

# INTRODUCTION TO PRICING FOR MICROINSURANCE

- **To provide participants with greater understanding of the pricing process**
- **To launch the actuarial training module**

Time	Details
<b>1400-1415</b>	Introduction & presentation of Objectives of the session
<b>1415-1545</b>	Key steps for Pricing MI.
<b>1545-1600</b>	Coffee Break
<b>1600-1615</b>	Case Study introduction
<b>1615-1645</b>	Introduction of the Actuarial Module
<b>1645-1730</b>	Q&A session
<b>1730-1745</b>	Wrap up and needs self assessment

*Move to the corner of the room which corresponds to your status*

- **Q1: Who are you working for:**
  - **An insurance company / self managed insurance program**
  - **A distribution channel (MFI, NGO, bank etc...)**
  - **Consultant / Donors**
  - **Other**

*Move to the corner of the room which corresponds to your status*

- **Q2: What is your involvement in pricing**
  - **Pricing specialist with more than 5 years of experience**
  - **Pricing specialist with less than 5 years experience**
  - **Not pricing specialist but involved in Pricing as part of product development**
  - **Not involved in Pricing**

*Move to the corner of the room which corresponds to your status*

- Q3: What is your experience in Microinsurance
  - Involved in Microinsurance for more than 5 years
  - Involved in Microinsurance for less than 5 years
  - Not started Microinsurance yet

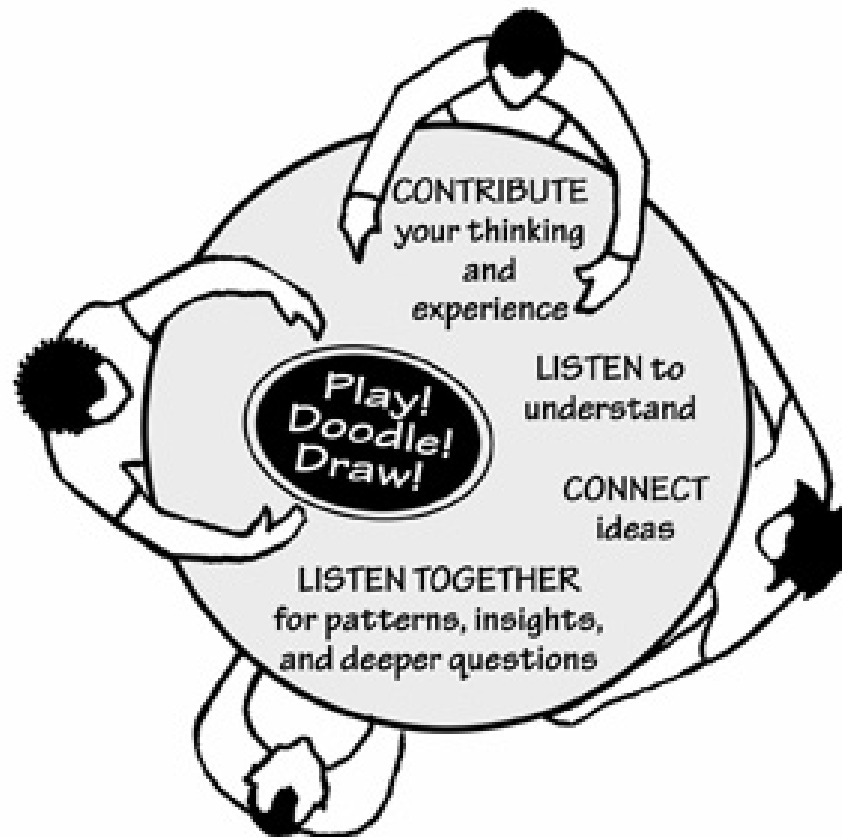
# Pricing for MI, what is your experience?

- **Go to the tables in group, and identify the host**
- **The host encourages people at their table to record their main ideas on the tablecloth.**
- **There will be 3 questions. For each, everyone will move to another table (mix with other participants). Only the host stays at his table and quickly summarize main points from previous discussion**

# Pricing for MI, what is your experience?

## CAFÉ ETIQUETTE

FOCUS  
on what matters!





# Pricing for MI, what is your experience?

**Q1: Based on your experience,  
what are the main steps  
involved in pricing**

# Pricing for MI, what is your experience?

**Q2: From your experience in pricing for Microinsurance, what main challenges have you encountered?**

## **Q3: Based on your experience, what are the most important factors to consider for improving pricing for MI**

*At the end of this round, collectively identify the three main factors enabling better Microinsurance Pricing and write them on the metacards.*

*Each represent of the group will quickly present in plenary.*

- **Similarities with traditional insurance:**
  - **Basic insurance principles still apply**
  - **Purpose of pricing is the same**
    - To determine a premium that is a fair price for the insurance coverage promised

