International Congress of Actuaries

The Actuarial Control Cycle in education

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Australian "Actuarial Control Cycle"

- How it fits in Australian education structure
- Purpose
- Content
- How it is delivered
- How it could be useful in global education

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Australian education structure

- Part I "Technical/quant" subjects
  = UK 101-109 (mostly as part of a University degree)
- Part II Actuarial Control Cycle
  = a general actuarial framework

Associate = Parts I and II

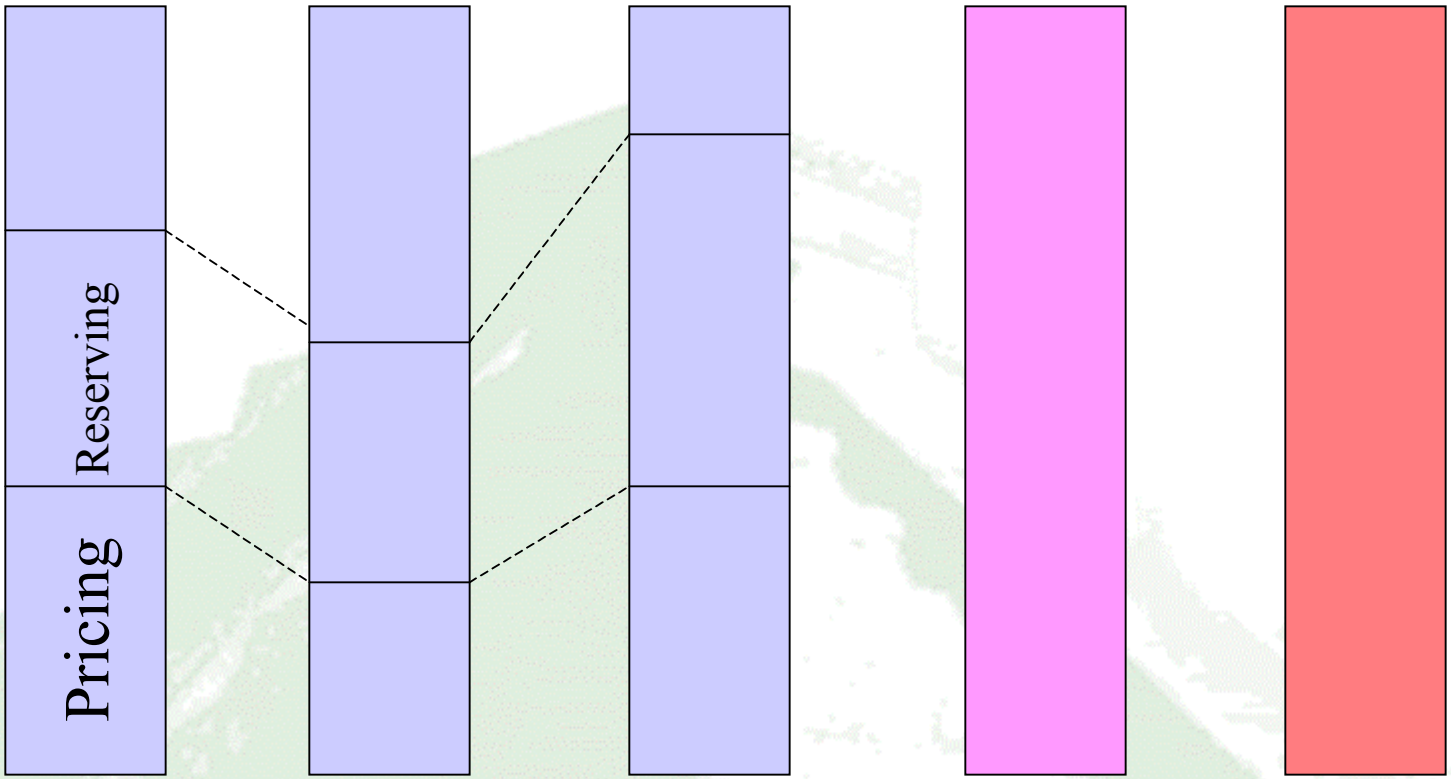
- Part III Specialisation (currently require 2)
  - currently Life, General (P&C), Superannuation (Pensions), Finance, Investments
- Part IV Professionalism Course, Experience

