Knowledge Management in the Pharmaceutical Industry

Enhancing Research, Development and Manufacturing Performance

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In recent years the Pharmaceutical Industry has undergone, and continues to undergo, unprecedented restructuring and changes in many of its areas including R&D, Manufacturing, Supply Chain Logistics and Commercial activities.

R&D is at the forefront of these changes. The Pharmaceutical Industry’s lifeblood is innovation – without innovative pipelines, companies struggle to survive – indeed thin pipelines have been the driver for the many mergers and acquisitions in the industry over the past two decades. The source of innovation for the industry is also changing – with the boundaries between pharmaceutical companies and between commercial organisations and academia becoming more fluid. At the same time the costs of R&D have escalated – the industry needs to either find ways to increase its chances of success, decrease risk or seek to reduce the cost of failure in order for it to be sustainable in the future. External sources of innovation (academia, biotechnology companies) now deliver a large proportion of pharmaceutical companies’ R&D pipelines. Companies are operating globally across the whole value chain and the need to share information and knowledge across time zones, continents and cultures provides further challenges.

With these changes the need for Knowledge Management to be more widely used and integrated becomes critical. In the past companies have continued to duplicate target validation activities, have not shared the learnings from unsuccessful clinical trials and generally been protective of all their data. This is no longer tenable from both a financial and social perspective – transparency is an ever increasing requirement from key stakeholders such as the regulators and patients. As mentioned in this book, this protection of data also extended internally in the past with a general reluctance of people across an organisation to share information and knowledge. An additional factor is the loss of the tacit knowledge residing in departing employees which has particular relevance for the Pharmaceutical Industry.
In addition, the rate at which biomedical data is accumulating is growing exponentially. How that data is harnessed and shared depends on the systems, processes and culture that form the framework of Knowledge Management. The linking of data with the right people creates the knowledge, both explicit and tacit, that is essential for innovation. Nowhere is this more crucial than in the Pharmaceutical Industry.

It is vitally important for companies to develop a holistic, integrated and company-wide Knowledge Management strategy – indeed it is hard to see how any pharmaceutical company will be competitive in the future without one. This book is therefore very timely.

The authors provide a general overview of Knowledge Management, before discussing it in relation to the Pharmaceutical Industry. Importantly they have used real-life examples, gained through their own experience and interviews with industry experts, to illustrate some of the best practices (and pitfalls) in implementing effective Knowledge Management. They highlight the importance of articulating the benefits of such a strategy and describe the key enablers for effective Knowledge Management. For anyone embarking on developing and implementing Knowledge Management strategies in biomedical science within and without the Pharmaceutical Industry, especially in the context of the new Open Innovation agenda, this book will prove invaluable.

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Professor Jacqueline Hunter CBE, is currently Chief Executive of OI Pharma Partners Limited. She has an extensive record in developing and running global centres of excellence in pharmaceutical research and is a leader in the application of Open Innovation principles to Life Sciences R&D. In 2010 Professor Hunter received a CBE for Services to the Pharmaceutical Industry and was presented with a Women of Achievement in Science, Engineering & Technology award. She is a Fellow of the British Pharmacological Society and holds a personal Chair at St George’s Hospital Medical School.