lower will be the value of multiplier. When a part of the increased income is saved; increase in income in the next round declines.

2. Imports

When purchase of the imported goods it acts as a leakage out of the domestic income stream.

3. Inflation

Price inflation also affects the working of the multiplier. When price increases, a part of the increased income is absorbed by such rise in price leading to a fall in consumption.

4. Strong liquidity preference

If the people prefer to hold the increase income in the form of idle cash balances to satisfy a strong liquidity preference for the transaction, precautionary and speculative motives. This will act as a leakage out of the income stream.

5. Taxation

Progressive taxes have the effect of lowering the disposable income of the tax payers and reducing their consumption expenditures.

Commodity taxation tend to raise the prices of goods, and a part of increased income may be dissipated on higher prices.

Therefore, increased taxation reduces the income stream and lowers the size of the multiplier.

6. Purchase of stocks and securities

3.0 Dynamic Multiplier [Period or Sequence Multiplier]

Keynesian income multiplier is an analysis in static equilibrium. He does not take into account the time lag involved between change in investment and a change in income.

An analysis of dynamic multiplier which takes into account the time lag is essential. Dynamic multipliers occur when there is a lagged response between consumption and disposable income.

$$C_t = F(Yd_{t-1})$$

This indicates that consumption spending lags the receipt of disposable income by one period. That is consumption is a function of disposable income, but disposable income received in period $t - 1$ is not consumed until period t .

Example :- Adjustments in income and consumption may take months to complete. If each adjustment take one month, then seventeen months are essential for a initial investment of Rs. 10 million to generate an income of Rs. 20 million, if MPC is half and multiplier is two consider the following table.

Dynamic Multiplier

Period in months	ΔI	ΔC	ΔY
0	0	0	0
t + 1	10	0	10
t + 2	10	5	10 + 5
t + 3	10	25	15 + 25
-	-	-	-
-	-	-	-
-	-	-	-
t + n	10	10	20

An initial investment of Rs. 10 million increase income by Rs. 10 million in the 1st month out of this Rs. 5 million will be spent on consumption. This increases the income to Rs. 50 million in the second month. Out of this Rs. 2.5 million will be spent on consumption, which increases income by Rs. 2.5 million and this goes on till in the 17th month, the income increases to Rs. 20 million. Algebraically, it can be written as:

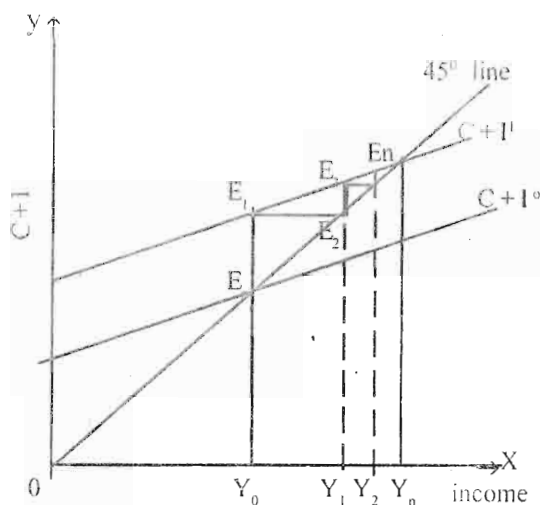
$$\Delta Y = \Delta I + \Delta Ic + \Delta Ic^2 + \Delta Ic^3 + \Delta Ic^{n-1}$$

where Y = income

I = investment

C = MPC

The working of the dynamic multiplier can be shown graphically in the following figure



45° line – Aggregate supply curve

$C + I$ line – Aggregate demand curve

When aggregate demand and supply are equal, equilibrium takes place at E_0 with an equilibrium level of income of Oy_0 . When investment increases, $C + I^0$ curve shifts upward to $C + I^1$ curve. Now aggregate supply leading to an increase in income from Y_0 to Y_1 . At this level of income also aggregate demand exceeds aggregate supply. This will again increase income to OY_2 . This process will continue till aggregate supply at Y_n level of income.

