MicroSave
Market-led solutions for financial services

Offices across Africa, Asia and Latin America

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Costing and Pricing of Financial Services for MFIs – Trainers Manual, Day 1

Based on

Costing and Pricing of Financial Services: A Toolkit for MFIs
David Cracknell, Henry Sempangi and Graham A.N. Wright

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MicroSave – Market-led solutions for financial services

Acknowledgements

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This training manual needs comments from trainers to provide additional training tips, examples and ideas! Your thoughts and comments are anticipated and welcomed for the next version.

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Trainer's Guide

Welcome to the *MicroSave* **Costing and Pricing of Financial Services Training Curriculum**. This guide is meant for those people who have taken the *MicroSave* Costing and Pricing training course and are going to reproduce the training elsewhere – or are going to "live it" by undertaking a costing and pricing exercise within their own organisation. The guide provides comprehensive session plans and also offers the experiences of some of our research partners, staff members and trainers who have used the information herein to cost and price financial services in the microfinance context.

It is intended that the trainer delivering this course will be familiar with costing and pricing of financial services as well as being a capable trainer. However, for those who may want to brush up on their training skills, there is an accompanying manual (or Microsoft Word file on CD) specifically discussing training skills and training issues. There are many other training manuals which the trainer may consult, including the "Participatory Learning & Action: A Trainer's Guide" of the IIED Participatory Methodology Series.[1] Several of the "Ice Breakers, Refreshers, etc." come from these manuals.

There's already a Costing and Pricing Toolkit on the *MicroSave* Website. Why is there a training manual also?
Some people will read the Costing and Pricing toolkit that is on our website and find that to be enough for their organisation to go forward with a costing exercise. However, we have had many people and organisations who asked for a training course as well. Some people feel that it is faster and easier to train all the members of a potential costing team in the process at once. This way they will literally all be "reading from the same page".

Who Should I be training?
You may choose (or be chosen) to train this course for different types of participants. Each will have different positives and challenges.

Training an MFI's potential costing team:
Training the potential members of the costing team in one MFI is the ideal training situation. All exercises will be directly relevant and useful in the immediate future – they will be developing the actual preparatory work needed for costing and pricing financial services within the MFI. For the trainer, all examples would require tailoring to directly address the needs of the one MFI. However, because the MFI team will be using the training as also an actual worksite, it may take slightly longer than the timings given here.

Training potential costing team members – multiple MFIs:
It may not be feasible (cost, time, number of requests) to train just one organisation. The trainer should insist – as much as possible – that the MFIs must send at least three or four members of the "inner core" of the costing team to the training. Training the key members of the team will show that the MFIs are serious about the training and will allow the teams to breakout into their own organisations, performing the exercises as relevant to their own MFIs. It may also provide for interesting and rich discussion between MFIs as to why/how their responses to the various exercises differ. But, beware – if your clients are in the same market, they are not likely to go into the details of their costing data – it simply wouldn't make sense to give your competitors such an edge!

Training individuals:
It will be more difficult to provide this training to many individuals from many different organisations. If this is the case, the training should be handled more like a Training of Trainers as these individuals should be responsible for taking back the information to their organisation in order to train up the costing team and management on how to plan and conduct the costing and pricing exercise within their respective MFIs.

[1] They can be reached at International Institute for Environment and Development/ 3 Endsleigh Street, London, WC1H ODD, UK

Training consultants:
It will be more difficult to provide this training to consultants from many different organisations. If this is the case, the training should be handled more like a Training of Trainers as these individuals should be responsible for taking back the information to their clients (MFIs) in order to train up the costing team and management on how to plan and conduct the costing and pricing exercise within their respective MFIs. Sometimes, you may also find yourself training policy makers and/or wholesalers and much of what is said has been said for individuals and consultants applies in such situations.

What do I need to tell my participants need to bring with them?
The trainer must insist –and ensure- that the participants to the course are coming to learn and "do". They are not coming to learn how to do it much later, after they return to their organizations. Therefore, this course is limited to MFIs and participants who are ready – or almost ready – to do a costing exercise. The amount of information "lost" in the long delay between the training course and an actual costing exercise dictates that this training follows directly on an actual costing exercise in the field. Thus, the participants must bring with them laptops that ideally have been loaded with all the information that they will need for the costing. This will include, among others, latest trial balance and financial statements, chart of accounts and possibly with as much detailed costing information as the organisation is comfortable providing.

What do I need from *MicroSave* for the Training?
This manual is intended to be utilised with several accompanying documents, all of which are located on the *MicroSave* resource CD or website www.*MicroSave*.org :

Manuals:

Participants' Toolkit:

MicroSave's Costing and Pricing of Financial Services Toolkit for MFIs. The toolkit is a step by step guide for participants to ensure that they plan and conduct the costing and pricing exercise in the most efficient and effective manner. The toolkit provides handouts, examples and checklists for various steps in the process. The trainer should make sure that the toolkit can be downloaded to the participant's laptops (or sent via email).

Handouts:

An electronic folder of handouts is included. There are two kinds of handouts: 1) Information handouts which replicate and/or add to information in the toolkit; and 2) Exercise handouts which will require participants to work on problems and exercises during the workshop.

Slideshows:

The slideshow folder is again separated by suggested training sessions. This course can be trained in several ways, as discussed herein. Ensure that you have the slideshow in the format most useful to you. Slides can be printed onto overhead slides and utilised with an overhead projector. However, due to the number of slides, the amount of text, and the "animation" of slides, it is highly recommended that the trainer utilises an LCD projector, if one can be located (and electricity is available, etc.). Many participants request that they are provided with a copy of the slideshows at the end of the course, which the trainer is free to provide to them.

Other Material:

State-of-the-art resource material related to costing and pricing of financial services such as CGAP ABC Costing Toolkit, *MicroSave* study titled "*Product Costing in Practice – The Experience of MicroSave*", *MicroSave* Briefing Notes and the like.

Practical Examples:
Practical examples have been provided throughout the course based on the experience of *MicroSave* with its Action Research Partners. The trainer should review the practical examples and where possible supplement or replace the examples given on the basis of his/her experience. Providing examples based on experience adds considerable value to the course, especially where examples are contextually and culturally appropriate for those being trained.

What else do I need for the Training?
To conduct the training you will need:

- A digital projector, although an overhead projector could be used.
- Some knowledge of PowerPoint: The slideshows may need some "customisation" – inserting the course schedule for example, customising exercises to meet the needs of the MFI being trained, adding local terms for savings and credit, the names of the MFI being trained, etc. The trainer should be very familiar with the slideshow, running through it several times before the training starts. This will help him/her note when to "click" onto the next slide and to understand the kind of "animation" that is on each slide. Generally, the animation should NOT be too complex or distracting, but the trainer may choose to eliminate all animation as well (see box).

I hate "animation". How do I turn it off?

- Highlight all slides at once by clicking on the bottom left icon that shows four squares (slides). This will give you a view of all the slides in the show. Then press Ctrl and A at the same time; this will highlight all of the slides in the show.
- Now that they are all highlighted, look on the toolbar at the top and click on "slideshow", then click on "preset animation" and select "off". There will be no more animation on any of the slides.

- Standard Training Room items: flip chart stands, flip charts, marker pens of various colours, hole puncher, stapler, masking tape, etc.
- Workshop materials for participants: Encourage them to take notes in their manuals (so pads of paper may not be needed) so they will remember the discussions better when they get back to their offices. However folders will be helpful considering the number of handouts and exercises that there will be during the course. It may be helpful to have pens, pencils, erasers, etc.
- Computers (ideally 1 for every 3-4 participants) to run the exercises. Participants should be encouraged to bring their own computers (laptops) to allow them to complete much of the initial planning for their costing on their own machines.

How do I use this Training Guide?
The training guide is, hopefully, self-explanatory.

Each session provides the Trainer with the **Session Objectives, Time, Methods, Materials, Slides Overview and Process and FAQs with illustrative examples, where appropriate:**

- The **time** that each session will take is flexible depending on the trainer, the number of participants, skill levels of the participants and whether or not the participants are all from the same organisation or from different ones.
- The **methods** simply alert the trainer as to whether the session is to be conducted as, for example, a presentation – which generally means the slideshow will be utilised, or as a breakout session and that breakout areas may be required.
- A list of all the **materials** that the trainer will need, above and beyond the list provided above, for the session is also included. Flipcharts, markers, tape should be assumed, even when not listed.
- The **slides overview** and **process** section provides just that – an overview for each slide in the upcoming session including the key aspects and process they should follow for each slide. Specifically, training tips have been included for each slide as trainer notes in each session as well as in the power point files. Each session signs off with a list of **FAQs** relevant to the session topic and where necessary **illustrative examples** have been provided. It is not intended that the trainer memorises the text (then we would have added some of our standard jokes!), but rather that the trainer feels confident discussing the issues at hand. The trainer should bring in relevant examples

from his/her own MFI experiences **and encourage participants to discuss their own experiences.** Adults generally learn better from "real life" rather than theoretical discussions.

- Finally, the trainer would find it very useful to become thorough with the actual toolkit and other resources like briefing notes, as they, apart from concepts and methods, also contain extremely valuable real world experiences, which could be very useful in conducting the training

Finally, the trainer will find the following **SYMBOLS** in the manual to signify different things.

The *idea* symbol means that you will find comments from our experienced staff and certified trainers. More comments, questions and ideas can be directed to *MicroSave*, their research partners or their trainers by using the e-mail addresses on the front of this manual, or accessing the website.

Offers training suggestions – trainer could try brainstorming, trainer could lecture, etc.

This symbol helps the trainer find the exercises that are in each session.

Preparation for Training

You have chosen your participants for the course (or they have chosen you!) and you have**:**

- COSTED and CONTRACTED the training and agreed with the MFI the number of days for training and follow-up; you have sub-contracted additional trainers and assured that all contracts and TORs are prepared.
- Sent, via e-mail or hard-copy, all the "pre-course" handout files to your participants, if there are going to be any.
- Sent via e-mail and/or hard copy, a letter requesting that the participants bring laptops, MFI financial statements and all relevant information to ensure that the training is as useful and "real-life" as possible. Sample e mail and preparation guidelines are enclosed as **annex 1 and annex 2** to this manual (end of trainer's manual day 3).
- Chosen an appropriate venue (steady supply of electricity, enough room for "breakout groups", etc.) and seating plan for the number of participants you will have (a "U" shaped seating arrangement; 6 tables angled towards the front, etc.).
- Ensured that participants are all in the process of doing a product costing and have the appropriate information available to them on the laptops that they will be bringing with them.
- Copied, bound and prepared all the manuals and handouts.
- Practiced with the slideshow so that you are confident how to use it (see the next step on "Preparing Your Slideshow").

Preparing Your Slideshow

MicroSave has "hidden" slides within each training. These will not appear when you are doing the slide presentation, but they provide additional details and more information from the toolkit. It is your job as a trainer to go through the slide presentation and decide which slides to "unhide" for greater depth in a particular session. Likewise, you may choose to hide some slides that are not as relevant to your audience. See the box at right for the steps to hide or unhide a slide.

Hiding and Un-hiding Slides

1. On the **Slides** tab in normal view, select the slide you want to hide.
2. On the **Slide Show** menu, click **Hide Slide**.

The hidden slide icon appears (or disappears to unhide) with the slide number inside, next to the slide you have hidden.

Also, when printing out the slides you need to be careful to uncheck the box that says "Print Hidden Slides." Otherwise all the slides will be printed for your participants and they will have a difficult time following your presentation (because you will skip over several slides).

Alternative Lesson Planning

Especially if you are working with only one MFI, you may be called on to deliver this training in stages. For example, you may want to train "Day 1" on a Monday and allow them the rest of the week to complete the Steps covered in Day 1. The following Monday you may train "Day 2", etc. If you do choose to train in this way, be aware of timing issues. You will need to take some time in the morning to review the work of the participants in the prior week. You may need to provide an hour or so to allow them to finalise the information that they produced over the prior week. This will necessitate some changes in the timing of each training "Day".

It is not recommended that the training be compressed into a very short time period nor overly extended. The "Days" have been calculated to allow the team plenty of time to work in detail on their MFI's own needs for pilot testing. Compressing this time may lead to confusion, and extending it may mean that the group is spending too much time in an "academic" setting and not enough time "doing it".

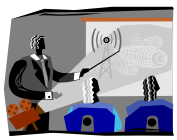
Session One

Participants Introduction and Overview

Session Objectives:

- Get to know all participants, their organisations and their roles within their MFIs
- Understand what is expected of them, and what they expect from the course
- Provide an overview of the course, its outline and schedule

Time:  **30 Minutes**

Methods: 

➔ Presentation
➔ Expectations exercise

Materials: 

Slide Show:

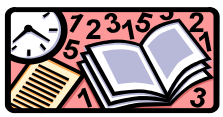
☑ **PowerPoint Presentation** entitled **"Session One"** – customised by the trainer with the course content pages.
☑ This session consists of approximately **8 slides** (Slide numbers 1 – 8 in respective PPT file)
☑ **Flash cards** for understanding participant expectations
☑ **Marker pens**

Handouts:

■ *Handout 1.1* **Course Outline**

Session Plan – Slide Notes for Facilitator

Slide Number and Time	Notes
Slide 1: 1 Minute	
Product Costing and Pricing ***Location, City*** ***From To Dates, Year***	• Please write down the location and city of the workshop along with from and to dates and year
Slide 2: 15 Minutes	
Session 1: Participants Introduction and Overview Please introduce yourself: Your name Your organisation Your position Your experience in costing and pricing	• It is useful for the trainer to know those participants who have had previous experience in costing and pricing, especially to form working groups for exercises. • Ask participants with prior experience of costing to discuss what they have done, this will enable you to bring them into the discussion during the course of the workshop
Slide 3: 2 Minutes	
Suggested Ground Rules … ☑ Brainstorm freely; disagree openly, but courteously… it stimulates discussion & helps others 'think aloud'! ☑ Speak up, or you'll be called upon to speak! ☑ Don't take up more than your fair share of talk time ☑ Avoid side conversations, let all participants benefit! ☑ Keep discussions and comments relevant ☑ Don't leave the room unless you have to ☑ Be prompt – morning, breaks, lunch…. ☑ Don't interrupt ☑ Speak up with interesting & relevant ideas that will add value ☑ Switch off cell phones!!! ☑ Others? *MicroSave*	• The slide is animated to give time to the facilitator to clearly spell out the suggested ground rules. • The workshop group should not only be allowed to frame the rules and penalties but also be held accountable so as to follow the rules and/or enforce penalties specified in a pleasant manner.

Slide Number and Time	Notes
Slide 4: **2** Minutes	
Participants Expectations Please complete 3 flash cards on your expectations for the product costing workshop Lets see if your **expectations** will be **met …**	• Please make sure that the participants write down one expectation in each flash card in large and legible handwriting and also that they use the appropriate marker pens. • At this point, while the main facilitator is explaining and talking to the participants, the co-facilitator can look through the completed flash cards and group the responses together and see if the expectations listed by the participants are being met through the workshop.
Slide 5: **2** Minutes	
Course Outline The course will cover: Rationale for costing: Why cost products? Costing terminology Introduction to costing methodologies How to make costing successful? Costing pitfalls  **Handout 1.1 – Course Outline**	• Briefly highlight the course outline. Do not go into detail here, this will be gone over in much more depth in the each of the respective sessions throughout the training. • Highlight those expectations that are being met – this would require categories of participant expectations being matched with those topics on the slides, which the facilitator can describe briefly in one or two sentences.
Slide 6: **2** Minutes	
Course Outline The course will cover Preparing for product costing Allocation based costing: Step by step Reporting costing results What next: Unpacking areas of concern Institutionalising costing 	• Highlight those expectations that are being met – this would require categories of participant expectations being matched with those topics on the slides, which the facilitator can describe briefly in one or two sentences

Slide Number and Time	Notes
Slide 7: 2 Minutes	
Course Outline The course will cover Practical experiences in product costing Pricing Strategies Cost based Competitor based Value based Next steps	• Highlight those expectations listed by the participants (if any) that are not likely to be met and explain why – e.g., as they are beyond the scope of the workshop in terms of content and substantive area, too specific to the geographic area or MFI etc. • It may be possible to discuss some outstanding issues outside of the sessions (during tea/lunch breaks etc)
Slide 8: 4 Minutes	
Useful Reading • *MicroSave* Toolkit for Costing and Pricing Financial Services • Product Costing in Practice – The Experience of *MicroSave* • Briefing Note # 16 Costing and Pricing Financial Services • Rahisi MFI sample costing spreadsheet • CGAP ABC Costing Toolkit	• The trainer needs to briefly talk about these documents and also highlight which of these are in the course material given to the participants. • The trainer could also briefly identify web or other resources (e.g., *MicroSave* Website, *MicroSave* Resource CD, CGAP Microfinance Gateway etc) from where the participants could gain access to these materials • The slide is hyperlinked and clicking the links will display the respective documents and/or resources on the screen, live in the workshop

FAQs for Facilitator

Q: Who can use this manual and toolkit?

- This manual and accompanying toolkit is designed for Micro Finance Institutions (MFIs), which, for the purposes of this Toolkit, are defined as any financial institution offering financial products (normally loans and/or savings) that are accessible to poor people. While this has been developed in Uganda, it is relevant across Africa and indeed the World.
- The costing of products is essentially a management tool and some pointers are given as to how management could make good use of this tool including for product pricing, cost control, product appraisal etc. The Toolkit is accompanied by a specific training course, which can be run for any individual MFI, or for a group of MFIs.

Q: How has this toolkit been developed?

- The development of this Toolkit began with a leading Ugandan MFI that had been providing savings services and micro loans for several years throughout the country. The funds generated by the savings services had been invested in fixed deposits/Treasury Bills and a reasonable level of interest was earned up to the middle of 1998. However, the rate of interest receivable on the fixed deposits dropped around that time, and the question arose: Can the MFI really afford to provide savings services to the economically disadvantaged that it tries to serve? Are the savings operations cost effective?

- ***MicroSave*** commissioned an exercise to look into this, and consultants from Aclaim worked with ***MicroSave*** and the MFI to assess the situation.
- The process of discovery and costing enabled a first draft of this Toolkit to be developed so that other MFIs could do their own costing of MicroFinance services, should they so desire. This version of the Toolkit has been developed after testing the original version in another MFI, a large savings bank in Kenya offering a wide variety of products. The bank is a very different organisation compared with the first MFI in the sense that it has more products and handles a larger volume of business and therefore provided a good vehicle for testing the Toolkit to see how applicable and relevant it would be for larger MFIs. It was found that the basic procedures and principles were equally relevant for larger MFIs, although further refinement was needed to cater for a more complex organisational structure and for a multi-product (rather than bi-product) environment.

Q: Why is costing necessary?

- In view of increasing professionalism of MFIs and the competition in the MFI market place, it is essential that MFIs carefully analyse exactly how much each part of their operations costs, so that they can make informed management decisions concerning them. Such decisions will include the following:

  1. What are the actual and full costs of delivering financial services and can they be reduced?
  2. How to enhance income and increase profitability?
  3. How to become more efficient – that is have the lowest possible unit costs?
  4. How to appraise business performance by product and where necessary modify the pricing of existing products?
  5. Whether to accept and implement new products (as part of the product development process)?
  6. How to price new products (as part of the product development process)?

Q: Why should MFIs bother to cost products?

- In the right environment, the benefits of product costing can be considerable. Identifying sources of profitability (and losses) allows a financial institution to focus on promoting their winning products, and redesigning those less profitable. Understanding of processes facilitates improvements in efficiency and a detailed understanding of cost structures allows more informed pricing decisions to be made.
- ***MicroSave's*** work with its Action Research Partners (ARPs) has clearly demonstrated that product costing interacts strategically with a huge and diverse range of business areas including pricing, efficiency, outreach, the design of incentive schemes, the identification of the most suitable product mix, marketing, customer service, staffing patterns, profit centre accounting and budgeting. The strategic dimensions of costing are rarely well recognised.
- Traditionally, greater attention has been placed on justifying high interest rates than towards ensuring that microfinance programmes operate efficiently. Until ***MicroSave*** started working with its ARPs, though several had costing systems, none fully costed products.

Q: What were the results of costing at *Microsave*'s ARP's?

- In *MicroSave's* ARPs, the identification of loss making products had a significant and immediate impact. Investigation revealed a range of explanations for losses including, poor investment efficiency, inappropriate pricing, an unwillingness to decrease rates to depositors when treasury bill rates fell, inappropriate allocation of staff, as well as expensive processes and internal control procedures. Once a loss-making product has been identified further investigation proved necessary, especially in the case of Allocation based costing.

- With declining Treasury Bill rates fee based products were found to be consistently amongst the most profitable products. Fees are also charged for the provision of specific services within individual products (loan application fees, withdrawal fees etc.). Whilst costing was the major focus of investigation, few of the *MicroSave* Action Partners coherently relate the price of a product with its cost of provision, the most common pricing strategy appears to be to perform review of the interest rates of the competition and base decisions on this.
- Making a transfer pricing adjustment, which accounts for the use of internally generated savings to finance a loan portfolio proved to be important in determining the profitability of savings products, but despite this a number of savings based products proved to be losing significant amounts of money. In several instances it appeared that the savings product was priced too competitively – in other cases more process level analysis is required to determine causality.

Q: What are the key lessons from *MicroSave*'s costing with its ARP's?

- When ***MicroSave*** started working on product costing it underestimated the challenges it would face in institutionalising costing within its partner organisations. Costing is institutionalised only when there is evidence that the process is being repeated, that the results of costing exercise are used strategically, that additional investigations are being performed. More sophisticated and capable institutions are able to take the process further and use allocation based costing as the foundation of profit centre accounting, to use costing information in financial modelling, and to move from allocation based costing to ABC. This "process of evolution" is occurring in several of our ARPs, but at very different speeds and to differing extents.
- Product costing provides information for the development of new products, though in the case of both activity and allocation based costing the information generated is an imperfect estimation, and therefore needs to be reviewed regularly and against a financial model during the pilot-test phase.
- Particularly in the case of allocation based costing additional investigations are required to understand the nature of certain costs, though areas of investigation are focused and targeted by the costing exercise. Initial investigations have looked into, or are investigating, investment efficiency, mobile banking operations, decreasing the cost of particular processes, improving the allocation of staff etc. Where detailed investigation is required, process audit can be used to unpack a particular process.