Fellow = Parts I to IV

Principles behind introduction of Control Cycle Subject

- Provide a broad framework for understanding actuarial work
- Draw out the common elements in different areas of current actuarial practice
- Show how these elements also apply in other potential areas of practice
- Provide a bridge from the narrow-view technical subjects to the practical, professional, specialist subjects

The old model - silos



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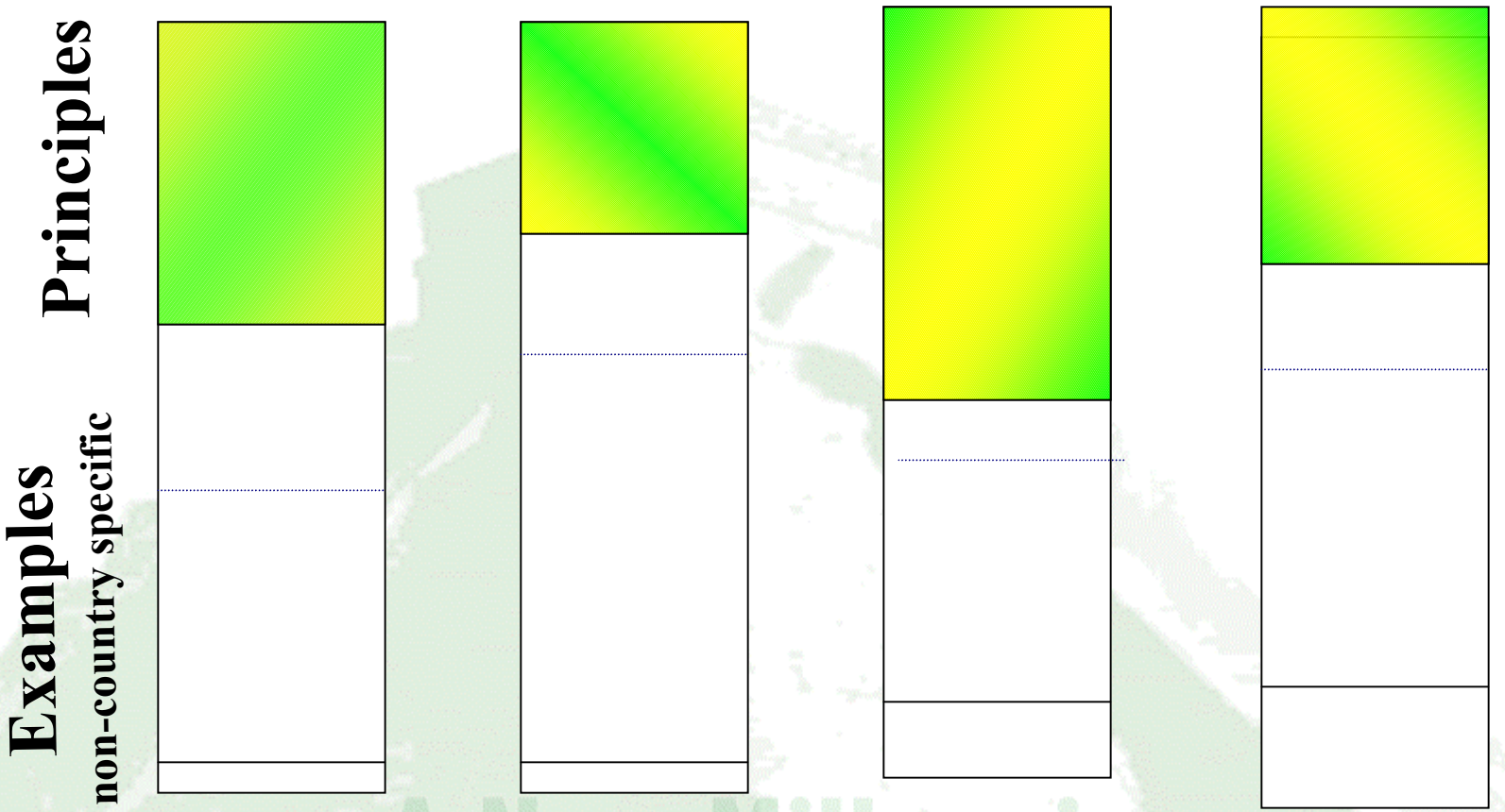
The new model - holistic