Example

The MPC is equal to 0.80. Consumption function of disposable income lagged by one period. In period $t+1$ there is a permanent Rs. 20/- fall in investment. For periods $t+1$ to $t+3$, calculate.

a) decrease in the level of income

b) the expenditure multiplier

$$a) \Delta Y_{t+1} = \Delta I (1)$$

$$\Delta Y_{t+1} = -20 \times 1$$

$$= -20 \text{ /-}$$

$$\Delta Y_{t+2} = \Delta I (1 + C)$$

$$= -20 \times (1 + 0.8)$$

$$= -36 \text{ /-}$$

$$\Delta Y_{t+3} = \Delta I (1 + C + C^2)$$

$$= -20 \times (1 + 0.8 + 0.64)$$

$$= -48.8 \text{ /-}$$

b) Expenditure multiplier = $\Delta Y / \Delta I$

$$t+1 = \frac{\Delta Y}{\Delta I} = \frac{-20}{-20} = 1$$

$$t+2 = \frac{\Delta Y}{\Delta I} = \frac{-36}{-20} = 1.8$$

$$t+3 = \frac{-48.8}{-20} = 2.44$$

4.0 Conclusion

In fact there are many kind of multipliers. Each model has its own characteristics features and each varies from model to model. The multiplier analysis however, states an important truth: An initial increase in autonomous investment, unless offset by corresponding fall in consumption expenditure, has secondary effects which lead to a large increase in total income spending upon the value of the multiplier.

DEVIKA KAMALANATHAN
2ND YEAR

DEPARTMENT OF COMMERCE

FIRST IN COMMERCE – 2003 / 2004

S/No.	Reg. No.	Name
1	2004/C/01	Calista Shiromi Santhiyogu
2	2004/C/02	Paramasivam Dineskumar
3	2004/C/03	Vansaslas Arulvassanthakumar Fernando
4	2004/C/04	Jothini Soosainayagam
5	2004/C/05	Kajanthini Nadarasa
6	2004/C/06	Keamila Ratnasingam
7	2004/C/07	Selvam Luxman
8	2004/C/08	Mahathevy Appaijah
9	2004/C/09	Kasilingam Mahesan
10	2004/C/10	Nagatharshini Theivendran
11	2004/C/11	Narmatha Chandrakumar
12	2004/C/12	Narmatha Maniekam
13	2004/C/13	Nimali Srithararajah
14	2004/C/14	Ratnam Pirakas
15	2004/C/15	Francis Xavier Pratheep
16	2004/C/16	Puwanenthiran Pratheepkanth
17	2004/C/17	Priyatharsini Thuraisingam
18	2004/C/18	Puspamalar Peterwilliam
19	2004/C/19	Rasanayagam Rasapuvineethan
20	2004/C/20	Nicholas Stanley Jude Lambert
21	2004/C/21	Sugaruba Thanabalasingam
22	2004/C/22	Surega Tharmanathan
23	2004/C/23	Kanagalingam Tharmith
24	2004/C/24	Selvaraja Thibeswaran
25	2004/C/25	Sivarajasingam Thivaakaran
26	2004/C/26	Thusyanthy Thuraisingam
27	2004/C/27	Uthayachchandran Uthayaramesh
28	2004/C/28	Shanmugaratnam Kolulathan
29	2004/C/29	Vibitha Yokasingam
30	2004/C/30	Lakssana Sangarapillai
31	2004/C/31	Thanarajah Thanaranjan
32	2003/C/48	Ramachandran Kajendran
33	2002/C/29	Balasubramaniam Sanmugaruban

