

MSc Telecommunications with Business Programme 2018/19

Module Name: Finance & Business Environment (ELEC0045)

Module Acronym: B2

Module Manager: Keith Carrington

Module Summary:

This module provides a thorough examination of the generic principles of finance, but using telecommunications and ICT service providers as example companies. The objective is to give the students sufficient understanding of finance and financial analysis so that they appreciate the importance of good financial decision making in managing projects and running businesses in a capital intensive industry. Specific topics covered include: financial accounting, management accounting, corporate finance, and investment appraisal techniques used in the construction of business cases. The module also includes key business environmental issues relevant to the ICT industry e.g. Regulation, legal considerations and the economics of telecommunications infrastructure.

Learning Outcomes:

At the end of the course, students should be able to understand:

- Financial statements and how to read them, as well as the principles of depreciation, ebitda, profit, cash flow, working capital, gearing, cost of capital, share price dynamics and dividend policy.
- How to construct a simple balance sheet, income statement (P&L account) and cash flow statement.
- What drives company and shareholder value and how to value a company

- The principles of Regulation and the implications and constraints of operating a business in a regulated environment.
- How to construct business cases and their importance in aiding decision making in a corporate environment; and to understand and apply investment appraisal principles and techniques.
- The cost dynamics of a telecommunications network and support- systems infrastructure, in terms of the effects of volume, quality of service, range of services supported, resilience, etc.
- The key business drivers for next-generation networks (NGN) and the components of the supporting business case.

Module Content

1) Financial Management

The role of financial management in any business is described, with detailed application to the telecommunications network operators' functions. Students will gain a thorough grounding in, and a good understanding of the application of, the following:

- Understand the primary financial statements consisting of the balance sheet, profit and loss account, and cash flow statement; and how to read them. Understand depreciation, ebitda, profit, cash flow, working capital, gearing, cost of capital, share price dynamics and dividend policy. Valuation of companies.
- Management Accounting: The application of management accounting to the business so that students can apply the principles to their own company circumstances.

- Corporate Finance: Understanding the different sources of finance to businesses and the importance of gearing and financial risk in structuring the company balance sheet.

2) The Regulatory and Legal Scene

The UK, European and World-wide legal and regulatory frameworks are presented, showing the constraints and opportunities offered to incumbent and other operators and service providers. The role of OFCOM is discussed in regulating what is becoming a converged market; this covers the vast range of broadcast, entertainment, and telecommunications applications. Students will understand the drivers and constraints involved in regulating the businesses, together with the opportunities that arise; they will also gain an appreciation of the legal principles involved.

3) Business Cases The key aspects of a business case are introduced, covering its role in corporate governance, the essential content, the financial case and supporting evidence. Students will be able to create their own credible and plausible business cases for capital and current account projects, including the use of Discounted Cash Flow (DCF) techniques, evaluating the cost of capital and deciding on financing options. They will be able to analyse the regulatory and legal risks and plan to mitigate them.

4) Infrastructure Economics

Description of the cost dynamics of a telecommunications infrastructure, covering access and core – fundamental to all networks (including railways, airlines, electricity supply, etc), fixed and variable cost, effect of volume on unit cost, cost and revenue apportionment, and long-run costs. In particular, the lectures examine how the network size, structure and choice of technology, together with the systems support infrastructure, impact on the financial performance of a network operator. Network costs and interconnection pricing are also studied in depth to understand how costs are allocated to build up product costs and prices. Students will understand the particular relevance of this to the development of next generation networks (NGN) and the provision of new-wave services.

Assessment:

At the end of the module students will be set a two and a half hour examination designed to assess their understanding of the financial and management accounting in today's telecommunications business and to create appropriate business cases.

Tutorials/Workshops:

Two hour tutorial to address the main learning points of the module and to prepare the students for their examination.

Guest Speakers:

Several guest speakers will be invited to give the students the benefit of their experience on the practical aspects of the telecommunications business.

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