Read more about these questions…

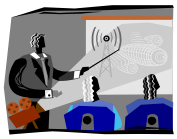
Session Two

The Context of Product Costing

Session Objectives:

- To enable participants to understand the context of product costing
- To help them understand and be able to explain the potential costs and benefits of product costing
- To facilitate them to understand in principle allocation and activity based costing

Time:  **45 Minutes**

Methods: 

➔ Presentation
➔ Questions and Answer Exercises

Materials: 

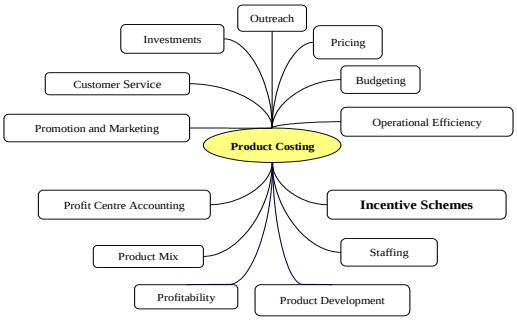
Slide Show:

☑ **PowerPoint Presentation** entitled **"Session Two"**
☑ This session consists of approximately **15 slides** (Slide numbers 1-15 in session 2 PPT file)

Handouts:

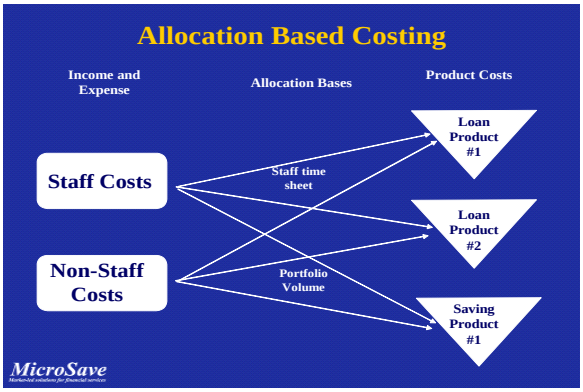
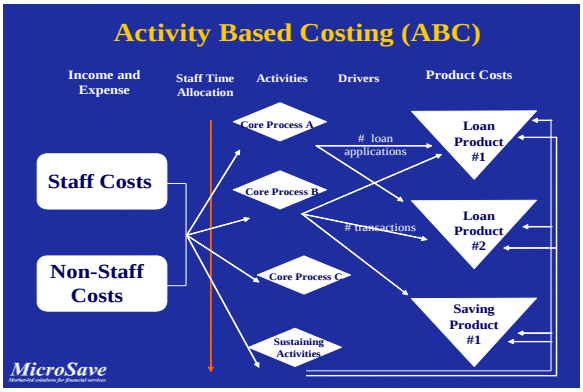
- *Handout 2.1* **Advantages and disadvantages of different costing methods**
- *Handout 2.2* **Circumstances favouring adoption of different costing methods**

Session Plan – Slide Notes for Facilitator

Slide Number and Time	Notes
Slide 1: 2 Minutes	
Session 2: The Context of Product Costing Session Objectives • To enable participants to understand the Context of product costing • To understand and be able to explain the potential Costs and Benefits of product costing • To understand in principle Allocation based costing and Activity Based Costing	• The facilitator needs to talk through the session objectives and mention that the focus is on the following: • How is costing interlinked with other aspects of an organisation? • Why do costing in the first place – why is it necessary? • What are the key similarities and differences between different costing methods; what are their relative advantages and disadvantages;
Slide 2: **5** Minutes	
Questions  What benefits do we expect to achieve with Product Costing? What aspects of our business does Product Costing influence?	• This slide carries an **exercise symbol** – the trainer needs to pause and get reactions, comments and responses from the participants. • This is something that the trainer needs to do whenever the exercise symbol is found on a slide. • Responses could be noted on a flip chart and referred to when presenting the strategic context of costing diagram further on – this would highlights those aspects mentioned by the participants while identifying critical aspects missed.
Slide 3: **5** Minutes	
The Strategic Context of Product Costing 	• Explain strategic linkages between product costing and other aspects like operational efficiency, budgeting, pricing etc, using the diagram as well as the next three slides that follow. This of course needs to be related to the questions in the previous slide. • The facilitator should refer to the handout on the strategic context of product costing provided in the participants' notes.

Slide Number and Time	Notes
Slide 4: 2 Minutes	
The Strategic Context of Product Costing *Outreach*: If we are more efficient and targeted on profitable products we can grow faster or further given available resources *Pricing*: Knowing the cost of product delivery is a first step in re-pricing products *Budgeting*: Knowing the cost of product delivery enables more accurate budgets to be developed *Operational Efficiency*: Targeting follow up work such as process mapping will improve profitability	• Allocate sufficient time to explaining these slides • They capture many of the benefits of Product Costing … and generate interest amongst participants. • Appropriate examples to substantiate the benefits of costing are also very useful. • These slides should enable the participants to relate the benefits of costing in their own organizational context
Slide 5: 2 Minutes	
Strategic Context of Product Costing *Product Refinement:* Identifying where products may need modifications to increase efficiency or to increase sales *Profitability*: Improve profitability of the institution by cutting out or refining loss making products *Incentive Schemes*: Financial and performance information is used to monitor and drive incentive schemes *Staffing*: Can identify where unproductive resources exist	• Allocate sufficient time to explaining these slides • They capture many of the benefits of Product Costing … and generate interest amongst participants. • Appropriate examples to substantiate the benefits of costing are also very useful. • These slides should enable the participants to relate the benefits of costing in their own organizational context
Slide 6: 2 Minutes	
Strategic Context of Product Costing *Product Mix*: Identify which products to push to increase profitability *Profit Centre Accounting*: Costing enables institutions to establish profit centres, typically branches *Promotion and Marketing*: Identifying an appropriate product mix has direct implications for which products to promote and market	• Allocate sufficient time to explaining these slides • They capture many of the benefits of Product Costing … and generate interest amongst participants. • Appropriate examples to substantiate the benefits of costing are also very useful. • These slides should enable the participants to relate the benefits of costing in their own organizational context • Discuss how product performance can be affected by gender which in turn may influence the product mix

Slide Number and Time	Notes
Slide 7: 3 Minutes	
Strategic Context of Product Costing *Customer Service*: Identifying inefficient processes and procedures can significantly improve customer service *Investments*: Product costing can lead to further investigations on investment efficiency	• Allocate sufficient time to explaining these slides • They capture many of the benefits of Product Costing … and generate interest amongst participants. • Appropriate examples to substantiate the benefits of costing are also very useful. • These slides should enable the participants to relate the benefits of costing in their own organizational context
Slide 8: 3 Minutes	
Other Benefits of Product Costing Allows the full costs of delivering products to be identified Identifies hidden costs Can improve business planning and investment decisions Can assist financial institutions to make decisions on outsourcing services With senior management support, costing can instil greater cost consciousness in staff	• Helps determine full cost of delivering financial services - including hidden/unreported costs. Thus, financial institutions really can get to know what are the total costs in delivering specific financial services • Previous costing exercises can be a very useful basis for business planning (including investment) decisions • Can provide information required for 'make' or 'buy' decision making – whether to do specific activities in-house or outsource them • If senior management support costing, the attitude starts to percolate down resulting in greater cost consciousness within the organisation
Slide 9: 2 Minutes	
Product Costing Methodologies Allocation Based Costing Allocation Based Costing is a method whereby each line of the profit and loss account is allocated to different financial products on the basis of a logical criteria called an Allocation Basis	• Ask participants to provide a definition. • The slide is animated for that purpose and the definition will appear only after a further click of the mouse

Slide Number and Time	Notes
Slide 10: 2 Minutes	
	The facilitator needs to explain the following • Under allocation based costing, costs are allocated to products according to logical criteria called allocation bases. • In this example, staff costs are allocated to loan products on the basis of the amount of time staff spend on the different products. • Non staff costs don't vary in proportion to time, in this case it was decided that non staff costs varied more in line with the size of the product. This means that larger products absorb a higher proportion of non staff costs. • The key issue here is the identification of the appropriate base for allocating the cost. The allocation base in the above example is "portfolio volume".
Slide 11: 2 Minutes	
Product Costing Methodologies Activity Based Costing Activity Based Costing traces costs through significant processes to products. Product delivery comprises a number of separate processes, for example, loan application processing, loan disbursement, and loan monitoring and loan recovery **Read More…**	• Ask participants to provide a definition. • The slide is animated for that purpose and the definition will appear only after a further click of the mouse
Slide 12: 2 Minutes	
 **Read More…**	In this diagram: • Staff time is used to drive costs to products, wherever possible. • Time is recorded against key processes… such as loan issuing, loan monitoring, loan repayment etc. • Costs are then allocated to key processes in proportion to this time spent. • Where costs are difficult to relate to a core process… they are placed in a category called "Sustaining Activities". • Costs from core processes are then allocated to individual products on the basis of logical criteria. For example… if the process was loan issuing… the criteria might be the number of loan applications. • The remaining "Sustaining Activities" are then separately allocated to products in the same way as under allocation based costing.

Slide Number and Time	Notes
Slide 13: 4 Minutes	
Advantages and Disadvantages of Using Allocation Based Costing and ABC **Allocation Based Costing** • Fewer steps • Simpler, less expensive • Consistent with P&L a/c • Uses less data • Starting point for additional investigation • Incorporates features of Activity • Based costing at branch level. **Activity Based Costing** • More expensive and detailed • Traces costs in cause and effect relationship • Allows management to focus on where to reduce costs • More precise and accurate Handout 2.1 **Read More…**	• The facilitator could ask the participants to provide responses on what they see as the possible advantages and disadvantages of using allocation based costing and Activity Based Costing • **The slide is animated for that purpose.** • The co-facilitator could use a flip chart to write participant responses for comparison with the slide. This matching of participant responses with those in the slide should serve to highlight crucial points that may have been missed out • Draw participants who have had previous costing experience into this discussion • The facilitator can click **Handout 2.1** to show the participants that they can refer to it to have an **overview of advantages/disadvantages of different costing methods**.
Slide 14: 5 Minutes	
Allocation Based Costing Verses ABC  Question What are the similarities and differences between Allocation Based Costing and ABC	• Ask participants to provide responses on what are the similarities /differences between allocation based costing and Activity Based Costing • This way the facilitator can check whether participant have broadly understood the two approaches • The co-facilitator could use a flip chart to write down the responses of participants. • Draw on the knowledge of experienced participants after giving other participants an opportunity to speak.
Slide 15: 4 Minutes	
So Which Method Should We Use? We advise MFI's to use allocation based costing first – its simpler, can be learned quickly and is easy to modify Use process mapping to analyse specific processes in detail After two or three product costing exercises using Allocation Based Costing consider introducing ABC Remember: Take Action – doing nothing is not an option! Handout 2.2 **Read More…**	• The facilitator can click **Handout 2.2** to show the participants the appropriate handout. Close the document to return to the presentation.

FAQs for Facilitator

Q: Why allocate costs?

- The allocation of costs to products is in response to an important business principle: that a business (generally) exists to maximise profits, through the sale of its products, and that all costs within the business must relate to that objective, and therefore to a product or to products.
- Consequently, however indirect a cost may be and however seemingly unrelated to a product, it must be possible to allocate it to a product or products. This basic principle is equally applicable to MFIs, even though their objective may not be to maximise profit, but merely to achieve financial sustainability.
- The exercise of costing financial services, or more precisely re-analysing the Income and Expenditure Statement by product, will necessarily involve allocating the costs of indirect, or support functions, to those services. Some common reasons given by managers for carrying out this type of cost allocation exercise are to:
  1. remind profit centre managers that indirect costs exist and that profit centre earnings must be adequate to cover some share of those costs
  2. encourage the use of central services that would otherwise be under-utilised
  3. stimulate profit centre managers to put pressure on central managers to control service costs
  4. use it as a basis for staff compensation (for example when product managers/field staff salaries are linked to product profitability).
- Thus, in view of increasing professionalism of MFIs and the competition in the MFI market place, it is essential that MFIs carefully analyse exactly how much each part of their operations costs, so that they can make informed management decisions concerning them. Such decisions will include the following:
  1. How to cut costs and raise income?
  2. The appraisal of business performance by product and where necessary modify the pricing of existing products?
  3. Whether to accept and implement new products (as part of the product development process)?
  4. How to price new products (as part of the product development process)?

Q: What are the advantages of Costing Products?

- Determines the full-costs of delivering products.
- Determines the profitability/contribution of the products (including over time).
- Assists making informed decisions about selection of products (including cost/benefit analysis).
- Promotes a high quality MIS.
- Facilitates development of cost/profit centres.
- Reveals hidden-costs (especially at the departmental level).
- Instils cost-consciousness amongst product/service department managers – enhances productivity.
- Facilitates the pricing of current/future products.
- Provides basis for business planning and investment decisions (e.g. which product to market etc.).
- Can be used as a basis for variance analysis (budget v. actual comparisons etc.).

Q: What are the outputs of the cost allocation exercise?

- The cost allocation exercise can produce at least two, different, financial analyses of the Income and Expenditure Statement, showing the split between the products offered by the MFI. The financial information can then be combined with other, more qualitative information and non-financial data to assist management in evaluating their operations. The two analyses are:
  1. **Total Cost Allocation** – where all costs both direct and indirect are allocated across the products and the net profit/loss of each product is shown.
  2. **Marginal Cost Allocation** – where one product or more products are treated as the main/core business activity and all other products as a secondary activity. Under this approach only additional/incremental costs are allocated to the other products, i.e. those costs that could be avoided if the secondary (or "marginal") products were discontinued.
- It is very important to realise, from the outset, that this exercise will not provide precise figures. A lot of assumptions and judgements will be made and the final figures will, to an extent, be subjective.
- The financial reports produced will therefore be indicative of the real situation, and if the same process is applied periodically and consistently, it will be possible to make very meaningful comparisons over time. Indeed several of ***MicroSave***'s partner MFIs are now using this costing system as part of their monthly management reporting routines.

Q: What kind of benefits can cost allocation yield to an MFI?

The kind of benefits that cost allocation can provide to an MFI is evident from the impact at Equity Building Society. Within 3 months of Equity's first costing the following benefits were reported

1. Increased use of data. Monitoring activity rates by teller and by branch led to reallocating staff.
2. Greater standardisation in accounting for costs.
3. Improved staff appraisal systems.
4. Adjusted pricing – reduced interest paid on fixed deposits.
5. Changed fee structures on salary accounts.
6. Adjusted the chart of accounts to reflect direct income and costs on a product by product basis.
7. Attributed an increased range of direct costs to branches.
8. Improved management perception of cost control.
9. Re-working of some allocation bases through subsequent costing exercises.
10. Demonstration of the fact that steps to improve efficiency and higher volumes of business had significantly increased the profitability of savings products.
11. Demonstration of the fact that failure to fully re-price Fixed Deposits led to continuing losses on the product.
12. Availability of basic costing information for new innovations such as mobile banking.
13. Detailed costing of Equity's mobile banking demonstrated the need to develop a strategy for the mobile banks considering:
    - The financial significance of charging a specific mobile banking fee.
    - The importance of fully utilising fixed assets.
    - The need to operate more mobile units around existing branches to maximise portfolio and generate additional income.
    - The significance of the tea payments in the success of the mobile banking model.

Q: How long will it take for an institution to realise the benefits of cost allocation?

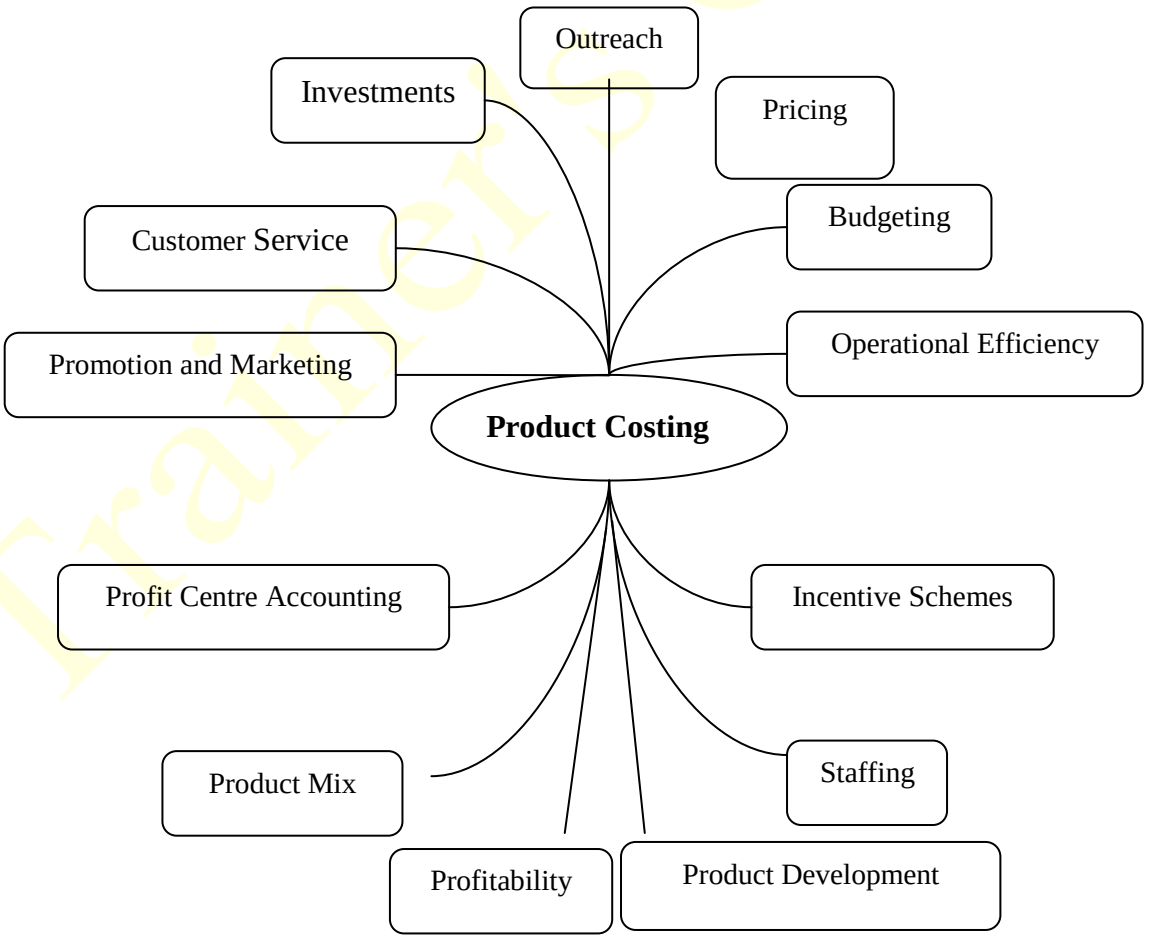
- At Equity Building Society, many of the aforementioned benefits were evident by 3 months.

- For benefits to accrue, the key is to take action and institutions that have responded to the results of the cost allocation exercise have indeed started reaping benefits, often, as early as 3 months.

Q: What is the strategic context of product costing?

- For all of the stated benefits the significance of product costing is only apparent when you consider the strategic context within which product costing is considered. Figure below and box next page indicate the range of strategic issues that knowledge of product costs and profitability can influence.

Figure: The Strategic Context of Product Costing (Cracknell and Sempangi 2002)



The Strategic Context of Product Costing	
Element (s)	**Relationship to Product Costing and Pricing**
Budgeting	Once product costing has been completed the next logical step is to create budgets for individual products, and to set targets and expectations – measuring, for example, the impact of allocating increased resources to marketing on the profitability of the product.
Operational Efficiency	Particularly in the case of ABC, the financial institution has the ability to increase their operational efficiency through the close examination of the product processes, in the case of Allocation Based Costing this entails an additional step of process auditing a particular product or routine/system to deliver that product.
Customer Service	An improved understanding of products and processes is a significant step to improving customer service, especially when combined with ***MicroSave's*** **"**Market Research for MicroFinance" tools.
Pricing	Product costing enables you to directly relate the pricing of a product with the costs of providing the product, ABC goes a stage further and allows institutions to set charges of particular services according to the costs of an individual process. See ***MicroSave****'s* "Pricing of Financial Services" toolkit.
Profit Centre Accounting	Using allocation based costing it is a simple matter to extend the costing analysis to allocate costs to profit centres, understanding the profitability of certain locations or functions enables strategic decisions to be made.
Product Mix	Once the profitability of individual products has been determined, the institution can work to promote its profitable products and either remodel or improve the efficiency of delivery of its less profitable products.
Promotion and Marketing	Promotion and marketing is strategically tied to developing the institutions ideal product mix. See ***MicroSave****'s* **"**Marketing for MFIs" toolkit.
Investments	Under ***MicroSave****'s* Allocation Based Costing – the efficiency of the investment process was examined in two Action Research Partners as part of product costing.
Staffing Levels and Allocation	Examining staff allocation against activity levels reveals considerable differences in performance in different locations and offers considerable opportunities for saving costs.
Design and Implementation of Incentive Schemes	Having a better picture of optimal performance, and having the tools to measure this performance, enables the design and implementation of more appropriate staff incentive schemes. See ***MicroSave***'s "Staff Incentive Systems" toolkit.
Outreach	Having efficient processes, high investment efficiency, the correct product mix, the optimal allocation of staff, can increase outreach depending on the objective of the product.
Profitability	Product costing can lead to increased efficiency, improved staffing levels and allocation, rationalise product pricing, target promotion to profitable products, and improve the design of staff incentive schemes, it should reflect in the profitability of the institution.
Product Development	Costing and pricing of financial services is an important part of the product development cycle. ***MicroSave*** sees the product development cycle in four distinct phases and in all these phases, costing and pricing issues have strategic importance: **1. Research to identify needs and opportunities** **2. Design and pilot testing** **3. Monitoring and evaluation of the pilot test** **4. Revision and scaled-up implementation** Please refer to Box next page for a more information on this aspect

Product Development: Where Costing/Pricing Fits In

From Wright, Graham A.N. "Beyond Basic Credit and Savings: Developing New Financial Service Products for the Poor"

Costing and pricing of financial services is an important part of the product development cycle. ***MicroSave*** sees the product development cycle in four distinct phases:

1. Research to identify needs and opportunities

This includes a review of the competition and products offered by both the formal and informal sectors, conducting market research as an integral and on-going part of staff's interactions with the clients, and through contacting other market leaders in the MicroFinance industry.

