



OFC 2015

The future of optical networking
and communications is here.

www.ofcconference.org

*8th Workshop on Startups and
Entrepreneurship*

Wednesday, March 25, 2015

3:30pm - 5:00pm

Expo Theater III

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The photonics industry continues to be a dynamic market in which innovation takes place at a breathtaking pace. And much of this innovation is driven by startup companies. While many people like to start a company and many admire the startups that made it big, the process of starting company can be challenging. The aim of this workshop is to provide practical guidelines and dos and don'ts by featuring a number of seasoned entrepreneurs who tell their story. The focus of the presentations is to share key insights and lessons learned that are useful for any entrepreneur wanting to start a company or develop a new business. The workshop concludes with a panel session with ample room for questions and answers.

Moderator/Organizer

Erik Pennings, GM and Principal, 7 Pennies Consulting

Speakers/Panelists

Dr Andrew Rickman, Founder, CEO and Chairman, Rockley Photonics, Inc.

Ed Coringrato, Jr , Business Consultant and Board Member

Richard Bergstrom on behalf of **Raj Kapany**, Board/Advisor/Investor, Valdor and Luxar

Alex Behfar, SVP and GM, Photonic Solutions Business Unit, M/A-COM

Loi Nguyen, PhD, Co-Founder & Vice President Optical Interconnect, Inphi Corporation

Handouts sponsored by a financial contribution
from Inphi, M/A-COM, 7 Pennies Consulting, and the OIDA



Moderator/Organizer

Erik Pennings, GM and Principal, 7 Pennies Consulting



Erik Pennings started his career in R&D working at Bellcore (now Telcordia) and at Royal Philips Electronics where he pioneered several optoelectronic components and during which time he published around 70 papers.

In 1995, he moved to sales and marketing at Philips Optoelectronics, where he was responsible for the business development for WDM lasers, tunable lasers, and high-speed EML's. Partly as a result of the growth that was achieved, Philips sold this business unit in 1998 to JDSU for well over \$1 billion. Dr. Pennings continued his career being responsible for sales and marketing at ThreeFive Photonics, which grew through a number of mergers into ASIP, then into Apogee Photonics, and finally into CyOptics. During this time, he grew revenues by 50% or more each quarter. In 2007, Dr. Pennings joined Eudyna Devices Inc. where he was responsible for marketing in the U.S.

In 2009, Dr. Pennings started his own consulting company (www.7pennies.com) specializing in sales, marketing, and business development. He is working with high-tech startups as well as large corporations in order to grow their business and/or by providing targeted advice.

Dr. Pennings has a M.S. in Physics (cum laude) from Groningen University, a Ph.D. (distinction) from Delft University of Technology, and an executive MBA from the Simon Business School in Rochester.

8th Workshop on Startups and Entrepreneurship

OFC, March 25th, 2015

Erik Pennings



Introducing 7 Pennies...

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- My background:
 - Post-doc at Bellcore (Telcordia) plus Research at Philips
 - New business development at Philips Optoelectronics
 - Sold for >1B\$ to JDSU
 - Sales & Marketing at ThreeFive Photonics
 - Merged into ASIP, Apogee, CyOptics, and was then acquired by Avago
 - Responsible for marketing at Eudyna
 - Acquired by Sumitomo
- Started 7 Pennies Consulting in 2009
 - Focus on sales, marketing, and business development
 - Typically working in long-term part-time engagements
 - Specific areas: FTTH, Mobile, TIAs, RF & Lasers, PICs, S/W

OFC'15 Startup Workshop



25-mar-15

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Why a Startup Workshop

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- Startups are exciting and are important
 - Everyone is intrigued / inspired by Google, Apple, Amazon, ...
 - New companies are essential for innovation and the economy
- Startups can be rewarding / require an appetite for risk
 - Risk, by the way, is very relative these days...
- But starting and building a company is not simple
 - This is not being taught at school
 - And entrepreneurship is hard to learn from books
 - Like anything else, this is best learned by just doing it
 - But beyond taking a plunge, you can learn from others
 - Especially serial entrepreneurs “who’ve done it”

OFC'15 Startup Workshop



25-mar-15

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Workshop contents

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The future of optical networking and communications is here
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- Great line up of speakers in this workshop:
 - Andrew Rickman (Bookham/Oclaro, Kotura, Rockley)
 - Ed Coringrato (CyOptics/Avago)
 - Richard Bergstrom on behalf of Raj Kapany (K2/Emcore)
 - Alex Behfar (BinOptics / M/A-COM)
 - Loi Nguyen (Inphi)
- Panel session
- Please note:
 - There are printed handouts
 - If you want a softcopy (mailing list), please leave your business card
 - Discussion afterward encouraged, but exhibition closes at 5pm
 - By the way, there is also a photonic integration workshop at 6pm

OFC'15 Startup Workshop



25-mar-15

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Thanks!