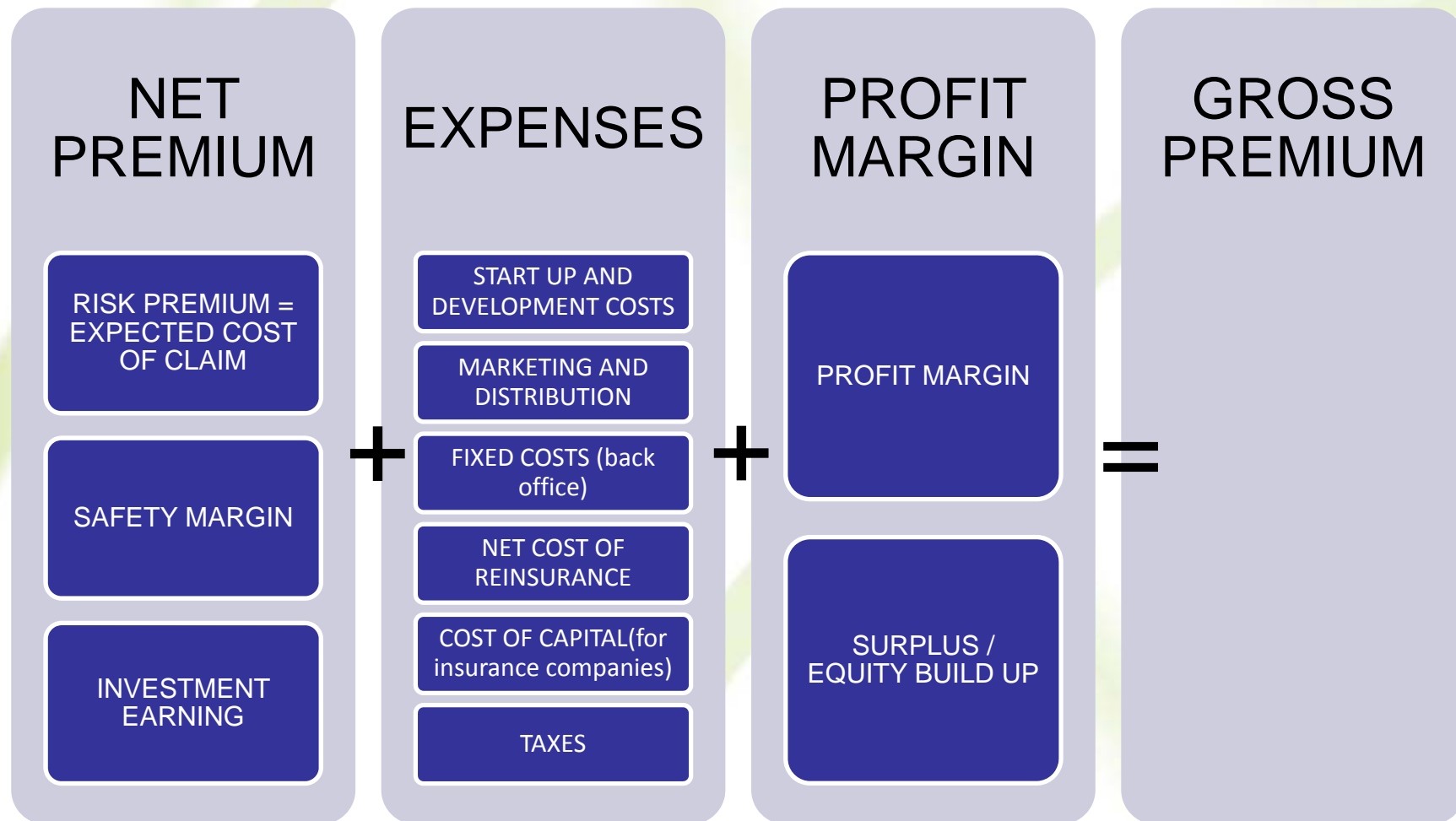
- **Limited experience data available**
  - **Lack of comparable products in market to use as benchmarks**
  - **Need for capacity and systems to collect quality data**
- **Processes**
  - **Processes have a huge impact on pricing assumptions, especially enrollment mechanism and claim control**

- Limited willingness and capacity to pay
- Long term approach needed for sustainability
  - Takes time to reach scale
- The market is not exposed to insurance and very sensible to pricing fluctuations. **IT IS IMPORTANT TO GET PRICING RIGHT**

