Innovation and Entrepreneurship for Accounting in PNG

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Outlines

- Motivation
- Introduction to DBS (Department of Business Studies)
- Innovation and Entrepreneurship: A Global Perspective
- Innovation and Entrepreneurship for Developing DBS
- Accounting for Consultation, services and decision making
  - Accreditation with AACSB, EQUIS and AMBA for Business
  - Developments and Standards in Accounting
- Conclusion
Motivation

- Innovation and Entrepreneurship has drawn increasing attention globally.
- The further development of PNG will heavily rely on Innovation and Entrepreneurship.
- Accounting is important for DBS and PNG.
- The evolution or history of McKinsey & Company, HBS and Wharton School of Business demonstrate:
  - Accounting is not only for bookkeeping, but also for decision making.
- How to incorporate Innovation and Entrepreneurship with accounting become more important for DBS and PNG.
Introduction to DBS

- DBS is the largest one of the 13 academic departments at the UNITECH
  - A multidisciplinary Department with proven track records for producing PNG and South Pacific regional leaders and beyond.
  - Our alumni have led PNG’s industrial and governmental sectors for decades.
  - 2 professors and 25 academic staff.
  - 600+ undergraduate and postgraduate enrolments every year.
  - The scholar-practitioner programs of DBS are directed and delivered by a highly qualified and experienced Professors, Doctorates and Masters degree holders from the prestigious universities of Europe, Asia, Australia, New Zealand, and others.
DBS also offers two postgraduate degree programs:
- M. Phil in IT
- Executive Masters in Business Administration (EMBA) program,
- The programs make our students easier to build bridges between knowledge, skills, values and practice, between university and industry.
Research at DBS

Research Centre of Big Data Analytics and Intelligent Systems (BAIS)

- Published a number of research articles of international visibility (ERA A, SCOPUS, and ISI (SCI))
  - [https://www.researchgate.net/profile/Zhaohao_Sun](https://www.researchgate.net/profile/Zhaohao_Sun)
  - [https://www.semanticscholar.org/search?author%5B%5D=Zhaohao%20Sun&q=Zhaohao%20Sun&sort=relevance&ae=false](https://www.semanticscholar.org/search?author%5B%5D=Zhaohao%20Sun&q=Zhaohao%20Sun&sort=relevance&ae=false)

- 2016-2017: 6 International journal articles (ERA and SCL 3, SCOPUS 5)
- Established an international research team
- Consulting services to international organizations and Research Gate
- Cooperated with international peers
- Contribute to AIS world, BISC, and Research Gate
- Regularly publish a BAIS series (currently, Vol 5. No. 3).
Strategic Direction of DBS-I

- Structured postgraduate programs and PhD programs
- Programs of DBS aim to drive various aspects of national strategic visions and development efforts, as well as regional and global competitiveness in an increasingly complex business environment.
EMBA’s Strategic Direction

PhD

DBA

EMBA

MBA, 2018

Graduate’s Diploma in BA

Graduate with 5 years

Graduate with Bachelor

Graduate with Bachelor
Postgraduate Diploma in Auditing

Steering Committee

- Prof Zhaohao Sun
- Noah Angal
  - Chief Internal Auditor of UNITECH
- TESS WINGI
  - First Assistant Secretary, Internal Audit and Compliance Division
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Develop other two research centres at DBS and PNG UoT

- **PNG - Australia Centre for Governance and Policy**
  - Working together with governments of PNG and Australia, Universities of Australia and PNG UoT
  - Focus on Governance and Policy Development for PNG

- **PNG - China Centre for Business Studies**
  - Working together with governments of PNG and China, Universities of China and PNG UoT
  - Focus on studies on commercialization, marketing, privatization and globalization
    - Key of business: everything can be negotiated under the international regulations and standards.

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Strategic Direction of DBS-III

- Develop a Centre of Innovation and Entrepreneurship (CIE).
  - To be established
  - At Departmental level

- Make DBS
  - the largest and strongest Department of the thirteen academic departments at the PNGUoT
  - a most innovative, entrepreneurial, and research oriented Department of the South Pacific region.

