



INSTITUTE OF ACTUARIAL
& QUANTITATIVE STUDIES

Subject : Life Insurance – PPP

Topic – Product Design

Introduction – Need for Product

“Different people want different benefits and different mixes of benefits.”

Philip Kotler

What is Product ??

“A product is anything that can be offered to a market for attention, acquisition, use or consumption and that might satisfy a need or want.”

Philip Kotler

Introduction

- *Companies may possess variety product mix*
- *Half of profits of all US Fortune companies came from products that did not exist ten years ago.*
- *Companies introduce new products to tap existing clients and explore new segments*

Why there is Need for Product ??

- Changes in tastes of customers*
- Intense competition*
- Change in economic/social environment*
- Increase in purchasing power*
- Failure of old products/ recently launched products – actual product may not have been properly designed, incorrectly positioned, poorly advertised, greater competition.*

Insurance Product ??

- *Are described as UNSOUGHT consumer goods by Kotler. “ There are consumer goods that a customer does not know or knows about but does not normally think of buying. Classic examples are life insurance.”*
- *Unsought goods require lot of advertising, personal selling and marketing efforts.*
- *Life insurance is seldom bought, always sold*

Life Insurance Product

- All products require approval of IRDA before launch, designed by actuaries.*
- Individual (including pension) and group products*
- Products may be packaged/ straight-jacketed (“take it or leave it”) – could work only in monopoly environment*
- Non-packaged -flexibility –with riders/add-ons – available with competition by private players*
- One single product cannot suit all customers*
- Indian consumer is curious and demanding*

Feature of any Life Insurance Product

Who can be insured ?

What can be the sum assured ?

- ☐ *Under what events would SA be payable ? How/when would the SA be payable ?*
- ☐ *Term of the policy - minimax Age at entry*
- ☐ *Premium payment modes*
Any additional benefits like riders ? Conditions/exclusions under each policy

Basic Element of Life Product

- Life insurance business based on two basic instincts – fear and greed*
- Term insurance takes care of fear of death Pure*
endowment fulfils the greed for money
- TI & PE are basic elements in every life insurance plan*
- Called the basic building blocks in all LI product design. Every company has different products to suit the need of every customer.*

Product Design – Concept

- The payment of insurance premium and acceptance of the contract by the insurer creates contractual obligation.*
- Claim is a right of the insured to receive the amount secured under the policy of insurance contract.*
- It is the pecuniary interest in the insurance contract.*
- Claims are to be paid either to the insured or the nominees of the insured by the insurer under the agreement or the terms of the contract of insurance*

Why a Product might Need to be Created or Modified ??

- Market awareness of a new product need
- Availability of new financial instruments

- Insufficient profitability
- Inefficient use of capital

Factors in Product Design

- ☐ *Profitability*
- ☐ *Marketability*
- ☐ *Competitiveness*
- ☐ *Financing requirement*
- ☐ *Risk characteristics*
- ☐ *Onerousness of any guarantees*
- ☐ *Sensitivity of profit*
- ☐ *Extent of cross-subsidies*
- ☐ *Administration systems*
- ☐ *Consistency with other products*
- ☐ *Regulatory requirements*

Profitability

- *A company will want to ensure that the premiums charged for non-linked contracts will be sufficient to cover the benefits to be provided and the expenses in most foreseeable circumstances, and provide a profit margin.*
- *At a general level, a life insurance product can be broken down into three components: savings, protection and administration.*
- *For unit-linked contracts it will want to ensure that overall the charges will be sufficient to cover the expenses to be incurred, and provide a profit margin.*

Marketability

- The benefits offered need to be attractive to the market in which the contract will be sold.*
- Innovative design features may make a contract more attractive as may the addition of options and guarantees.*
- In the context of marketability, one would consider how understandable the product is.*
- The distribution channel involved will have a fundamental influence on what product is required, how it should be structured, and how it should be priced.*

Competitiveness

- *The prime influence on competitiveness will be the level of the expense charges.*
- *Competitive markets ensure lower profit margin, as earning lower profit will be better than earning NO profits. (Focus on volumes)*
- *In Low competitive markets, higher per policy margin is possible.*

Financing Requirement

- *This is a particularly important criterion for new life insurance companies because of the small amount of free assets that they have available to finance new business.*
- *As a result, these new companies often sell just unit-linked products.*
- *The actuary will use model office techniques to project the financial situation with and without the new product under sensible sales assumptions to assess the company's ability to finance the product, and whether the return on capital is adequate.*

Risk Characteristics

The level of risk that may be acceptable will depend upon the company's ability or willingness either to absorb risk internally or to reinsure or hedge it.

For a company entering a new market for that company (perhaps using a new distribution channel) the mortality parameter risk would still be relatively large.

If the company is faced with a large parameter risk it could do one or several of:

- *offer the contract in unit-linked and/or reviewable form to avoid a long-term rate guarantee*
 - *reinsure a large part of the risk*
 - *incorporate very ample margins in the premium rates*
 - *offer the contract as an additional "rider" benefit rather than stand-alone.*

The ability to hedge investment risk will be an important consideration in the design of financial guarantees.

Onerousness of any Guarantees

- *The company will need to consider the onerousness of any guarantees, for example the level of any guaranteed surrender values under a non-linked contract.*
- *Offering guarantees results in two problems:*
 - *Possibly having to suffer a cost that you did not fully expect; and,*
 - *Probably (depending on the supervisory reserving regime) having to reserve for this possibility from the outset – thereby increasing the capital strain of the product.*

Sensitivity of Profit

- *Products are more likely to be sensitive to particular types of risk the more onerousness the guarantees are.*
- *The important variables that might impinge on profitability are:*
 - *investment return*
 - *mortality, or other contingency if relevant*
 - *expenses, including expense inflation*
 - *withdrawal rates.*

Extent of Cross-subsidies

- A company needs to decide on the extent of any cross-subsidies between, for example, large and small contracts.*
- Ideally, even small policies should cover their own administrative cost and sales cost.*
- However, cross subsidies could be used at product level or SA level to compensate for smaller policies.*

Administration System

- The system requirements of a new product may limit either the benefits to be provided or the charging structure to be adopted.*
- The issue of compatibility with the administration system can also be extended to cover the aspect of simplicity: it is in the interests of the administration system, policyholders, agents / brokers and the company's staff that the product be simple.*
- Thus any complications must be warranted by some significant advantage in terms of the factors discussed.*

Consistency with Other Product

- The company may wish to ensure that the charging and benefit structures of a new policy are at least similar to any existing business.*
- The key reason is that a major change will result in significant systems development, which will take time.*
- There are benefits in terms of saving time and cost with such things as training administration and sales staff, printing marketing literature and so on.*



Regulatory Requirement

- *A company must adhere to any regulatory requirements,
Eg maximum (capped) charges, treating customers fairly.*
- *These should be taken into account in product design.*