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Speaker/Panelist

Dr Andrew Rickman, Founder, CEO and Chairman, Rockley Photonics, Inc.



Dr Andrew Rickman OBE is the founder, CEO and Chairman of Rockley Photonics based in the UK and Pasadena, CA. Rockley Photonics is a rapidly expanding company, formed with a team of colleagues highly experienced in previous successful technology ventures, to develop novel optical communication systems.

Andrew was previously the founder, CEO and Chairman of Bookham Inc. (now called Oclaro Inc. [NASDAQ: OCLR] and headquartered in San Jose, CA), one of the world's largest fiber optics telecom component producers. Andrew founded Bookham in 1988, as CEO, grew the company from a start-up to a FTSE100 company and latterly chaired the business through the consolidation of the telecoms industry.

More recently he was Chairman of Kotura Inc., a leader in the field of silicon photonics for fiber optic communications, high performance computing and sensing applications, and was instrumental in its development and ultimately successful sale for \$82 million in 2013 to Mellanox® Technologies, Ltd. (NASDAQ: MLNX; TASE: MLNX), a leading supplier of end-to-end interconnect solutions for servers and storage systems.

Andrew has a mechanical engineering degree from Imperial College, London; a PhD in silicon photonics from Surrey University; an MBA from Cranfield University and honorary doctorates from Surrey, Edinburgh Napier and Kingston Universities. He is a chartered engineer and a Fellow of the Royal Academy of Engineering and of the Institute of Physics. He was awarded an OBE in the Queen's Millennium Honors list for services to the telecommunications industry and is a winner of the prestigious Royal Academy of Engineering Silver Medal for his outstanding contribution to British Engineering.

In 2000, Andrew was named UK's Technology and Communications Entrepreneur of the Year by Ernst and Young. In 2011, Andrew was awarded an Honorary Professorship at SIMIT, Chinese Academy of Sciences. Andrew has held advisory board positions with the East Asia Institute of the University of Cambridge and Applied Science and Technology Research Institute of Hong Kong. He was a Trustee of The Oxford Trust. He was previously a council member of the UK Government's Engineering and Physical Sciences Research Council (EPSRC).

Speaker/Panelist

Ed Coringrato, Jr , Business Consultant and Board Member



Ed J. Coringrato, Jr. is currently Senior Director at I2R Nanowave, Inc., Board Member at Nanowave Technologies, Inc., Board Member (pending) at Luna Innovations, Board Member at Pennsylvania Manufacturers Resource Center (MRC), and Technology Advisory Board Member at Ben Franklin Technologies Partnership of Northeastern PA.

Ed served as President and Chief Executive Officer and board member of CyOptics, Inc. from January 2005 until its sale to Avago Technologies in June 2013. Prior to that he was CyOptics VP of Business Development from February 2003 through December 2004. From 2000 until 2003, Mr. Coringrato was co-founder and served as Chief Financial Officer of CENiX, Inc., an optical start-up that developed high-speed optical modules using an automated manufacturing platform.

Mr. Coringrato also worked for 18 years at AT&T and Lucent Technologies, where he held positions in engineering, marketing and sales, strategic planning, business development and product management. Mr. Coringrato holds a BS degree in Industrial Engineering and Systems Management and an MBA from The Pennsylvania State University.

OFC 2015

Workshop on Startups and Entrepreneurship

March 25, 2015

Ed Coringrato
Business Consultant and Board Member
ecoringrato@gmail.com

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Why am I participating on this panel?

- Former CEO of start-up CyOptics, Inc. – sold to Avago Technologies in June, 2013.
- Co-Founder of start-up CENiX, Inc. – merged with CyOptics in 2003.
- Former 18 year veteran of Lucent Technologies, Microelectronics Group (positions in Engineering, M&S, PLM, Strategy and Bus Dev) – left in 2000.
- Raised ~\$160M in equity financings and closed numerous debt facilities. Worked with industry leading VCs/PEs.
- Responsible for 5 M&A's while at CyOptics and while at Lucent helped to form of 2 Joint Ventures and led a major acquisition (Ortel).
- BSIE and MBA from Penn State University.