DEPARTMENT OF COMMERCE
BACHELOR OF COMMERCE – PART I – 2002/2003

S/No.	Reg. No.	Name
1	2002/C/01	Miss Abirami Ramalingapillai
2	2002/C/03	Miss Hamshananthy Mahendra
3	2002/C/04	Mahendranayagam Jeyakaran
4	2002/C/05	Miss Jeyaruby Ponnampalam
5	2002/C/06	Pusparasa Jude Ananthakumar
6	2002/C/08	Miss Kalaiarase Sathiapalan
7	2002/C/09	Miss Kayalvily Sebamalai
8	2002/C/10	Subramaniam Kuganantharajah
9	2002/C/11	Thiyagarajah Lesly Vannarajah
10	2002/C/12	Thambiah Muralitharan
11	2002/C/13	Tharmakulasingam Newseelan
12	2002/C/14	Yogaratnam Nirushan
13	2002/C/15	Miss Niranchani Vivegananthan
14	2002/C/16	Satkuru Paskarakuru
15	2002/C/17	Selvarajah Pirabagaran
16	2002/C/18	Namasivayam Piratheepan
17	2002/C/19	Nithiyanantham Pirapananthan
18	2002/C/20	Kanapathippillai Piratheepan
19	2002/C/21	Gnanalingam Piratheepan
20	2002/C/22	Miss Priyatharmila Amirthalingam
21	2002/C/23	Ramakrishnamoorthy Ragupathy
22	2002/C/24	Anton Xavier Ramilson
23	2002/C/25	John Pillai Robin Jetrigo
24	2002/C/26	Miss Sabina Nagimutheen
25	2002/C/27	Miss Sangeetha Alvappillai
26	2002/C/28	Miss Sankeetha Thanabalasingam
27	2002/C/29	Balasubramaniam Sanmugaruban
28	2002/C/30	Jesuthasan Sebastian Jeyananth
29	2002/C/31	Miss Sivachehelvi Sivarajasingam
30	2002/C/32	Miss Sivapiriya Sivarajasingam
31	2002/C/33	Miss Subagini Yogarasa
32	2002/C/34	Kalyjanasundram Subashkanna
33	2002/C/35	Miss Subothini Sivasingham

34	2002/C/36	Suppiah Sutharsan
35	2002/C/37	Miss Suventhiny Visnunathan
36	2002/C/38	Miss Thabothini Sivasutharasa
37	2002/C/39	Sellathurai Thanashan
38	2002/C/40	Miss Thanusha Sivanadran
39	2002/C/41	Miss Tharshini Vadivel
40	2002/C/42	Esthyaky Tony Gobnel
41	2002/C/43	Miss Vijeyasri Srikanthan
42	2002/C/44	Miss Abirami Somesegaram
43	2002/C/45	Somasuntharam Nanthakopan
44	2002/C/46	Rajaratnam Sunirthan
45	2002/C/47	Pathmanathan Thineskumar
46	2002/C/48	Sabaratnam Jeyakumar
47	2002/C/49	Jeevakanthan Koveathan
48	2000/C/02	Paventhiran Ananthan
49	99/C/22	Miss Kopiha Thambiraja
50	99/C/84	Arulampalam Arulnesan
51	95/C/105	Thambiaiyah Vijayamohan
52	94/C/59	Thamayanthy Rasish
53	95/C/76	Ganeshan Srimayaran