- Change DBS to BSSP (Business School of South Pacific)
Actions for realising the strategy of DBS

- **Recruit**
  - 3 professors of Accounting, Management and IT
  - 5 associate professors and senior lecturers
    - in Accounting, Applied Economics, IT and Management

- **Collaborate with governments of PNG and Australia, Universities of Australia and China, Industries of PNG, Australia and China**

- **Develop an environment of**
  - Student-centred teaching; research informed teaching
  - Research inspired
  - Collaboration with governments and industries
Teaching Philosophies at DBS

- Innovative through Teaching, Research & Development
- Entrepreneurial
  - Practical relevance through Industrial Advisory Committee and Industrial Placements.
  - Planning for business incubator start-up
- Student-centred teaching
  - Improved student services for a great learning experience
Student-Centred T/L

- Student-centred originates from international best-practices and research in education
- Student-centred is social requirement from mass education, rather than elite education

Different methods:
- Business: Case-Based Harvard Method (For Harvard MBA)
- Medical: Problem-Based Learning
- Engineering: Project-Based Learning
- Blended teaching/learning combining online and offline teaching/learning
Innovation

- Innovation = a "new idea, device or method". However, innovation is often also viewed as the application of better solutions that meet new requirements, unarticulated needs, or existing market needs.
  - This is accomplished through more-effective products, processes, services, technologies, or business models that are readily available to markets, governments and society.

- Innovation is crucial to the continuing success of any organization

Entrepreneurship

- capacity and willingness to develop, organize, and manage a business venture along with any of its risks in order to make a profit.
- the process of designing, launching and running a new business, which typically begins as a small business, such as a start-up company, offering a product, process or service for sale or hire, and the people who do so are called 'entrepreneurs'
- a spirit and a basis for developing PNG
- Ref: https://en.wikipedia.org/wiki/Entrepreneurship
Innovation and Entrepreneurship: A Global Perspective

- Innovation and Entrepreneurship in China
  - National strategy: everyone is encouraged to undertake Innovation and Entrepreneurship.
    - Idea: A nation is hopeless without innovation
- At a university level, a student organisation for Innovation and Entrepreneurship,
  - The students conduct projects on Innovation and Entrepreneurship and participate in competition of the university or school level.
  - Innovation and Entrepreneurship has formed an excellent environment at a university.
- In southern China, a lot 15 years-old boys left home for Entrepreneurship to make money.
Innovation and Entrepreneurship: A Global Perspective

- Innovation and Entrepreneurship in Australia
- Innovation is encouraged from year 1.
- Entrepreneurship in Australia
  - Is organised in middle and high school.
  - My son organised a company for manufacturing a good and receive an award from the industry sponsor in his high school,
    - he just graduated from Harvard U for the MBA in 2017
  - Some students of university, like one of my students, dropped out from university and opens their business.
- Bachelors and Masters Programs Innovation and Entrepreneurship: Adelaide, UNSW, UTS, and more.
Innovation and Entrepreneurship: A Global Perspective

- **Innovation in USA**
  - It purses innovation in every corner. This is why USA is the most powerful in the world.
  - President Trump uses innovation to change himself from a billionaire to national president.

- **Entrepreneurship in USA**
  - Bill Gates dropped out from Harvard University and founded his Microsoft with Alan Paul.
  - Zuckerberg dropped out from Harvard University and founded his Facebook
  - Larry Ellison, CEO of Oracle, dropped out from three top universities. He said that why are you not a billionaire, because you have not the experience of dropping out from a university.
Innovation and Entrepreneurship for Developing DBS

- Industry Advisory Committee
  - To be established soon, CPA should contribute to it with 2 members
  - Mr Vincent Kuma? vkuma@cpapng.org.pg
  - What you need is what we must offer

- Centre of Innovation and Entrepreneurship

- Innovation
  - Research inspired teaching and learning
  - Incorporating with Innovation and Entrepreneurship within teaching and learning
    - Integration between Innovation and research.
    - Integration between Innovation and teaching.
    - Integration between Entrepreneurship and teaching.
  - Learn from success of Innovation and Entrepreneurship from others.
Industry training