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CyOptics at a Glance

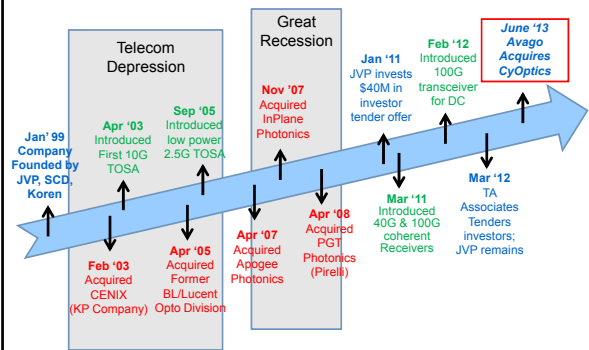
Largest Merchant Supplier of Optical Chip and Component Technologies

- Heritage of Bell Labs and Lucent
- 25 years of research, development and investments
- Leading-edge InP Technology
- Headquarters in Breinigsville, PA
- 875 employees, 192 engineers
- World-class manufacturing capabilities



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CyOptics timeline to a successful exit



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What can be learned from CyOptics?

Assembling the Right Team

- Experts in their field with a passion for the business.
- History of working well together.
- Ability to work well in cross functional teaming.
- Willingness to Advocate, Agree and Align.

Selecting the Best Investors

- Industry leaders with strong (multi-year) commitment to your particular industry sector.
- Strong belief in supporting the management teams they invest in.
- Having the financial resources and timeline to fund the company life cycle.

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What can be learned from CyOptics?

Executing the Strategy

- Understand your core competencies and become the best that you can be.
- Extend your reach only when it fits your core competencies and is a natural evolution of your current markets.
- For CyOptics, our strategy was to:
 - Leverage our core competency in InP devices for Metro and Long Haul markets.
 - Move into the Access market using our DFB lasers.
 - Capitalize on data center move to single mode lasers and higher data rates.
 - Move into defense optoelectronics with our US based design & manufacture.

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What can be learned from CyOptics?

Having the Right Company Leadership

- Manage your company as a business, not an R&D lab.
- At CyOptics we managed by:
 - Establishing business cases.
 - Setting milestones and tracking results through gate reviews.
 - Stopping projects when we were behind or the market moved on.
- As CyOptics CEO, I worked closely with our technologists and helped to focus their expertise on creating value for our shareholders.
 - Having lead customers, setting budgets, and tracking results to established milestones.

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What can be learned from CyOptics?

Being Open to M&A and/or Partnerships

- The Optoelectronics industry has a high learning curve.
- M&A and/or partnerships can be used to accelerate learning curves and time to market.
- For CyOptics, our acquisitions provided technologies and human resources to amass an industry leading, vertically integrated competence around photonic integrated circuits.
- All of our acquisitions were successful as they were physically integrated into the core business or as a standalone facility, developed a common culture.

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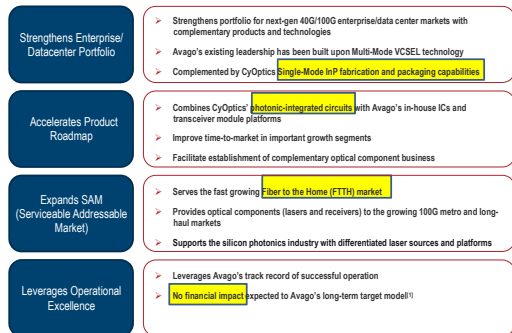
What can be learned from CyOptics?

Focusing on Financial Performance

- Do industry benchmarking and competitive analyses.
- Establish objective and milestones focused on generating better than industry performance.
- At CyOptics, we achieved this objective through:
 - Keeping our fixed costs to a minimum.
 - Managing our cash (tightly!); no investment before its time.
 - Identifying customer drivers for our new product developments.
 - Gaining production scale on our fixed cost operation.

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Compelling Strategic Rationale for Avago Fiber Optics Business



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What am I doing now?

- Providing business consulting services.
- Membership on company boards.
- Membership on not-for-profit boards supporting US manufacturing and technology company incubation.
- Helping to advice and guide the next wave of startups and entrepreneurs.