# Product Development Process

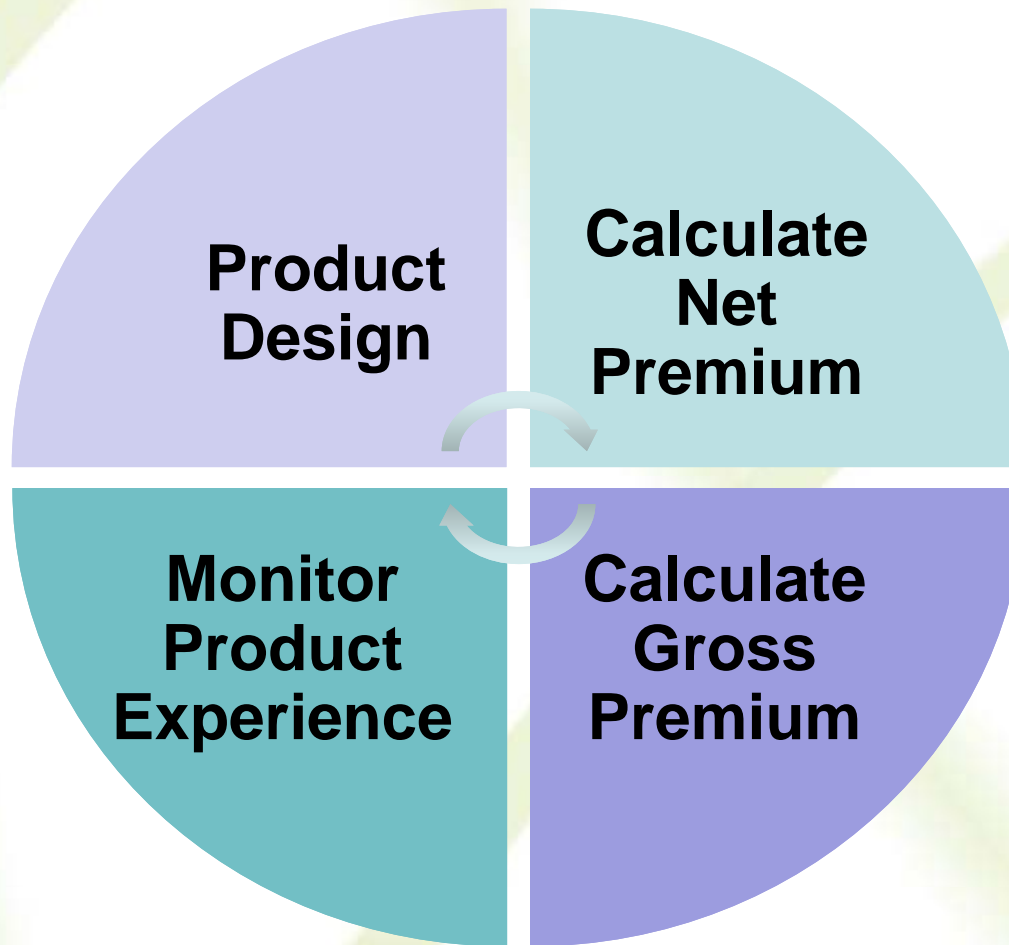


# THE GROSS PREMIUM ELEMENTS

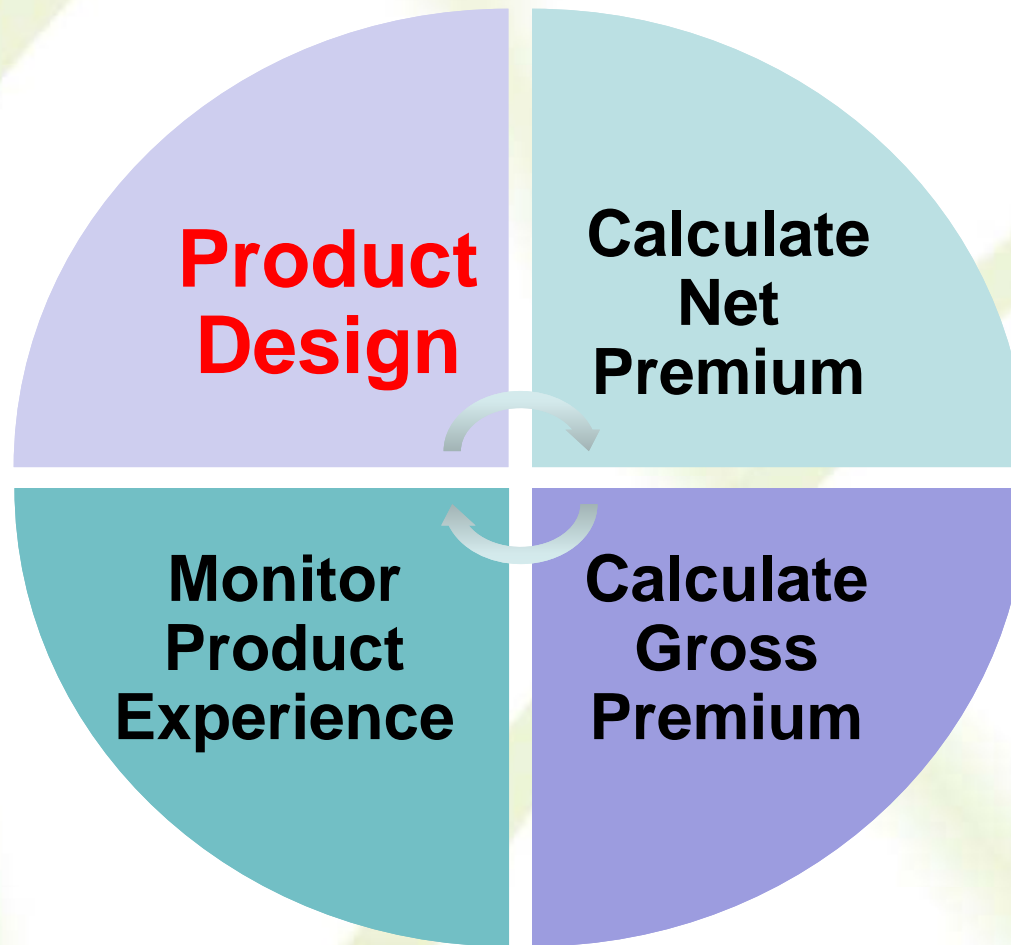