- It is necessary for every DBS students.
  - Engineering students in Australia is compulsory
- Internship is a kind of Industry training
  - With salary or Voluntary
  - Mid-November to Mid February. (3 months, 12 weeks)
  - From year 2 on, try, try and try.
- Initiative spirit for hunting Internship
  - Il are important.
  - If you do not think about it, you can have it.
- Case study is a kind of nexus between university and industry
  - Best example: HBS uses case studies as a unique teaching method for over a century.
Accounting or Accountancy

Accounting or accountancy is the measurement and processing, analysis of financial information on economic activities about economic entities such as businesses and corporations and communication of this information to a variety of stakeholders.

Accounting analytics explores how financial statement data and non-financial metrics can be linked to financial performance.

- applying big data analytics to accounting in the trinity age of big data, analytics and, artificial intelligence
- https://www.coursera.org/learn/accounting-analytics
Big Data Analytics

- Big data analytics (BA) is science and technology about to collect, organize and analyse big data to discover patterns, knowledge, and intelligence as well as other information within the big data.

- BA is an emerging science and technology involving the multidisciplinary state-of-art ICT, mathematics, operations research (OR), machine learning, and decision science for big data [1, 2]

- BA = big data descriptive analytics + big data predictive analytics + big data prescriptive analytics

Body of Knowledge of Accounting

- Financial accounting (including accounting systems and processes, professional and regulatory processes, theoretical financial accounting issues)
  - focuses on the reporting of an organization's financial information, including the preparation of financial statements, to external users of the information
- Management accounting (measurement, analysis and reporting of information for internal use by management)
- Accounting information systems, Accounting analytics
- External auditing, tax accounting and cost accounting
  - A selection of auditing and assurance, finance, economics, quantitative methods, information systems, commercial law, corporation law and taxation law.
  - Ref: https://en.wikipedia.org/wiki/Accounting
# Body of Knowledge of Accounting

<table>
<thead>
<tr>
<th>Bachelor</th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Judgement</strong></td>
<td>Exercise judgement under supervision to solve routine accounting problems in straightforward contexts using social, ethical, economic, regulatory and global perspectives</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td>Integrate theoretical and technical accounting knowledge which includes a selection of auditing and assurance, finance, economics, quantitative methods, information systems, commercial law, corporation law and taxation law</td>
</tr>
<tr>
<td><strong>Application Skills</strong></td>
<td>Critically apply theoretical and technical accounting knowledge and skills to solve routine accounting problems</td>
</tr>
<tr>
<td><strong>Master</strong></td>
<td>Exercise judgement under supervision to solve routine accounting problems in diverse contexts using social, ethical, economic, regulatory and global perspectives</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td>Integrate theoretical and technical accounting knowledge which includes a selection of auditing and assurance, finance, economics, quantitative methods, information systems, commercial law, corporation law and taxation law</td>
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</table>
Professional Accounting bodies

- the *American Institute of Certified Public Accountants* (AICPA) and the other 179 members of the *International Federation of Accountants* (IFAC),[36] including *CPA Australia*.
- **CPA Australia** (Certified Practising Accountants)
  - almost one-quarter of CPA Australia’s members now reside outside of Australia, with over 35,000 in Asia
- the **Big Four** accounting firms: *Deloitte* (UK), *Ernst & Young* (UK), *KPMG* (Netherlands) and *PricewaterhouseCoopers* (UK)
  - offering audit, assurance services, taxation, management consulting, advisory, actuarial, corporate finance and legal services

- [https://en.wikipedia.org/wiki/CPA_Australia](https://en.wikipedia.org/wiki/CPA_Australia), retrieved on 120817
Accounting as a Consultation

