

Preface

In the current competitive world, business enterprises face great challenges in scaling and managing their IT infrastructure. To handle these challenges, IT infrastructure management offers focused and efficient solutions in important infrastructure areas for developing and managing the organisational IT infrastructure. Business organisations can achieve cost-effective and quick time-to-delivery by using proven delivery models, mature techniques, standardised tools and robust processes offered by IT infrastructure management. IT infrastructure management guarantees high reliability, round-the-clock availability of services, efficient manageability and optimum scalability. IT infrastructure service delivery helps in achieving proactive and cost-effective solutions and gaining fast return on IT infrastructure investments.

INTENT

This book is aimed to help the undergraduate and postgraduate students of professional courses by familiarising them with the concept of IT infrastructure and its management, and providing them requisite expertise in this area. It is intended to impart knowledge of IT infrastructure management topics and issues, while keeping technical words at its minimum.

KEY FEATURES

The book emphasises on the following:

- *Basics of Information Technology (IT), IT infrastructure and its management*
- *Service delivery and service support processes*
- *Storage and security management in the context of IT infrastructure management*
- *Important security practices, threats and challenges in the field of computer security*
- *IT ethics*
- *Emerging trends in IT sector*
- *Case study*

ORGANISATION

The book contains nine chapters and starts with an introduction on the basics of Information Technology (IT), IT infrastructure and its management (Chapter 1). Subsequently, it provides a detailed overview of IT service and IT system management processes. Challenges in IT infrastructure management, IT system and service management process, information system design process, patterns for IT system management and IT infrastructure library are some of key concepts covered in Chapter 2.

The book gives a comprehensive discussion on service delivery and service support processes (Chapters 3 and 4) which are the most essential parts of IT infrastructure management. It provides an elaborate discussion on important service delivery processes such as service level management, financial management, service continuity management, capacity management and availability management. It also

talks about service support processes such as configuration management, incident management, problem management, change management and release management.

Storage management is an important component of IT infrastructure management. It protects the organisation from the risks of data loss, helps in reducing complexity, manages cost, and provides compliance with data retention and availability requirements. It improves service continuity by reducing backup and recovery time, and improving application availability with data recovery and management technologies. It helps in adapting changes within the IT infrastructure to minimise service interruptions and generates fast restorations and backups. Chapter 5 is dedicated to Storage Management and discusses all its aspects.

Security management is an important area of management. It helps in realisation of the security and other external requirements which are specified in internal or external policies of an organisation. It also helps in accomplishing the basic level of security which is necessary to guarantee the continuity of the management organisation. Chapter 6 on Security Management provides an elaborate discussion on many important aspects of security in context to IT infrastructure management. Normal security practices, threats and challenges in the field of computer security are covered in depth.

IT ethics, which has become very important in current scenario, is discussed in Chapter 7. Chapter 8 delves into the emerging trends in IT sector, namely e-commerce, electronic data interchange, global system for mobile communications, Bluetooth and infrared technology. Chapter 9 focuses on a Case Study that elucidates the functioning of an IT organisation and studies various aspects of its activities and infrastructure management.

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