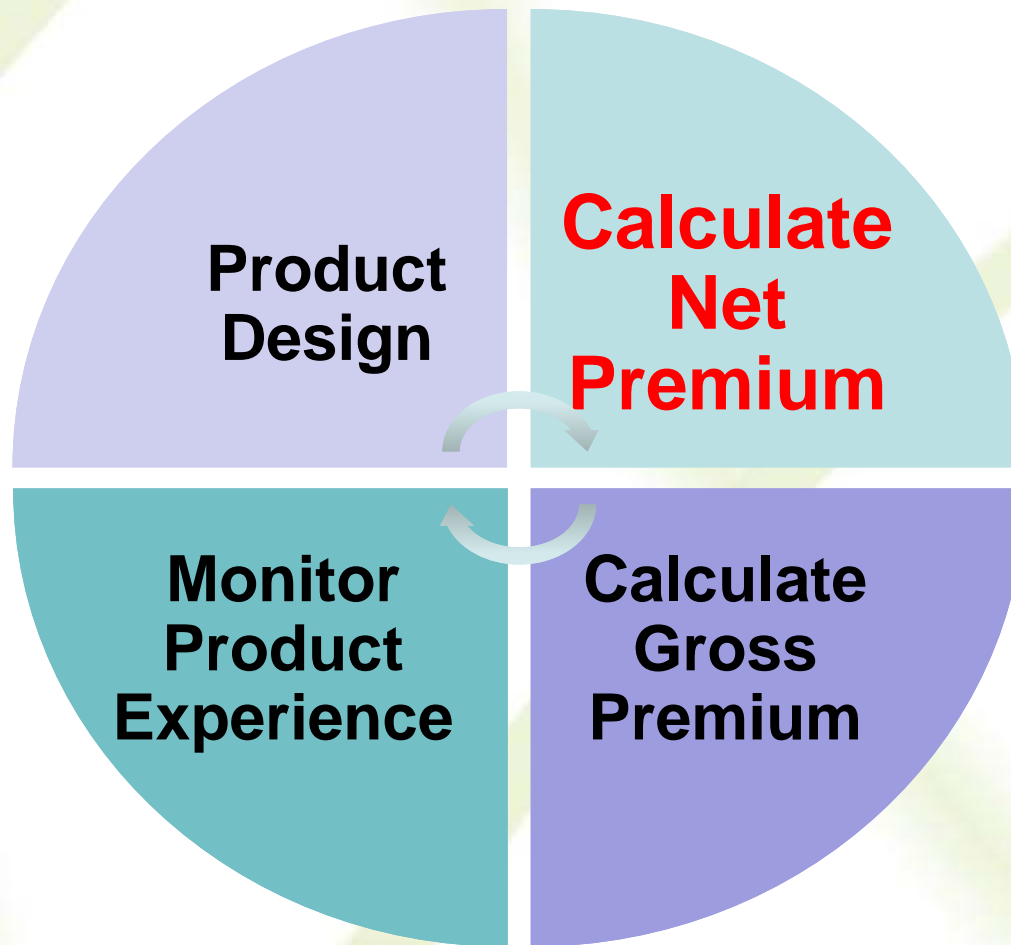
# THE PRICING CYCLE



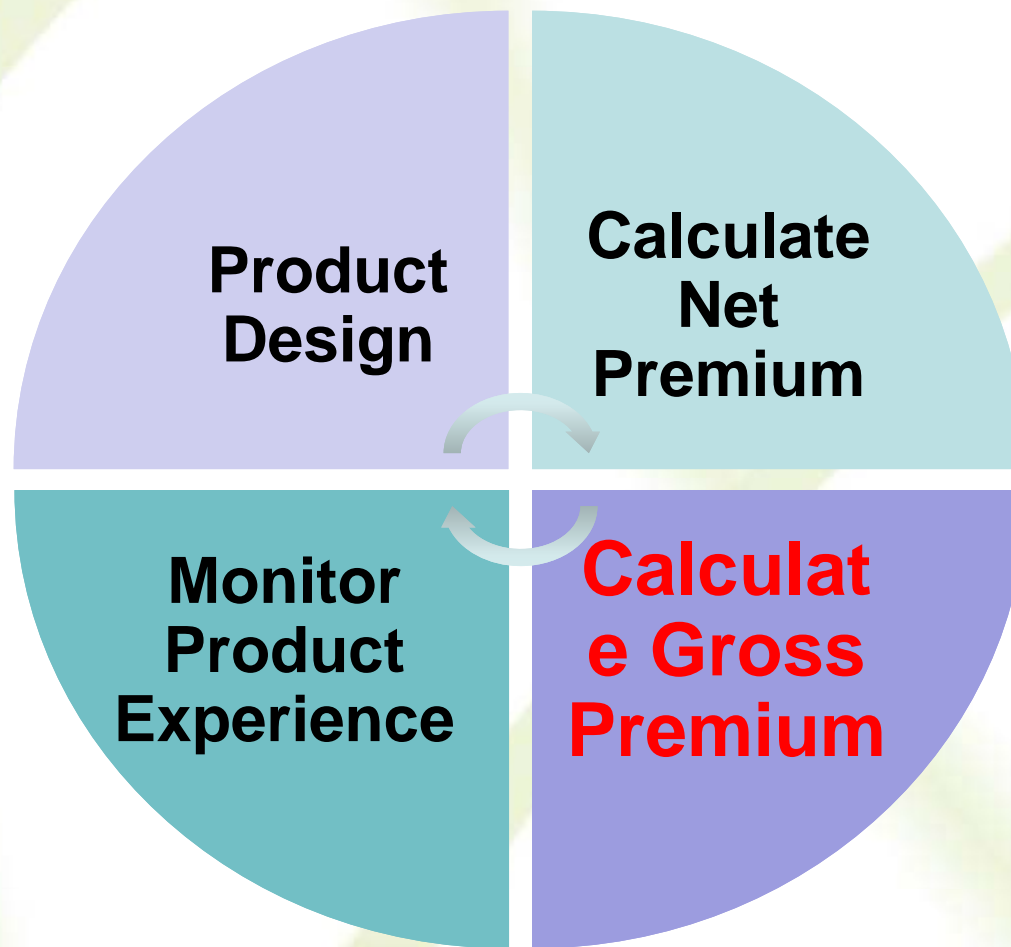
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