DEPARTMENT OF COMMERCE
BACHELOR OF COMMERCE – PART I – 2002/2003 A

S/No.	Reg. No.	Name
1	2003/C/01	Miss Arthika Mahadeva
2	2003/C/02	Ratnasingam Arunan
3	2003/C/03	Miss Balamani Perumal
4	2003/C/04	Ponnaman Devanesah
5	2003/C/05	Miss Floristella Mariyathas
6	2003/C/06	Kailayapillai Jeyakanthan
7	2003/C/07	Miss Jeyanthini Rajalingam
8	2003/C/08	Miss Jeyapriya Vivekananthan
9	2003/C/09	Miss Kajintha Nadarajah
10	2003/C/10	Kulasegaram Kirubaharan
11	2003/C/11	Miss Kiryyalini Nagarajah
12	2003/C/12	Miss Lathika Kanagalingam
13	2003/C/13	Nadarajah Lokithan
14	2003/C/14	Kanagarathinam Manoharan
15	2003/C/15	Miss Mariya Premila Francis
16	2003/C/16	Miss Mathani Selvaratnam
17	2003/C/17	Ibra Lebbe Mohamed Rati
18	2003/C/18	Thuraisingam Mukunthan
19	2003/C/19	Thavananthaguru Nishkalananth
20	2003/C/20	Miss Prabalini Seevaratnam
21	2003/C/21	Miss Priyatharshini Rajeswaran
22	2003/C/22	Vaiththilingam Rajanikanthan
23	2003/C/23	Vadivelu Rajikaran
24	2003/C/24	Miss Rathidevy Vishnumoorthy
25	2003/C/25	Ramanathan Ratnaraj
26	2003/C/26	Sebasthy Robinson
27	2003/C/27	Miss Sasireka Gunaratnam
28	2003/C/28	Thangarajah Satheeshan
29	2003/C/29	Miss Sayanthini Kathiresampillai
30	2003/C/30	Thangarajah Selvakumar
31	2003/C/31	Shananthy Kananathan
32	2003/C/32	Miss Sharmila Subramaniam
33	2003/C/33	Sriparaparan Sivasundaram
34	2003/C/34	Miss Sivatharshini Sivaneswaran
35	2003/C/35	Miss Sugantha Shanmuganathan

36	2003/C/36	Shanthiralingam Sukirthan
37	2003/C/37	Miss Sulaxsana Navarathnam
38	2003/C/38	Miss Thanusha Sri Somasegaram
39	2003/C/39	Miss Tharmini Sandrasegarampillai
40	2003/C/40	Miss Thayalini Thanapalasingam
41	2003/C/41	Miss Thayananthi Singarayar
42	2003/C/42	Parameswaran Thileepan
43	2003/C/43	Thanabalasingam Thushyanthan
44	2003/C/44	Miss Umamatheeswary Arulampalam
45	2003/C/45	Yoganathan Ushaanthan
46	2003/C/46	Mr.Kaneshamoorthy Vickneswaranathan
47	2003/C/47	Miss Vimala Kunarathinam
48	2003/C/49	Ulaganathan Prasannan

DEPARTMENT OF COMMERCE
BACHELOR OF COMMERCE – PART II

S/No.	Reg. No.	Name
1	2001/C/01	Rajendram Amalraj
2	2001/C/02	Subramaniam Arumugathan
3	2001/C/03	Miss Carolin Peter
4	2001/C/04	Miss Dhanushanthini Yoganathan
5	2001/C/05	Miss Devaki Kamalanathan
6	2001/C/06	Arokiyanathan Edien Camilloa
7	2001/C/07	Miss Hajamuki Iyasurai
8	2001/C/08	Miss Jamuna Suntharalingam
9	2001/C/09	Themotheyu Jasdeepan
10	2001/C/10	Shanmugarathinam Jeyanthan
11	2001/C/11	Kandasamy Kajandrakumar
12	2001/C/12	Kamalasingam Kajeeran
13	2001/C/13	Miss Kalaivani Vadivel
14	2001/C/14	Miss Karthigajiny Annalingam
15	2001/C/15	Miss Karthiga Ariyakunarajah
16	2001/C/16	Miss Krisana Sutheresan
17	2001/C/17	Subramaniam Luckumar
18	2001/C/18	Miss Mithila Vijayaratnam
19	2001/C/19	Shanmugam Nesarajah
20	2001/C/20	Miss Parameswary Soorasangarapillai
21	2001/C/21	Kandasamy Partheepan
22	2001/C/22	Nadarajah Pathmaseelan
23	2001/C/23	Tharmakulasingam Pratheepan
24	2001/C/24	Vellipuram Partheepan
25	2001/C/26	Kengasuthan Peratheepan
26	2001/C/27	Miss Peratheeba Ganeshalingam
27	2001/C/28	Saravanamuthu Prashanthan
28	2001/C/29	Miss Pratheeba Yogaratnam
29	2001/C/30	Tharmalingam Pratheepan
30	2001/C/31	Vethanayagam Pretheeskumaran
31	2001/C/32	Nadarajah Premakanthan
32	2001/C/34	Mariyathan Reegan
33	2001/C/35	Miss Revathy Sivapalasingam
34	2001/C/37	Miss Rukmani Ganesharajah