2. Design and pilot testing

This includes the detailed design, *costing and pricing of existing and new products*, prior to their initial implementation on a pilot-test basis.

3. Monitoring and evaluation of the pilot test

This includes monitoring the financial and organisational consequences of the new product (including *revisiting the costing and pricing of existing and new products*) and conducting market research among the clients to review how the product was perceived and used.

4. **Revision and scaled-up implementation**

Once these analyses have been completed, the MFI can make the necessary amendments to the product, its pricing, delivery, marketing etc. before going for scaled-up implementation.

Box: Product Development where Costing/Pricing Fits In.

Q: What are direct and indirect costs?

- **Direct costs** are those costs incurred specifically as a result of providing a specific service or product. Direct costs can be fixed or variable. These are the most easy to allocate to products. Examples include: interest payable on savings generated by each savings product, advertising/promotional materials developed for individual products, vehicle use attributable to each product, loan losses associated with each loan product etc.
- **Indirect costs** are those costs that do not relate directly to a specific service or product but are necessary to run the organisation as a whole. Examples include overheads such as rental of premises (head office and branch), utilities, central management costs, legal, audit and consultant fees etc.

Q: What are fixed and variable costs?

- **Fixed costs** are those costs incurred that (in the short-run at least) do not vary with the number of transactions or products. Examples include rental of premises (head office and branch), depreciation on existing fixed assets, most staff salaries (but not commission-based ones)/training etc.
- **Variable costs** are those that are incurred with each transaction for each product. Examples include staff time and stationery used to make each transaction etc.

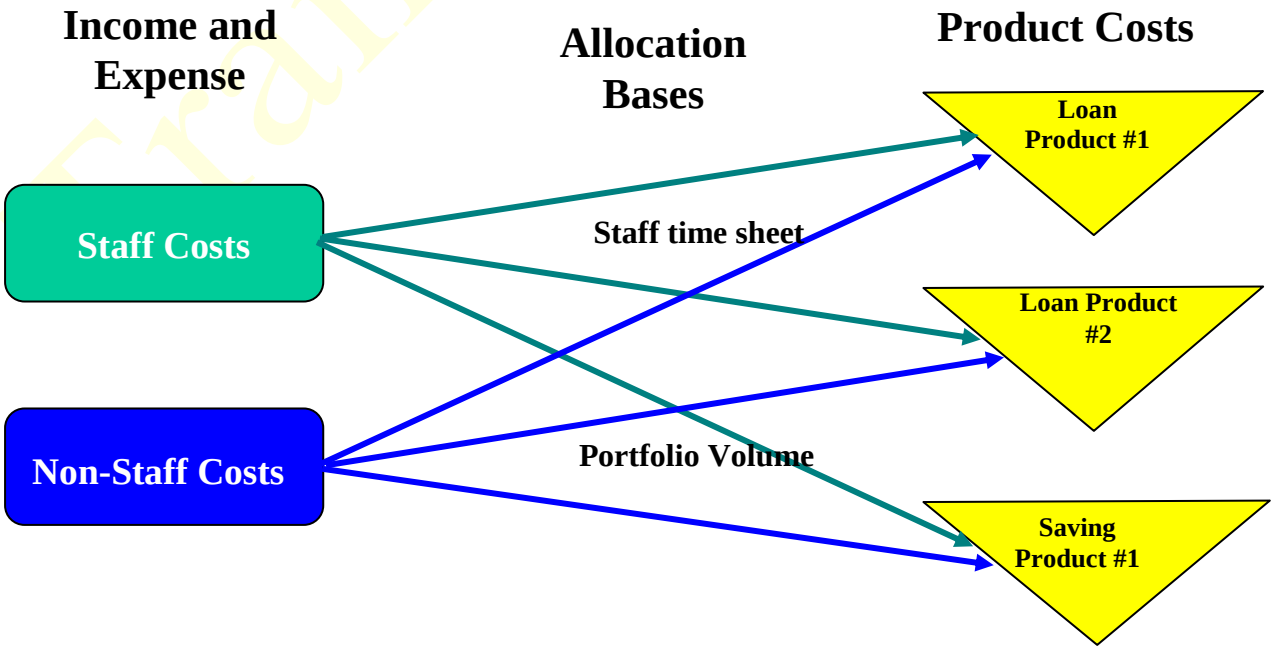
Q: What are the different product costing methodologies?

- There are two product-costing methodologies, Allocation Based Costing and Activity Based Costing (ABC).
- Allocation Based Costing is a method whereby each line of the profit and loss account is allocated to different financial products on the basis of a logical criteria called an Allocation Basis.
- Activity Based Costing traces costs through significant processes to products. Product delivery comprises a number of separate processes, for example, loan application processing, loan disbursement, and loan monitoring and loan recovery.

Q: What is allocation based costing?

- Allocation Based Costing is a method whereby each line of the profit and loss account is allocated to different financial products on the basis of a logical criteria called an Allocation Basis.
- As shown in Figure below, staff costs are passed on to Loan Product 1, Loan Product 2 and the savings product using the allocation based time taken and non-staff costs are allocated using the allocation base of the relative volume of each product.

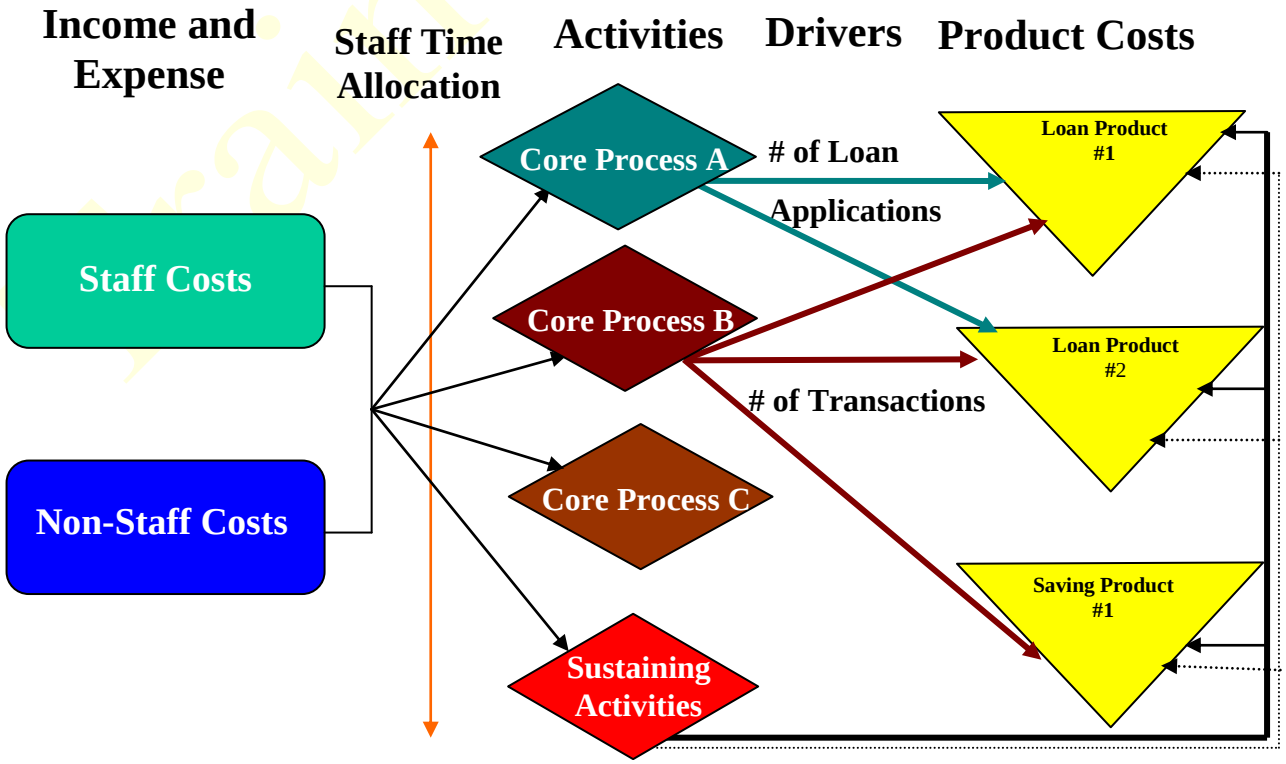
Allocation Based Costing



Q: What is activity based costing?

- Activity Based Costing traces costs through significant processes to products. Product delivery comprises a number of separate processes, for example, loan application processing, loan disbursement, and loan monitoring and loan recovery.
- Following the figure below, staff costs and non-staff costs are allocated to core processes upon the basis of staff time spent. Where members of staff do not directly spend time on core processes but rather provide support functions this time is booked to a general category called "sustaining activities". In most cases a significant proportion of head office costs come under this category.
- Once a cost for a particular core process has been determined based on staff time, these costs are then driven through to the products on the basis of a logical cost driver. To take a simple example, once you have determined the cost for processing a loan application – the logical cost driver would be the number of loan applications. Each product then absorbs costs for processing loan applications in proportion to the number of loan applications made by each loan product. Different processes will have different cost drivers.
- However, sustaining activities cannot be driven directly to particular products. The costs of sustaining activities need to be allocated to the different loan and savings products using allocation based costing techniques described in the toolkit.

Activity Based Costing



Q: What are the key steps in activity based costing?

STEP 1 Plan for the costing exercise.

STEP 2 Identify products for costing.

STEP 3 Ascertain core processes and activities - identify sustaining activities. An Activities Register or Dictionary is created that summarises activities taking up staff time. These activities are categorised into core processes.

STEP 4 Conduct staff time estimates for each activity, through timesheets, interviews and observation of processes and activities.

STEP 5 Calculate costs per activity – costs are allocated to activities using staff times.

STEP 6 Assign cost drivers and determine unit activity costs – a cost driver is a logical criterion that is used to allocate an activity cost to individual products, for example number of loan applications.

STEP 7 Drive activity costs to products – the unit cost per activity is multiplied by the cost driver volume per product, for example the cost of processing a loan application for a particular product is number of loan applications multiplied by the unit cost of making a loan application.

STEP 8 Allocate sustaining activity costs to product – these costs are directly allocated to products using allocation based costing.

Read more…

Q: Which are the advantages and disadvantages of allocation and activity based costing?

Table below outlines the Advantages and Disadvantages in using different costing methods.

Advantages and Disadvantages of
Allocation Based Costing Verses Activity Based Costing

	Allocation Based Costing	Activity Based Costing
Pros	• Fewer steps • Quicker, simpler and less expensive • Consistent with income statement • Can be powerful when used to target additional investigations	• Traces (rather than allocates) costs in a cause and effect relationship • Allows management to understand how and why costs are incurred • Focus on activities that are meaningful to staff and management • Identifies drivers of costs and the circumstances or requirements that cause an activity to take longer • Allows management to focus on where to reduce costs through reviewing the key points and expensive activities • Helps management better understand business process
Cons	• Relies on subjective input • Simplistically allocates costs • Volume-related allocation bases fail to account for product diversity and over burden "large" products	• Incorporates an additional step of allocating costs to activities • Is more complex, time consuming and expensive to implement • Relies on subjective input

Source: Helms and Grace 2002

Q: What circumstances favour the adoption of allocation or activity based product costing?

- Simply considering the pros and cons of a particular costing method fails to adequately recognize that the institutional environment is also critical in making a decision about which costing method to adopt.
- Table below presents circumstances, in which one or other method may be preferable.
- Of course the overall institutional environment is a web of different circumstances, some of which may indicate a preference for Allocation based costing, whilst others indicate a preference for ABC.

Circumstances favouring adoption of either Allocation or Activity Based Product Costing

Circumstance	Allocation Based Costing	Activity Based Costing
Management Information Systems	Requires moderate to strong information systems	Requires strong information systems.
Administrative burden	Moderate, some staff timings may be required but generally fewer than under ABC.	Higher burden due to the requirement to timesheet activities and validate them..
Staff capabilities	Appropriate where staff capabilities are limited.	Appropriate where there are a number of capable staff. Its also important to train several members of staff in ABC to ensure that institutional knowledge of the ABC process remains on departure of staff.
Experience	Possibly more appropriate where there is no prior experience of costing	Probably more appropriate when there is already institutional experience in costing.
Where Head Office Costs are a high percentage of total costs	A significant portion of these costs are likely to be considered sustaining overheads, and will therefore be directly allocated.	
Single product institution	Not appropriate	Particularly appropriate when there is one dominant process to understand.
Outputs	Provides a quick overview and enables some "quick wins"	Provides a detailed picture of core processes and activities.
Requirement for training	Less	More
Requirement for technical assistance	Less	More
Need for additional investigation	Targeted investigations required, often into the processes within loss making products	Less direct investigation required, due to the extensive investigation required to complete the ABC process

Source: Cracknell and Sempangi 2002

Q: So, which method of costing to use, when and why?

- Choosing between Allocation and ABC is not an automatic choice, whilst allocation based costing is simpler and easier to implement, ABC is technically superior and provides a wealth of process-based information that allocation based costing does not.
- ***MicroSave*** does not see a conflict between using Allocation Based Costing or ABC. Allocation Based Costing is a quick and relatively simple introduction to costing, which derives a range of benefits. ABC is a more in-depth approach, which examines core processes, but it requires greater time, skills, and institutional commitment. It is entirely possible for an institution, to start with Allocation based costing and graduate to ABC.
- Both allocation based costing and Activity Based Costing (ABC), each have advantages and disadvantages, as outlined earlier.
- Allocation Based Costing is a method whereby each line of the profit and loss account is allocated to different financial products on the basis of a logical criteria called an Allocation Base. More details of Allocation based costing can be found in *MicroSave's* Costing and Pricing of Financial Services Toolkit.
- ABC traces costs through significant processes to products. Product delivery comprises a number of separate processes, for example, loan application processing, loan disbursement, and loan monitoring and loan recovery. Staff costs and non-staff costs are allocated to core processes upon the basis of staff time spent. Where members of staff do not directly spend time on core processes but rather provide support functions this time is booked to a general category called "sustaining activities".
- Once a cost for a particular core process has been determined based on staff time, costs are then driven through to products on the basis of a logical cost driver. For example, once you have determined the cost for processing a loan application – the cost driver would be the number of loan applications. Each product then absorbs costs for processing loan applications in proportion to the number of loan applications made by each loan product. Different processes will have different cost drivers.
- Sustaining activities cannot be driven directly to particular products. The costs of sustaining activities need to be allocated to the different loan and savings products using allocation based costing techniques. More details about ABC can be found in CGAP's Product Costing Tool.
- Although, ABC allows a microfinance provider to assess the cost of key processes, which Allocation based costing cannot, the choice of which method to introduce should also be considered in relation to institutional capability and range of other institutional factors. Introducing product costing, especially ABC, which is technically more demanding, requires most institutions to have access to training and technical support, which in some places is in very limited supply and expensive.

Q: How long does it typically take to complete a typical allocation based costing exercise?

- ***MicroSave,*** which has worked with fifteen East African MFIs, as well as BURO, Tangail in Bangladesh to introduce product-costing systems, has a good indication of the process and time required to implement an allocation based costing system.
- Table below provides indicative timings for producing an allocation based costing system, both in respect of the establishing the product costing system for the first time and in performing a repeat costing. In the case of very large, or bureaucratic organizations, the time taken may be significantly longer.

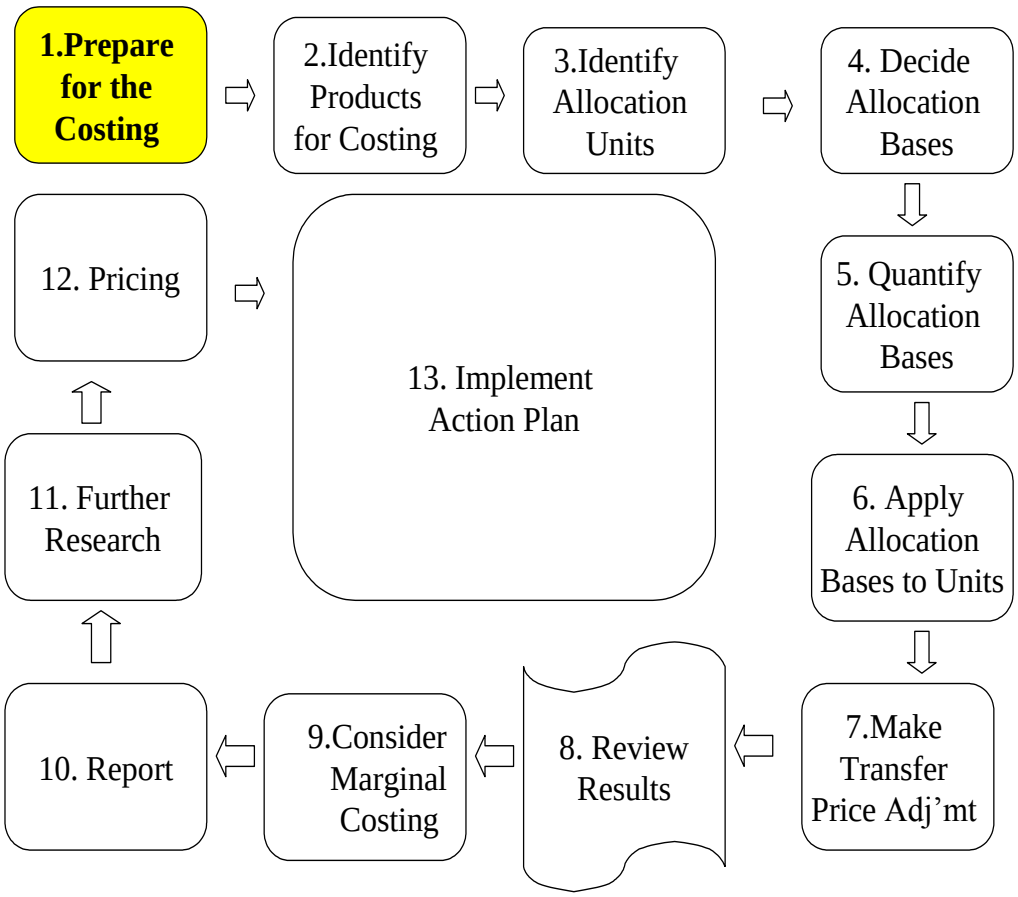
Step	Action	Indicative Time for first costing•	Indicative time for Repeat Costing	Responsibility for first costing
1	Brief the Management of the Action Research Partner on the product costing process	2 hours	Not required	***MicroSave***
2	Choose a costing team leader and assemble the team		As before	ARP
3	Choosing representative branch site			ARP
4	Ensure relevant background information is being gathered	Over the course of one week	Data collection exercise built into normal reporting cycle.	ARP
5	Train / Expose the product costing team to Allocation and / or ABC normally in a workshop environment	1 day	Not required	***MicroSave*** and ARP
6	Train the product costing team in direct observation, to enable the collection of data on front and back office timings – and collect data	1-2 days	1 day (validation)	***MicroSave*** and ARP
7	Complete time sheets for allocation based costing (where necessary)	3-5 days	1 day (Validation if necessary)	***MicroSave*** input into drawing up timesheets
8	Work with the product costing team to allocate costs and summarize results	2-4 days	1-2 days, as costing spreadsheets already created.	***MicroSave*** and ARP
9	Document the process and analyse results	1-2 days	4 hours – less extensive analysis required	ARP reviewed by ***MicroSave***
10	Prepare a report for Senior Management, highlighting the assumptions taken, the bases of allocations made, the key results and suggestions for follow up.	1 day	4 hours – as it is possible to build on earlier reports.	ARP
11	Make a presentation to Senior Management; draw up list of Action Points, noting areas in which the costing process can be improved and strengthened.	2 hours	2 hours	ARP Costing Team with ***MicroSave***
12	Perform follow up activities	As required	As required	ARP
13	After 3-6 months re-perform costing exercise			ARP
14	Consider making changes to your accounting and budgeting system to enable most of the Product Costing to be produced automatically		This will significantly reduce the time taken for data processing	ARP

Source: ***from Cracknell and Sempangi 2002***

• Timings are indicative and are based on the elapsed time for a relatively competent, average sized MFI. However, there has not been sufficient experience in introducing ABC within MFIs for us to create representative timings for ABC. Most ARPs have required support from ***MicroSave*** on the first round of costing, and when there are staff changes, but have been able to handle subsequent costing exercises by themselves.

Q: What are the typical stages in an allocation based costing exercise?