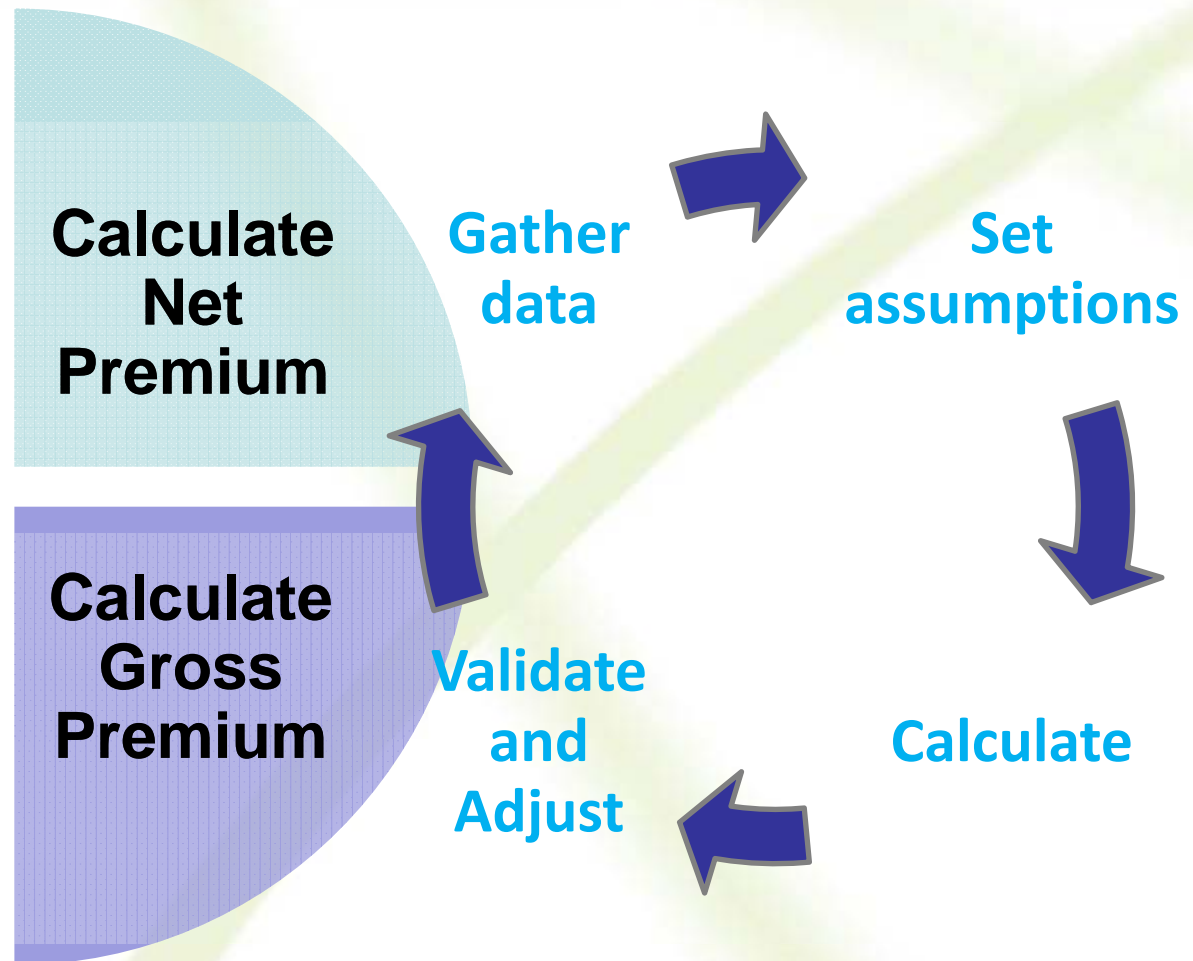
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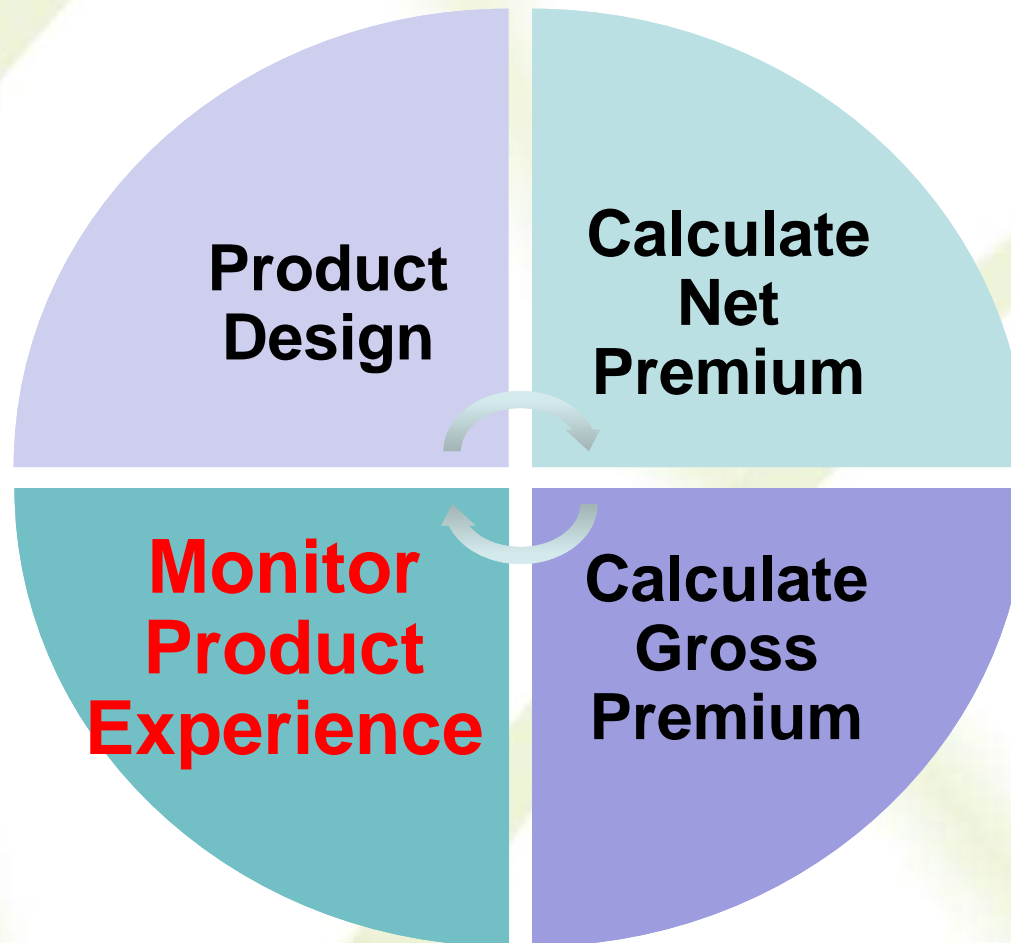
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