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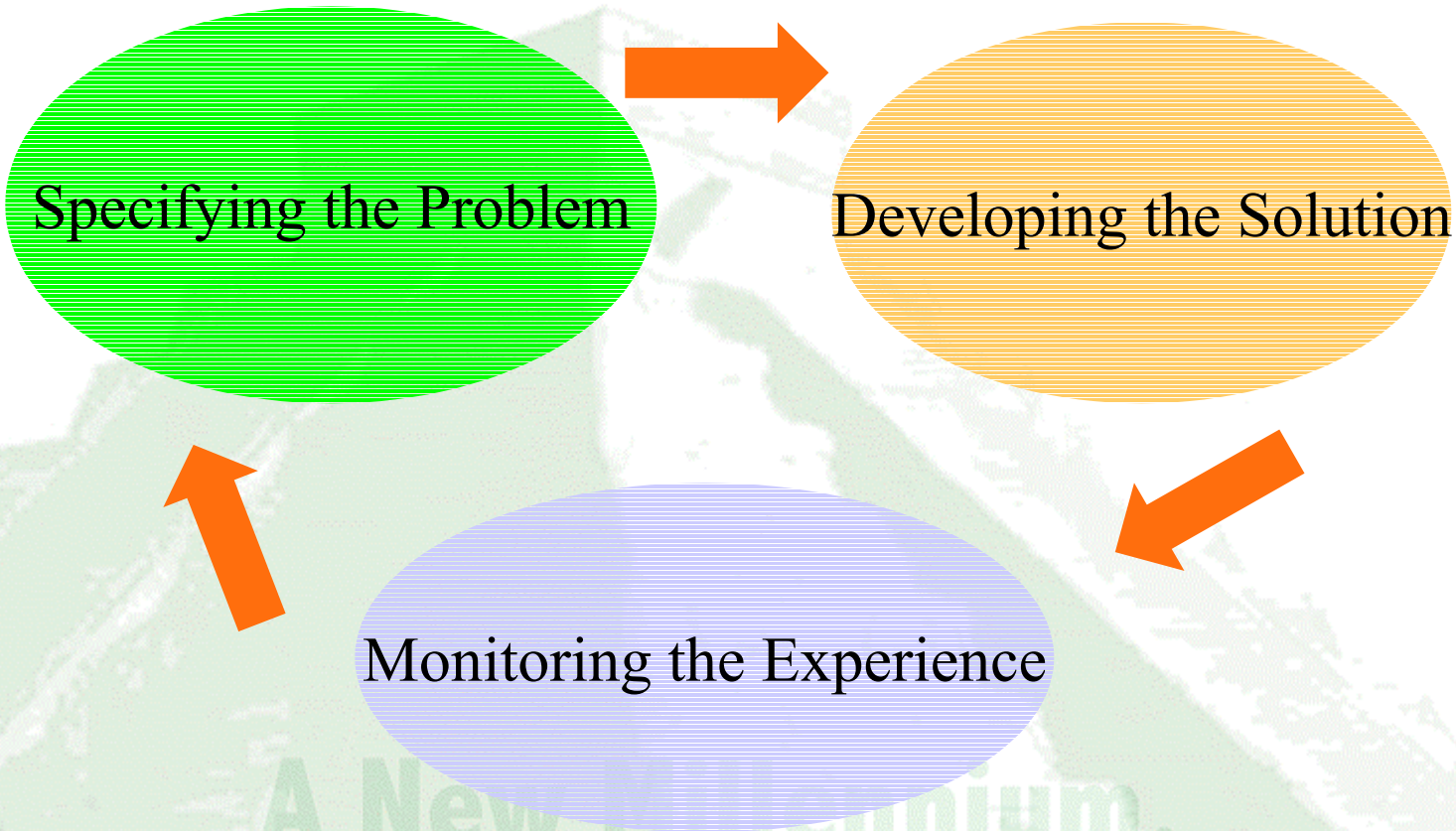
The Cycle Concept