35	2001/C/38	Miss Sangeetha Krishnapillai
36	2001/C/39	Miss Sasileka Kandappillai
37	2001/C/40	Selvarasa Selvakkumar
38	2001/C/41	Shanmugamorthy Senkeeran
39	2001/C/42	Sivagowri Sinnathurai
40	2001/C/43	Miss Sivajini Sivalingam
41	2001/C/44	Sivanandamoorthy Sivesan
42	2001/C/45	Kanapathippillai Sooriyakanthan
43	2001/C/46	Thuraisingam Sritharan
44	2001/C/47	Miss Subogini Thiyagarasa
45	2001/C/48	Thiyagarajah Sutharsan
46	2001/C/49	Miss Thanushya Vigneswaramoorthy
47	2001/C/50	Miss Tharsini Arulanathan
48	2001/C/51	Muthucumaraswamy Thileepan
49	2001/C/52	Jeyapalasingam Thusikanth
50	2001/C/53	Nadarajah Uthisthiran
51	2001/C/54	Miss Vanitha Selvarajah
52	2001/C/55	Miss Vasuki Ramachandran
53	2001/C/56	Miss Yoganithy Nallasivampillai
54	2001/C/57	Puvanenthiran Shayanthan
55	2001/C/58	Mahathevan Subaharan
56	2001/C/59	Sabapathy Jeganathan
57	2001/C/60	Kandiah Thayaaparan

DEPARTMENT OF COMMERCE
BACHELOR OF COMMERCE – PART III

S/No.	Reg. No.	Name
1	2000/C/01	Balasingam Ajanthakumar
2	2000/C/03	Miss Anitha Vigneswaran
3	2000/C/04	Pavilupillai Anton
4	2000/C/05	Miss Anusha Shanmugalingam
5	2000/C/06	Balasubramaniam Arun
6	2000/C/07	Sivarajah Arunthavarajah
7	2000/C/08	Muthukumari Aruran
8	2000/C/09	Selvarajah Arunan
9	2000/C/10	Miss Balapiria Balachandran
10	2000/C/11	Satkunanantham Paraneedaran
11	2000/C/12	Miss Bamini Lingaratnam
12	2000/C/13	Miss Chrishanthi Mariadasan
13	2000/C/14	Kandasamy Gajendran
14	2000/C/15	Miss Gowri Balasubramaniam
15	2000/C/16	Miss Gowsalya Rajendran
16	2000/C/18	Miss Jane Thamayanathi Clifford Williamraja
17	2000/C/19	Krishnathurai Jeiramanan
18	2000/C/20	Miss Jeyavani Sritharan
19	2000/C/21	Francis Jude Wilfred
20	2000/C/22	Miss Jeyaruby Veerasingam
21	2000/C/23	Balasamy Kajan
22	2000/C/24	K. Kasenthiran
23	2000/C/25	Miss Kalaichelvi Somasuntharam
24	2000/C/26	Kandasamy Kamalaraj
25	2000/C/27	Thanapalar Kandepan
26	2000/C/29	T. Kirupanathan
27	2000/C/30	Miss Kirushnananthy Gopalakirushnan
28	2000/C/31	Miss Komala Gunabalasingam
29	2000/C/32	Pulenthiralingam Kuganathan
30	2000/C/33	Appaiya Kuhathas
31	2000/C/34	Anthonipillai Liston Rajanikanth
32	2000/C/35	Miss Malini Kanapathippillai
33	2000/C/36	Miss Makarvily Sebamalai
34	2000/C/37	Miss Mathivathani Sunmugarajah
35	2000/C/38	Miss Meera Balachandran
36	2000/C/39	Miss Meera Karunananthasivam
37	2000/C/40	Miss Morine Shamina Arasendran