Affiliations:

I2R Nanowave, Inc., Senior Advisor
Nanowave Technologies, Inc. Board Member
Luna Innovations Board Member (pending)
Pennsylvania Manufacturers Resource Center (MRC) Board Member
Ben Franklin Technologies Partnership of Northeastern PA, Technology Advisory Board Member

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Thank You!

Ed Coringrato
Business Consultant and Board Member
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Speaker/Panelist

Raj Kapany, Board/Advisor/Investor in charge of Corporate Development, Valdor Technologies and Luxar Inc.



Raj Kapany started his fiber optics career over 25 years ago with a startup called Kaptron which specialized in DWDM's, Splitters and Optical Switches. He was a co-founder in Kaptron where he raised venture financing from Crowntek [venture arm of Crown life insurance] and eventually merged Kaptron into AMP Inc [now Tyco Electronics].

As an executive for Amp Inc he became a Expatriate in London, and ran Amp's Strategic businesses in Europe, Middle East and Africa. On returning back to the USA with the 'startup itch', Mr Kapany co-founded another company called K2 Optronics focusing on External Cavity Laser's for CATV markets. After raising 3 rounds of Venture financing from Alloy, Advent, Jafco, Bessemer, JDSU, Intel, and Emcore, K2 Optronics merged into Emcore Corp in 2007 as part of their CATV business unit.

In 2008 Mr Kapany [with Angels] acquired Intexys [in France] from their VC's. This company produced Active Optical Cable products for the Data Center markets. This company qualified products into such customers as IBM for their Roadrunner super computer. This asset was strategically partnered in Asia.

Currently Mr Kapany's has invested and is a Board member and strategic advisor of several tech companies in Fiber optics, RFID, Internet, Data analytics, and Waste management.

Current positions include Board/Corporate Development of Valdor Technologies [HD video, assemblies] and Luxar Inc.[100G Data Analytics/COTDR]. Both companies are generating sales and are profitable.

Raj holds an Undergraduate degree from UC San Diego in Economics, and a Business Degree from Haas School of Business [UC Berkeley] in Finance.

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March 2015

Luxar Tech, Inc.

Background of Raj Kapany

- Raj Kapany started his fiber optics career over 25 years ago with a startup called Kaptron which specialized in DWDM's, Splitters and Optical Switches. He was a co-founder in Kaptron where he raised venture financing from Crowntek [venture arm of Crown life insurance] and merged Kaptron into AMP Inc in 1990 [now Tyco Electronics].
- Mr. Kapany co-founded another company called K2 Optronics focusing on External Cavity Laser's for CATV markets. After raising 3 rounds of Venture financing from Alloy, Advent, Jatco, Bessemer, JDSU, Intel, and Emcore, K2 Optronics merged into Emcore Corp in 2007 as part of their CATV business unit.
- Currently Mr. Kapany's has invested and is a Board member and strategic advisor of several tech companies in Fiber optics, RFID, Internet, Data analytics, and Waste management.
- Current positions include Board/Corporate Development of Valdor Technologies [HD video, assemblies] and Luxar Inc. [100G Data Analytics/COTDR]. Both companies are generating sales and are profitable.

Luxar Tech, Inc.

Sign of the Times

	Kaptron	K2 Optronics	Luxar/Valdor
Economic Times	High interest rates / low VC involvement	High Values / VC's involved	Gross margin / profit focus
Funding	Very tough	Easy	Moderate DD
Mechanism	Small team	Hire high #'s	Hire offshore
Board Structure	-3	-5-7	2-3 incl founders
Management	Technical	Full management	Engineering / sales first
Technology	Some IP filed	Lots of IP filed	Base IP files
Outcome	Corporate merge	MNA / IPO	Merge



Luxar Tech, Inc.

Challenges

- **HIRING**
 - Bringing on A players, get B players off the business
- **BOARD MEETINGS**
 - Give the board action items and ask for help
- **FUNDING**
 - Get smart money not dumb money
- **PRODUCT DEVELOPMENT**
 - Indoctrinate the tech team to meet their commitments on time
- **SALES STRATEGY**
 - ABS = Always be Selling [early involvement]
- **OPERATIONS**
 - Low cost/high volume partner -not always Asia anymore

Luxar Tech, Inc.