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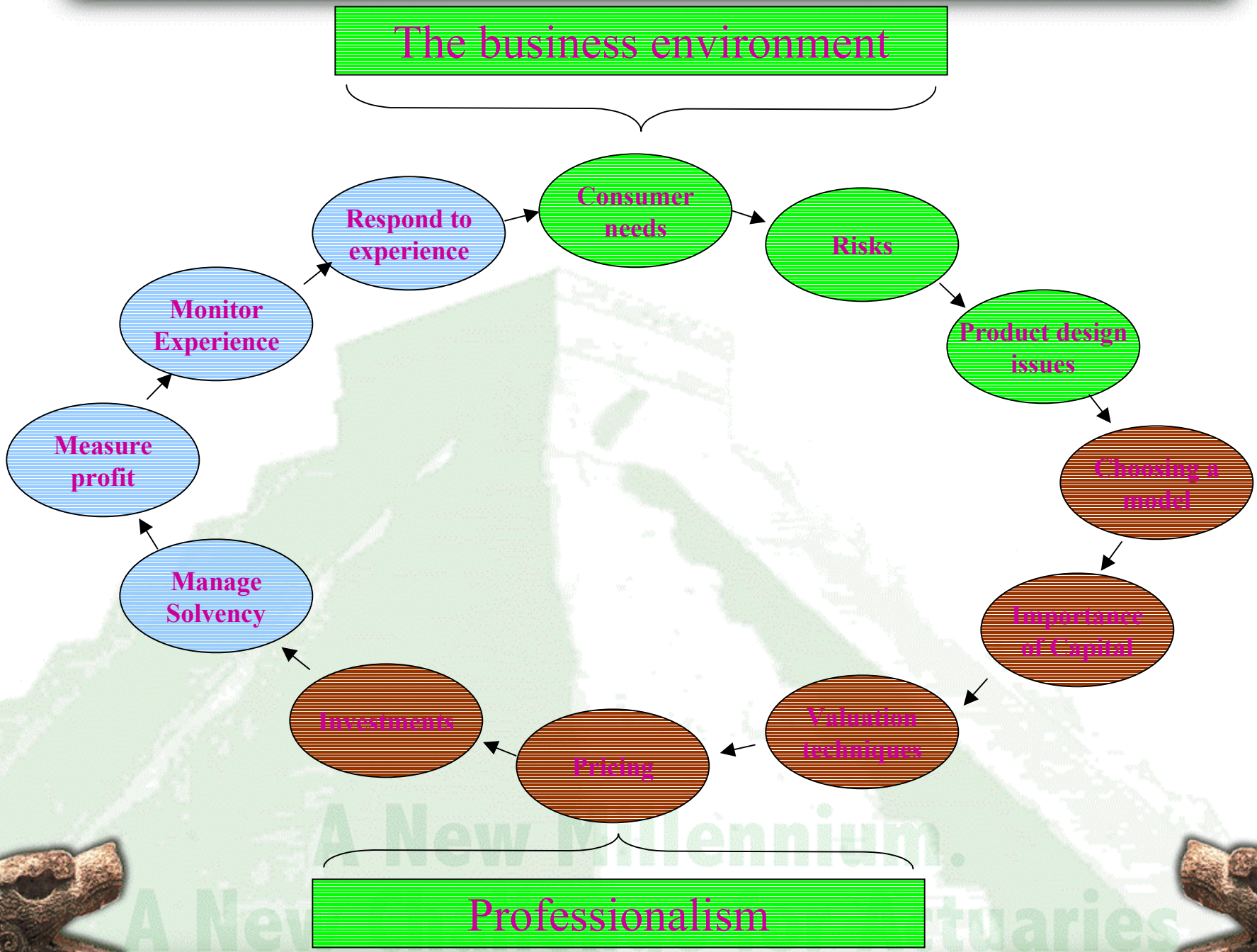
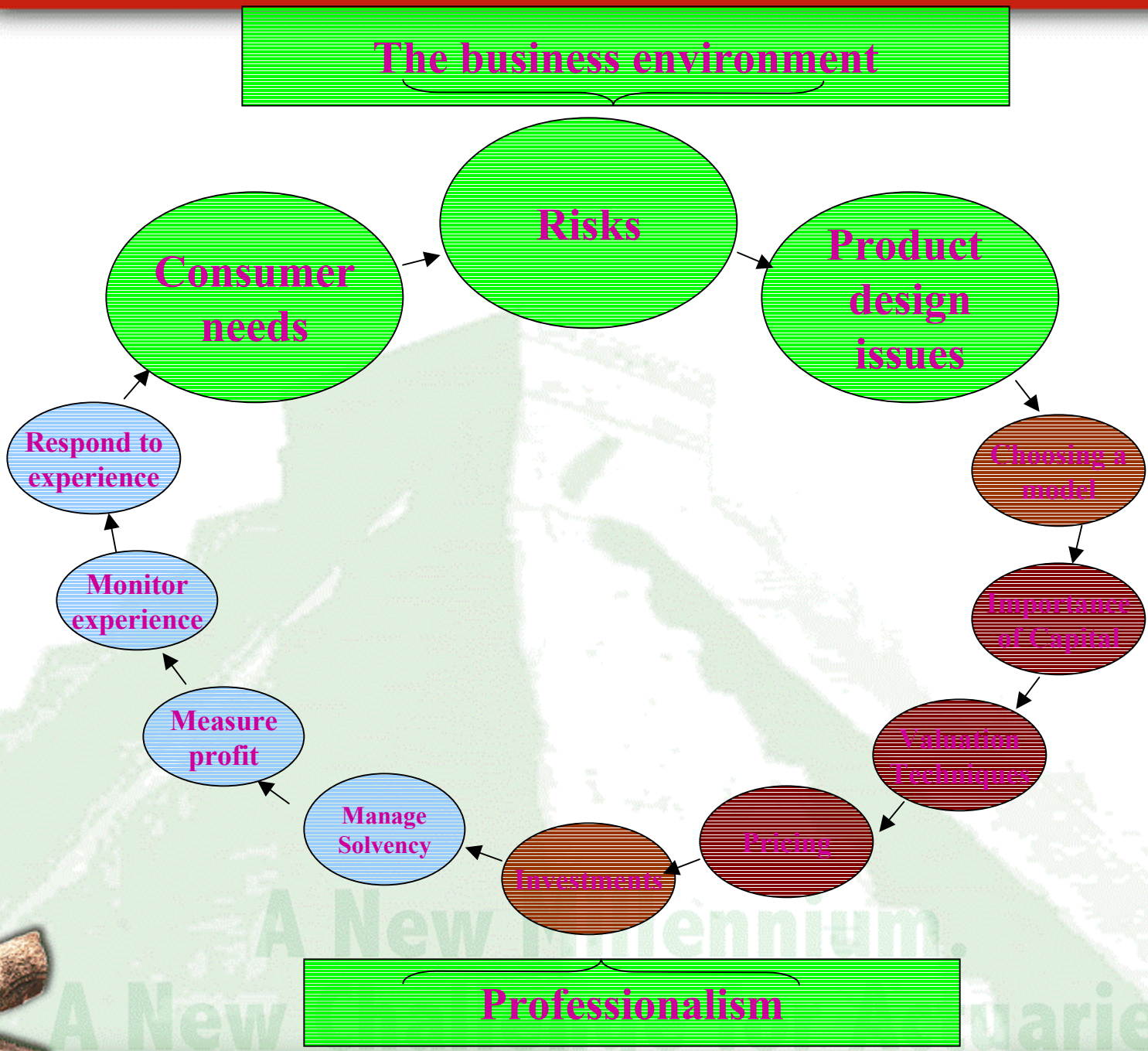

