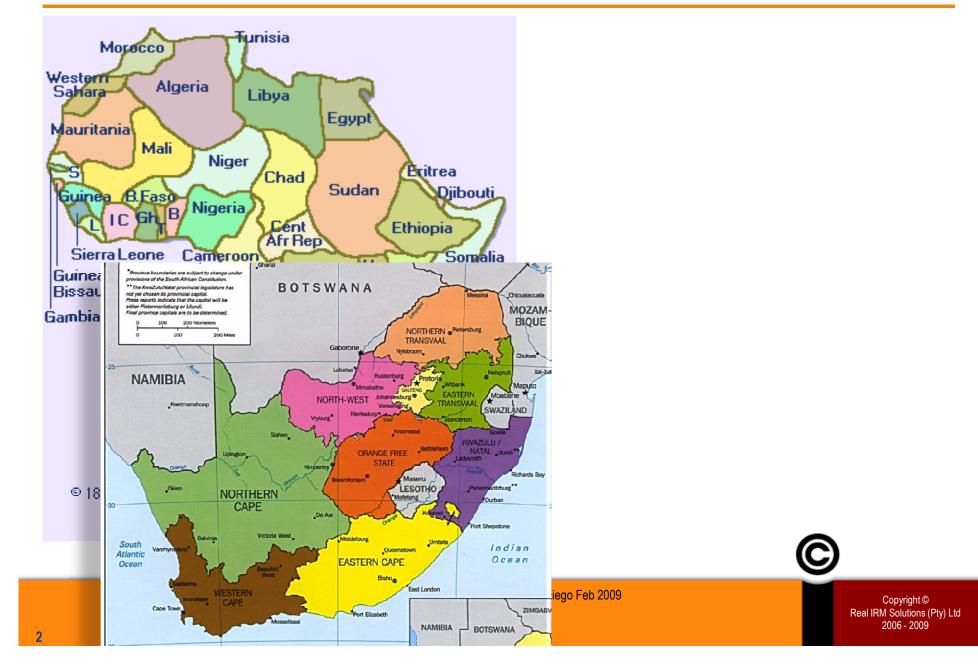# EA in South African Universities

EAPC San Diego

4 February 2009

Paul van der Merwe

South Africa

…iego Feb 2009

University of Pretoria

❑ Established in 1908

❑ In 2008, student numbers totalled 57 409

❑ In 1996, the University of Pretoria became the university with the highest research output in South Africa and we have maintained this status

❑ The academic programmes of the University are offered in nine faculties and a business school. The faculties comprise a total of 140 departments and 85 centres, institutes and bureaus.

EA Course - Informatics

❑ EA Honours course from 2007

❑ A module of Honours course in Informatics

❑ Average 70 students per year

❑ Dr Machdel Matthee course leader

❑ Prerequisite:

  ▪ Relevant B degree in Information Systems

  ▪ 60% average for final year courses

  ▪ Advanced System Development course

Curriculum - 2007

❑ Provide a comprehensive overview of EA

❑ Themes

- Introduction to Enterprise Architecture

- Overview of Zachman framework

- Overview of GERAM (Generalised Enterprise Reference Architecture and Methodology)

- EA frameworks

- EA methods – TOGAF and others

- EA and Service Oriented Architecture

- EA tools – System Architect, ARIS, Rochade

- Conclusion – review of all material

Curriculum – 2007 (continued)

❑ Project

- Development of an Enterprise Architecture solution for a secondary school

- Seven weeks

Curriculum - 2008

❑ Provide an in-depth overview of TOGAF ADM and Zachman Framework

❑ Themes

- ADM of TOGAF (Introduction to EA)

- Overview of Zachman Framework, Preliminary Phase of TOGAF

- Architecture Vision

- Business Architecture

- Data and Application Architecture

- Technology Architecture

- Architecture Implementation and Governance

- Conclusion – review of all material and case study

Curriculum – 2008 (continued)

❑ Project

- Development of an Enterprise Architecture framework for the Department of Informatics to improve the delivery of tuition

- Seven weeks

Lessons Learnt

❑ Do examples and case studies with students

❑ Prescribe modelling techniques at first

❑ Prescribe EA tools initially

❑ TOGAF too complicated and confusing at this level

BA Course – Industrial Engineering

❑ Business Architecture Honours course from 2006

❑ A module of Honours course in Industrial Engineering

❑ Average 30 students per year

❑ Marne de Vries leads course

❑ Prerequisite:

   ▪ Relevant B degree in Industrial Engineering

   ▪ Information Systems Design course

Curriculum

❑ Strategy, IT Strategy and Business Architecture

❑ Themes

- What is EA? Different value-creation approaches

- The strategic and business context - starting point for alignment

- EA Planning (mechanisms and tools)

- EA in practice (case studies)

- Planning for change (culture and human behaviour)

❑ Overview of TOGAF and other frameworks.

❑ Reference to Schekkerman's comparison of frameworks

Lessons Learnt

❑ Assessment a challenge

❑ How do you assess whether students understand the integration between all the different architectural levels and the application thereof?

UNISA

❏ Roots go back over 130 years, which makes it the oldest university in South Africa

❏ UNISA is Africa's premier distance learning institution

❏ More than 150 000 students

EA Course – Information Systems

❑ EA Honours course from 2009

❑ A module of Honours course in Information Systems

❑ Jan Mentz course leader

❑ Prerequisite:

  ▪ Relevant B degree in either Computer Science or Information Systems

Curriculum

❑ Overview of EA in business

❑ The role of EA as it relates to IT in the business

Other Universities

- University of the Western Cape

    - Roderick Lim Banda

    - Institute for EA

- Tshwane University of Technology

    - Masters course

    - Architecture Forum member

- University of KwaZulu Natal

- North-West University

Meraka

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