Success Formula

- CUSTOMER TRACTION
- STRATEGIC CORPORATES
- NEW EXECUTIVE MGMT
- GLOBALITY
- VOLUME PRODUCTIONS
- PATIENCE
- TEAMWORK
- CLEAR DELIVERABLES/ACCOUNTABILITY

Luxar Tech, Inc.

Kaptron Inc. – THE BEGINNING OF OPTICAL MARKET ACCEPTANCE

1985 – 1990

- Technology -mirror/fused
- Patents
- Amp Channel to Market > Fiber channel
- Amp Co-development for their markets
- Hire in Fused Specialist
- Obtain tier one teaching customer ATT for long distance 850/1300nm

Luxar Tech, Inc.

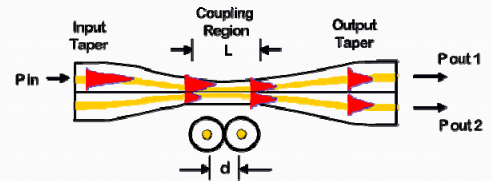
Concept of Kaptron

- LENS
- DICHROICS
- PIVOTING MIRROR
- FUSED BICONICAL
- LINK TO A STRATEGIC CO DEVELOPER TYCO

Luxar Tech, Inc.

The Concept of Kaptron, cont'd

The energy transfer is dependent on the core separation (d) and the interaction length (L).



Luxar Tech, Inc.

Concept of K2 Optronics

- LEVERAGE LABS OF AMP
- ECL DESIGN
- ECL BENEFITS
- PACKAGING
- OFF SHORE
- OEM SALES
- YIELDS

Luxar Tech, Inc.

Concept of K2 Optronics, cont'd

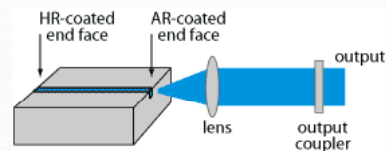


Figure 1: Simple setup of a diode laser with external cavity. The semiconductor chip is anti-reflection coated on one side, and the laser resonator extends to the output coupler mirror on the right-hand side.

Luxar Tech, Inc.

Steps/Timelines

- 2000 START
- 2003 PRODUCT DEV
- 2005 PRODUCTION
- 2006 REVENUE
- 2007 EXIT

Luxar Tech, Inc.

K2OPTRONICS 'MARKET VALUATION / GROWTH TO TELECOM BANKRUPTCIES'

2000-2007

- Unique ECL technology
- Early Outsource involvement –Fabrinet
- Corporate CATV partnerships - Emcore/JDSU
- Hire in engineerings not
- PhD's Capture idea from Corporate Development Labs
- Hired in strong Board members from Ciena / Infinera / JDSU

Luxar Tech, Inc.

LUXAR 'THE DAWN OF A NEW AGE – DATACENTERS!'

2011-2015

- Early customer adoptions/ Revenue
- Leveraging datacenter/security explosion
- Building a strong Executive team - sales/general mgmt.
- Early penetration into Large Asia Carriers
- Traction w/ top US Router Company's
- Leveraging Mexico Deregulation w/ American Movil/Carlos Slim.

Luxar Tech, Inc.

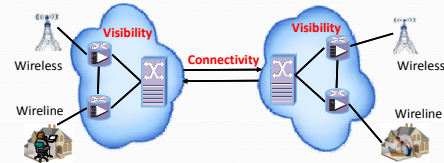
Product Focus

Network Evolution

- Line rate from 10G to 100G
- Switch from centralized to distributed
- Data storage from local to cloud

Challenges

- Connectivity: transmission more complex
- Security: intrusion detection more difficult
- Data control: Loss of visibility due to cloud



Focus: low latency Data Center connectivity and full Network visibility

Luxar Tech, Inc.

After the Exit

- PERSONAL TIME OFF/RECHARGE
- ANSWERING THE \$5B QUESTION
- ASSEMBLANCE OF A NEW TEAM
- GAINING VALUE BEFORE VC
- THINKING HOW TO EXIT
- FOCUS ON REVENUE GENERATION / PROFITABILITY
- WORRY ABOUT CASH-FLOW

Luxar Tech, Inc.

