Pilgrim Beart

25 years experience developing, managing, productising and marketing novel technologies in the UK (Cambridge & Oxford) & the USA (California). Focussed on the early stages of product and company development. Founded 3 technology companies.

COMMERCIAL EXPERIENCE

INNOVATION: CREATING NEW CONCEPTS AND BRINGING THEM TO MARKET

Throughout my career has pushed forwards the boundaries of technology, initially as an individual R&D engineer, then team manager, then as Founder of 3 technology startups in Cambridge. A good understanding of how to map technology potential against market need, and avoid some of the pitfalls.

FORMING AND BUILDING TECHNOLOGY COMPANIES

Having co-founded three technology companies, and prior to that worked in several startups, experienced a range of outcomes (flotation, exit, failure) and learned a lot about the factors which determine the outcome.

LEADERSHIP

As CEO, founder and manager, can inspire and organize teams. Understand the need to ensure the effectiveness and quality of a team, with preference for small teams.

MARKETING: IDEAS, PRODUCTS, COMPANIES

Mapping a technology's potential against the need of the market involves a lot of going out and talking to people: the creators, potential customers, competitors, perhaps government. Evangelism is a two-way process and strong networking is essential. Even a small company can do a great job of marketing into a large company because it can effectively become the carrier of information between parts of the large organization. Example: AlertMe's £20m 2010 deal with British Gas.

RAISING MONEY: SEED, ANGEL AND VC FUNDING

Have raised both small amounts (£10k's and £100k's from Angel investors) and, as part of a top team, larger amounts (round sizes from £1m to £15m), understanding that it is not simply a matter of raising the money, but of doing so on the right terms, with the right expectations, and with the right timing.

CLEANTECH: BIG PICTURE AND SPECIFIC FOCUS ON CONSUMER AND ENERGY MANAGEMENT

Climate change and Energy security are driving a fundamental shift for our society, and thus represent a huge opportunity/threat for engineers, entrepreneurs, companies and investors. Well-networked in this space, in government, corporate and NGO, with a good appreciation of the dynamics of the next 20 years.

TECHNICAL EXPERIENCE

COMPUTER DESIGN: HARDWARE, SOFTWARE, SERVICES, CHIPS AND OPERATING SYSTEMS

Graduated with a BSc in Computer Engineering. Early career was spent developing most aspects of computers, so have a good understanding from the transistors up.

DIGITAL MEDIA: ALGORITHMS AND SYSTEMS FOR AUDIO, VIDEO & GRAPHICS

Early career was spent designing digital audio and video editing systems (which at the time were pushing the envelope so hard that they required very advanced technology, e.g. borrowed from military radar), and "media processor" and video game console technology, pushing the boundaries of high-throughput hardware and software.

CONSUMER PRODUCTS AND SERVICES

Interest in and understanding of the end-use of technology has grown, with considerable experience of delivering it to the mass market. Antenova has delivered 100m's of antennas into consumer devices such as laptops and smartphones, and AlertMe taught a lot about the trend from products to services, having delivered more than a million systems into homes.

RADIO FREQUENCY (RF): DEVICES AND ANTENNAS

THE INTERNET OF THINGS AND RFID

MAGNETICS AND POWER ELECTRONICS

Topics which are "black magic" to most engineers, which is why they are interesting! Not a world expert in any of them, but have developed startups based on them (Antenova and Splashpower, AlertMe), and experienced many of the challenges of working in these interesting spaces (not least, hiring engineers who understand them!).

INTELLECTUAL PROPERTY RIGHTS

With a career in R&D, and having raised money from VC's who require evidence of novelty and barriers to entry, have developed a good understanding of patent law and practice (and some about other registered IPR), and have lectured to Cambridge University undergraduates on the subject.

GENERAL SCIENCE AND TECHNOLOGY

With an enquiring mind, have a good general grasp of science and technology, and can have a coherent conversation with most scientists, engineers and technologists, and act as a bridge between them and the commercial world.

CAREER

ALERTME.COM LTD. CAMBRIDGE UK, 2006-   FOUNDER DIRECTOR

Co-founded AlertMe with Adrian Critchlow. AlertMe is a platform to keep us each connected with our homes, at all times, wherever we are. As both homes and people are increasingly online, it seemed strange that the two weren't really connected, so we created AlertMe as a service to do just that, with a Home Area Network connected via a Hub Gateway to a set of Cloud applications and thence a range of online UI's including SmartPhone Apps, making it easy for mass-market consumers to see and manage their homes from anywhere. This space has since come to be known as the "Connected Home" or "Smart Home" market, and an early example of the coming Internet of Things. Rather than pursue a broad "Home Automation" approach for rich people and geeks, we followed a targeted approach of rolling-out specific applications for the mass consumer market, sector by sector, with a strong focus on Home Energy. We seed-funded the company in 2006 and started building a world-class technology team in Cambridge. In 2007 we raised a £5m angel round, and in 2008 launched AlertMe Home Monitoring in the UK, b2c. In 2009 we raised £8m Series A and launched AlertMe Home Energy with Google and the UK's largest energy retailer British Gas. In 2010 we landed Mary Turner as CEO to drive growth through rollout with Tier 1 telco's, retailers and utilities and raised a further £15m. In 2011 the company acquired WattBox. In 2012 the company closed its first major US deal with Lowes. The company now has offices in Cambridge, London and San Francisco.