The key stages in an allocation based costing exercise are given in the diagram below



Session Three

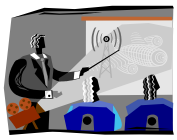
Preparing for Costing

Session Objectives:

- To assist participants to fully prepare for product costing
- To compose a product costing team
- To begin to prepare a presentation for management to brief them on the product costing

Time: 

35 Minutes

Methods: 

➔ Presentation
➔ Questions and Answer Exercises

Materials: 

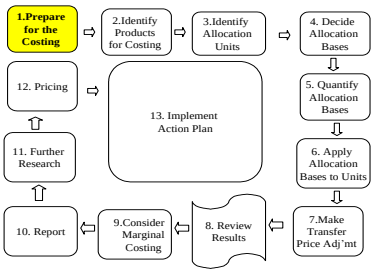
Slide Show:

☑ **PowerPoint Presentation** entitled **"Session Three"**
☑ This session consists of approximately **12 slides** (Slide numbers 1-12 in respective PPT file)

Handouts:

- *Handout 3.1* **Preparing for Costing**
- *Handout 3.2* ***MicroSave*'s Approach to Allocation Based Costing**

Session Plan – Slide Notes for Facilitator

Slide Number and Time	Notes
Slide 1: 2 Minutes	
Session 3: Preparing for Costing Session Objectives To assist participants to fully prepare for product costing To compose a product costing team To begin to prepare a presentation for management to brief them on the product costing	• Talk through the session objectives and mention the focus is on helping participants prepare for their product costing exercise ensuring • Selection of the most appropriate product costing team • Preparation of a presentation for participants to provide to management on why product costing needs to be undertaken and what are the potential benefits for the organization?
Slide 2: 1 Minute	
Prepare the Costing  	• Using this diagram briefly explain the broad steps for undertaking a cost allocation exercise. • This gives the participants a sense of direction.
Slide 3: 3 Minutes	
Preparing for Costing Brief senior management … during this workshop you will prepare a presentation to management on product costing Select a costing team Who should be in the costing team?	• While selecting the costing team, the facilitator should emphasize the fact that the participants should think of **"names" of people** who could actually be on the costing team • This would require the participants to look through several issues of whether the potential team members have the time, capacity/skills, objectivity, understanding of the context and relevant managerial position to serve on the costing team. • The additionality of having a specific member in the costing team should be carefully examined, weighed and evaluated before deciding on its composition.

Slide Number and Time	Notes
Slide 4: 4 Minutes	
Preparing for Costing Allocate resources to the costing team What resources should we devote to the costing exercise Take Key Decisions What allocation units and bases should we use What additional investigation is required Choose the representative branch site Gather information	• Resources would have to be thought in terms of finances, human and all other resources (computers, vehicles etc) required to undertake the exercise in a successful manner • Representative branches in terms of years of operation, size, client outreach and product mix etc must be chosen • New and nascent branches / products are perhaps better avoided
Slide 5: 2.5 Minutes	
Typical Information Required Organisational chart Chart of Accounts Trial Balance Transactions volumes by product by month Balances by product by month Payroll: broken down by product where possible Details of any agency agreements Key transaction timings Handout 3.1: Preparing for Costing **Read more…**	• Stress that having required information is the key to completing the costing exercise efficiently and effectively • Facilitator should, as outlined in Handout 3.1, emphasize that two types of information are required: • **Essential Information** such as details of the products and where they are being offered, detailed trial balance, chart of accounts – total/branch, staff grades, with title, location, salary and benefits, detail of investments held and investment income (period/month end), savings product balances (period/month end), transaction based information, transaction time information etc • **Background information** like detailed organization chart, list of managerial staff showing name and designation, details of any previous costing exercise, departmental structure, details of any agency agreements, details of any notional charges and transfer payments, treasury analysis and the like • Information about staff salaries is very sensitive and should normally be handled by the team leader alone. • Emphasise that obtaining information is not always easy, in particular the number of transactions volumes by product by month. Use examples where possible to demonstrate this point.

Slide Number and Time	Notes
Slide 6: 2.5 Minutes	
Typical Information Required Sometimes Breakdown of company vehicles Space allocated to different products Teller positions allocated to different products Handout 3.1: Preparing for Costing **Read more…**	• Stress that having required information is the key to completing the costing exercise efficiently and effectively • Facilitator should, as outlined in Handout 3.1, emphasize that two types of information are required: • **Essential Information** such as details of the products and where they are being offered, detailed trial balance, chart of accounts – total/branch, staff grades, with title, location, salary and benefits, detail of investments held and investment income (period/month end), savings product balances (period/month end), transaction based information, transaction time information etc • **Background information** like detailed organization chart, list of managerial staff showing name and designation, details of any previous costing exercise, departmental structure, details of any agency agreements, details of any notional charges and transfer payments, treasury analysis and the like • Information about staff salaries is very sensitive and should normally be handled by the team leader alone. • Emphasise that obtaining information is not always easy, in particular the number of transactions volumes by product by month. Use examples where possible to demonstrate this point.
Slide 7: 5 Minutes	
Key Question  Given the list of information required for a product costing: Is there any information which you feel will be difficult or time consuming to obtain? Handout 3.1: Preparing for Costing **Read more…**	• This is an exercise slide. Give a maximum of 5 minutes for participants to debate ***within their institutional groups*** on what specific information may be difficult to obtain • Talk through difficulties in plenary, as this will give participants a better idea of the problems that they may face.

Slide Number and Time	Notes
Slide 8: 3 Minutes	
Composing the Costing Team Costing is a team effort, though the costing team needs to be a controllable size 3-5 people Costing requires Agreement of senior management on allocation bases Knowledge of the institutions financial statements Detailed information from your MIS An understanding of the factors which drive operational costs Basic technical proficiency in costing, spreadsheets	• Composition of the costing team is a crucial issue and can determine the degree of success achieved in the costing exercise • Individuals with the skills, capacity, time, objectivity, understanding of the context and relevant managerial position are the ones that need to be chosen • Ensure any appropriate interest groups are represented in the costing team to ensure access to information and acceptance of the results
Slide 9: 3 Minutes	
How Much Time? How much time should a product costing exercise take? The initial allocation based costing exercise can take a relatively short amount of time (normally completed in five days with a 3 person costing team) in an organisation with Good information systems A simple chart of accounts Capable staff Handout 3.2 **Read More…**	• Highlight ***MicroSave's*** practical experience with regard to timelines for costing as per Handout 3.2 • Allocation based costing – shorter time span and lesser effort • Activity based costing – longer time span and greater level of effort
Slide 10: 3 Minutes	
How Much Time? How much time should a product costing exercise take? An Activity Based Costing Exercise can take much, much longer in a relatively simple institution it can take 2-3 weeks from a five person costing team… and longer in a larger, more complex institution Handout 3.2 **Read More…**	• Many institutions have failed to implement Activity Based Costing immediately, because it involves significant institutional commitment. • It may be better to start with allocation based costing and then graduate through process mapping and finally into Activity Based Costing

Slide Number and Time	Notes
Slide 11: 2 Minutes	
Responsibilities of the Costing Team Ideally the team should include members from Senior Management: To ensure buy in to costing results Finance: For knowledge of institutional costs, and to understand unusual postings Operations: For knowledge of cost drivers Information Technology: For access to key details from the MIS system	• Ask participants what could happen if any of these departments are not represented on the costing team?
Slide 12: 4 Minutes	
Key Question  Given your organisation who should be involved in the product costing exercise and why? Will the people you have selected for the product costing have sufficient time to participate in product costing	• Give maximum of 4 minutes to participants to come up with specific names on who should be involved in the costing exercise in their own organizations. • As a reality check go around the groups and ensure that participants have specific names of people who could become members of their organizational costing team. Ask the groups if all their suggested team members would be able to take part in the product costing.

FAQs for Facilitator

Q: What kind of people to choose to be a part of the costing team?

Generally speaking, the right people are those who are:

1. Knowledgeable about the organization and its workings.
2. Objective in their orientation.
3. Provide cross-functional perspectives.
4. Interested in improving cost effectiveness.
5. Available and motivated to stay with the exercise until completion, and
   Influential enough to facilitate implementation of the agreed-upon changes

Q: What resources are typically required to successfully complete a costing exercise?

Generally speaking, the following resources would be required:

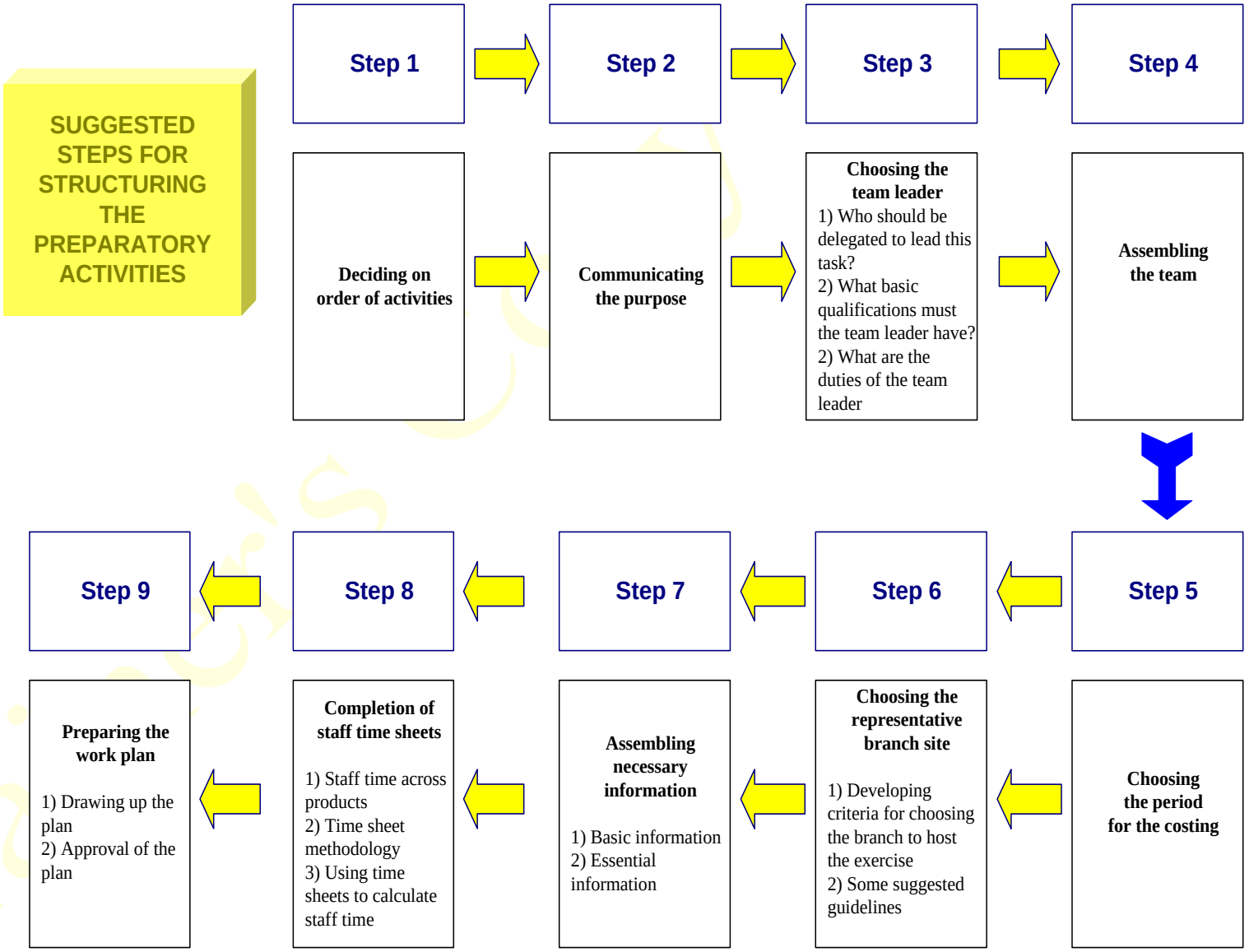
1. Human resources – people and their time and effort towards the costing exercise.
2. Physical resources – computers, vehicles, stationary, telephones and their use for specific purposes in the costing exercise, and
3. Financial resources – specific expenses to meet the needs of the costing exercise like travel and other logistic expenses.

Q: How to structure the preparatory activities?

Please refer to Diagram, next page and Table, below and next few pages:

STEP 1	**Deciding on order of activities**	This is the stage that prepares the ground for all subsequent activities of the cost allocation exercise. Before the exercise starts, there are certain activities that should be concluded so as to ensure the best use of time when the exercise actually begins. These are activities described below.

STEP 2	**Communicating the purpose**	It is important that the CEO/senior management take the time to explain and communicate the reasons for conducting a costing exercise to ensure that institutional inertia/resistance is minimised. Costing exercises should provide accurate information that promotes accountability, and comparison between products (branches, staff etc.). This information can be very threatening to some people. Staff must be reassured that this information is not being gathered to use against them, but rather to help empower them to make better management decisions.


SUGGESTED STEPS FOR STRUCTURING THE PREPARATORY ACTIVITIES
Step 1
Step 2
Step 3
Step 4
Deciding on order of activities
Communicating the purpose
Choosing the team leader
1) Who should be delegated to lead this task?
2) What basic qualifications must the team leader have?
2) What are the duties of the team leader
Assembling the team
Step 5
Step 6
Step 7
Step 8
Step 9
Choosing the period for the costing
Choosing the representative branch site
1) Developing criteria for choosing the branch to host the exercise
2) Some suggested guidelines
Assembling necessary information
1) Basic information
2) Essential information
Completion of staff time sheets
1) Staff time across products
2) Time sheet methodology
3) Using time sheets to calculate staff time
Preparing the work plan
1) Drawing up the plan
2) Approval of the plan

STEP 3	**Choosing the team leader**	Costing of an organisation's products is a vital function, which should be of great interest to top management. However this exercise requires a substantial amount of time and therefore it is probably best delegated by the CEO to another senior person in the organisation. It is essential that the CEO/Board of Directors be supportive of, and seen to be supportive of, the costing exercise … the results may well provide insights and information that are of surprise and result in controversy or the need to take difficult decisions.	
		Who should be delegated to lead this task?	Ideally the person delegated to lead the task should be a member of the senior management team. If it is not possible for the CEO to give the exercise full time attention, he/she should be available to the costing team on regular basis, preferably at least half a day a week.
		What basic qualifications must the team leader have?	The team leader should report to the CEO, be able to access anybody in the organisation and should be familiar with basic accounting procedures.
		What are the duties and responsibilities of the team leader?	The team leader's duties and responsibilities include the following: ➡ to be responsible for the day to day activities of the team ➡ to assign work to the other members of the team and supervise them effectively ➡ to prepare regular briefs for the CEO and seek his/her input as and when needed ➡ to prepare and present the final report about the exercise to the CEO and management team.

STEP 4	**Assembling the team**	The team leader will be responsible for initiating arrangements for the recruitment of the other members of the team. Ideally the team should not be too big since it will be reporting to the management team regularly, thereby keeping all key persons in the organisation up-to-date on progress. A team of 3 or 4 members including the team leader, would be adequate[2]. To ease the work of the team, the operations and accounts departments should be represented on it.

STEP 5	**Choosing the period**	The team will choose a period on which to base the exercise. All information to be used for the costing exercise will come from this period. Ideally the period should be representative and long enough to level out seasonal variations. A full year would be the most ideal. But in the event that there has been a long lapse of time since the latest annual figures are available, this ideal may have to be compromised and recent quarterly statements will have to suffice. In the event that a great deal of data has to be generated specifically for the costing exercise, the volume of work involved would make the exercise too long, and therefore a period of 3 to 6 months would suffice. The period should be as recent as possible, i.e. up to the last month for which management accounts are available.

[2] The amount of time and effort to be invested in the exercise will vary from institution to institution depending on the complexity/size of the institution and the way that it is management information systems have been set up. Small MFIs will probably only take a week to ten days to complete a comprehensive costing exercise, for larger ones this may extend to a month.

<table>
<tr><td>STEP 6</td><td>Choosing the representative branch site</td><td colspan="2">Since the exercise deals with real data, it is important to use maximum care in choosing the branch or branches whose operations will be the source of information for the exercise. If it were not for time and resource considerations all branches of the organisation would be included. Due to these constraints, only one branch will normally be selected to host the exercise. If the organisation has more than one distinct type of branch, then one of each type should be visited. The activity at these branches will be visited and reviewed to:
1) determine optimal allocation bases (through discussion with branch staff, examining the structure of the chart of accounts, review of branch records etc.) and then
2) quantify these allocation bases (i.e. determine the percentage to be allocated to each product) for each allocation unit (cost or income item);
3) request staff to complete timesheets to allow the team to use the staff time allocation basis where appropriate.
This sample branch(es) will be used to allocate branch-level income/costs to the individual products. Head Office income/costs will be allocated in a separate part of the exercise.
<u>Note:</u> Analysis of branch profitability in which Head Office costs are allocated to the MFI's branches may be conducted as a <u>separate</u> costing exercise. It is not generally desirable to try to allocate Head Office costs to the branches and then on to the products as this is extremely complex and likely to cause confusion.</td></tr>
<tr><td></td><td></td><td><u>Criteria for choosing the branch to host the exercise</u></td><td>Since the results of the exercise are replicated throughout the organisation, it is important that the branch(es) selected be as representative as possible in many respects – product mix, number of clients served, maturity/age of branch etc.. This is one of the ways of maximising the accuracy of the results.</td></tr>
<tr><td></td><td></td><td><u>Suggested guidelines for choosing branches</u></td><td>In keeping with this objective, it is suggested that as much as possible the following guidelines be followed in selecting the branch to host the cost allocation exercise:
• the branch should not be among the smallest in the organisation in terms of transactions handled;
• the branch should be equal or slightly bigger than the average branch in the organisation;
• the branch should preferably not be the HO branch;
• the branch should offer most, and ideally all the products of the organisation; and
• the branch should be reasonably "mature".</td></tr>
</table>

STEP 7	**Assembling necessary information**	Basic and essential information The basic information required for use in the exercise will include the following: • chart of accounts for the Income and Expenditure accounts; • detailed Income and Expenditure Statement for the period; • staff costs by employee grade; • organisation charts; • staff time per product (the estimated average time a member of staff spends processing a product during a given period – probably on the basis of timesheets see 3.8 below) for staff who deal directly with customers or product transactions, e.g. cashier, teller, branch manager (if this is to be used as an allocation basis – as it almost inevitably will be for salary etc. costs); • product balances (average of month-end balances for the period); • employee numbers by grade for each department; and • transaction statistics[3] (if this is to be used as an allocation basis)
STEP 8	**Completion of time sheets**	Staff time Staff time per product is a major input in this cost allocation exercise. Most organisations do not maintain data on product staff time. As mentioned already this data is used to distribute staff costs across an organisation's products. In most MFIs staff costs account for more than 50% of total costs. It is therefore necessary to distribute the expense across the organisation's products fairly accurately in order to come out with a credible costing result.
		Time sheets Time sheets are used to calculate staff time per product. Members of staff record the time spent processing a product or a unit of the product and for a chosen representative period (typically a week or a month) they account for all the time in the working day (including for example general administrative duties).
		Using time sheets to calculate staff time • Each member of staff is given a blank time sheet at the beginning of the period • On a daily basis each member of staff 'accounts' for the time he/she spends in the office by indicating in the time sheet how much time is spent on each activity that he/she gets involved with in the course of the day • At the end of the day totals are made of the staff time spent on each activity or product • At the end of the period totals are made and an average calculated for each product as a percentage of the total time available from the staff • This result (or the equivalent) constitutes the staff time per product.
STEP 9	**Preparing the work plan**	Drawing up the plan In order to achieve the best possible use of time, the team will identify all the major activities involved in the exercise, and for each activity: • Estimate the time needed for its completion and attach its corresponding time targets (the time by which the activity should have commenced and the time when it should have been completed). • Indicate the person or persons responsible for implementation Indicate the nature and quantity of resources required to accomplish the job
		Approval of the plan The team leader should discuss the work plan with, and obtain approval from the CEO. Thereafter the team should be guided by the work plan and endeavour to minimise avoidable deviations.

[3] In organisations where the software package in use is not able to capture transaction statistics automatically, arrangements should be made to compile daily transaction statistics covering the sample period well ahead of commencement of the exercise. Again, the data should ideally relate to the whole period selected. However, if the statistics are being compiled manually, a shorter sample period could suffice, say 2 weeks in the first selected month and 2 weeks in the last month.

Q: What background information is typically required in a costing exercise?

This background information, which should be readily available, is required in a costing exercise:

1. **Detailed Organization chart -** This shows lines of responsibility and organizational structure.
2. **List of managerial staff, showing name and designation -** We will be talking to managerial staff across the organization as part of the costing exercise so this schedule is important.
3. **Details of any previous costing exercise -** If a previous costing exercise has been carried out in your organization, please give details - this can make the introduction of a new costing system easier as part of the work we are likely to perform may have been done before.
4. **Departmental structure -** Where there is a departmental structure with costs accounted for at departmental level, the departmental structure should be given.
5. **Details of any agency agreements -** Details of any agency agreements with third parties that allow third parties to carry on transactions in your name.
6. **Details of any notional charges and transfer payments -** It is quite common for Banks a number of levy notional charges and transfer payments internally, these should be explained.
7. **Treasury analysis -** Where your organization has a Treasury function, information related to daily investment yields and balances invested can be important.

Q: What essential information is typically required in a costing exercise?

This essential information, which perhaps needs to be constructed, is required in a costing exercise:

1. **Details of the products and where they are being offered -** Brief details on each product being offered, listing the locations at which the product is being offered.
2. **Detailed Trial Balance -** This should be the trial balance for the period that you wish to cost – so 9 months to end of September for example.
3. **Chart of Accounts – total / branch -** The chart of accounts should be provided and where the chart of accounts is different at head office / branch level the two charts of accounts should be provided.
4. **Staff grades, title, location, salary and benefits -** This information should be made available as necessary in order to allocate salaries to products.
5. **Detail of investments held and investment income (period / month end) -** It is important for us to be able to look at the investment income generated from customer deposits in some detail in order to be able to attribute income back to the individual products.
6. **Savings product balances (period / month end) -** Combined with information on details of investments and investment income, having details of savings balances allows the allocation of investment income across products.
7. **Transaction based information -** Where possible the number of transactions (and in some costing exercises) the value of transactions needs to be ascertained for each product.
8. **Transaction time information -** Information detailing average time taken on particular types of transaction is important for allocation based costing and vital for Activity Based Costing. Where this information is available, it should be provided.