Speaker/Panelist

Alex Behfar, SVP and GM, Photonic Solutions Business Unit, M/A-COM



Dr. Alex Behfar has served as M/A-COM Senior Vice President and General Manager, Photonic Solutions, since December 2014. In 2000, he founded BinOptics Corporation (BinOptics), a provider of indium phosphide lasers for data centers, mobile backhaul, silicon photonics and access networks, and served as the Chairman and Chief Executive Officer of BinOptics from its inception through the December 2014 M/A-COM acquisition.

Before founding BinOptics, Dr. Behfar worked at IBM for more than 10 years in various capacities, including Laser Enterprise, Microelectronics Packaging, CeramiCard and the Intellectual Assets group. He designed the epitaxial structure and physical layout of the first commercially viable high-power 980nm pump laser product. This technology was later sold by IBM to JDS Uniphase and is now part of II-VI Incorporated. He also served as IBM's worldwide cross-functional program manager for optoelectronics and telecommunications.

Dr. Behfar holds an M.S. and a Ph.D. in Electrical Engineering from Cornell University and a B.Sc. in Electrical and Electronic Engineering from King's College, University of London. He has been awarded 48 U.S. patents with 9 U.S. patents pending.



MACOM

Outline

- Background
- Why was BinOptics started?
- Starting up the start-up
- Building up the start-up
- Exit
- Lessons learned

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MACOM

Background

1985-1990	MS/PhD – Focus on Semiconductor Lasers	Cornell University
1990-2000	Technical – Developed High Power Lasers Strategic Business Development Intellectual Assets	
2000-2014	Founder & CEO	
2014-	Dec 2014 Acquisition SVP & GM, Photonic Solutions NASDAQ:MTSI	

3

Why Start BinOptics?

Cleaved Facet Lasers

- Waveguide Formation
- Contacts
- Cleave to Form Mirrors
- Stack & Coat Mirrors
- Test
- Singulate
- Package

Etched Facet Lasers

- Waveguide Formation
- Etch Mirrors
- Contacts
- Wafer Level Coatings
- Test
- Singulate
- Package

Bring elegance and cost structure of wafer scale processing and testing to semiconductor laser manufacturing

4

MACOM

Starting the Start-Up

- Leaving the *Mother Ship*
 - Leave successful career of behind
 - Uncertainty/lack of security vs. excitement of founding a new company
- Look at your strengths/weaknesses
 - Augment your team with right mix of skills that are complementary to yours
- Fundraising
 - Focus on VC's for Series A that can help open doors and give you credibility with recruiting
- Location of company
 - BinOptics was Ithaca, NY
 - Proximity to Cornell University allowed us to hit the ground running
 - Locate where you can find talent/resources
- Hiring the initial engineering team
 - Full time job for several weeks
 - 20 phone interviews-a-day!
 - Don't hire people like yourself – tremendous value of cross-pollination
 - Self-disciplined; aligned values; principled; and appropriate work ethic

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MACOM

Building Up the Start-Up

- R&D
 - Don't cut any corners
 - You get one bite at the apple with most customers
- Frequent visits with many potential customers
 - Find out what keeps them up at night and determine a genuine market need
 - Make sure development is synchronized with this need
- Bring on an independent (non-investor) Board member
 - Many years of experience in similar industries
 - You'll have many forks in the road – excellent to seek advice from an experienced board member
- Expect many, many bumps in the road
 - Even in the darkest hour never contemplate giving up as an option
 - However, be realistic and adjust to the reality of your situation and your industry/environment
 - Be patient: BinOptics took 14 years from founding to exit
- Little room for errors in a start-up
 - Need close to flawless execution of things under your control

6

Exit

- Pick the fruit when it's ripe
 - Resist pressure to Exit when you know the timing is wrong
 - Conversely, push to get an Exit if you think the timing is right
- Investment Banker Due Diligence
 - Very, very important – take your time
 - Hire people with a proven track record and intimate knowledge of your space
 - Prepare questions that only folks with their fingers on the pulse of your industry can answer
- IPO vs. being acquired?
 - Varies by appetite of investors for risk
 - IPO exposes investors to market movement risk while they are locked up
 - Acquisition is more deterministic
 - Desires of the management team

Lessons Learned

- Hire the right people
 - Self-disciplined
 - Aligned values
 - Principled
 - Work ethic
- Bring on an independent (non-investor) Board member
 - Many years of experience in the same/similar industries
- There is very little room for errors in a start-up
 - Execute items under your control as flawlessly as possible

Speaker/Panelist

Loi Nguyen, PhD, Co-Founder & Vice President Optical Interconnect, Inphi Corporation



Dr. Nguyen co-founded Inphi Corporation in the Fall of year 2000 with the vision of building a world-class high-speed semiconductor company. That vision was tested with the collapse of the dot.com, but remained intact, never wavering, during the company history. Inphi remains true to its core mission to develop innovative, leading edge semiconductor solutions that enable the next-generation of Internet infrastructures, which include Long Haul, Metro, Data Center, and Enterprise.

