



FAKULTI PENGURUSAN DAN INDUSTRI HALAL

PROGRAM	Diploma in Technology Management
COURSE NAME	TECHNOLOGY MANAGEMENT
COURSE CODE	DDWG 1213
CREDIT HOUR	3
SYNOPSIS	This course is designed to introduce students to the basic theories of technology usage in business. The impact and types of technology life cycle, product development and innovation in technology in order to solve business problems.
COURSE STRUCTURE	
CHAPTER	TOPICS
1	INTRODUCTION TO MANAGEMENT OF TECHNOLOGICAL INNOVATION 1.1 The Importance of Technological Innovation 1.2 The Impact of Technological Innovation on Society 1.3 Innovation by Industry: The Importance of Strategy
2	SOURCES OF INNOVATION 2.1 Creativity 2.2 Translating Creativity into Innovation 2.3 Innovation In Collaborative Networks
3	TYPES AND PATTERNS OF INNOVATION 3.1 Types of Innovation 3.2 Technology S-Curves and Technology Cycles 3.3 Dominant Designs 3.4 Multiple Dimensions of Value
4	TIMING OF ENTRY 4.1 First-Mover Advantages and Disadvantages 4.2 Factors Influencing Optimal Timing of Entry



	4.3 Strategies to Improve Timing
5	ORGANIZATION'S STRATEGIC DIRECTION 5.1 Assessing the Firm's Current Position 5.2 Identifying Core Competencies and Capabilities 5.3 Strategic Intent
6	COLLABORATION STRATEGY 6.1 Reasons for Going Solo and Advantages of Collaborating 6.2 Types of Collaborative Arrangements 6.3 Choosing a Mode of Collaboration 6.4 Choosing and Monitoring Partners
7	PROTECTING INNOVATION 7.1 Patents, Trademarks, Copyrights and Trade Secrets 7.2 The Effectiveness and Use of Protection Mechanisms 7.3 Advantages of Protection
8	ORGANIZING FOR INNOVATION 8.1 Size and Structural Dimensions of the Firm 8.2 Structural Dimensions of the Firm 8.3 Modularity and "Loosely Coupled" Organizations 8.4 Managing Innovation Across Borders
9	MANAGING NEW PRODUCT DEVELOPMENT PROCESS 9.1 Sequential Versus Partly Parallel 9.2 Customers And Suppliers Involvement 9.3 Tools for Improving the New Product Development Process 9.4 Tools for Measuring New Product Development Performance
10	MANAGING NEW PRODUCT DEVELOPMENT TEAMS 10.1 Constructing New Product Development Teams 10.2 The Structure of New Product Development Teams 10.3 The Management of New Product Development Teams



11	CRAFTING DEPLOYMENT STRATEGY 11.1 Launch Timing and Licensing & Compatibility 11.2 Pricing, Distribution and Marketing
12	TECHNOLOGY ACQUISITION 12.1 Role and importance of technology acquisition 12.3 Methods of technology acquisition (internal and externals) 12.4 R&D as an internal technology acquisition 12.5 Processes and methods in external acquisitions.
13	TECHNOLOGY EXPLOITATION 13.1 Technology Commercialization and Marketing 13.2 Technology transfer and Technology Utilization 13.3 Reverse Innovation
References:	<ol style="list-style-type: none">1. Schilling, Melissa A. (2019) Strategic Management of Technological Innovation (6th Edition), Mcgraw-Hill Education.2. Cetindamar, D. Phaal, R., and Probert, D. (2016), Technology Management - Activities and Tools (2nd Edition), Palgrave, UK.