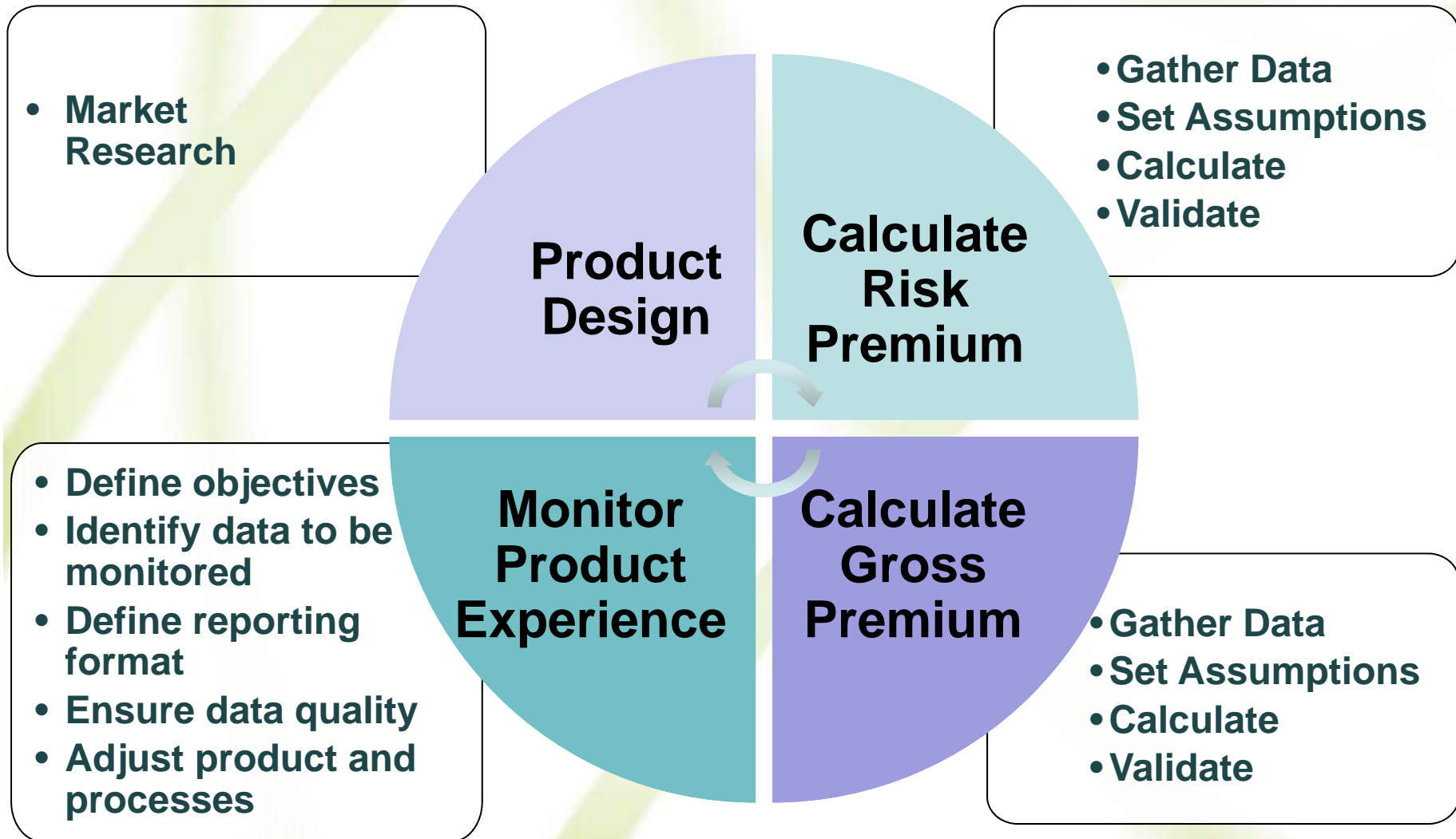
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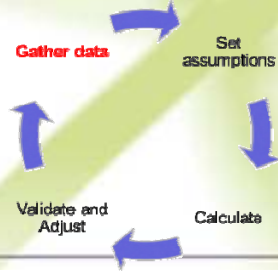


