BOOK REVIEW



- Title of the Book: *The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution*
- Author: Walter Isaacson
- Publisher: Simon & Schuster
- Year of Publication: 2014
- Price: 699 (Paperback)
- Language: English
- Hardcover: 560 pages
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The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital *Revolution* is a panoramic history of the technological revolution from the author who previously enthralled us with the biographies of Benjamin Franklin, Albert Einstein, Henry Kissinger, Steve Jobs. While Walter Isaacson's previous books focused on a single person and his lifetime. 'The Innovators' does an excellent job in exploring several fascinating personalities that created our digital revolution and condensing over 250 years of evolution of the digital technology industry in about 500 pages. Here, the author's challenge was in translating technical jargon to prose for the general audience, and he delivered a flawless and triumphant performance. Well, everybody knows the stories in bits and pieces about the digital world; however, few authors are as adept as Walter Isaacson in stitching together well-researched and deftly crafted anecdotes into a vigorous and gripping narrative, a task so laborious and daunting that it could be compared to arranging a Rubik's cube that's fighting back.

In the world of innovation, there are endless and unsettled debates about who did what, when and where, who copied and who stole ideas and who deserves what credit. Once again, Isacson provides a balanced view in answering most of these questions. The book begins with Ada Lovelace, Lord Byron's prodigious daughter, who pioneered computer programming in the 1840s. With this curtainraising, the book has also tried to bring out the forgotten role women played from the beginning in the tech revolution, be it the contribution of Grace Hopper or the classic example of the creation of ENIAC, where the system's programming fell to a remarkable group of women: Fran Bilas, Betty Jennings, Ruth Lichterman, Kay McNulty, Betty Snyder, and Marlyn Wescoff. The story then skips forward to World War II, where engineers worked to build machines that could calculate the trajectories of missiles and shells. The subsequent chapters then navigate on to the origin and role played by programming, transistor, microchips, video games, internet, personal computer, software, transitioning online, and the web and finally culminating in the emergence of giant companies like Big 5 (Google, Amazon, Meta, Apple, Microsoft). Much of the action happens at universities like MIT (Vannevar Bush's differential analyzer). Bletchlev Park (the all-electronic computer called the Colossus which deciphered German codes), the Bell Labs in drab New Jersev (where the transistor was invented). In this masterly saga, we meet exciting personalities like Vannevar Bush, Alan Turing, John von Neumann, J.C.R. Licklider, Doug Engelbart, Robert Noyce, Bill Gates, Steve Wozniak, Steve Jobs, Tim Berners-Lee, and Larry Page. This book is a powerful story of how their minds worked and made them so inventive and innovative. It is also a narrative

of how their ability to collaborate and master the art of teamwork made them even more successful. What led few people to turn visionary ideas into reality? Why few succeed and others fail? Is being a genius guarantee breakthroughs? Questions such as these are answered in this book. The author reiterates that innovation is collaborative labour and the interplay between hackers, companies, universities, academic researchers. We come across plenty of anecdotes like the bitter patent fight over the world's first true computer between John Mauchly and John Atanasoff and the 1979 visit to Xerox PARC by a group of Apple executives led by Steve Jobs.

The current generation is overly focused more on Applications, web, and mobile, to begin their journey of a modern-day innovator. However, this book takes us to the early 1950s that would make us tinker with the hardware of a computer and that would willingly awaken interest in computer programming. Therefore, this book is destined to be the standard history of the digital revolution and a definitive and an indispensable guide for anybody who wants to understand how innovation happens, the bottom line being that it occurs at the intersection of humanities and science, and it's a team game.

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