The business environment
Consumer needs
Risks
Product design issues
Choosing a model
Importance of Capital
Valuation techniques
Pricing
Investments
Manage Solvency
Measure profit
Monitor Experience
Respond to experience
Professionalism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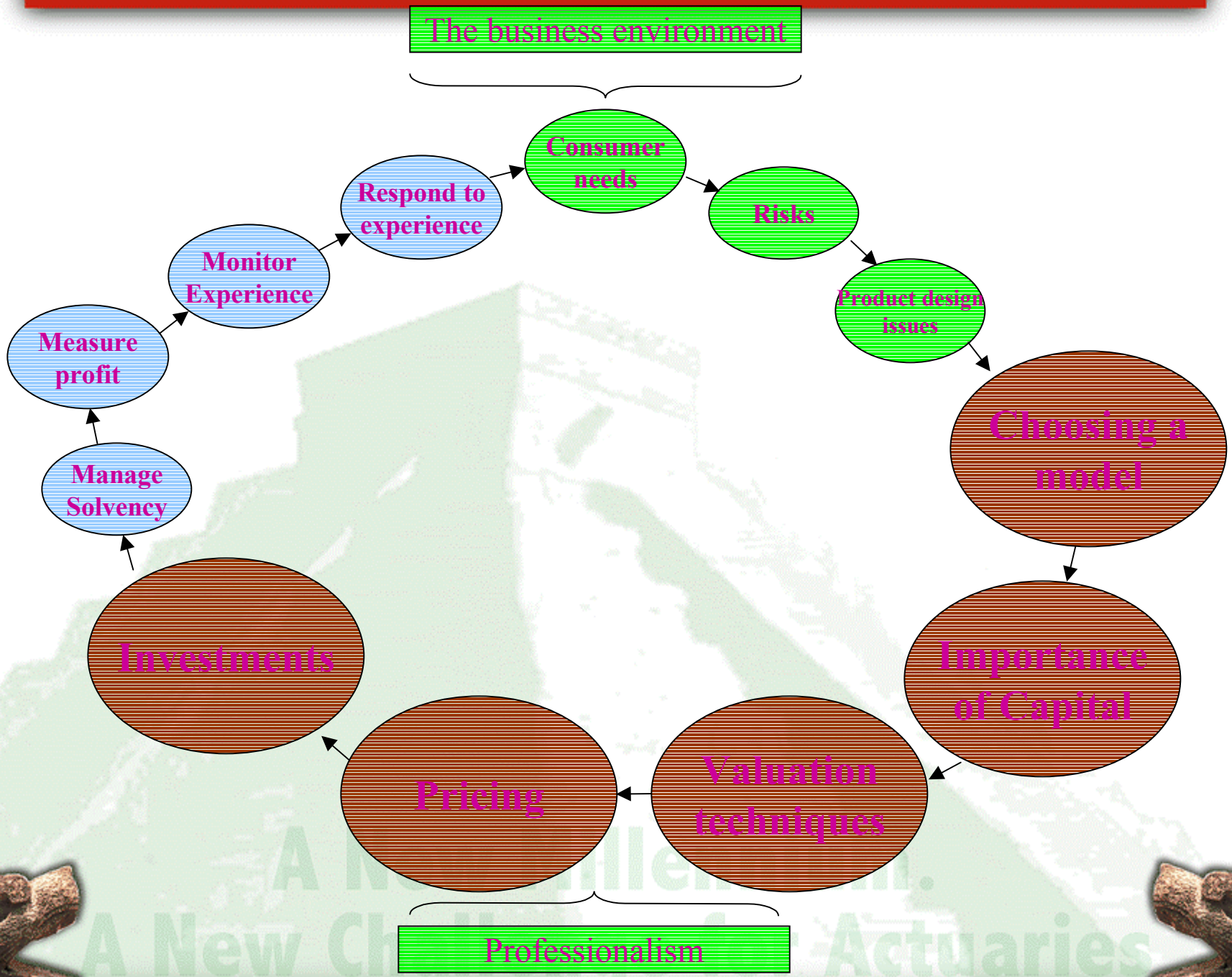
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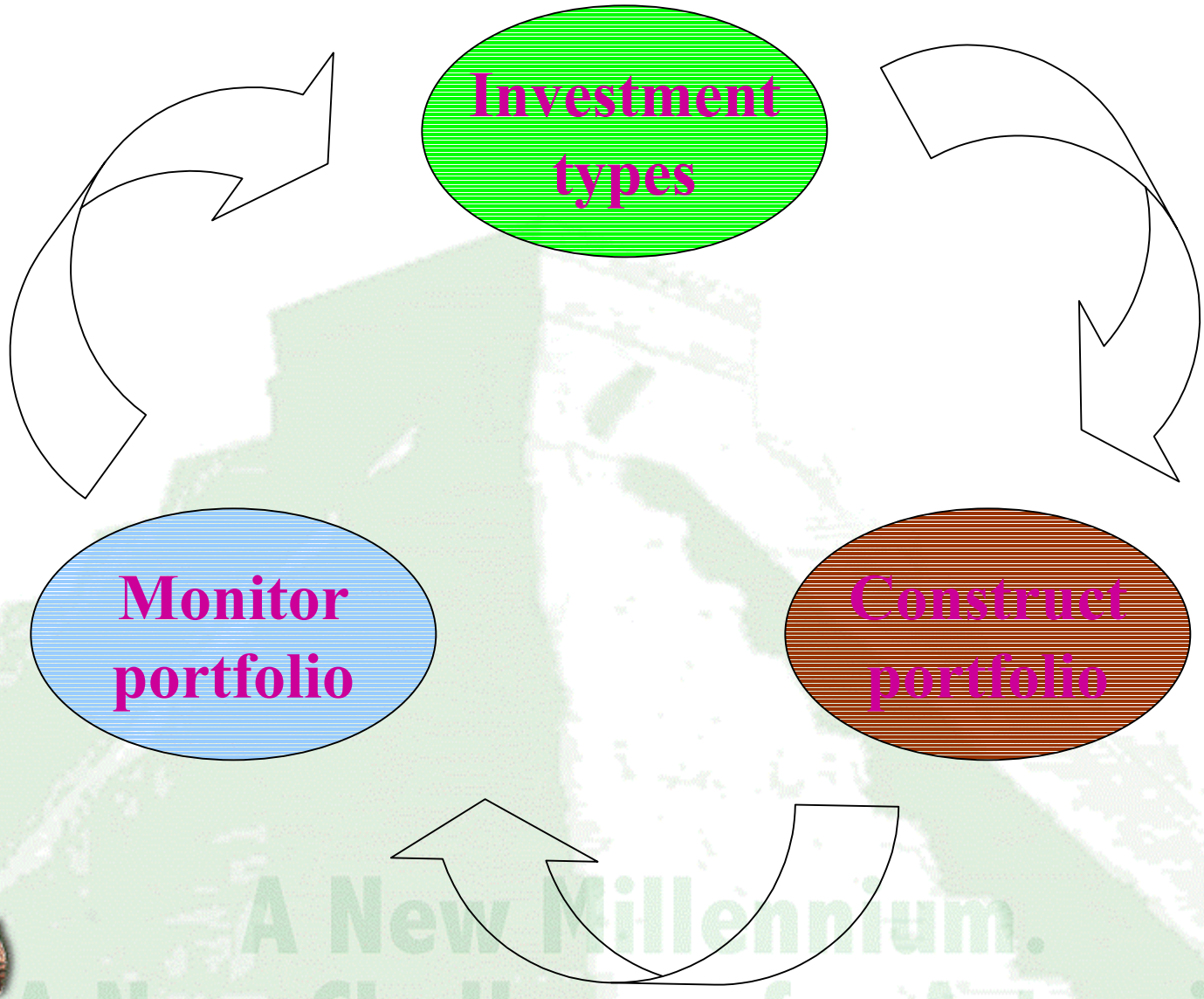