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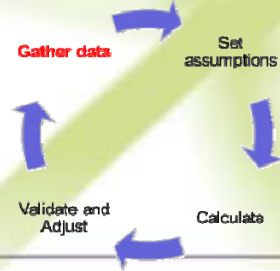
- Pricing for different products may involve:
  - Different data
  - Different models or formulas
  - Different margins
- BUT
  - **The PROCESS is the same!**





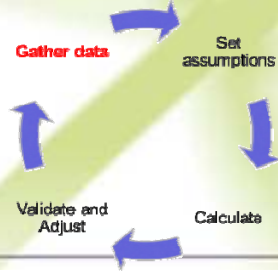
# 1. GATHER DATA

WHAT?	WHY?	WHERE?
<b>QUANTITATIVE DATA</b>	<ol style="list-style-type: none"> <li>1. CLAIM FREQUENCY</li> <li>2. CLAIM COST</li> <li>3. EXPENSES</li> <li>4. INSURED POPULATION CHARACTERISTICS</li> </ol>	<ol style="list-style-type: none"> <li>1. PRODUCT CLAIM EXPERIENCE</li> <li>2. DISTRIBUTOR'S INFORMATION</li> <li>3. NATIONAL AND INTERNATIONAL SURVEY</li> <li>4. OTHER PRODUCT/COUNTRY CLAIM EXPERIENCE</li> </ol>



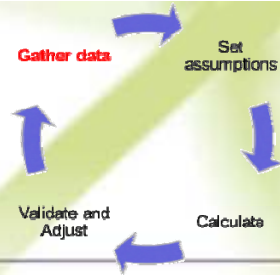
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QUALITATIVE INFORMATION	<ol style="list-style-type: none"> <li>1. UNDERSTAND QUANTITATIVE DATA</li> <li>2. SET ASSUMPTIONS</li> <li>3. VALIDATE</li> </ol>	<ol style="list-style-type: none"> <li>1. MEET WITH CLIENT</li> <li>2. MEET WITH EXPERT</li> </ol>



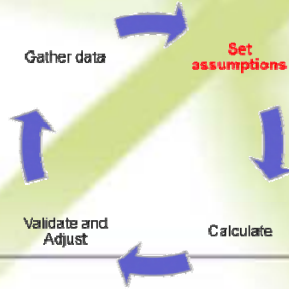
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QUALITATIVE INFORMATION	<ol style="list-style-type: none"> <li>1. UNDERSTAND QUANTITATIVE DATA</li> <li>2. ADJUST QUANTITATIVE DATA</li> <li>3. VALIDATE</li> </ol>	<ol style="list-style-type: none"> <li>1. MEET WITH CLIENT</li> <li>2. MEET WITH EXPERT</li> </ol>
<b>BENCHMARKING INFORMATION</b>	<ol style="list-style-type: none"> <li>1. WILLINGNESS / ABILITY TO PAY</li> <li>2. COMPETITORS OFFER</li> </ol>	<ol style="list-style-type: none"> <li>1. SURVEYS</li> <li>2. MARKET RESEARCH</li> <li>3. PILOT TESTING</li> </ol>



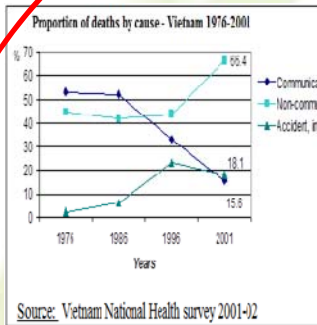
# 1. GATHER DATA

- **CONTEXT IS CRUCIAL IN MI. SPEND TIME IN UNDERSTANDING IT!**
- **GET INFORMATION FROM ALL STAKEHOLDERS**
- **CHECK DATA REASONABILITY**
- **IF YOUR PRICING IS OUTSOURCED, PROVIDE RELEVANT INFORMATION TO CONSULTANT AND CHECK DATA QUALITY**



# 2.SET ASSUMPTIONS

## MARKET RESEARCH



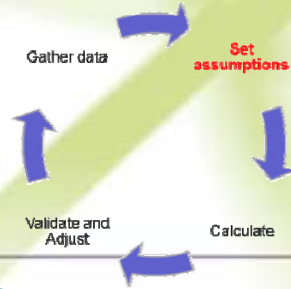
Age	Mortality	
	male (qx)	female (qx')
15	0.48	0.26
16	0.64	0.31
17	0.82	0.39
18	1	0.47
19	1.15	0.53
20	1.26	0.53
21	1.33	0.47
22	1.35	0.41
23	1.35	0.37
24	1.37	0.37
25	1.41	0.39
26	1.45	0.42
27	1.49	0.44
28	1.55	0.46
29	1.64	0.47
30	1.78	0.51
31	1.98	0.57
32	2.17	0.66
33	2.38	0.76
34	2.6	0.85
35	2.84	0.97



Frequency rate

Claims Cost

Volume

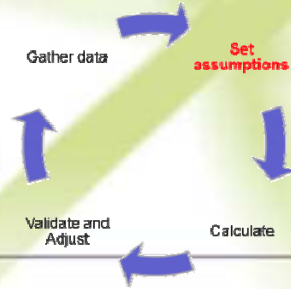


## 2.SET ASSUMPTIONS

$$\text{Frequency Rate} = \frac{\text{Number of Claims}}{\text{Exposure}}$$

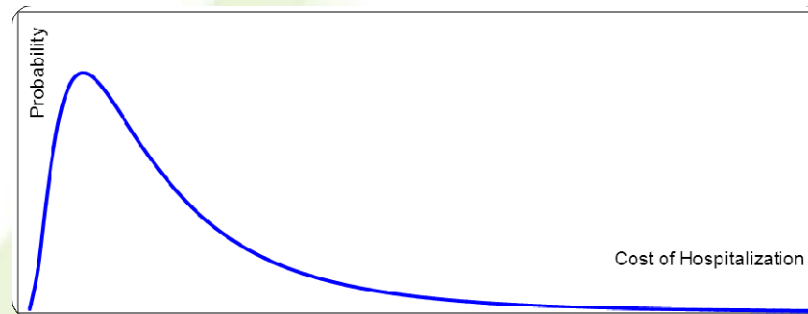
- Define “Exposure” basis – the reference population for which the claims experience applies to
  - For example, the number of lives that were insured during the period = “lives exposed to risk”