SPLASHPOWER LTD. CAMBRIDGE UK, 2002-2006   VP INNOVATION

Now e-coupled. At Splashpower we defined the "wireless charging" space for portable mobile devices, which is now seeing millions of consumer electronics devices being sold around the world. Combining several challenging technologies which most engineers view as "black box" (electromagnetics, power electronics, control systems and thermal design), the resulting platform was described by many as simply "magic!". Played a leading role in creating and protecting the core technology, which was first in the world to demonstrate constant power transfer to a portable device regardless of its position or orientation.

ANTENOVA LTD. CAMBRIDGE UK, 1999-2000   FOUNDER DIRECTOR

Fabless manufacturer of innovative mass market antenna technology which has shipped many 10's of millions of units. Antenova antennas are used in Blackberries, Dell laptops, Samsung phones, providing many bands of connectivity across WiFi, Bluetooth, GPS and 2G/3G/4G. Led the protection and transfer of IPR from two Universities, recruited the initial executive team, and exited returning a profit to the Angel investors.

ACTIVERF LTD. CAMBRIDGE UK, 1999-2001   FOUNDER DIRECTOR

Now Gatekeeper Systems. An early implementer of real-time indoor asset-location systems, using a variety of short-range RF technologies. As CEO, built the original 30-strong team and led the first two rounds of funding.

CHROMATIC RESEARCH INC. CALIFORNIA USA, 1995-1998   SOFTWARE MANAGER

Acquired by ATI which in turn was acquired by AMD. Chromatic designed the Mpact™ VLIW SIMD media-processor – an IC of similar scale and complexity to Intel's Pentium. A world first in executing all PC media functions in software, including 2D & 3D graphics, videoconferencing, V34 modem, DVD decode and audio, and one of the first applications of Rambus. It required nearly 30 Windows drivers. Successfully shipped in major OEM PCs (Gateway, Compaq) and was first to demonstrate fully compliant DVD decoding on a PC. Managed the 15-people audio software group, developing algorithms and drivers, and spoke at conferences. Focussed on recruitment, technical leadership, project management and architectural design for next generation in a company which grew to 300 people. In Redmond 1 day/week as Microsoft liaison.

ATARI INC. CALIFORNIA USA, 1994-1995   SENIOR ENGINEER

Atari created the world's first 64-bit video games console, the Jaguar. In the Advanced Technology Group, designed parts of two 100k gate ASICs for the 64-bit Jaguar2 game-console using Verilog/Synopsys, including a Processor cache, Digital video encoder and CD-ROM interface. Also researched algorithmic texture generation and low-RAM architectures.

EUPHONIX INC. CALIFORNIA USA, 1992-1994   ENGINEERING MANAGER

Innovative manufacturer of Digitally-controlled Audio Mixing Consoles, which went public in 1995. Managed the Processing Systems division and oversaw successful introduction of three major new product lines.

SOLID STATE LOGIC LTD. OXFORD UK, 1988-1992   DESIGN ENGINEER

SSL was at the time the world-leader in professional audio mixing consoles. Designed major parts of the ScreenSound Digital Audio Editor and Scenaria Digital Post-Production Mixer. Wrote software for kernel, system, applications and GUI. Designed hardware, including digital audio standards converter (polyphase FIR), MIDAS ASIC for digital audio routing and mixing, 40MHz 68030 CPU card, 40Mbyte/sec three-drive SCSI card.

ARCOM LTD. CAMBRIDGE, UK 1984-1985   DESIGN ENGINEER

Arcom designed and manufactured computer boards for industrial and scientific control and monitoring. Before University, worked as Design Engineer and designed several of the world's first STE bus control boards, which were distributed by major companies (RS, Farnell) and helped drive the company's early growth.

EDUCATION

THE CITY UNIVERSITY, LONDON 1985-1988

B.Sc. Degree (2:1 Hons.) in Computer Engineering, and in final year won both Course Prize and overall Project Prize for writing a hard-real-time audio operating system using an early prototype of the ARM processor. During vacations wrote three successful electronic music albums.

UPPINGHAM SCHOOL, RUTLAND

ST FAITHS SCHOOL, CAMBRIDGE