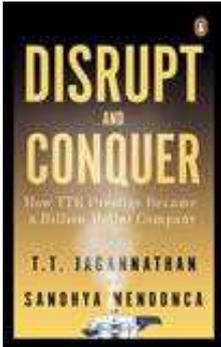# Books

Disrupt and Conquer: How TTK Prestige Became a Billion-Dollar Business. Authors: T T K Jagannathan and Sandhya Mendonca. Publisher: Portfolio. Sold by: Random House India. Hardcover. Pages: 232. Price INR 599 (INR 469 at Amazon).

The TTK Group was founded in 1928 in Chennai (then Madras) by T.T. Krishnamachari, who later became a Union minister and held the portfolios of finance, industry and commerce for close to fifteen years. In this book, the current chairman T.T. Jagannathan, along with Sandhya Mendonca, takes the readers through the journey of this extraordinary company which fought off bankruptcy and rose like a phoenix to become a highly profitable, successful entity. What makes this story all the more startling is that T.T. Jagannathan is an accidental and reluctant businessman. He came into the profession very unexpectedly, and without any preparation, with neither an MBA nor having ever worked in the family business before having its very survival entrusted to him. Like a phoenix, the Group and its constituent companies, have risen from the ashes, many times over, to stand tall and proud. This is the story of a journey that began with early success and experienced catastrophic disasters, and set about turning its fortunes around in stunning comebacks, time and again. With invaluable business lessons, decades of experience and innovation distilled in these pages, Disrupt and Conquer is a must-read for aspiring entrepreneurs, executives and business leaders. We are happy to inform the author and the publisher have given permission to publish the chapter 17 -- "The Karma of Business", of this book.
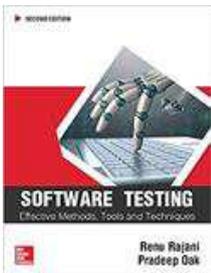
Software Testing: Effective Methods, Tools and Techniques. 2nd Edition. Authors: Renu Rajani & Pradeep Oak. Publisher: McGraw Hill Education. Paperback. Pages: 376. Price: INR 635 (INR 425 at Amazon).

The book is based on the authors' experience in setting up, leading, and transforming test engagements and introducing testing in emerging technology engagements. Since the first edition of this book in 2003, which saw 13 reprints to date, the software testing discipline has evolved with its broadened and deepened reach. This thoroughly revised book presents these developments in a comprehensive manner with a strong balance of theory, analysis and design. Along with its well-defined learning objectives and chapter-end exercises, the book motivates readers to delve deeper into the application aspect of the subject. The book explores the different aspects of testing dealing with (i) Testing tools, (ii) Latest testing methods for Agile, DevOps, Object Oriented development, (iii) Testing of Social Media, Mobility, Analytics, and Cloud applications (iv) Case studies involving latest and niche topics (v) Current state of practice and opportunities & careers in testing. The key features include: 15 Projects on key topics like-Software Test Design Technique, Testing Analytics and Big Data Applications, Model-based Testing etc. ; A separate section on Current State of Practice based on the industry's requirements; 5 Case studies on topics like Embedded Software Systems used in Aerospace Applications, Validation of BASEL II Compliance, etc.; Exhaustive review question in every chapter; Well-defined challenges encountered during application. Supplements include: Instructor's Elements:-- PowerPoint Lecture Slides; and Student's Elements -- Web Links for further reading & Test Case Scenarios for Practice. The book will be useful to graduates specializing to make a career in software testing and IT professionals aiming to work in software testing engagements.
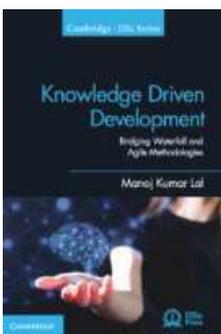
Knowledge Driven Development – Bridging Waterfall and Agile Methodologies. Author: Manoj Kumar Lal, a BIT Sindri and IISc Bangalore alumnus and working in TCS since 1997. Publisher: Cambridge University Press and IISc Press. Hardcover. Pages: 322. Price: INR 750/-.

This book introduces a new software development methodology – Knowledge Driven Development (KDD) based on digitisation of the project knowledge. The project knowledge needs to be consistently managed across the project's activities and outputs and any deviation may result in project delivery issues. The two well-known methodologies - Waterfall and Agile, attempt to meet this challenge although with limited effectiveness. Waterfall projects struggle to keep their documentation up-to-date and in Agile the project knowledge specified is generally at a high level. The project knowledge is digitised in KDD via a specified number of building blocks represented in the inventory and relationship format. Digitisation allows quantification of project knowledge resulting in easier impact analysis, exhaustive traceability, easier reuse, less rework and easier defect detectability. KDD provides a continuous improvement environment in the project delivery by reusing and adding to the enterprise knowledge. KDD supplements DevOps with its digital knowledge management offering. KDD may evolve as a constituent of Industry 4.0 proposition from knowledge management perspective. KDD may also assist Waterfall and Agile methodologies via its digital knowledge management proposition. Taking the knowledge digitisation concept beyond IT, the book proposes the Generic Knowledge Management Framework (GKMF). With a brief introduction to KDD, the author has contrasted Waterfall, Agile and KDD methodologies through an example in the first chapter. Via 17 chapters of the book, the author has provided the full conceptual details of KDD and GKMF to be assessed by its interested readers in industry and academia. This book adds to the existing literature on software engineering and knowledge management.
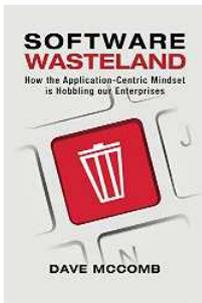
Software Wasteland: How the Application-Centric Mindset is Hobbling our Enterprises. Author: Dave McComb. Publisher: Technics Publications. Paperback. Pages: 220. Price: INR 1745 at Amazon. USD 24.95.