- McKinsey & Company as a No 1 world consulting group, originally from accounting founded in 1926.
  - How to use accounting to improve business decision making.
  - provide finance and budgeting services on organization and management issues using accounting
- McKinsey, a professor of accounting at the University of Chicago Booth School of Business until 1935
  - is credited with the first textbook in management accounting Managerial Accounting, published in 1924, and the book on business budgeting, Budgetary Control, published in 1922.
  - He consider accounting first as bookkeeping and then decision making
- Mr Marvin Bower, "the father of modern management consulting, of McKinsey links HBS from 1930s on
Accounting as a financial service

- Wharton School of the University of Pennsylvania
  - established in 1881 through a donation from Joseph Wharton (through a $100,000 initial pledge) and is the world’s first collegiate school of business
  - Wharton School of Finance and Economy, from 1881 to 1901, and the Wharton School of Finance and Commerce, from 1902 to 1971
  - Wharton began awarding MBA degrees in 1921
  - Accounting as a financial services to economy and commerce

Learning and Teaching Academic Standards in Australia

- Tertiary Education Quality and Standards Agency (TEQSA)
  - a national body for regulation and quality assurance of tertiary education against agreed standards.
  - the Australian Qualifications Framework (AQF). Threshold learning outcomes (TLOs) were defined in terms of minimum discipline knowledge, discipline-specific skills and professional capabilities including attitudes and professional values that are expected of a graduate from a specified level of program in a specified discipline area.

Accounting in the Learning and Teaching Academic Standards

- This statement covers coursework programs of study in accounting that are offered by higher education providers (HEPs) in Australia and that lead to the award of a bachelor or master degree.
  - These are defined as level 7 and level 9 in the Australian Qualifications Framework (AQF).

- not cover accounting honours degrees and graduate diplomas or PhDs in accounting. These are respectively level 8 and level 10 awards in the AQF. Nor does this statement cover master degrees in accounting by research. Each of these will be covered by a separate standards statement.
Relationship to qualifications frameworks

- Accounting academic standards were developed to align with the draft Australian Qualifications Framework (AQF) and PNG NQF.

- Accounting accreditation means that
  - Our accounting programs must meet the requirement of international (professional) standards provided by AQF, CPA Australia and others.
  - We must learn from other universities including in Australia or in New Zealand.
Accounting Programs Accreditations

- AACSB Association to Advance Collegiate Schools of Business
  - There are 182 schools that hold AACSB Accounting Accreditation. 14 Australian universities have AACSB Accreditation.
  - USA and Australia favored. No European countries.

- EQUIS (European Quality Improvement System)
  - EQUIS has accredited 139 institutions, with 39 countries represented among the accredited schools. 7 Australian Universities have received EQUIS: The Business school of Sydney U, the Melbourne Business School and business faculties at the U of Western Australia, UQ, Univ of South Australia, UNSW, Monash U, and QUT have also earned EQUIS accreditation

- CPA of Australia accredits all the programs of accounting

- Related associations
  - CPA PNG
  - International Accounting Education Standards Board
  - TEQSA Tertiary Education Quality and Standards Agency (Australia)
  - AFAANZ Accounting and Finance Association of Australia and New Zealand
Future Developments

- Think globally, innovate and act locally
- Implementation, and a competent management
- Will develop accounting program of DBS to
  - Undergraduate, postgraduate, Masters program and PhD programs of accounting
- Soon our students will be high qualified and competitive in employment.
Conclusion

- All these cannot be realized
  - without your strong support in terms of finance, human resources, and ICT infrastructure with international vision
  - Without our close cooperation.
- DBS are ready to cooperate with you all to
  - Improve the infrastructure of teaching, research and working
  - Develop postgraduate programs including Master of Accounting, MBA, also PhD programs.
- DBS are ready to cooperate with you all to
  - Incorporate Innovation and Entrepreneurship with teaching, learning and research.
- Thank you!
References


- James Oscar McKinsey (June 4, 1889 – November 30, 1937) was the founder of McKinsey & Company that bears his name in 1926


- Dr Albert Schram UNITECH's Journey Towards Becoming a Good University, August 2016. the PNG CPA conference.
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- [https://www.researchgate.net/profile/Zhaohao_Sun](https://www.researchgate.net/profile/Zhaohao_Sun)
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