Q: How much time will an allocation based costing exercise require?

The indicative times for first and repeat costing across activities is given in Table below

Step	Action	Indicative Time for first costing•	Indicative time for Repeat Costing	Responsibility for first costing
1	Brief the Management of the Action Research Partner on the product costing process	2 hours	Not required	***MicroSave***
2	Choose a costing team leader and assemble the team		As before	ARP
3	Choosing representative branch site			ARP
4	Ensure relevant background information is being gathered	Over the course of one week	Data collection exercise built into normal reporting cycle.	ARP
5	Train / Expose the product costing team to Allocation and / or ABC normally in a workshop environment	1 day	Not required	***MicroSave*** and ARP
6	Train the product costing team in direct observation, to enable the collection of data on front and back office timings – and collect data	1-2 days	1 day (validation)	***MicroSave*** and ARP
7	Complete time sheets for allocation based costing (where necessary)	3-5 days	1 day (Validation if necessary)	***MicroSave*** input into drawing up timesheets
8	Work with the product costing team to allocate costs and summarize results	2-4 days	1-2 days, as costing spreadsheets already created.	***MicroSave*** and ARP
9	Document the process and analyse results	1-2 days	4 hours – less extensive analysis required	ARP reviewed by ***MicroSave***
10	Prepare a report for Senior Management, highlighting the assumptions taken, the bases of allocations made, the key results and suggestions for follow up.	1 day	4 hours – as it is possible to build on earlier reports.	ARP
11	Make a presentation to Senior Management; draw up list of Action Points, noting areas in which the costing process can be improved and strengthened.	2 hours	2 hours	ARP Costing Team with ***MicroSave***
12	Perform follow up activities	As required	As required	ARP
13	After 3-6 months re-perform costing exercise			ARP
14	Consider making changes to your accounting and budgeting system to enable most of the Product Costing to be produced automatically		This will significantly reduce the time taken for data processing	ARP

Source: ***from Cracknell and Sempangi 2002***

• Timings are indicative and are based on the elapsed time for a relatively competent, average sized MFI. However, there has not been sufficient experience in introducing ABC within MFIs for us to create representative timings for ABC. Most ARPs have required support from ***MicroSave*** on the first round of costing, and when there are staff changes but have been able to handle subsequent costing exercises by themselves.

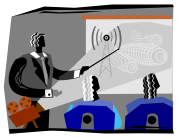
Session Four

Identify Products for Costing

Session Objectives:

- To assist participants to decide which products that they should cost

Time:  **15 Minutes**

Methods: 

➔ Presentation
➔ Question and Answer Exercises

Materials: 

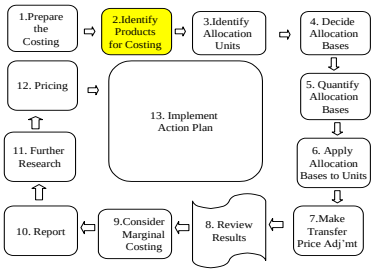
Slide Show:

☑ **PowerPoint Presentation** entitled **"Session Four"**
☑ This session consists of approximately 6 **slides** (Slide numbers 1 -6 in respective PPT file)

Handouts:

Handout 4.1 **What to do when there are a large number of products to cost?**

Session Plan – Slide Notes for Facilitator

Slide Number and Time	Notes
Slide 1: 1 Minute	
Session 4: Identify Products for Costing  	• Identify the session on the screen highlighted in yellow
Slide 2: 2 Minutes	
Session 4: Identify Products for Costing *Session Objective* To assist participants to decide which products that they should cost	This session guides participants as they decide • Which products to cost? • What to do when there are a large number of products? • What to do when there are new products?
Slide 3: 2 Minutes	
Identify Products for Costing Should we cost all products? Some products are too small to reliably cost Some products are too new to reliably cost Some products are "joint products" for example working capital loans and compulsory savings	• Mention that products that are being pilot tested and /or very nascent /small in terms of their market outreach could be excluded. • Likewise, "joint products" i.e. products that are actually conditions for accessing other products need not be costed separately, for example • Many MFIs place conditions on clients with regard to compulsory savings and link disbursement of loans to these savings. Compulsory savings are sub-product of the respective loan products • Similarly, insurance for assets like livestock etc are often a requirement for livestock loans.

Slide Number and Time	Notes
Slide 4: 3 Minutes	
What About New Products? A new product cannot be fully costed immediately - fully absorbing the costs will show a huge loss which won't reflect the underlying profitability of the product A new product should be fully costed when it has been pilot tested and it is moving to rollout, this is when the cost base has settled and it is gaining volume	• Products being pilot tested have not reached operating volume and so would report large losses which are not representative of the products long term profitability • New products, can at best, be expected to cover direct costs • For new products the appropriate mechanism is not full product costing but tracking direct income and direct cost against the detailed financial projections for the product.
Slide 5: 2 Minutes	
What About New Products? In the early stages of a product it can only be expected to cover its direct costs The approach to use is to compare costs against financial projections developed for the new product	• Products being pilot tested have not reached operating volume and so would report large losses which are not representative of the products long term profitability • New products, can at best, be expected to cover direct costs • For new products the appropriate mechanism is not full product costing but tracking direct income and direct cost against the detailed financial projections for the product.
Slide 6: 5 Minutes	
Key Question  What products will we cost in our institution? Are there any products that we will chose not to cost … why is this? Handout 4.1	Provide participants five minutes to ponder and then visit groups individually. Issues that can arise include: • **Large number of products to cost** • New/small products • Products in different currencies • Where there are many products consider • Whether products have similar features and can be grouped together • The materiality of the products, try to cost at least 80-90% of the total product portfolio • Give out Handout 4.1, which suggests strategies for costing, when there are a large number of products

FAQs for Facilitator

Q: What products are better excluded from the costing?

- Products which are being pilot tested and/or very nascent/small in terms of their market outreach could be excluded.
- Likewise, products that are actually conditions for accessing other products need not be costed separately – for example, many MFIs place conditions on clients with regard to compulsory, forced and/or mandatory savings and link disbursement of loans to these savings. Hence, in some ways, these savings products are sub-product of the respective loan products and hence, there would be no need to cost these savings products separately as they form a part of the conditions for accessing the loan in the first place.
- Similarly, insurance for assets like milch animals etc are often included as mandatory conditions without which the loan would itself not be released in the first place. Hence, these insurance products need not be costed separately.

Q: What is it better not to cost new products?

- A new product cannot be fully costed immediately - fully absorbing the costs will show a huge loss which won't reflect the underlying profitability of the product.
- A new product should be fully costed when it has been pilot tested and it is moving to rollout, this is when the cost base has settled and it is gaining volume.
- In the early stages of a product it can only be expected to cover its direct costs, and
- The better or preferred approach to use is to compare costs against financial projections developed for the new product.

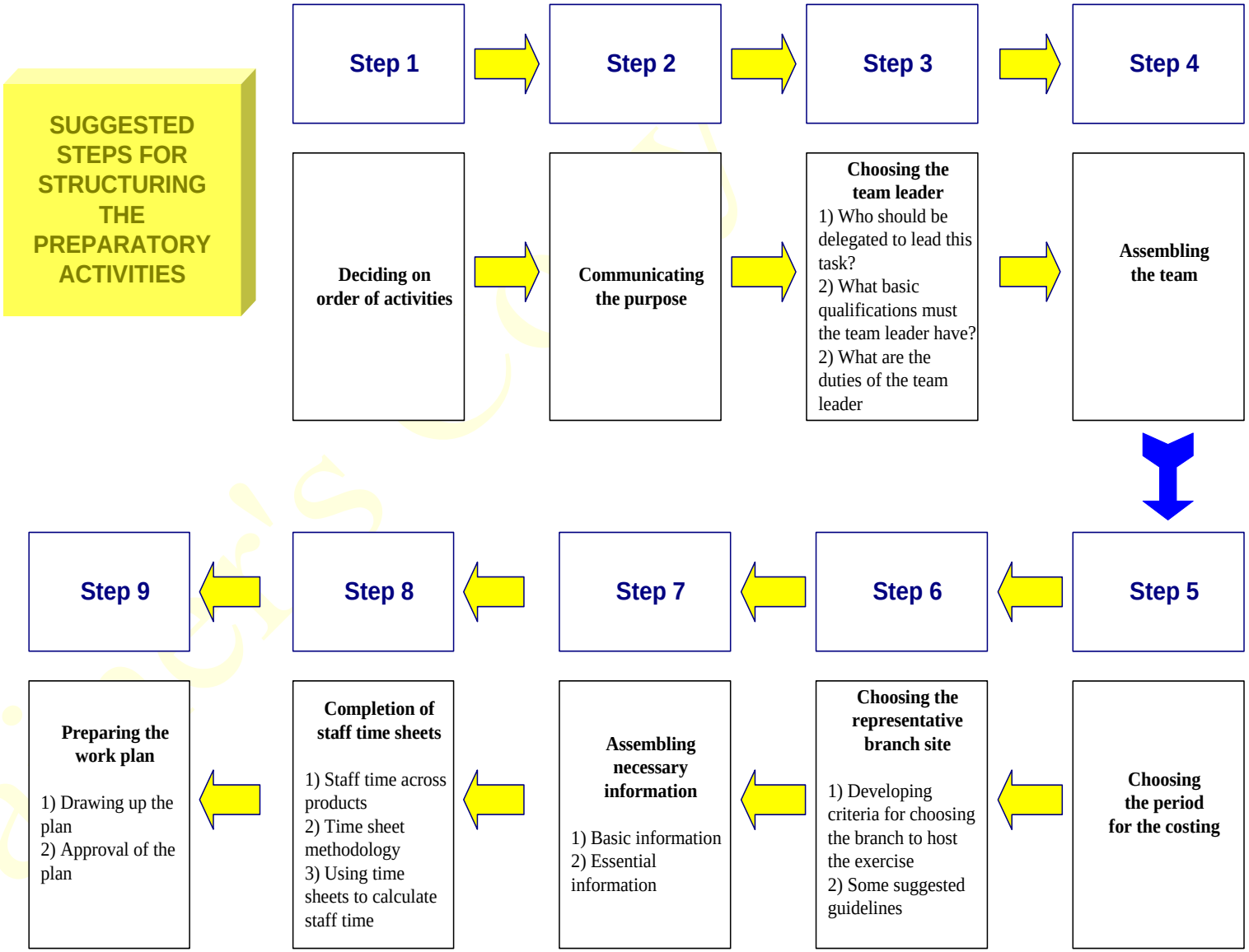
Q: How many products to cost?

1. While it depends on the strategic context, at best, costing more than 10 products could become a tedious exercise, and
2. However, the final products costed should comprise between 80-90% of the total product portfolio.

Q: What do we do when there are a large number of products to cost?

Please see table below and diagram given in the next page:

Steps	Description	Comments
Step 1	List all products that need to be costed.	This would include all products including savings, loans, insurance and other independent products
Step 2	Categorise them according to similar features and characteristics and describe common features.	Sometimes, the same product offered to another segment of the market and/or to clients in a different geographic area could be called by a different name and hence, appear as a different product in an institution's product portfolio roster. However, in reality, they are not perhaps different products because they may carry the same features and conditions
Step 3	Determine in percentage terms, the share of each product in the total product portfolio in turnover terms	The formula for this = $\frac{\text{Turnover of Specific Product (Usually Average Balance Over the Last Year)}}{\text{Total Turnover of All Products (Usually Average Balance Over the Last Year}}$
Step 4	Determine in percentage terms, the share of each product within its category (as per step 2) in turnover terms	The formula for this = $\frac{\text{Turnover of Specific Product in a Category (Usually Average Balance Over the Last Year)}}{\text{Total Turnover of All Products in that category (Usually Average Balance Over the Last Year}}$
Step 5	Choose the top 10 -12 products, such that they account for between 80% -90% of the total product portfolio (in turnover terms) while simultaneously ensuring that there is at least 1 product in every category given in step 2	This requires ranking of products in terms of their percentage contribution to the overall product portfolio – the product which contributes the highest percentage will come first followed by the one that contributes the next highest and so on.
Step 6	Choose 1 – 2 other products that have strategic importance but low in turnover	This is essentially dependent on the strategic importance of product and could be a subjective decision and indeed, even a judgment call
Step 7	Develop final list of products to be costed along with generic description of features of these products	The final list of products to be costed should be accompanied by a description of features so that one understands what their generic product category represents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1) Who should be delegated to lead this task?
2) What basic qualifications must the team leader have?
2) What are the duties of the team leader
Assembling the team
Step 5
Step 6
Step 7
Step 8
Step 9
Choosing the period for the costing
Choosing the representative branch site
1) Developing criteria for choosing the branch to host the exercise
2) Some suggested guidelines
Assembling necessary information
1) Basic information
2) Essential information
Completion of staff time sheets
1) Staff time across products
2) Time sheet methodology
3) Using time sheets to calculate staff time
Preparing the work plan
1) Drawing up the plan
2) Approval of the plan

Q: Why distinguish between compulsory and voluntary savings? Which of them can be costed separately?

- It is important to distinguish between compulsory savings, which are an integral part of the lending methodology and thus part of the cost structure of the loan product, and voluntary savings which are offered as a separate service and product.
- The costs associated with collecting and administering compulsory savings should be allocated to the loan product(s)/service(s). The costs associated with voluntary savings should be allocated to the voluntary savings product(s)/service(s).
- In some cases clients voluntarily save more than the compulsory minimum required by the MFI's lending methodology.
- Clearly there is a continuum between MFIs that collect only compulsory savings (which should be costed as part of the loan product cost) and those that do not collect any compulsory savings but offer entirely voluntary savings services (which should be costed as savings products). In the middle of the continuum are MFIs that require compulsory savings as collateral but allow their clients to use these accounts as voluntary savings accounts to the extent that they are not pledged as part of the collateral/group guarantee system. In these latter cases, disentangling the additional transactions and activities necessary to offer the voluntary component of the savings service (for costing as a separate savings product distinct from the loan product) is likely to be complex and will require careful analysis, and
- Unless these voluntary savings are substantial and/or tracked separately from the compulsory savings, there is limited benefit from costing them separately. However, if these voluntary savings are tracked separately or are substantial, the MFI may want to cost this service.

Session Five

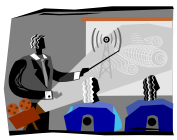
Identify Allocation Unit

Session Objectives:

- To enable participants to perform a basic product costing exercise
- To introduce participants to practical sources of support for product costing

Time: 

30 Minutes

Methods: 

➔ Presentation
➔ Group Exercises (in non-institutional groups)

Materials: 

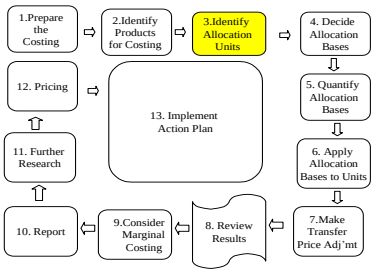
Slide Show:

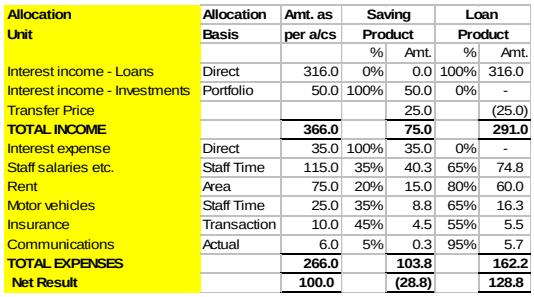
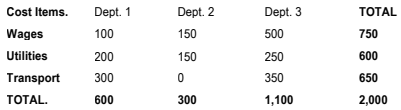
☑ **PowerPoint Presentation** entitled "**Session Five**"
☑ This session consists of approximately **9 slides** (Slide numbers 1 – 9 in respective PPT file)

Handouts:

- *Handout 5.1* **Rahisi, Background Information**
- *Handout 5.2* **Rahisi, Allocation Units**
- *Handout 5.3* **Rahisi, Explanation of the Trial Balance**
- *Handout 5.4* **Rahisi, Using the Spreadsheet**
- *Handout 5.5* **Rahisi Blank Spreadsheet**

Session Plan – Slide Notes for Facilitator

Slide Number and Time	Notes
Slide 1: 2 Minutes	
Session 5-10 Performing Product Costing Objectives To enable participants to perform a basic product costing exercise To introduce participants to practical sources of support for product costing	• The focus in these five sessions is on helping participants to do an actual product costing exercise using the Rahisi Case Study
Slide 2: 2 Minutes	
Session 5: Identify Allocation Unit  	• **The focus in this section is on allocation units - what they are and how to choose them?** • Allocation units are the items of income and expenditure that are going to be allocated across an MFI's different products. It is the total for a type of income expense taken from the chart of accounts, which to be allocated or distributed across the products of the organisation. It is the starting point for the allocation exercise, the unit of raw data to be used in the exercise.
Slide 3: 2 Minutes	
Chosing the Cost Allocation Unit The cost allocation unit An item expense (or income) to be allocated or distributed across the products of the organization Different possible allocation units The account line as per chart of accounts The department (where a departmental structure is maintained)	**How to choose allocation units?** **Simple Allocation Units** • The choice of the allocation unit for the exercise will depend on the way the organisation's chart of accounts is structured and on the type of standard accounting reports produced by the organisation. • If the organisation maintains a simple structure of accounts which does not analyse departmental costs separately, the team should adopt the *account line* in the income and expenditure accounts as the allocation unit **Departmental Allocation Units** • For most financial institutions the simple basis applies. • However, where departments are retained as cost centres, a better approach may be to use departments as an allocation unit.

Slide Number and Time	Notes
Slide 4: 5 Minutes	
Allocation Units As Illustrated in the Costly Bank Example 	• The column shaded yellow shows the various items from Costly Bank's chart of accounts
Slide 5: 3 Minutes	
Cost Allocation Units 	• It is also possible to split costs by department
Slide 6: 2 Minutes	
Line Items or Departments? What are the likely advantages and disadvantages of choosing account line items or departments as the cost allocation unit?	• **What are the advantages or disadvantages of allocating by line or by department?** • The main advantage is in the time saved on the whole costing exercise when using one as opposed to the other. Using the department as an allocation unit makes the task quicker since the number of departments normally will be less than the number of accounts, and therefore the items to allocate across products will be a lot fewer. • Also, since it is often easier to relate products to departments than it is to relate products to individual account lines, the logical process of selecting an allocation can be clearer.

Slide Number and Time	Notes
Slide 7: 4 Minutes	
Deciding on the Allocation Unit The reports/chart of accounts of the MFI If accounting reports show costs by department, then (usually) adopt a department as allocation unit Otherwise adopt the account line as per the chart of accounts	
Slide 8: 3 Minutes	
Key Question  Which allocation unit should you chose for your institution and why?	• Take 3 minutes in institutional groups, this choice is normally easily made.
Slide 9: 7 Minutes	

Rahisi MFI: Allocation Units
 	
Rahisi MFI requires your help over the next two days to perform product costing. During this time you will work in the same 3 teams
 	
Rahisi MFI has made the first decision to perform product costing based on account lines in its chart of accounts. Your work will start with choosing allocation bases for Rahisi MFI…
 	
Handout 5.1 Handout 5.2 Handout 5.3 Handout 5.4 Handout 5.5
 	
■ *Handout 5.1* **Rahisi, Background Information**
■ *Handout 5.2* **Rahisi, Allocation Units**
■ *Handout 5.3* **Rahisi, Explanation of the Trial Balance**
■ *Handout 5.4* **Rahisi, Using the Spreadsheet**
■ *Handout 5.5* **Rahisi Blank Spreadsheet**
	• Break the class into working groups of 4 people each and each group should have a laptop.
	• While group sizes of five may be manageable, from the perspective of working on the computer, they are practically difficult
	• Explain the various handouts including the Excel spreadsheets
	• Make copies of the spreadsheet on several diskettes to speed up distribution to groups during the workshop.
	• When grouping participants try to ensure that
	  ○ Each group has at least one skilled Excel operator
	  ○ Those with some experience in costing are split into different groups
	  ○ As far as possible participants in a group are from different institutions

FAQs for Facilitator

Q: What are allocation units?

- Allocation units are the items of income and expenditure that are going to be allocated across an MFI's different products. It is the starting point for the allocation exercise, the unit of raw data to be used in the exercise. Please note that allocation units are always represented in currency terms – Shillings, Pound Sterling, Dollar etc.

Q: What are typical examples of allocation units?

- Items in italics are typical allocation units from the chart of accounts.

INCOME	EXPENSES
SAVINGS INCOME	**DIR.COSTS SAVINGS**
Membership Fees	*Interest on Ordinary Savings*
Savings Withdrawal Fee	*Interest on Contractual Savings*
Compulsory Savings Ledger Fee	*Insurance Money Policy*
Interest from t/bills	
LOANS INCOME	**DIR. GENERAL COSTS LOANS**
Loan Commission	*Interest on Commercial Borrowings*
Interest on Working Capital Loans	*Loan Provisions*
Interest on Development Loans	*Legal and Recovery Fees*
Recovery of Written off Loans	

Q: How to choose an allocation unit?

- The choice of the allocation unit for the exercise will depend on the way the organization's chart of accounts is structured and on the type of standard accounting reports produced by the organization. It is the chart of accounts that is the basis of the cost allocation exercise. In most cases, as in the case below, allocation units follows the institution's chart of accounts.