38	2000/C/42	Tharmakulasingam Mugunthan
39	2000/C/43	Thillainathan Mugunthan
40	2000/C/44	Nicholas Sebastian
41	2000/C/47	Paramasamy Baskaran
42	2000/C/48	Balakrishnan Partheepan
43	2000/C/49	Miss Piramila Pushparajah
44	2000/C/51	Miss Priya Krishnamoorthy
45	2000/C/52	Paramalingam Pirunthan
46	2000/C/53	Miss Rajeswary Ganeshan
47	2000/C/54	Miss Rajini Poobalasingam
48	2000/C/55	Miss Renuga Kathiragamanathan
49	2000/C/56	Miss Rojini Balachandran
50	2000/C/57	Sebamalir Kristy Mehendra
51	2000/C/58	Kanagaratnam Sabashan
52	2000/C/59	Miss Sagunthala Sivaprakasam
53	2000/C/60	Vaikuntharajah Sasikanth
54	2000/C/61	Miss Sathiarani Sathiaselvan
55	2000/C/62	Annarajah Senthuran
56	2000/C/63	K. Senthilkumaran
57	2000/C/64	Miss Selvamalini Sellathurai
58	2000/C/65	Miss Sharmila Subramaniam
59	2000/C/66	Miss Shiromi Beatrice Ranasingam Amalathas
60	2000/C/67	Miss Sopitha Ponnudurai
61	2000/C/68	Ratnasingam Srikanthan
62	2000/C/69	Sinnathamby Subaskar
63	2000/C/70	Miss Sujeeva Rajendram
64	2000/C/71	Miss Sujitha Pathmanathan
65	2000/C/72	Miss Sunethira Elayathamby
66	2000/C/73	Miss Sutharjini Ampikapathy
67	2000/C/74	Gunasingam Suthakaran
68	2000/C/75	Srilandan Suthakaran
69	2000/C/76	Thevarasa Rotesan
70	2000/C/77	Miss Thagshayaini Veeramarajah
71	2000/C/78	Miss Thaksini Mahalingam
72	2000/C/79	Subraminiam Thanaruban
73	2000/C/80	Miss Tharmini Manikalingam
74	2000/C/81	Miss Tharsini Shanmuganathan
75	2000/C/82	R. Thileepan
76	2000/C/84	Somasegaram Uthanan
77	2000/C/85	Victor Nishantha Rancy
78	2000/C/86	Miss Malarvily Siyananthan
79	2000/C/89	S.Sivananthan
80	2000/C/90	S.Kokulan