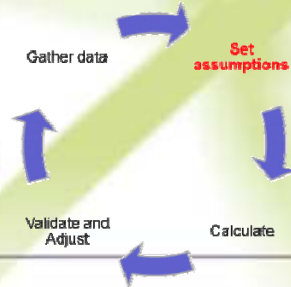
Frequency  
rate



# 2.SET ASSUMPTIONS

- Expected claim amount
  - Simple or complex depending on insured benefits
  - Different methods
    - average claim vs probability distribution



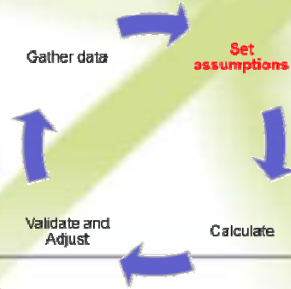


## 2.SET ASSUMPTIONS

- **Some factors that can affect volume assumptions for MI:**
  - **Voluntary or mandatory product**
  - **Existing insurance culture**
  - **Trust and consumer education within target market**
  - **Tangibility of benefits for clients**
  - **Incentives for sales force/distribution channel**

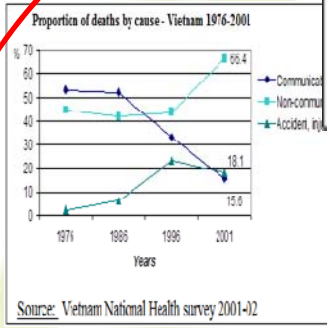
Volume





# 2.SET ASSUMPTIONS

## MARKET RESEARCH



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- 1/ Trends
- 2/ Portfolio composition
- 3/ Effect of insurance on behavior

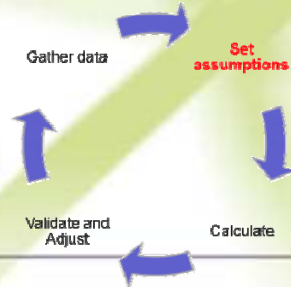


- 4/ Product Features

Frequency rate

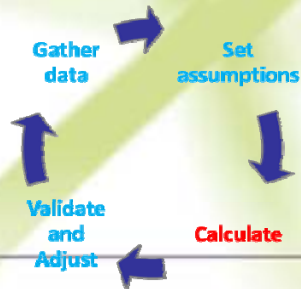
Claims Cost

Volume



## 2.SET ASSUMPTIONS

- Pricing assumptions should correspond to business plan assumptions
- Setting assumptions often requires judgment and experience
- If your pricing is outsourced, ask and question the consultant assumptions

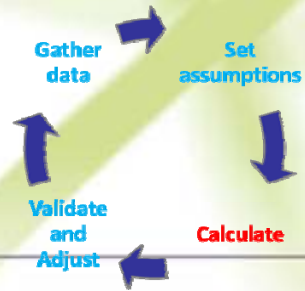


## 3.CALCULATE

- Risk Premium = Expected Cost of Insurance:



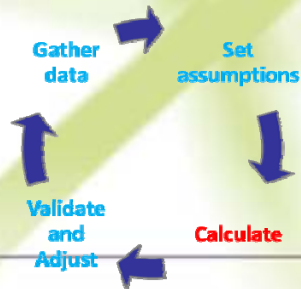
- Calculated per insured unit:
  - policy, insured person, insured group, insured car, etc
- Calculated relative to the period for which the premium is paid
  - for example, annually



## 3.CALCULATE

- Individual Life Insurance (1 year term):

$$\text{Annual Risk Premium} = \text{Annual Mortality rate} \times \text{Sum Insured}$$

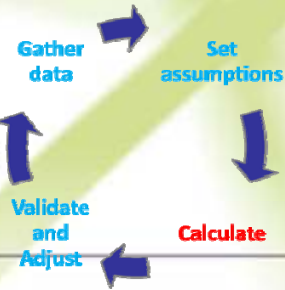


## 3.CALCULATE

- Two common methods to include expenses in gross premium:

### 1. In proportion to the Gross Premium:

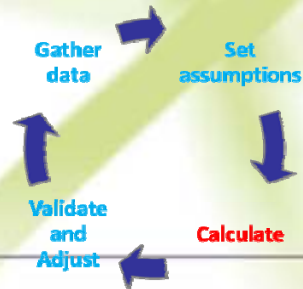
$$\text{Gross Premium} = \text{Risk Premium} \div (1 - \text{Expense Loading (\%)})$$



## 3.CALCULATE

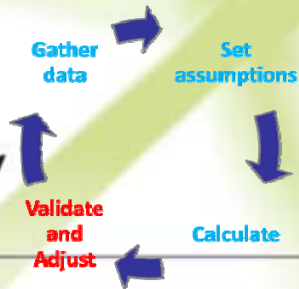
### 2. As a fixed amount for every policy:





## 3.CALCULATE

- Using a Model is a powerful tool to simulate scenarios and clarify relations between different pricing parameters



## 4. VALIDATE

- PRICING IS AN ITERATIVE PROCESS, AND PRODUCT DESIGN AND PROCESSES WILL HAVE TO BE REVIEWED IF NECESSARY
- Increasing premium after launch will face considerable resistance
- Check premium reasonability against willingness to pay / competitors price / related cost to client / expected claim amount
- Conduct scenario testing
- Use a model to moderate discussion between all stakeholders
- Conduct pilot test



- The ILO's Microinsurance Innovation Facility has developed a 3-day training workshop
- The Facility is finalizing a corresponding technical guide, to be found at [www.microinsurancefacility.org](http://www.microinsurancefacility.org) at the end of the year

**THANK YOU!**

**carophily@ilo.org**