Dr. Nguyen was among the first industry executives who saw the emergence of 100G as the new industry standards. He rallied the Inphi team to develop the first 100G linear transimpedance amplifier (TIA), which enabled the widespread deployment of coherent systems for Long Haul and Data Center Interconnect, the first 100G Ethernet SERDES in 40-nm CMOS, which reduced the power consumption and size of 100G pluggable modules by more than a factor of 2, and the first 200G linear modulator driver for 16-QAM coherent systems.

Prior to co-founding Inphi, Dr. Nguyen was a research scientist specializing on high speed semiconductor devices and circuits. He was the winner of the prestigious IEEE Electron Devices Society Rappaport Award for Best Paper in 1992, author or co-author of more than 50 published papers in scientific journals or technical conferences, and holder of 7 US patents. He was also a key contributor to the NASA Wilkinson Microwave Anisotropy Probe (WMAP) that mapped the cosmic microwave background from the early universe which is now on permanent display at the Smithsonian Air and Space Museum in Washington D.C.

Dr. Nguyen holds B.S. and Ph.D. degrees in electrical engineering from Cornell University and an MBA from the Anderson School of Management at UCLA.

Inphi
Think Fast

High Tech Startups Do's and Don'ts

Inphi
Think Fast

My Background

- High-speed semiconductor specialist
- Ph.D. Cornell University, 1989
- MBA, UCLA 1997
- Co-founder of Inphi, 2000

IEEE Rappaport Best Paper Award, 1992

Map of Universe, NASA Wilkinson Anisotropy Probe, 2001-03

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A Walk Down Memory Lane...

Source: NASDAQ OMX Group
Stated axes indicate US recession - 2014 research.stlouisfed.org

- Series A
- Series B & C, "down rounds"
- Series D & E, "up rounds"
- ▲ IPO

Successful IPO on NYSE @ \$12/share, 11/2010

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Inphi Leads in Data Movement Interconnects

Optical

3,000km

Networking

100s meters

Memory

Millimeters

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Inphi Corporate Overview

Founded in 2000, IPO in November 2010 (NYSE: IPHI)

Headquarters: Santa Clara, CA
Offices Worldwide in the USA, Canada, China, Japan, Korea, Singapore, United Kingdom.

446 employees worldwide, 75% engineering

23 Consecutive Quarters of Profitability (Non-GAAP Net Income before Taxes)

Revenue: FY12 \$92M
FY13 \$103M
FY14 \$160M

Cash Position \$69M, no debt (as of Dec. 31, 2014)

Growing Annual Revenue (\$M)

200 Million Units Shipped (Cumulative MU)

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Think Fast

Do's and Don'ts

Let's Begin...



"First of all, forget everything you learned in obedience school."



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7

DO: Quit Your Day Job Before Fund Raising!



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8

DON'T: Waste Time on Business Plan



Things will change and you need to adapt to the new reality!



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9

DO: Build a Word Class Team



It's all about people!



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DON'T: Burn Up Precious Cash



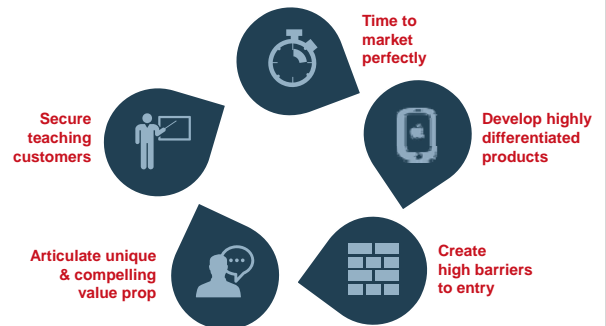
**5 to 7 years to cash flow positive
7 to 10 years to IPO**



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DO: Develop Winning Strategy



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DON'T: Underestimate the Incumbents



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At the End...



It's all about out running the competition!



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