Items from an institution's Chart of Accounts

Allocation Unit	Allocation Basis	Amount in accounts	Savings Product		Loan Product	
		Kshs. Million	%	Kshs. Million	%	Kshs. Million
Interest Income - Loan Product	Direct	316.0	0%	0.0	100%	316.0
Interest Income – Investments	Portfolio	50.0	100%	50.0	0%	-
Transfer Price Adjustment				25.0		(25.0)
TOTAL INCOME		**366.0**		**75.0**		**291.0**
Interest Expense	Direct	35.0	100%	35.0	0%	-
Staff Salaries Etc.	Staff Time	115.0	35%	40.3	65%	74.7
Rent	Area	75.0	20%	15.0	80%	60.0
Motor Vehicles	Staff Time	25.0	35%	8.8	65%	16.2
Insurance	Transaction	10.0	45%	4.5	55%	5.5
Communications	Actual	6.0	5%	0.3	95%	5.7
TOTAL EXPENSES		**266.0**		**103.9**		**162.1**
Net Result		**100.0**		**(28.9)**		**128.9**

Figure 1: Choosing Allocation Units — Costly Bank

Q: Are allocation units only cash inflow or outflow items?

- Allocation units encompass all expenses and income including non-cash items. For example, depreciation expenses on fixed assets, provision expenses (loan loss provision etc), amortization expenses of intangibles and depletion expenses for minerals etc are all perfectly legitimate allocation units although they do not directly involve an outflow of cash.

Q: What is the impact of subsidies?

- There is a need for identification of various subsidies so that the full costs of delivering the products can be really understood. In other words, **indirect, hidden and/or unreported subsidies** must be identified and incorporated, if the income statement has not been adjusted - otherwise the product costing results could turn out to be significantly different. For example:
  1. An organization could have a subsidy on its borrowings.
  2. Its capacity building and systems development could be subsidized.
  3. It could also have specialized technical support that is subsidized, and
  4. Vehicles could also be subsidized etc.
- **Unless these are incorporated, the real and full costs cannot be determined.**

Q: What is the impact of method of accounting – accrual versus modified cash or cash basis?

- The method of accounting could have an impact, especially if the accrual method of accounting is used. Careful consideration would have to be given to aspects like rules for recognition of income, de-recognition of income, reversal of income recognised and the like. While subsequent cost allocations could take care of some issues, it is nonetheless important to recognise the fact that the method of accounting chosen indeed has an impact on the accuracy of the cost allocation exercise.
- For example, assume that income is recognized on the accrual basis and hence, income due at financial year end but not received then has been recognised with corresponding entry for accounts receivable, accrued interest. This is because, income is recognised when it is due and reversed, if not received only by three months from the due date (let us assume that this is as per the legal requirements in the strategic context). Let us further assume that the cost allocation exercise using the above data identifies one of the loans as profitable, as the cost allocation is done on the financial year end income statement (when reversal of income has not taken place). Let us finally argue that a majority of loans for which the interest was accrued, actually do not get paid within 3 months and hence, interest income accrued will have to be reversed.
- If these loans account for a significant portion of the portfolio, then, the results of the previous cost allocation exercise using financial year end data would be erroneous as the profitability shown for that particular product used accrued income, which has been subsequently reversed as it has not been received. The results could be startling, especially if the proportion of such loans is high and result in a profitable product (from year end financial statement costing) becoming a loss making one (as per results of a subsequent costing exercise). The above fact can be worked out mathematically and it can indeed be shown that the method of accounting has a significant impact on the cost allocation exercise, especially when the portfolio of the financial institution is a volatile one.

Q: When to use simple allocation units versus departmental allocation units?

- If the organisation maintains a simple structure of accounts which does not provide departmental costs separately, the team should adopt the *account line* in the income and expenditure accounts as the allocation unit.
- **Simple Allocation Units -** Where the organisation maintains a simple chart of accounts (account lines only and not per Head Office department), it will be necessary to follow a two stage process: firstly allocating branch level costs to each product and then allocating Head Office costs to each product. For most MFIs the simple basis applies and this is the basis used in the examples, which follow.
- **Departmental Allocation Units -** For most MFIs the simple basis applies. If the organisation maintains a departmental structure of accounts, and accounting reports show costs by department, the team should nearly always adopt the *departments* as the allocation units. A worked example of departmental basis is given later in the section on selection of allocation bases.
- The key point to remember is that whether we use departments or line items as allocation units, either way the same total cost is being allocated, albeit from different starting points.

Q: What are the advantages or disadvantages of allocating by line or by department?

- The main advantage is in the time saved on the whole costing exercise when using one as opposed to the other.
- The department as an allocation unit makes the task quicker since the number of departments normally will be less than the number of accounts, and therefore the items to allocate across products will be a lot fewer.
- Also, since it is often easier to relate products to departments than it is to relate products to individual account lines, the logical process of selecting an allocation basis is clearer.

Session Six

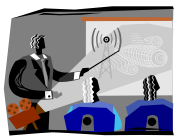
Decide on Allocation Bases

Session Objectives:

- To enable participants to perform a basic product costing exercise
- To introduce participants to practical sources of support for product costing

Time: 

2 Hours and 30 Minutes

Methods: 

➔ Presentation
➔ Group Exercises (in non-institutional groups)

Materials: 

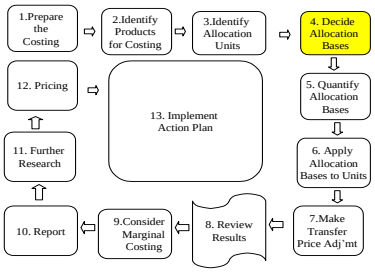
Slide Show:

☑ **PowerPoint Presentation** entitled "**Session Six**"
☑ This session consists of approximately **15 slides** (Slide numbers 1 – 15 in respective PPT file)

Handouts:

Handout 6.1 **Rahisi Team's Allocation Bases**

Session Plan – Slide Notes for Facilitator

Slide Number and Time	Notes
Slide 1: 1 Minute	
Session 6: Decide on Allocation Bases  	• Identify the session on the screen highlighted in yellow – it useful, time and again, to let the participants know where they have reached in relation to where they are headed.
Slide 2: 6 Minutes	
Decide on Allocation Bases Definition The criterion followed in allocating or distributing a cost (unit of expense or income) to products or departments that it relates to Examples: Actual basis Transaction basis Portfolio basis Direct staff numbers basis Staff time basis etc	• The slide has been animated to give participants an opportunity to define the term allocation base
Slide 3: 5 Minutes	
Allocation Bases The establishment of allocation bases can be *extremely controversial*, particularly when the results highlight unprofitable products or when staff remuneration is based on the performance of their cost centre	

Slide Number and Time	Notes
Slide 4: 5 Minutes	
Allocation Bases It is essential that management carefully reviews the allocation bases and goes through a process to *discuss and resolve disputes* that arise from the bases chosen This process will provide additional information and may possibly even result in changes being made to the allocation bases	• It may be useful to have a thorough discussion of the allocation bases with a wide range of internal stakeholders, after they have been chosen by the costing team but before the actual cost have been allocated
Slide 5: 3 Minutes	
Allocation Bases **As Illustrated in the Costly Bank Example** (table below)	
Slide 6: 3 Minutes	
Cost Allocation Bases **Examples** ***Direct***: Where the expenditure or income item relates solely and entirely to one product ***Staff time***: Where staff are involved in transactions at a detailed level, the estimated split of their time across the different products	• Some allocation bases can be easily attributed to a specific product and are therefore fully allocated to that product, so for example, interest income can normally be attributed directly to the loan products that generated the income. • Others, e.g. office rent, are shared between products and criteria have to be identified to distribute the cost across the products of the organisation on the most fair and accurate basis possible. • Staff time is often used to allocate the costs of branch staff, as there is a more direct relationship between the products the bank sells and their time, than for some other staff

Allocation Unit	Allocation Basis	Amt. as per a/cs	Saving Product		Loan Product	
			%	Amt.	%	Amt.
Interest income - Loans	Direct	316.0	0%	0.0	100%	316.0
Interest income - Investments	Portfolio	50.0	100%	50.0	0%	-
Transfer Price				25.0		(25.0)
TOTAL INCOME		**366.0**		**75.0**		**291.0**
Interest expense	Direct	35.0	100%	35.0	0%	-
Staff salaries etc.	Staff Time	115.0	35%	40.3	65%	74.8
Rent	Area	75.0	20%	15.0	80%	60.0
Motor vehicles	Staff Time	25.0	35%	8.8	65%	16.3
Insurance	Transaction	10.0	45%	4.5	55%	5.5
Communications	Actual	6.0	5%	0.3	95%	5.7
TOTAL EXPENSES		**266.0**		**103.8**		**162.2**
Net Result		**100.0**		**(28.8)**		**128.8**

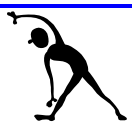
Slide Number and Time	Notes
Slide 7: 2 Minutes	
Cost Allocation Bases **Examples** ***Direct staff numbers***: Based on the actual number of staff positions allocated directly to a product ***Transaction***: The total number of transactions per product over a defined period as a percentage of all transactions	• Most costs cannot be allocated directly, and here some judgment needs to be applied. • As a general guideline, the closer an indirect cost item is to the level of the transaction, the more appropriate it will be to use an allocation basis based on staff. • Transaction basis is often used where costs are believed to comprise a small part of every transaction… for example computer depreciation.
Slide 8: 3 Minutes	
Cost Allocation Bases Examples ***Actual***: For account lines of ad hoc individual items to be allocated on an actual transaction by transaction basis, rather than in total ***Portfolio***: The relative average proportions of the product portfolios, using amounts on deposit and/or loaned	• Portfolio basis is often used for senior management as senior management guides the strategic direction of the organisation and /or products of significance • Portfolio basis can be of several kinds – Total Portfolio, Portfolio Savings, Portfolio Loans etc
Slide 9: 3 Minutes	
Cost Allocation Bases Examples ***Area***: Based on the actual office space consumed by the product or department in terms of area allocated ***Equal***: Where each product is given an equal share of an item of income or expenditure	• Area is very useful in theory to allocate rental costs. However, it is very difficult to use in practice • Equal… think carefully about using equal… it can become a "catch all" category for all those allocation units that are difficult to place.

Slide Number and Time	Notes
Slide 10: 4 Minutes	
Identifying Allocation Bases The relevance of an allocation base to an allocation unit will depend on that unit's relationship with the products All relationships are somewhere on a continuous line between direct and indirect Relationship to product  Direct indirect Direct time/direct staff transaction portfolio Allocation basis	• In choosing which allocation basis to use, it is important to consider what makes the most sense for your institution. This will depend in part on your access to information about the exact nature of the expense incurred and about particular allocation bases. What information can your MIS provide? What information can be gathered relatively easily using a manual process? • Some cost items (allocation units) can be directly attributed to a specific product and are therefore fully allocated to that product. Others, e.g. office rent, are shared between products and criteria have to be identified to distribute the cost across the products of the organisation on the most fair and accurate basis possible. Some allocation units will be obviously direct and their allocation is very straightforward. • However most cost items (allocation units) will not fall into this category and the degree to which they are indirect will vary. Some judgment will need to be applied. As a general guideline, the closer an indirect cost item is to the specific transaction level the more appropriate it will be to use an allocation basis based on staff. • At the other end of the scale, strategic and overall functions, such as senior management, will typically be allocated to the products using the (usually average) portfolio basis as this gives the closest indication of each product's contribution to the organisation's performance as a whole. • Support functions, and less direct activities (e.g. middle management) will be usually be allocated using the transaction basis.
Slide 11: 2 Minutes	
Identifying Allocation Bases Remember the caveat ... The selection of allocation bases is subjective it is important to consider and discuss many options in order to identify the most appropriate allocation basis for each allocation unit.	• The complexity of allocation bases reflects the sophistication of the systems and a financial institution's level of development. • Simple, easy to understand allocation bases are generally preferable. • Meaningful time-series analysis will usually only be possible if the choice of allocation bases remain relatively consistent from one period to the next. But because circumstances do change, it is important to review the choice of allocation bases in future costing exercises. • The objective is to come up with a materially reasonable allocation, which will be reasonably accurate in most circumstances.

Slide Number and Time	Notes
Slide 12: 2 Minutes	
Absorption Allocation Base **The absorption allocation base** is used when there is a simple and straightforward way of allocating one line item or department total into another line or department that is then allocated to the products	• See the following example
Slide 13: 1 Minute	
Absorption Allocation Base **Example:** The Human Resources department can often be most easily allocated firstly to all the other departments (based on the number of staff per department) and is thus automatically allocated to products using the allocation basis applicable to each department	• An example of how this base is used in practice will give the best explanation. • Kenya Post Office Savings Bank (KPOSB) is a large organisation with many departments. The Human Resources department is an indirect, support department and it was decided that the costs of this department could be most easily allocated firstly to all the other departments (using the absorption basis, based on the number of staff per department) • Thus HR costs are automatically allocated to products using the allocation basis applicable to each department.
Slide 14: 5 Minutes for this Slide and 90 Minutes for Exercise	
Rahisi MFI: Identifying Allocation Bases  Guided by: The structure of the Rahisi MFI Functions of departments The organisation's structure of accounts All the statistics and other information gathered from the write up on Rahisi MFI Come up with a list of possible allocation bases for each allocation unit	• Groups to read the Rahisi Case Study Handouts • They should discuss and choose the appropriate allocation bases for the various chart of accounts line items • Work with each group and ensure that they first discuss and choose the allocation bases and thereafter enter the appropriate allocation base number in the Excel spreadsheet for each item of income and expenditure.

Slide Number and Time	Notes
Slide 15: 15 Minutes	
Selecting Allocation Bases Compare your list of allocation bases with that of Rahisi's cost allocation team  Handout 6.1 *Handout 6.1* **Rahisi Team's Allocation Bases**	• By listening to group discussions identify where it has been more difficult for participants to select an appropriate allocation base. • In plenary, for items of income or expense where there is obvious difficulty, facilitate a comparison of the choice of bases between groups • Where divergence exists between the allocation bases, the rationale should be discussed and understood by participants

Exercise



Session Number:	Six
Session Name:	Decide on Allocation Bases
Objective:	To help participants learn to identify and choose allocation bases
Group Formation:	Non-institutional groups. Ensure that every group has one participant with knowledge of excel and one with previous costing experience (if available)
Resources:	Computer, Excel Spread Sheet with Blank Costing Template (Handout 5.5)
Time:	**90 Minutes** for exercise in groups and **15 minutes** for plenary discussion
Tasks:	**To identify allocation bases for Rahisi MFI**
Handouts:	■ *Handout 5.1* **Rahisi, Background Information** ■ *Handout 5.2* **Rahisi, Allocation Units** ■ *Handout 5.3* **Rahisi, Explanation of the Trial Balance** ■ *Handout 5.4* **Rahisi, Using the Spreadsheet** ■ *Handout 5.5* **Rahisi Blank Spreadsheet** ■ *Handout 6.1* **Rahisi Team's Allocation Bases**
Description:	The participants need to use above handouts (Handouts 5.1 to 5.5 distributed by facilitator in previous session and Handout 6.1 this session) and get into non-institutional groups to do the **following task** in 90 minutes: 1. **Identify allocation bases for Rahisi MFI**, whose background information, allocation units, and explanation of trial balance, are given in the handouts 5.1, 5.2 and 5.3 respectively. Handout 5.4 provides an explanation of how to use the spreadsheet while handout 5.5 is the blank spreadsheet on which the participants will work. 2. Groups to read the Rahisi Case Study Handouts. 3. They should discuss and choose the appropriate allocation bases for the various chart of accounts line items and enter the appropriate allocation base number in the excel spread sheet for each item of income and expenditure. 4. They should report back in plenary on the allocation bases they have chosen for Rahisi MFI, along with rationale.
Facilitator's Role:	• Break the class into working groups of 4 people each and each group should have a laptop. • While group sizes of five may be manageable, from the perspective of working on the computer, they are practically difficult. • Explain the various handouts including the Excel spreadsheets. • Make copies of the spreadsheet on several diskettes to speed up distribution to groups during the workshop. • When grouping participants, try to ensure that: 1. Each group has at least one skilled Excel operator. 2. Those with some experience in costing are split into different groups, and 3. As far as possible, participants in a group are from different institutions. • Work with each group and ensure that they first discuss and choose the allocation bases and thereafter enter the appropriate allocation base number in the excel spreadsheet for each item of income and expenditure. • By listening to group discussions identify where it has been more difficult for participants to select an appropriate allocation base. • In plenary, for items of income or expense where there is obvious difficulty, facilitate a comparison of the choice of bases between groups, and • Where divergence exists between the allocation bases, the rationale should be discussed and understood by participants.

FAQs for Facilitator

Q: What are allocation bases?

- Allocation bases refer to the method by which the allocation units are spread across different products. They are the rules by which allocation units (income or expense items) are spread across various products.

Q: How to identify possible allocation bases?

- These decisions tend to be subjective and it is important to devote adequate time to them, ensuring that there is a supportable reason for the decisions made. Typically, the costing team will hold brainstorming sessions, during which it will identify possible allocation bases. The sessions will be guided by:
  1. The structure of the organization.
  2. Functions of departments.
  3. The organisation's structure of accounts, and
  4. All the statistics and other information gathered during the preparation stage.

- The team should try to be as open minded as possible bearing in mind that this is not the stage for sieving but a stage for identifying as many possible bases[4] as possible from which ultimately to select a set of the best and most convenient options for the organisation.
- Once again, it is important to re-emphasise that the selection of allocation bases is subjective in nature and it is important to consider and discuss many options in order to identify the most appropriate allocation basis for each allocation unit. Furthermore, this is often an iterative process through which several allocation bases are considered and tested as the cost allocation team works through the costing process and becomes increasingly familiar with the MFI and the details of its operations.

[4] See next FAQ for a listing of typical allocation bases

Q: What are some common examples of allocation bases?

- Possible allocation bases are tabulated below but it is important to mention that almost any basis could be used as long as it is supported by a reasonable logical argument.

Table: Examples of Allocation Bases	
Basis	**Application**
Direct	Where the expenditure or income item relates solely and entirely to one product, and it would normally vary directly with transaction activity or value on that product. E.g. loan loss provisions, interest paid on savings products or (in some cases) transport.
Staff time	Where staff are involved in transactions at a detailed or direct level, the estimated split of their time across the different products. E.g. office stationery or utilities such as electricity.
Direct staff numbers	Based on the actual number of staff positions allocated directly to a product. E.g. when some staff are specifically responsible for specific products or for utilities such as water, the consumption of which is unlikely to vary with differing staff levels.
Direct staff cost	Based on the salary costs of staff positions allocated directly to a product. E.g. when different levels/salary structures of staff deal with different products.
Transaction	The total number of transactions per product over a defined period as a percentage of all transactions. E.g. computer systems costs.
Actual	For account lines consisting of ad hoc individual items which need to be allocated on an actual transaction-by-transaction basis, rather than in total. E.g. accounts entitled "sundries".
Portfolio – deposit base	The relative average proportions of the product portfolios over a defined period of time, using amounts on deposit and/or amounts loaned (i.e. balance sheet basis). E.g. the costs of the CEO's office to the products of the organisation.
Portfolio – investment income base	The relative average proportions of the product portfolios over a defined period of time in terms of direct income or expense by product. This is particularly useful when products do not result in balance sheet assets/ liabilities. E.g. money transfer services/remittance products. E.g. the costs of the CEO's office to the products of the organisation.
Area	Based on the actual office space consumed by the product or department in terms of area allocated. E.g. rent or depreciation charge for buildings.
Equal	Where each product is given an equal share of an item of income or expenditure. E.g. for generic institutional advertising.
Absorption	Where the costs of a department are first absorbed into other departments or cost lines before then being allocated using another basis, i.e. a two-step process.
"Core product"	Where a fixed, high proportion of any item is allocated to the core (or primary) product and a small residual element is split across the other products - mainly used in marginal costing.
Fixed	Where a cost or income item is taken to be fixed and therefore independent of product performance, and it is allocated to the core product under the marginal costing.

Q: Should an individual allocation base cover a broad range of allocation units?

- The key aspect to remember is that the set of allocation bases will need to cover the majority of situations satisfactorily, bearing in mind that the objective is to come up with a materially reasonable allocation, not a hundred percent accurate allocation.
- There are many cost allocation bases that can be used and the objective here is to identify a set of bases which can be used in the context of the organisation and which will cover all the situations within that organisation.

Q: How to decide on allocation bases?

- Descriptions of different allocation bases were provided in **Table above**. In choosing which allocation basis to use, it is important to consider what makes the most sense for your institution. This will depend in part on your access to information about the exact nature of the expense incurred and about particular allocation bases. What information can your information system provide? What information can be gathered relatively easily using a manual process?
- Some cost items (allocation units) can be directly attributed to a specific product and are therefore fully allocated to that product. Others, e.g. office rent, are shared between products and criteria have to be identified to distribute the cost across the products of the organisation on the most fair and accurate basis possible.
- Some allocation units will be obviously direct and their allocation is very straightforward.
- However most cost items (allocation units) will not fall into this category and the degree to which they are indirect will vary. Some judgement will need to be applied. As a general guideline, the closer an indirect cost item is to the specific customer transaction level the more appropriate it will be to use an allocation basis based on staff time or the numbers/costs of direct staff.
- At the other end of the scale, strategic and overall functions, such as senior management, will typically be allocated to the products using the (usually average) portfolio basis as this gives the closest indication of each product's contribution to the organisation's performance as a whole.
- Support functions, and less direct activities (e.g. middle management) will be usually be allocated using the transaction basis.

Relationship to product: → (Direct … Indirect)

Allocation Basis: Direct → Time/Direct Staff → Transaction → Portfolio

- As figure below indicates, interest income is direct because it can be attributed solely and entirely to the loan product.

INTEREST INCOME is **direct** because it can be attributed solely and entirely to the loan product and it would normally vary directly with transaction activity or value on that product. The direct basis relates costs specifically to a particular product. Likewise, the allocation bases have been chosen for the other chart of account line items.