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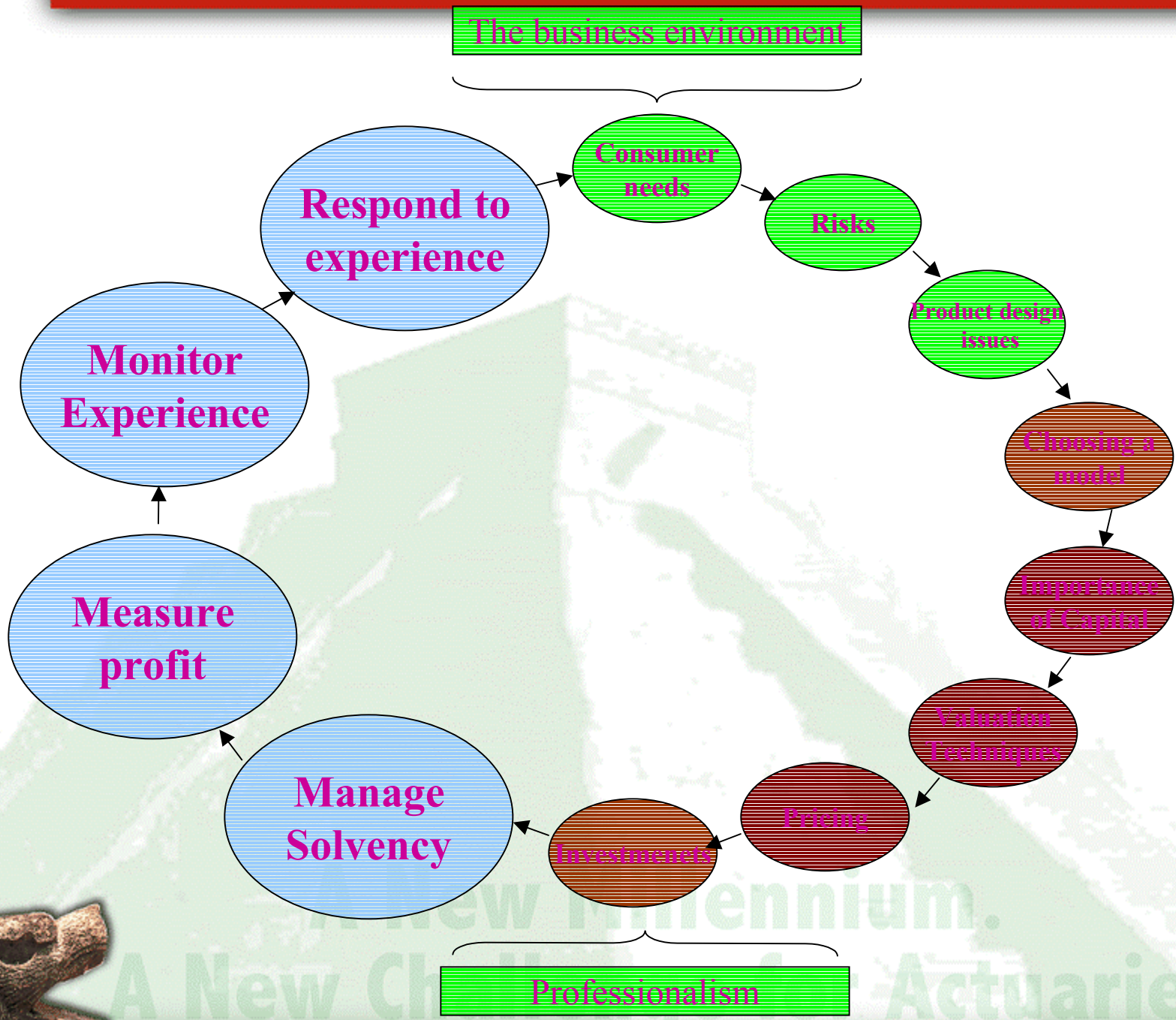
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How the subject is delivered

