

## **Case Example: Bookham Technology.**

Bookham Technology was the first company to manufacture commercially integrated components, based on silicon, that generate, detect, route and control light signals in fibre-optic communication networks. It was founded in 1988 in a room above a garage by its current Chairman, Andrew Rickman. By 2002 it was listed on the London Stock Exchange and the Nasdaq, and had acquired Nortel Networks' and Marconi's optical fibre component, thereby positioning it just behind JDS Uniphase as the number two global supplier of fibre optic components.

Born in Bookham, Surrey, in 1960, Rickman is a Chartered Engineer with a B.Sc from Imperial College London, a PhD in integrated optics from the University of Surrey and an MBA from Cranfield University. Prior to the inception of Bookham, he was an Associate in the Oxford Ventures Group, which provided start-up companies with advice on business issues and finding capital, and a consultant to GenRad, specialising in signal processing. It was this combined experience that led him to identify the opportunity for optical technology to be used as a platform, with the potential to bridge several growth markets.

With initial funding from the UK Department of Trade and Industry, Rickman rented office and laboratory space at the Rutherford Appleton Research Laboratory before moving to a new office and manufacturing facility at Milton Park in 1994. In 1997, the fledgling business launched its revolutionary manufacturing technology, ASOC, which has been improved and developed over the years and followed by a whole series of product innovation, including the industry's first silicon-based multi-channel Electronic Variable Optical Attenuator (EVOA). As a consequence, within 15 years the company had developed into a £22million public company employing in excess of 700 staff, accommodated in offices in China, France, Italy, Japan and the U.S.A and offering a complete portfolio of products that are widely used in optical fibre telecommunication systems.

Having founded Bookham and guided it through its early development, Rickman stepped down as Chief Executive Officer in February 2001 and was replaced by Giorgio Anania, who, as Bookham's Senior Vice President of Sales and Marketing since 1998, had played a key role in the company's growth and development. He is an Oxford Physics graduate who holds a Doctorate in Plasma Physics from Princeton University. Prior to joining Bookham he gained valuable commercial experience of both the U.S. and European technology markets both as a consultant and as a senior manager. He was recruited from Flamel Technologies, a French drug-delivery company, where he was Vice President for Sales, Marketing and Business Development and was involved in all aspects of the day-to-day management of the company, including taking it public on the NASDAQ in June 1996.

Since his appointment, the company has recruited Steve Abely and Steve Turley as Chief Financial Officer (CFO) and Chief Commercial Officer (CCO), respectively. Abely brings to Bookham over 20 years' experience in senior financial positions in various US technology companies, a good knowledge of US financial markets and a track record in management of rapid growth business environments. Prior to joining Bookham, Abely was CFO of Arescom Technology, a private broadband access

equipment provider, based in California. Similarly, Turley brings to Bookham over 25 years of experience in the optoelectronics and telecommunications industry, most recently as Vice President Strategic Partnerships with Nortel's High Performance Optical Component Solutions Group. He holds a Physics degree from Oxford and a Ph.D in Semiconductor Laser Physics from the University of Sheffield.

In January 2001, the team was strengthened with the further appointment of Philip Davis, MA, who joined as General Counsel and Company Secretary. Davis trained as a solicitor with the law firm Rowe and Maw, and was previously Senior Legal Counsel at Imperial Chemical Industries plc. And with Bookham's most recent acquisition of Nortel Networks' Optical Components division in November, the executive team was completed with the addition of Chief Operating Officer, Liam Nagle and Chief Technical Officer, Mike Scott, both formerly NNOC executives. Together, these six constitute Bookham's Senior Management team. They are aided by 6 non-executive directors who, together with Rickman and Anania, form the Company Board. (Their bio details are provided in table 1). Thus, Rickman has surrounded himself with a powerful team intended to take Bookham through the next stage of its development.

Within months of the Senior Management team being in place the company acquired Marconi's optical component business, launched a new single-fibre transceiver, announced a new, radical wideband tuneable laser and demonstrated a four-fold increase in port density for active multi-channel links on the ASOC platform. A key component of the Marconi acquisition was an agreement that Marconi would purchase a minimum of £30 million of products over 18 months. With the addition of Marconi's optical components business and the supply agreement negotiated with Marconi, Bookham is better positioned to address the poor visibility and can offer a wide portfolio of products as the market improves. This not only increased the company's expected revenues but provided greater stability at a time when market conditions continued to be difficult to predict.

**Table 1: Bio details of the Non-Executive Directors of Bookham Technology**

<u>Name</u>	<u>Qualification</u>	<u>Age</u>	<u>Experience</u>
Prof. David Simpson	DScCBE, FRSE,	75	President Gould Corporation, FIWW Chicago
Lori Holland	BSc (Econ)	44	Chief Financial Officer, Zaffire, Inc., NeoMagic Inc and Read-Rite Corporation. Board of Directors, Valley Medical Center, Silicon Valley. Technology start-up Consultant
Dr. W. Arthur Porter	Ph.D, FIEE	60	Dean of Engineering and Vice President for Technology Development at the University of Oklahoma. Formerly President and Chief Executive Officer, Houston Advanced Research Center.
Jack St Clair Kilby	MSc (EE) MNAE	78	Joint Nobel Prize winner in Physics

Robert Rickman	MA., MSc	44	Brother of the founder Director of Highland Timber plc and a number of private companies.
Joseph Cook	MBA	50	Senior Vice President of Network Systems Engineering at WorldCom global network. Previously a communications engineer with Bechtel Corporation. Advisor to University of Texas at Dallas and Oklahoma State University..

On 8 November 2002, Bookham Technology completed the purchase of the optical components business from Nortel Networks, comprising the transmitter and receiver business and the optical amplifier business. The economies of scale generated by the creation of the new enlarged group will facilitate increased cost efficiencies. By integrating this business with Bookham's own active and passive solutions, Bookham will take a significant step towards becoming a leading worldwide provider of optical components, modules, and sub-systems and thus, towards meeting its customers' desire to have fewer suppliers offering a broader range of products.

So, although the telecommunications market remains challenging and difficult to predict Bookham appears to have in place the technology, agreements and people to enable it to embark on the next, exciting stage of its development.

### Case Example Exercise

Review Chapter 11, in particular the sections on “Founder’s Disease” and “Creating the Entrepreneurial Team”. What can you learn from the Bookham case that reinforces the theory? How successful do you think Bookham have been in overcoming the succession problem and creating the entrepreneurial team to take the company to the next stage in its development? Justify your answer.