Allocation Unit	**Allocation Basis**	**Amount in Accounts**	**Savings Product**		**Loan Product**	
			%	Kshs. Million	%	Kshs. Million
Interest Income - Loan Product	Direct	316.0	0%	0.0	100%	316.0
Interest Income – Investments	Portfolio	50.0	100%	50.0	0%	-
Transfer Pricing Adjustment				25.0		(25.0)
TOTAL INCOME		**366.0**		**75.0**		**291.0**
Interest Expense	Direct	35.0	100%	35.0	0%	-
Staff Salaries Etc.	Staff Time	115.0	35%	40.3	65%	74.8
Rent	Area	75.0	20%	15.0	80%	60.0
Motor Vehicles	Staff Time	25.0	35%	8.8	65%	16.3
Insurance	Transaction	10.0	45%	4.5	55%	5.5
Communications	Actual	6.0	5%	0.3	95%	5.7
TOTAL EXPENSES		**266.0**		**103.8**		**162.2**
Net Result		**100.0**		**(28.8)**		**128.8**

Figure 2: Deciding on Allocation Bases — Costly Bank

- Likewise, allocation units should be reviewed line by line and for each line the most appropriate allocation basis from the wide range of possibilities identified should be determined. This can then be entered into the excel sheet alongside the allocation unit that it relates to.

Q: What is the absorption basis?

- One basis that works in a different way to the others is the *absorption basis*.
- The absorption basis is used when there is a simple and straightforward way of allocating one line item or department total into another line or department that is then allocated to the products. The example of how this basis is used in practice will give the best explanation.
- The Kenyan savings bank, with which this costing system was tested, is a large organisation with many departments. The Human Resources department is an indirect, support department and it was decided that the costs of this department could be most easily allocated firstly to all the other departments (using the absorption basis, based on the number of staff per department) and thus it is automatically allocated to products using the allocation basis applicable to each department.
- There may be similar or other cases where there is a clear way of absorbing the costs of indirect departments into more direct departments or cost lines, before then allocating to products.

Q: What to do if there are disputes while deciding on allocation bases?

- The establishment of the allocation bases can be extremely controversial, particularly when the results highlight unprofitable products or when staff salaries/remuneration is based on the performance of their cost centre. It is therefore essential that management carefully reviews the allocation bases and goes through a process to discuss and resolve disputes that arise from the bases chosen. This process is extremely useful as it focuses management on the key cost drivers and inefficiencies in the organization. This process will also provide additional information and may possibly even result in changes being made to the allocation bases. (For an excellent example of this, see the CGAP Occasional Paper No. 2,"Cost Allocation for Multi-service Micro-finance Institutions"- available on the CGAP website at http://www.cgap.org).
- In fact, the level of complexity of allocation bases should reflect the sophistication of the MFI's systems and its level of development. Simple, easy to understand allocation bases are generally preferable and that is whole point for discussing and building consensus. In addition, it is important to note that meaningful time-series analysis will usually only be possible if the allocation bases remain consistent from one period to the next.

Q: What to do if there are almost equally competing allocation bases?

- Perform sensitivity analysis to see what the results may look like if alternative bases are used, and
- Recalculate on the different bases to see if it makes a material difference to the results of the costing.

Q: What to do if allocations bases are questionable?

- The first time a costing exercise is performed there is likely to be considerable questioning on the allocation bases chosen
- Ensure the rationale for the choice of allocation bases is clear
- Recalculate questionable allocations on different bases to see if it makes a material difference to the results of the costing.
- It probably won't but it is worth a try anyways

Q: How to select allocation bases? – Illustrative Example 1

Mbale Savings and Credit (MSC) is a small MFI and maintains a simple structure of accounts. It offers three products namely:

- Ordinary Savings Account (OSA),
- Special Savings Account (SSA), and
- Ordinary Loan Account (OLA).

Using the MSC chart of accounts, and the identified possible allocation bases, select the most suitable allocation bases for the account lines listed in the table below and then compare the result with the one prepared by the MSC cost allocation team. Account line items are as follows:

1. Interest income
2. Staff salaries & allowances
3. Interest income – investments
4. Staff medical expenses
5. Commitment fees
6. Staff pensions
7. Interest Payable – Ordinary Savings Account
8. Staff training
9. Interest Payable – Special Savings Account
10. Rent – commercial
11. Interest expense – donor funds
12. Rent – residential
13. Motor vehicle expenses
14. Marketing
15. Insurance – money
16. Insurance – premises
17. Postage & telecom.

The selection made by the MSC costing team is given in the next page along with the rationale

CHART OF ACCOUNTS LINE ITEM	WHAT IS THE APPROPRIATE ALLOCATION BASIS?	WHY IS THIS THE APPROPRIATE ALLOCATION BASIS?
Interest Income–	Direct (OLA)	Interest received from loans is directly attributable to the loan products and as there is only one loan product, it is fully allocated to this product
Interest income – investments	Savings Portfolio (OSA and SSA)	Interest received from investments made with clients' savings can best be allocated on the basis of the average portfolio of each savings account type
Commitment fees	Direct (OLA)	Commitment fee income is derived directly from loans
Interest Payable – Ordinary Savings Account	Direct (OSA)	This is because interest is paid directly to ordinary savings account holders and is directly attributable to this product.
Interest Payable – Special Savings Account	Direct (SSA)	This is because interest is paid directly to ordinary savings account holders and is directly attributable to this product.
Interest expense – donor funds	Direct (OLA))	Interest paid on capital fund loans from donor agencies is a direct cost of providing loans to clients and as there is only one loan product, OLA, it is directly allocated to OLA
Staff salaries & allowances	Staff time	Since all staff deal with all the products, it was necessary to develop timesheets and allocate these costs on the basis of the percentage of time each category of staff spent on each product.
Staff medical expenses	Staff time	Since all staff deal with all the products, it was necessary to develop timesheets and allocate these costs on the basis of the percentage of time each category of staff spent on each product.
Staff pensions	Staff time	Since all staff deal with all the products, it was necessary to develop timesheets and allocate these costs on the basis of the percentage of time each category of staff spent on each product.
Staff training	Modified Transaction	Training is given on customer care and administering individual products and can therefore best be allocated on a transaction basis – modified to reflect the length of the training courses on each product
Rent – commercial	Transactions	Since this was felt to best reflect the need for the space to accommodate customers and the staff to deal with them and the transactions they make.
Rent – residential	Equal	Since the CEO's house is part of his salary package and he is responsible for the institution as a whole
Motor vehicle expenses	Actual	The usage logs kept in each vehicle allowed the allocation of these directly to each product
Marketing	Equal	Most of MSC's advertising is to promote the institution as a whole
Insurance – money	Portfolio basis	By virtue of the contract with the insurance company, the insurance for money held/transported by MSC and its staff is directly related to the number of value of the amounts held
Insurance – premises	Transactions	The insurance premium for the building is based on the size of the building and this is determined by the area needed to accommodate customers and the staff to deal with them and the transactions they make.
Postage & telecommunications	Actual	The automatic telephone logging system and the manual system in the post-room allows MSC to use this basis

Now, consider, whether and how any of the above allocation bases will change if there were 2 loan products and 2 savings products – namely, **Loan Products -** Ordinary Loan Account (OLA), and Special Loan Account (SLA); **Savings Products -** Ordinary Savings Account (OSA), and Special Savings Account (SSA). The changes in allocation bases are given below:

CHART OF ACCOUNTS LINE ITEM	WHAT IS THE APPROPRIATE ALLOCATION BASIS?	WHY IS THIS THE APPROPRIATE ALLOCATION BASIS?
Interest Income	Portfolio (Loans)	Interest received from loans is directly attributable to the loan products and as there are two loan products, this item can be allocated on the basis of the average portfolio of each loan account type. **Ideally, it would be better to have the interest accounted for separately by loan product as the loan terms and conditions including interest and fees could differ across the loan types**
Interest income – investments	Savings Portfolio (OSA and SSA)	No Change from before
Commitment fees	Portfolio Loans	Commitment fee income is derived directly from loans and as there are two loan products, this item can be allocated on the basis of the average portfolio of each loan account type. **Ideally, it would be better to have the interest accounted for separately by loan product as the loan terms and conditions including interest and fees could differ across the loan types**
Interest Payable – Ordinary Savings Account	Direct (OSA)	No Change
Interest Payable – Special Savings Account	Direct (SSA)	No Change
Interest expense – donor funds	Direct (OLA))	Interest paid on capital fund loans from donor agencies is a direct cost of providing loans to clients and as there are two loan products, OLA and SLA, this item can be allocated on the basis of the average portfolio of each loan account type.
Staff salaries & allowances	Staff time	No Change
Staff medical expenses	Staff time	No Change
Staff pensions	Staff time	No Change
Staff training	Modified Transaction	No Change
Rent – commercial	Transactions	No Change
Rent – residential	Equal	No Change
Motor vehicle expenses	Actual	No Change
Marketing	Equal	No Change
Insurance – money	Portfolio basis	No Change
Insurance – premises	Transactions	No Change
Postage & telecommunications	Actual	No Change

Q: How to identify possible allocation bases for departmental allocation? – Illustrative Example 2

The following example of Microfinance Inc. (MFI), explains how department costs are allocated. MicroFinance Inc. (MFI) has 6 departments and maintains an accounting structure showing departmental costs separately. MFI is embarking on a cost allocation exercise. Assuming that the only information available is that detailed below:

(a) What would be the most appropriate allocation unit?
(b) What would be the possible allocation bases?

Information available:

- Organisation structure:

MFI is organised into 6 departments namely:

1) CEO's office,
2) Savings,
3) Loans,
4) Finance,
5) Human Resources, and
6) Marketing

- Products of the organisation:
  1) Ordinary savings account (OSA) and
  2) Fixed deposit account (FDA) (both under savings department)
  3) Ordinary loan account (OLA) (under the loans department)
- Chart of accounts – see table below

MFI's Chart of Accounts.

	Income	Direct Expenses	Indirect Expenses	Savings Dep't	Loan Dep't	Finance Dep't	Human Resources Dep't	Marketing Dep't
Interest income – Treasury Bills	X							
Interest income – Fixed Deposits with Banks	X							
Commissions – Ordinary Savings Accounts	X							
Interest income – Ordinary Loan Accounts	X							
Commissions – Ordinary Loan Accounts	X							
Penalties – Ordinary Loan Accounts	X							
Commitment fees – Ordinary Loan Accounts	X							

	Income	**Direct Expenses**	**Indirect Expenses**	**Savings Dep't**	**Loan Dep't**	**Finance Dep't**	**Human Resources Dep't**	**Marketing Dep't**
Interest expense – Ordinary Savings Accounts		X						
Interest expense – Fixed Deposit Accounts		X						
Interest expense – Funds for on-lending under Ordinary Loan Account		X						
Operating stationery – Ordinary Savings Accounts		X						
Operating stationery – Fixed Deposit Accounts		X						
Operating stationery – Loans		X						
CEO's Office			X					
Salaries & allowances			X	X	X	X	X	X
Staff pensions			X	X	X	X	X	X
Staff medical expenses			X	X	X	X	X	X
Staff training				X	X	X	X	X
Entertainment			X					
Motor vehicle expenses			X	X		X		
Water			X	X	X	X	X	X
Security expenses			X	X	X	X		
Electricity			X	X	X	X	X	X
Repairs and renewals			X	X	X	X	X	X
Office rent			X	X	X	X	X	X
Postage & telecommunicat' ns			X	X	X	X	X	X
Printing & stationery			X	X	X	X	X	X
Travelling & subsistence			X			X		
Insurance – money policy				X				
Professional services						X		
Audit fees						X		
Advertising								X

(a) **Allocation unit** – The most appropriate allocation unit would be the Department
(b) Some of the **possible allocation bases** would be the following:

Direct basis	Area	Absorption
Actual	Staff time	Staff Salary
Portfolio	Direct staff numbers	Equal
Transaction	Staff time	

The procedure and the set of allocation bases selected by the MFI team are as follows:

Allocation Unit	Allocation Basis
Interest Income – Treasury Bills and Fixed Deposits	*Savings Portfolio basis* – since the interest income in these line items is all directly associated with the savings products (OSA and FDA) in proportion to the savings generated.
Commissions – Ordinary Savings Accounts	*Direct basis* to OSA – since this source of income comes directly from the OSA
Commissions, Penalties and Commitment Fees – Ordinary Loans Accounts	*Direct basis* to OLA – since this source of income comes directly from the OLA
Interest Expense – OSA, FDA and OLA	*Direct basis* to OS, FDA and OLA – since the interest expense can be directly attributed to each of the products
Operating Stationery	*Direct basis* to OS, FDA and OLA – since the operating stationery expense can be directly attributed to each of the products
CEO's Office	*Portfolio basis* – the CEO gives general leadership to the entire organisation and it was observed that the higher the portfolio the more the attention and time the dept. commits to a product. So the portfolio basis was considered most appropriate.
Savings Department The department produces two products the Ordinary Savings Account and the Fixed Deposit Account. Accordingly the costs have to be split between the two products on the following bases:	
• Staff salaries and pensions	Staff salary basis
• Staff medical and training	Staff time basis
• Security expenses	*Direct basis* to Ordinary Savings Account – most cash transactions which call for this expense are to do with Ordinary Savings Account
• Repairs & renewals	*Savings basis* – most of the equipment in the department is there because of the Ordinary Savings Account and it was decided to split the costs between the two on 9:1 basis, called "savings basis".
• Office rent	Savings basis
• Postage & telecommunications	*Actual basis* – the department maintains a register that shows purpose for each telephone call made, hence calls made in respect of each product can be identified.
• Printing & stationery	Actual basis
• Insurance-money	*Portfolio basis* – the insurance premiums are calculated on the basis of average amounts held
• Motor vehicle expenses	*Savings basis*
• Utilities	*Savings basis*
Loans department	*Direct basis* – all work in the dept. is geared towards the production, delivery and maintenance of one product, the Ordinary Loan Account.

Allocation Unit	Allocation Basis
Finance department	*Transaction basis* – the amount of work in the finance dept., depends on the volume of transactions generated by product demands. Hence the transaction basis was considered the most appropriate
Human resources department	*Absorption basis* - on the basis of number of staff in each of the CEO, Savings, Loans, Finance and Marketing departments
Marketing department	Equal basis – *since MFI's marketing efforts promote the image of the organisation as a whole and are not geared to any specific product*

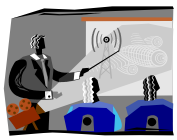
Session Seven

Quantifying Allocation Bases

Session Objectives:

- To enable participants to perform a basic product costing exercise
- To introduce participants to practical sources of support for product costing

Time:  **3 Hours and 30 Minutes**

Methods: 

➔ Presentation
➔ Group Exercises (in non-institutional groups)

Materials: 

Slide Show:

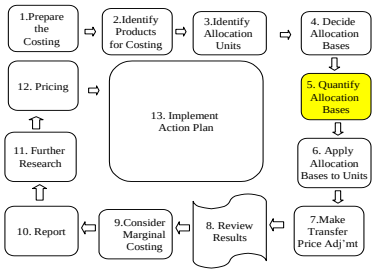
☑ **PowerPoint Presentation** entitled **"Session Seven"**
☑ This session consists of approximately **5 slides** (Slide numbers 1 – 5 in respective PPT file)

Handouts:

- *Handout 7.1* **Rahisi, Loan Portfolio**
- *Handout 7.2* **Rahisi, Savings Portfolio**
- *Handout 7.3* **Rahisi, Transactions and Transactions Time**

- *Handout 7.4* **Rahisi, Number of Accounts**
- *Handout 7.5* **Rahisi, Marketing**
- *Handout 7.6* **Rahisi, Depreciation**
- *Handout 7.7* **Rahisi, Human Resources**
- *Handout 7.8* **Rahisi Bad Debts Provision**

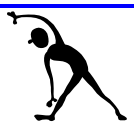
Session Plan – Slide Notes for Facilitator

Slide Number and Time	Notes
Slide 1: 2 Minutes	
Session 7: Quantifying Allocation Bases  	• Identify the session on the screen highlighted in yellow
Slide 2: 7 Minutes	
Quantifying Allocation Bases *Objective*: To work out **percentages** for apportioning the allocation units across different products Each base is expressed as a percentage split across all the products and should be summarised in a table as follows: **Basis** **Prod.A** **Prod.B** **Prod.C** **Prod.D** **Total** **Transaction** 15% 25% 10% 50% 100 **Staff time** 10% 30% 25% 35% 100	• The objective is to work out percentages for each allocation base, that show how allocation units using this allocation base will be divided amongst different products. • In the example… considering transactions as an allocation base, 15% of the total number of transactions relates to product A, 25% to product B, 10% to product C and 50% to product D. Summing across transactions will always yield a total of 100%. • Similarly after investigation 10% of staff time was attributed to product A, 30% to product B, 25% to product C, and 35 % to product D. • The same process is adopted for each allocation base.
Slide 3: 6 Minutes	
Quantifying Allocation Bases The method of quantifying allocation bases depends on how each basis is to be applied Some bases are calculated using statistics and financial data, (portfolio, direct, transaction) others measured (staff timings) and others estimated	• Staff timing, as an allocation base, is a measured one. There could be time sheets for each employee across products and hence totaling of time spent by all employees on a product divided by total staff time an all products (times 100) gives % of staff time for that product. • Many allocation bases can be quantified exactly. But where there are genuine difficulties, participants should not get too engaged in finding exact values. For example in a recent costing it was found to be very difficult to obtain the number of transactions for the whole year being costed … so a representative month was chosen instead.

Slide Number and Time	Notes
Slide 4: 7 Minutes	
Quantifying Allocation Bases As Illustrated in the Costly Bank Example	• Review the Costly Bank example briefly going line by line. • Explain why interest income is 100% allocated to loans and investment income and interest expense is 100% allocated to savings. • Say that staff time was found to be used 35% by the savings product and 65% to the loan product… so staff salary costs have been apportioned in the same ratio.
Slide 5: 8 Minutes this Slide and 180 Minutes for Exercise	
Rahisi MFI: Quantifying Allocation Bases  Using the information given quantify the allocation bases for Rahisi MFI Rahisi, Loan Portfolio Rahisi, Savings Portfolio Rahisi, Transactions and Transactions Time Rahisi, Number of Accounts Rahisi, Marketing Rahisi, Depreciation Rahisi, Human Resources Rahisi Bad Debts Provision **Handouts:** *Handout 7.1* **Rahisi, Loan Portfolio** *Handout 7.2* **Rahisi, Savings Portfolio** *Handout 7.3* **Rahisi, Transactions and Transactions Time** *Handout 7.4* **Rahisi, Number of Accounts** *Handout 7.5* **Rahisi, Marketing** *Handout 7.6* **Rahisi, Depreciation** *Handout 7.7* **Rahisi, Human Resources** *Handout 7.8* **Rahisi Bad Debts Provision**	• Pass out and explain each handout separately, while, simultaneously projecting it on the screen. • Explain each handouts in brief and their relevance so that participants are "prepared" to work through the exercise themselves • Allow participants time to work in finish each handout before handing out additional information

Allocation Unit	Allocation Basis	Amt. as per a/cs	Saving Product		Loan Product	
			%	Amt.	%	Amt.
Interest income -Loans	Direct	316.0	0%	0.0	100%	316.0
Interest income - Investments	Portfolio	50.0	100%	50.0	0%	-
Transfer price				25.0		(25.0)
TOTAL INCOME		**366.0**		**75.0**		**291.0**
Interest expense	Direct	35.0	100%	35.0	0%	-
Staff salaries etc.	Staff Time	115.0	35%	40.3	65%	74.8
Rent	Area	75.0	20%	15.0	80%	60.0
Motor vehicles	Staff Time	25.0	35%	8.8	65%	16.3
Insurance	Transaction	10.0	45%	4.5	55%	5.5
Communications	Actual	6.0	5%	0.3	95%	5.7
TOTAL EXPENSES		**266.0**		**103.8**		**162.2**
Net Result		**100.0**		**(28.8)**		**128.8**

Exercise



Session Number:	Seven
Session Name:	Quantifying Allocation Bases
Objective:	To help participants learn to quantify chosen allocation bases
Group Formation:	Non-institutional groups
Resources:	Computer, Excel Spread Sheet with Costing Template (Handout 5.4)
Time:	**180 Minutes** for exercise in groups and plenary discussion (where required)
Tasks:	**To quantify chosen allocation bases for Rahisi MFI**
Handouts:	All **previous handouts** on Rahisi MFI with following **fresh handouts:** **Handouts:** *Handout 7.1* **Rahisi, Loan Portfolio** *Handout 7.2* **Rahisi, Savings Portfolio** *Handout 7.3* **Rahisi, Transactions and Transactions Time** *Handout 7.4* **Rahisi, Number of Accounts** *Handout 7.5* **Rahisi, Marketing** *Handout 7.6* **Rahisi, Depreciation** *Handout 7.7* **Rahisi, Human Resources** *Handout 7.8* **Rahisi Bad Debts Provision**
Description:	The participants need to use above handouts and get into same non-institutional groups to do the **following task** in 180 minutes: 1. **Quantify chosen allocation bases for Rahisi MFI**, using the information given in the above handouts. The workings should be done on the blank spreadsheet in sheets titled "Portfolio", "Calculated" and/or "Allocation Bases" 2. Groups to read the various Rahisi Case Study Handouts. 3. They should discuss and quantify the appropriate allocation bases using techniques and methods described in the session. 4. If required, they may be called upon to report back in plenary on the quantification process (methods and techniques) used by them and results obtained.
Facilitator's Role:	• Break the class into working groups of 4 people each and each group should have a laptop. Ideally, it would be better if the participants worked in the same non-institutional groups for the Rahisi Case Study. • Pass out and explain each handout separately, while, simultaneously projecting it on the screen. Explain each handout in brief and their relevance so that participants are "prepared" to work through the exercise themselves – in other words, they must be able to relate a handout to the quantification of a specific allocation base. *Allow participants time to work in finish each handout before handing out additional information.* • Work with each group and ensure that they first discuss the information given in the handouts, while simultaneously identifying the allocation base to be quantified. Some of the participants may need help with understanding the linking of cells and facilitator should move around and assist those participants who require such assistance. • Guide them to use the excel sheets labelled "portfolio" and "calculated" and once they have finished their calculations, ensure that their calculations are linked to the sheet titled "Allocation Bases". • By listening to group discussions identify where it has been more difficult for participants to quantify an allocation base. In plenary, for allocation bases where there is obvious difficulty in quantifying, facilitate a discussion and outline possible calculation methods along with their rationale.