DEPARTMENT OF COMMERCE
BACHELOR OF COMMERCE – PART III

S/No.	Reg. No.	Name
1	99/C/01	Kathirgamathamby Ajanthan
2	99/C/02	Paskarathasan Akilan
3	99/C/03	Miss Joseph Jesyuthasan Anett Nilani
4	99/C/04	Antony Anesten Roch
5	99/C/05	Pancharatnam Anura
6	99/C/06	Miss Anushathevi Saravanaperumal
7	99/C/07	Miss Anushiya Arunasalam
8	99/C/08	Miss Babatharany Kandiah
9	99/C/09	Athimuthulingam Baskaran
10	99/C/10	Antony Christy
11	99/C/11	Isither Lawrence Christan
12	99/C/12	Jesuthasan Dinesh
13	99/C/13	Miss Gayathiri Ganeshamoorthy
14	99/C/14	Edward Rajanayagam General Ithayathas
15	99/C/15	Sivagnanam Gnanasoruban
16	99/C/16	Nesathurai Jenarthanan
17	99/C/17	Miss Kamalini Thurauratnam
18	99/C/18	Paramasivampillai Kannathasan
19	99/C/19	Miss Kathyayoni Mahalingam
20	99/C/20	Miss Kavitha Gengatharan
21	99/C/21	Ramalingam Kiritharan
22	99/C/22	Miss Kopiha Thambirajah
23	99/C/23	Miss Thayanusha Varatharajan
24	99/C/24	Kathirgamanathan Kugathasan
25	99/C/25	Miss Manjula Julie Black
26	99/C/26	Miss Mayaikantharani Kandiah
27	99/C/27	Miss Nalinthini Rasavallayan
28	99/C/28	Kanapathippillay Naveetharan
29	99/C/29	Nadesapillai Nimalaswaran
30	99/C/30	Miss Nirusha Rajadurai
31	99/C/31	Miss Umagowri Somasundaram
32	99/C/32	Vallipuram Vijenthiran
33	99/C/33	Yahappar Philip Premathasan
34	99/C/34	Balasingam Philipneri
35	99/C/35	Miss Priyatharshini Kulanthaively
36	99/C/36	Miss Oriyatharshini Sellathurai
37	99/C/37	Puvenendran Ragunathan
38	99/C/38	Miss Subagini Rejakulasingam
39	99/C/39	Sivapunnaiam Rajkumar
40	99/C/40	Miss Rajawathanee Thambirajah
41	99/C/41	Miss Jebashirani Sabanathan

42	99/C/42	Miss Rancini Arulantham
43	99/C/43	Ponnampalam Kavinthiran
44	99/C/44	Senthirajah Sabesan
45	99/C/45	Subraminiyam Sabesh
46	99/C/46	Miss Sangeetha Kanapathiaiya
47	99/C/47	Krishnarajah Sathees
48	99/C/48	Miss Kalaijothy Annamalai
49	99/C/49	Kulasingam Selvakumaran
50	99/C/50	Kandiah Shanmuganathan
51	99/C/51	Miss Shylaji Tharmendran
52	99/C/52	Miss Shiyaliny Tharmarajah
53	99/C/53	Miss Sivaanthi Tharmalingam
54	99/C/54	Kailasapathy Jeyakanthan
55	99/C/55	Miss Sivayathany Chelliah
56	99/C/56	Namasivayam Sivanantharajah
57	99/C/57	Sithamparappillai Sooriyakumaran
58	99/C/58	Thambu Sritharan
59	99/C/59	Miss Sujatha Kumarasamy
60	99/C/60	Paramalingam Sujanthan
61	99/C/61	Santhirasegaram Sureshkumar
62	99/C/62	Miss Susikala Sinnarasa
63	99/C/63	Theivandram Sukethan
64	99/C/64	Shanmuganathan Sutharsan
65	99/C/65	Miss Sutharsini Sundaralingam
66	99/C/66	Rasiah Suthakaran
67	99/C/67	Kanapathippillai Suthakaran
68	99/C/68	Jegatheesan Tamilalagan
69	99/C/69	Miss Jamini Thiruvilingam
70	99/C/70	Miss Tharminy Sinnathamby
71	99/C/71	Miss Tharshini Vilvarajah
72	99/C/72	Miss Tharsini Kanapathippilai
73	99/C/73	Miss Tharshini Kiritharan
74	99/C/74	Velupillai Vigneswaran
75	99/C/75	Krishnapillai Thevatharsan
76	99/C/76	Balasingam Thirulegeswaran
77	99/C/77	Yogalingam Umesh
78	99/C/78	Miss Vama Namasivayakurukkal
79	99/C/79	Miss Vasantha Mohanarajah
80	99/C/80	Miss Yasitha Ganesan
81	99/C/81	Ananthar Kesavanathammoorthy
82	99/C/83	S.Kamalachchandaran
83	99/C/101	T.Thilakawathi
84	99/C/102	N.Ketheeswaran