This is the book your Systems Integrator and your Application Software vendor don't want you to read. Enterprise IT (Information Technology) is a $3.8 trillion per year industry worldwide. Most of it is waste. We've grown used to projects costing tens of millions or even billions of dollars, and routinely running over budget and schedule many times over. These overages in both time and money are almost all wasted resources. However, the waste is hard to see, after being so marbled through all the products, processes, and guiding principles. That is what this book is about. We must see, understand, and agree about the problem before we can take coordinated action to address it. The trajectory of this book is as follows: Chapter 1 explores how bad the current state is. The three industries that address software waste are discussed, including the legacy software industry, neo-legacy software industry, and legacy modernization industry. Examples of application waste are illustrated from both public and private sectors. Chapter 2 deals with the economics of the software industry. Although the economic trade-offs are changing at the speed of Moore's Law, our approaches are not keeping pace. One can learn how information systems really behave in terms of actual application development. In Chapter 3, the author uses "root cause analysis" to reveal the real contributors to this situation, which are dependency, redundancy, complexity, and application centricity. Chapter 4 recounts the many failed attempts we've made in the past to deal with information system complexity, including relational databases, ERP systems, enterprise data modeling, service oriented architectures, and APIs, Agile, data warehouse and business intelligence, outsourcing and offshoring, cloud, Software as a Service (SaaS), data lakes, machine learning, and artificial intelligence. Chapter 5 dismantles seven fallacies that contribute to our remaining stuck. For example, the first fallacy is "We need detailed requirements or we won't get what we want." The quagmire is not affecting all sectors of the economy equally. Chapter 6 looks at how this is playing out in the government and private sectors, large and small companies, and various parts of the IT industry itself. Chapter 7 outlines some action you can take now to begin to extricate yourself, including a detailed assessment and defining metrics for measuring and preventing software development waste.
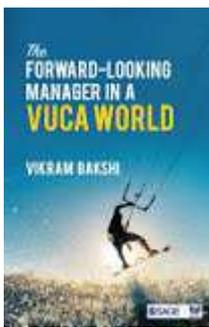
The Forward-Looking Manager in a VUCA World. Author: Vikram Bakshi. Publisher: SAGE Publications Pvt. Ltd. Paperback. Pages: 312. Price: INR 450 (INR 336 at Amazon)

Many large organizations have to cede their market dominance to new disruptive players. Well-oiled organizations are hitting roadblocks due to unanticipated problems that are slowing down operations. VUCA (Volatile, Uncertain, Complex and Ambiguous) is affecting organizations like never before - impacting schedules, delaying deliverables, and causing cost overruns. Managing projects has become a nightmare with the uncertainties and ambiguities of business, delaying integration of allied activities, making the project a non-starter even before it gets off the ground. In this VUCA world, it is imperative to confront the volatile, embrace the unknown, conquer the complex, and understand the ambiguous to be able to predict what lies ahead. This book helps managers master the art of dealing with VUCA by providing relatable experiences from the armed forces and advocating the use of RACE methodology. The book suggests disruptive tools and methods, and advises managers on the leadership traits needed for successfully completing projects by cutting losses and preventing chaos. It is a must-read for all managers involved in operations, supply chain, logistics, and production and manufacturing portfolios. Ex-army personnel who are starting a second career in the corporate/private sector will also greatly benefit from reading this book.
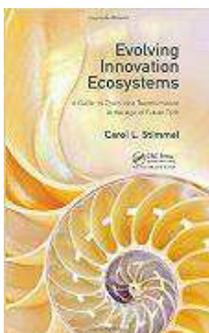
Evolving Innovation Ecosystems: A Guide to Open Idea Transformation in the Age of Future Tech. Author: Carol L. Stimmel. Publisher: Auerbach Publications. Hardcover. Pages: 268. Price: USD 62.69

While emerging technologies create massive opportunity, especially for investors and companies that seek more adaptable forms of economic growth than currently available, value is held inert by traditional approaches, patents, and other closed systems. Yet, open data, content, and information may be the key to mass innovation for future technologies, although they bring difficult challenges to private-industry models that depend on the established ideas of intellectual property. It is from this foundational observation that OpenXFORM (a blending of the words Open and the engineering abbreviation for Transformation) was developed and is explored and described in this book. The intent of the model design is to synthesize an approach to the process of innovation, inspired by natural systems and human-centric design processes. OpenXFORM describes how an open system of innovation can adapt to the unregulated world of information, data, and content; can decompose its own information to release to the open world; and can discover ways to find the points of synergy among the studied and tested methodologies that put human relationships first. This book presents an explicit innovation process that shows how to move from a breakthrough idea through a process that encourages innovative thinkers to test their assumptions, validate hypotheses, and tune and tweak their ideas, not only to drive solutions for users but also to meet the strategic goals of their companies. The anatomy of innovation through OpenXFORM contains the process for moving ideas from a flight of fancy to an explicit concept that is ready to produce.