FAQs for Facilitator

Q: What is meant by quantifying an allocation base?

- This stage will work out ratios or percentages for apportioning values of the allocation unit among the different products they relate to.
- After determining the allocation bases for use in the exercise, the next step is to decide the ratios on the basis of which the value for each allocation unit will be apportioned among the products it relates to. The process entails attaching weights to each product in proportion to its fair share of that value.
- Each basis will be expressed as a percentage split across all the products and could be summarised in a table as follows:

Basis	Prod. A	Prod. B	Prod. C	Prod. D	TOTAL
Transaction	15%	25%	10%	50%	100
Staff time	10%	30%	25%	35%	100

- In the above case, using transaction as an allocation base, 15% (of any appropriate allocation unit) can be attributed to product A, 25% to product B, 10% to product C and 50% to product D. Please note that horizontal summering across transactions will yield a total of 100%. Like wise, 10% of staff time can be said to be attributable to product A, 30% to product B, 25% to product C, and 35 % to product D.
- Thus, using these and other allocation bases, appropriate allocation units expense or income item can be allocated to different products. For example salary expense can be allocated to different products using staff time allocation base. In such cases, 10% of salary expense will be attributable to product A. 30% to products B, 25% to product C and 35% to product D.
- Thus, the method of quantifying allocation bases may depend to some degree on how each basis is to be applied and therefore it is suggested that bases are quantified after deciding how they will be used. Some bases are calculated using statistics and financial data, and others are estimated.

Q: As an example, how to quantify transaction as an allocation base? What about staff timing?

Transaction, as an allocation base, could be calculated as follows:

$$\frac{\text{Transaction for a given product}}{\text{Total transactions}} \times 100$$

Staff timing, as an allocation basis, is a measured one. There could be time sheets for each employee across products and hence totalling of time spent by all employees on a product divided by total staff time an all products (times 100)gives % of staff time for that product.

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Q: How to quantify allocation bases?

Information related to the allocation bases is gathered and then applied to the different products as outlined below. In the Costly Bank example, it is possible to separately identify all of the **interest income** from the loan product, so this is **allocated 100%** to the loan product using the **"direct basis"**. The direct basis relates costs specifically to a particular product.

As shown below, **quantifying allocation bases** involves allocating 100% of interest income to the loan product and 0% to the savings product for the reasons mentioned above.

Allocation Unit	Allocation Basis	Amount in accounts	Savings Product		Loan Product	
			%	Kshs. Million	%	Kshs. Million
Interest Income - Loan Product	Direct	316.0	0%	0.0	100%	316.0
Interest Income – Investments	Portfolio	50.0	100%	50.0	0%	-
Transfer Price Adjustment				25.0		(25.0)
TOTAL INCOME		**366.0**		**75.0**		**291.0**
Interest Expense	Direct	35.0	100%	35.0	0%	-
Staff Salaries Etc.	Staff Time	115.0	35%	40.3	65%	74.7
Rent	Area	75.0	20%	15.0	80%	60.0
Motor Vehicles	Staff Time	25.0	35%	8.8	65%	16.2
Insurance	Transaction	10.0	45%	4.5	55%	5.5
Communications	Actual	6.0	5%	0.3	95%	5.7
TOTAL EXPENSES		**266.0**		**103.9**		**162.1**
Net Result		**100.0**		**(28.9)**		**128.9**

Figure 3: Quantifying Allocation Bases — Costly Bank

- Similarly, since **investment income** is earned by **investing the savings of depositors**, this income is **allocated** fully to the savings product. If there were two savings products, Costly Bank would use the "portfolio basis" to apportion investment income to each product in the ratio at which each product contributed to the funds being invested. *In the present example, there is only one savings product and hence, 100% of the income is attributed and allocated to that product.*
- In Figure 3, staff salaries are divided between the savings and loan product. Costly Bank measures the amount of time that the staffs spend on each product and determine that 35% of staff time is spent on the savings product and 65% of time is spent on the loan product. In practice this step takes time, as each grade of staff needs to be considered separately. Normally different allocation bases are used for allocating the costs of front line staff and senior management.
- In this example the space that each product takes up within each branch is used as a proxy to determine how much of the rental income should be allocated to each product. Where this information is available, area is frequently used as the basis for allocating rental costs.
- At this stage the costing exercise becomes more subjective. On what basis should motor vehicle expenses be allocated between the savings and loan products? It is not at all obvious. The basis will differ from institution to institution, but should be *based on logical and defendable* criteria. In the Costly Bank example, vehicles are used predominantly by loans officers to follow up on defaulting clients and by savings officers to market the savings product; hence "staff time" becomes a reasonable proxy for the products use of motor vehicles.

Q: How to construct the calculation formats for some of the allocation bases like Portfolio, Portfolio Savings, Portfolio Loans etc?

Calculating Portfolio, Portfolio Savings and Portfolio Loans as an example

I	II	III	IV	V	VI	VII
Row No	**Portfolio Data for Months, All figures are monthly averages, unless otherwise noted, in Shillings**	**Ordinary Savings Account**	**Special Savings Account**	**Ordinary Loan Account**	**Special Loan Account**	**Staff Loan Account**
1.	Jan	800	1,320	25	1,000	100
2.	Feb	810	1,350	25	1,038	100
3.	March	820	1,360	25	1,075	100
4.	April	830	1,420	50	1,112	100
5.	May	840	1,510	110	1,150	100
6.	June	850	1,550	180	1,188	100
7.	July	860	1,720	240	1,225	100
8.	August	870	1,790	340	1,262	100
9.	September	880	1,870	400	1,300	100
10.	Oct	890	1,950	450	1,337	100
11.	Nov	900	2,040	460	1,375	100
12.	Dec	910	2,090	470	1,412	100
13.	**Total Portfolio**	**10,260**	**19,970**	**2,775**	**14,474**	**1,200**
14.	**Avg Portfolio**	**855**	**1,664**	**231**	**1,206**	**100**
15.	**Portfolio %**	**21.08%**	**41.02%**	**5.70%**	**29.73%**	**2.47%**
16.	**Portfolio Loans %**			**15.04%**	**78.45%**	**6.51%**
17.	**Portfolio Savings %**	**33.94%**	**66.06%**			

Step # 1: First note the facts about the data:

- There are 5 products – Ordinary Savings Account, Special Savings Account, Ordinary Loan Account, Special Loan Account and Staff Loan Account. The sum of their annual (monthly average) turnover's equals total portfolio
- Three products are loan products – Ordinary Loan Account, Special Loan Account and Staff Loan Account. The sum of their annual (monthly average) turnover's equals total loan portfolio
- Two products are savings products – Ordinary Savings Account and Special Savings Account. The sum of their annual (monthly average) turnover's equals total savings portfolio
- The data for each product is for 12 months – starting with January and ending with December

Step # 2:

- Next, total the average monthly portfolio turnover per product across the year. For this, total the values (for the respective months) in Column's III, IV, V, VI and VII and enter the total value in respective cells in row 13.
- For example, in column III, which is for Ordinary Savings Account, this would entail totaling the following values:

800 (Jan average turnover) +
810 (Feb average turnover) +
820 (March average turnover) +
830 (April average turnover) +
840 (May average turnover) +
850 (June average turnover) +
860 (July average turnover) +
870 (August average turnover) +
880 (September average turnover) +
890 (October average turnover) +
900 (November average turnover) +
910 (December average turnover)

= 10,260, **which is entered in cell in row 13, column III.**

Likewise, we have corresponding figures of

19,970 for Special Savings Account (Row 13, Column IV)
2,775 for Ordinary Loan Account, (Row 13, Column V)
14,474 for Special Loan Account, (Row 13, Column VI), and
1,200 for Staff Loan Account (Row 13, Column VII)

Step # 3:

- Compute average annual total portfolio turnover for each product
- For this, we need to take total annual (monthly average) portfolio turnover
- Divide this total annual (monthly average) portfolio turnover (respective cells in Row 13) by the number of months, which is 12.
- This gives the **Average Annual Portfolio Turnover for the various Products.**

- For Ordinary Savings Account, this equals, 10260/12 = 855 (Row 14, Column III)
- For Special Savings Account, this equals, 19970/12 = 1664 (Row 14, Column IV)
- For Ordinary Loan Account, this equals, 2775/12 = 231 (Row 14, Column V)
- For Special Loan Account, this equals 14474/12 = 1206 (Row 14, Column VI)
- For Staff Loan Account, this equals 1200/12 = 100 (Row 14, Column VII)

Step # 4:

Compute, total average annual portfolio turnover for all products

= average annual portfolio turnover for Ordinary Savings Account (Row 14, Column III) + average annual portfolio turnover for Special Savings Account (Row 14, Column IV) + average annual portfolio turnover for Ordinary Loan Account (Row 14, Column V) + average annual portfolio turnover for Special Loan Account (Row 14, Column VI) + average annual portfolio turnover for Staff Loan Account (Row 14, Column VII)

= 855 + 1664 + 231 + 1206 + 100
= 4056 (**which is the total average annual portfolio turnover for all products)**

Likewise, total average annual portfolio turnover for loan products is the sum of the average annual portfolio turnover of loan products (i.e., Ordinary Loan Account, Special Loan Account and Staff Loan Account)
= 231 (Ordinary Loan Account) + 1206 (Special Loan Account) + 100 (Staff Loan Account) = 1537

Following the same logic, we have total average annual portfolio turnover for savings products as the sum of the average annual portfolio turnover of savings products (i.e., Ordinary Savings Account and Special Savings Account) = 855 + 1664 = 2519

We are now ready to calculate the contribution of each product to the total portfolio, total loans portfolio and total savings portfolio

Step # 5:

Compute the contribution of each product to the total portfolio in terms of average annual portfolio turnover.

For example, Contribution of Ordinary Savings Account to total average annual portfolio =

$$= \frac{\text{Average Annual Portfolio Turnover for Ordinary Savings Account}}{\text{Total Average Annual Portfolio for All Products}}$$

$$= \frac{855}{855+1664+231+1206+100}$$

$$= \frac{855}{4056}$$

= 21.08% (Row 15, Column III)

In other words, Ordinary Savings Account accounts for 21.08% of average annual total portfolio,
Special Savings Account - 41.02% (Row 15, Column IV), Ordinary Loan Account - 5.70% (Row 15, Column V), Special Loan Account - 29.73% (Row 15, Column VI) and Staff Loan Account – 2.47% (Row 15, Column VII).

Summing up the portfolio percentages for the 5 products equals 100% (this is a checking mechanism that you can use to see if the calculations are indeed correct). In this case, adding, we have, sum of 21.08% + 41.02% + 5.70% + 29.73% + 2.47% = 100%

Step # 6:

Compute the contribution of each loan product to the total loan portfolio in terms of average annual portfolio turnover. **There are 3 loan products – namely, Ordinary Loan Account, Special Loan Account and Staff Loan Account. For example, Contribution of Ordinary Loan Account to total loan portfolio =**

$$= \frac{\text{Average Annual Portfolio Turnover for Ordinary Loan Account}}{\text{Total Average Annual Portfolio for All Loan Products}}$$

$$= \frac{231}{231+1206+100}$$

$$= \frac{231}{1537}$$

= 15.04 % (Row 16, Column V)

In other words, Ordinary Loan Account accounts for 15.04% of average annual total loan portfolio, Special Loan Account – 78.45% (Row 16, Column VI and Ordinary Loan Account – 6.51% (Row 16, Column VII). Summing up the portfolio (contribution) percentages for the 3 loan products equals 100% (this is a checking mechanism that you can use to see if the calculations are indeed correct)

Step # 7:

Compute the contribution of each savings product to the total savings portfolio in terms of average annual portfolio turnover. **There are 2 savings products – namely, Ordinary Savings Account, Special Savings Account. For example, Contribution of Ordinary Savings Account to total loan portfolio =**

$$= \frac{\text{Average Annual Portfolio Turnover for Ordinary Savings Account}}{\text{Total Average Annual Portfolio for All Savings Products}}$$

$$= \frac{855}{855+1664}$$

$$= \frac{855}{2519}$$

= 33.94 % (Row 17, Column III)

In other words, Ordinary Savings Account accounts for33.94% of average annual total savings portfolio while Special Savings Account – 66.06% (Row 17, Column IV). Summing up the portfolio (contribution) percentages for the 2 savings products equals 100% (this is a checking mechanism that you can use to see if the calculations are indeed correct)

Step # 8:

From the above, we thus have the quantification of the following allocation bases, which can then be used to allocate the costs of the various allocation units to which they correspond

Summarising, we have the following as the quantified allocation bases

Quantified Allocation Bases	Ordinary Savings Account	Special Savings Account	Ordinary Loan Account	Special Loan Account	Staff Loan Account	Total Across a Row
Portfolio	21.08%	41.02%	5.70%	29.73%	2.47%	100%
Portfolio Loans	NA	NA	15.04%	78.45%	6.51%	100%
Portfolio Savings	33.94%	66.06%	NA	NA	NA	100%

Thus, when we choose "Portfolio" as the allocation basis, we would be allocating

- 21.08% of the respective cost or income (allocation unit) to Ordinary Savings Account
- 41.02% of the respective cost or income (allocation unit) to Special Savings Account
- 5.70% of the respective cost or income (allocation unit) to Ordinary Loan Account
- 29.73% of the respective cost or income (allocation unit) to Special Loan Account
- 2.47% of the respective cost or income (allocation unit) to Staff Loan Account

Likewise, when we choose "Portfolio Loans" as the allocation basis, we would be allocating

- 15.04% of the respective cost or income (allocation unit) to Ordinary Loan Account
- 78.45% of the respective cost or income (allocation unit) to Special Loan Account
- 6.51% of the respective cost or income (allocation unit) to Staff Loan Account

Similarly, when we choose "Portfolio Savings" as the allocation basis, we would be allocating

- 33.94% of the respective cost or income (allocation unit) to Ordinary Savings Account
- 66.06% of the respective cost or income (allocation unit) to Special Savings Account

Q: How to quantify the allocation bases? – Illustrative Example 1

Suppose that the cost allocation team at MSC selects only:

- direct basis,
- portfolio basis,
- transaction basis
- equal basis,
- actual basis, and
- staff time basis

as the set of bases to be used in the exercise. How would the quantification of the bases proceed?

The team will examine each allocation basis in the set, in turn, and as a guiding principle the team will ask the question: what proportion is due to Ordinary Savings Account, Special Savings Account, & Ordinary Loan Account?

Note that for each allocation basis will require a different analysis/calculation, and that "actual" will require a separate analysis/calculation for each line item being allocated.

The result reached by the MSC team appears below:

(a) Direct basis – this was considered straight forward. If the cost or income item is direct to OSA then quantification would be 100% for Ordinary Savings Account, and 0% for Special Savings Account and Ordinary Loan Account. The same principle would apply if the item was direct to Special Savings Account or Ordinary Loan Account.

(b) Portfolio basis – this will follow the same ratio as that existing between individual product turnover expressed as average end of month balances for the sample period. For example if the average of the end of month balances for the three products during the sample period were:

- Ordinary Savings Account: Shs. 800 million
- Special Savings Account: Shs. 200 million
- Ordinary Loan Account Shs.1,000 million

then the quantification would be 40% and 10% and 50% for Ordinary Savings Account, Special Savings Account and Ordinary Loan Account respectively. The Portfolio basis for savings accounts only would be 80% and 20% for Ordinary Savings Account and Special Savings Account respectively.

(c) Transaction basis – this was ascertained by analysing a random sample of transactions in the representative branch studied. The ratio of transactions made, and therefore the resulting quantification of the allocation basis, was follows: 30%, 15% and 55% for Ordinary Savings Account, Special Savings Account and Ordinary Loan Account respectively.

(d) Modified Transaction basis – this was introduced specifically to allocate staff training costs since it was important to reflect the fact that the Ordinary Loan Account required longer/more training than the Special Savings Account which is a straight-forward product. After discussion, the estimated required modification resulted in a quantification of the allocation basis, as follows: 30%, 5% and 65% for Ordinary Savings Account, Special Savings Account and Ordinary Loan Account respectively.

(e) Equal basis – the cost item will be equally distributed to each product. For example the team decided that marketing expenditure (which promoted MSC as an institution not on a product-by-product basis) benefited all products of the organisation equally and should therefore be shared equally. Hence the resulting quantification was 33.3% for each of the three products.

f. Actual basis – the team examined sample transactions of actual usage, like motor vehicle expenses, and found that on average for every 100 transactions 25 could be attributed to Ordinary Savings Account, 20 to Special Savings Account, and 55 to Ordinary Loan Account. The team therefore adopted the quantification of 25%, 20% and 55% for Ordinary Savings Account, Special Savings Account and Ordinary Loan Account respectively. For postage, the team found from the post room records that most postal expenses could be attributed to pursuing loan repayments and that the actual allocation basis was 30%, 5% and 65% for Ordinary Savings Account, Special Savings Account and Ordinary Loan Account respectively

g. Staff time basis – they followed the same procedure as described in the example under section 8.3.1 above and came up with the quantification of 35%, 15%, and 50% for Ordinary Savings Account, Special Savings Account, and Ordinary Loan Account respectively.

Q: How to quantify the allocation bases? – Illustrative Example 2

Branch Z, was selected to host the cost allocation exercise, and handles all three of MSC's products, the Ordinary Savings Account, the Special Savings Account and the Ordinary Loan Account. As part of the preparatory stage each member of staff completed time sheets. The cost allocation team has established the salaries for each member of staff at Branch Z from the payroll. The exercise is at the stage of quantifying allocation bases for staff expenses. Time (as opposed to number of staff working on each product or area) was chosen since most staff members are involved one way or another in dealing with each of the three products. It is therefore essential to identify what proportion of each staff member's time is spent on each product.

How should the team proceed?

For each member of staff (see example below):

- Establish from the time sheets how much time was spent on each of the products;
- Express the time spent on each product as a percentage of the total time spent by each staff member on all products; (e.g. [from the example below] the manager spends 30%, 10% and 60% of her time on the Ordinary Savings Account, the Special Savings Account and the Ordinary Loan Account respectively, whereas the Accounts Assistant spends 40%, 20% and 40% of his time on the Ordinary Savings Account, the Special Savings Account and the Ordinary Loan Account respectively) etc.
- Enter the resulting percentage into a worksheet against each staff member;
- Apply the percentage to the actual salary to obtain the cost per product for the staff;
- Enter the cost in the costs column of the worksheet.

For each product:

- obtain totals of costs;
- express the cost as a percentage to the total staff cost.

Staff Time Allocation basis: Used for a variety of staff related expenses (e.g. medical expenses, training etc.)
Staff Salary Allocation basis: Used for allocating staff salary related expenses (e.g. salaries and allowances, pensions, festival bonus etc.)

Staff category	Salary	OSA	FDA	OLA	Salary costs allocated to:		
		% time	% time	% time	OSA	SSA	OLA
Manager	10,000	30%	10%	60%	3,000	1,000	6,000
Accounts Assist.	5,000	40%	20%	40%	2,000	1,000	2,000
Credit Officer	7,500	0%	0%	100%	0	0	7,500
Teller	6,500	75%	25%	0%	4,875	1,625	0
Office Assist.	3,000	30%	20%	50%	900	600	1,500
Total	32,000				10,775	4,225	17,000
Staff Time Allocation Basis		**35%**	**15%**	**50%**			
Staff Salary Allocation Basis					**34%**	**13%**	**53%**

Calculations for the above Table on Staff Time Allocation Bases and Staff Salary Allocation Bases are illustrated hereafter:

(1) The Staff Time Allocation Bases is arrived at as follows:

For OSA, it is

Staff Time Allocated to OSA / Total Category of Staff Allocated	=	30%+40%+0%+75%+30% / 5	=	175% / 5	=	**35%**

For SSA, it is

Staff Time Allocated to SSA / Total Category of Staff Allocated	=	10%+20%+0%+25%+20% / 5	=	75% / 5	=	**15%**

For OLA, it is

Staff Time Allocated to OLA / Total Category of Staff Allocated	=	60%+40%+0%+100%+50% / 5	=	250% / 5	=	**50%**

These figures have been highlighted in yellow in table on previous page

(2) The Staff Salary Allocation Bases is arrived at as follows:

For OSA, it is

Salary Costs Allocated to OSA / Total Salary Costs for All Products	=	3,000 + 2,000 + 0 + 4,875 + 900 / 32,000	=	10,775 / 32,000	=	33.67% or **34%**

For SSA, it is

Salary Costs Allocated to SSA / Total Salary Costs for All Products	=	1,000 + 1,000 + 0 + 1,625 + 600 / 32,000	=	4,225 / 32,000	=	13.20% or **13%**

For OLA, it is

Salary Costs Allocated to OLA / Total Salary Costs for All Products	=	6,000 + 2,000 + 7,500 + 0 + 1,500 / 32,000	=	17,000 / 32,000	=	53.13% or **53%**

These figures have been highlighted in yellow in table on previous page

Although any individual allocation basis may be used for several allocation unit lines, each basis should only need one calculation e.g. wherever the transaction basis is applied it has the same value.

Results from illustrations

The result was tabulated as follows:

Allocation Basis	**Quantification**			**Total**
	OSA	SSA	OLA	
Direct – Ordinary Savings Account	100%	0%	0%	100%
- Special Savings account	0%	100%	0%	100%
- Ordinary Loan Account	0%	0%	100%	100%
Portfolio	40%	10%	50%	100%
Savings Portfolio	80%	20%	0%	100%
Transaction basis	30%	15%	55%	100%
Modified Transaction basis	35%	5%	65%	100%
Equal	33%	33%	34%	100%
Actual – motor vehicles	25%	20%	55%	100%
Actual – postage	30%	5%	65&	100%
Staff time	35%	15%	50%	100%