- Institute sets syllabus, oversees standards
- Universities teach and assess
- Taught in 4th year undergraduate, or in Masters, or single subject (non-degree)
- Taught by 4 universities in Australia
  - all have face-to-face lectures
- Distance version offered by
  - University of Melbourne by video-tapes
  - Macquarie University (in Sydney) by internet

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Internet teaching:

1. How it works
2. Delivery of Content
3. Communication
4. Other Features

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1. How it works

- Software package “WebCT”
- Each student has password
- Students can log in anywhere, any time
- Students in: Australia, NZ, UK, USA, Singapore, Malaysia, Philippines, Hong Kong...
- Examination centres arranged locally (same as traditional correspondence course)

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2. Delivery of Content:

- Different media: text, PowerPoint slides, digital audio
- Links
- Automated quizzes

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3. Communication

- **Discussion Board**
- **Private Mail**
- **Chat and File-sharing (not very effective in practice)**

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Discussion Board

Teacher ⟷ Students

Students ⟷ Students

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Discussion Board (continued)

- Public, but can be anonymous
- Interactive
- Whole class or sub-groups
- Permanent record
- Can be searched, downloaded

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Communication (continued)

- **Private Mail**

Teacher ⟷ Student

Student ⟷ Student

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4. Other Features

- Assignment submission and feedback
- Teacher can track student activity
- Surveys and quizzes can be automatically marked, marks collated

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Conclusions about Internet teaching

- An exciting new tool
- Needs strong support of teachers - NOT a labour-saving device!
- An end to isolation
- A great resource for a global education system

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Global education and the Control Cycle

- A useful framework across practice areas or within a single practice area
- UK has similar approach in their "Core Applications" proposal
- Potential in new systems of education - bridging technical and practical
- Textbook in preparation for 2003

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Thank you!