DEPARTMENT OF COMMERCE

S/No.	Reg. No.	Name
1	98/C/01	Miss B. Ahilakalaa
2	98/C/02	Miss D. Anusha
3	98/C/03	Mr M. Ariyam Robet
4	98/C/04	Mr M. Asokumar
5	98/C/05	Mr N. Babujee
6	98/C/06	Mr T. Balamurali
7	98/C/10	Mr P. Fabian Figurado
8	98/C/11	Mr S. Gajan
9	98/C/12	Miss G. Geethanjali
10	98/C/13	Miss M. Indumathy
11	98/C/14	Mr S. Jenarthanan
12	98/C/15	Miss A. Jennet Mary Amalini
13	98/C/16	Mr N. Jeyanthiran
14	98/C/17	Miss S. Jeyatharjiny
15	98/C/18	Mr T. Jasmin Oyaloood
16	98/C/20	Miss A. Kamalini
17	98/C/21	Mr P. Gandipan
18	98/C/22	Miss Kavitha
19	98/C/23	Mr K. Kengatharan
20	98/C/24	Mr V. Kesavan
21	98/C/28	Mr V. Krishnarasa
22	98/C/30	Miss G. Krishnamalar
23	98/C/33	Mr M. Mariyarasa
24	98/C/35	Miss F. Mary Therosita
25	98/C/36	Miss M. Joseph Merlin Shamini
26	98/C/37	Mr A. Mohanaraj
27	98/C/38	Mr K. Muraleetharan
28	98/C/39	Mr S. Nadesan
29	98/C/41	Miss T. Niranjini
30	98/C/42	Miss P. Biruntha
31	98/C/43	Mr P. Paramasigamany
32	98/C/44	Miss B. Pathma
33	98/C/45	Mr S. Pirasanna
34	98/C/47	Miss B. Pirabasini
35	98/C/48	Mr R. Prapeshkannan
36	98/C/49	Miss M. Prashanthy
37	98/C/50	Miss K. Piratheepa
38	98/C/51	Mr P. Premachanthiran

39	98/C/52	Miss K. Prieethini
40	98/C/53	Mr G. Purusoththaman
41	98/C/54	Miss K. Rahini
42	98/C/55	Mr V. Rajakugan
43	98/C/56	Mr R. Rajkumar
44	98/C/57	Mr L. Ram Ramanan
45	98/C/58	Miss P. Revathee
46	98/C/59	Mr K. Satheeskanna
47	98/C/60	Mr S. Satheeswaran
48	98/C/61	Miss T. Sathiyalogini
49	98/C/62	Mr S. Selvanayagam
50	98/C/63	Miss S. Sivachelvy
51	98/C/64	Miss V. Sivagowri
52	98/C/65	Miss K. Sivajini
53	98/C/66	Mr M. Sivakumaran
54	98/C/67	Mr K. Sivaraj
55	98/C/69	Miss B. Subatha
56	98/C/70	Mr S. Suganthan
57	98/C/72	Miss S. Sujitha
58	98/C/75	Mr K. Suthakaran
59	98/C/76	Mr S. Sutharsan
60	98/C/77	Miss A. Thamilini
61	98/C/78	Miss T. Thavapriya
62	98/C/79	Miss K. Thaya
63	98/C/80	Mr R. Thevanantha
64	98/C/81	Mr T. Umasuthan
65	98/C/82	Mr A. Vakeesan
66	98/C/83	Miss S. Vanaja
67	98/C/84	Miss K. Vasuki
68	98/C/85	Mr S. Vimalan
69	98/C/88	Mr S. Varatharaj
70	98/C/89	Mr S. Pushpakeethan
71	98/C/91	Mr N. Sri Sankar
72	98/C/93	Mrss T. Kunavathani
73	98/C/95	Mr S. Manoharan
74	98/C/97	Mr K. Mayooran
75	98/C/98	Mr S. Shiritharan
76	98/C/99	Miss M. Sivarani
77	98/C/100	Miss R. Sharmila
78	98/C/103	Mr T. Uthajakumar
79	97/C/72	Mr S. Mathanakumar
80	95/C/114	Mr V. Sivarajah

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