

Acquisition Strategy & Lessons Learned Update

Wendell Brooks

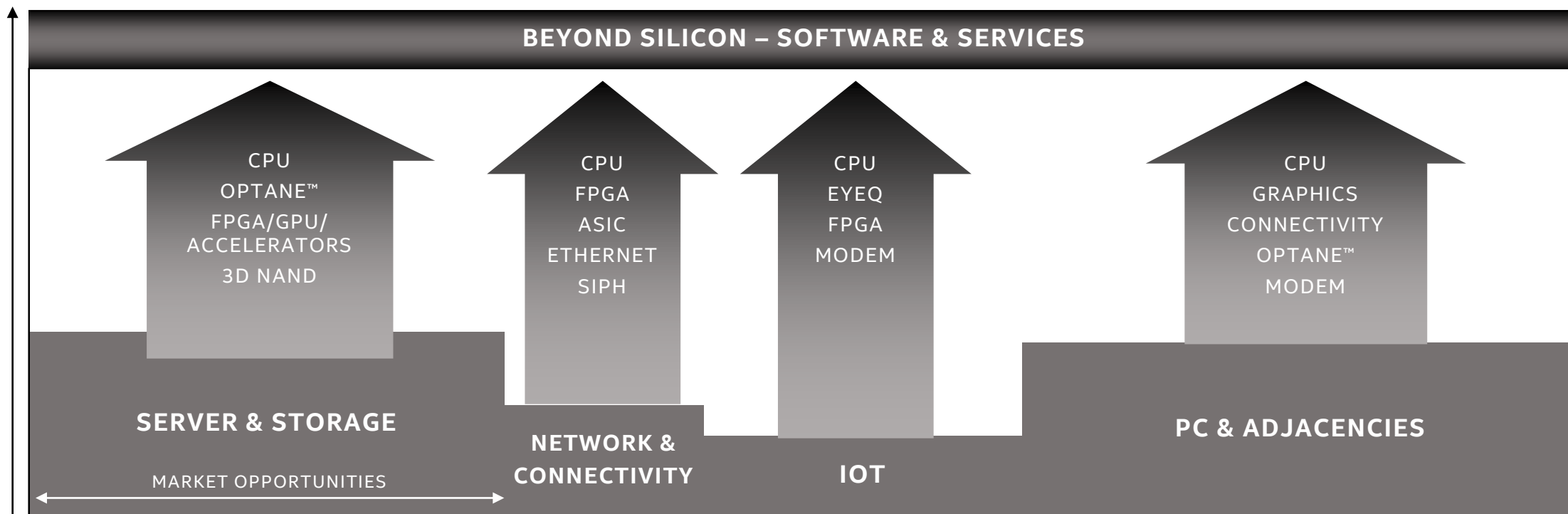
Senior Vice President, Intel

President, Intel Capital

Our Ambitions: Biggest Opportunity in Intel's History

~\$300B

2024 POTENTIAL SI MARKET OPPORTUNITY



Creating the Future .. Our Roadmap for Growth...

CPU to XPU

Protect our core CPU franchise and expand architectures and role of software

Workload growth and consolidation to hyperscalers

- Domain-specific acceleration

Data Center disaggregation

- XPU
- Connectivity
- Custom/SOCs w/lead IPs
- Storage disaggregation/in-storage compute

Drive to hybrid/multi-cloud

- Enterprise vs. Cloud dynamics
- E2E security platform
- Machine Analytics as a Service

Network / Edge

Intelligent Networks, 5G and Edge Compute

Virtualization of the Network

- Cloud-native Network Acceleration software
- vRAN, VNF
- NaaS/MNO

Distribution of compute with build-out of 5G and Edge

- Custom/SOCs w/ lead IPs
- Cloud-agnostic container platform
- Services: System/network opts, vertical services
- Edge Cloud – low latency workloads
- E2E Security platform

IOT Verticalization

Expanding in key verticals, democratizing edge AI and selectively moving beyond silicon

Vision AI is the killer app

- Vision AI Accelerator SoC/IP
- OpenVINO/developer tools democratize workflows

Increasing model complexity

- AI acceleration w/ HW/SW e.g. retraining, Graph NN, Reinforcement learning
- Optimized high-performance fabric
- Compute in-memory

Raising the abstraction bar

- Core DL software and AI PaaS

Pervasive AI across devices

- Custom/SOCs w/ lead IPs
- Privacy preserving ML technologies

Expand Role of Software

Software is increasingly a focus area to enable platforms (e.g. Cloud Native Network Acceleration software, OneAPI, OpenVINO/developer tools etc.)

The Current M&A Landscape presents opportunities...

- Debate continues over U-shaped versus V-shaped economic recovery. Recent modest improvements in unemployment rates coupled with public markets recovering to pre-COVID highs may point to a V-shaped recovery. Still too soon to call.
- Governments continue to take unprecedented measures to stabilize economy
- Escalating East / West tension and nationalism; deal approval environment uncertain
- M&A activity in hard hit industries has accelerated in previous market dislocations:
 - 1987 – credit unions and S&L's
 - 2001/2002 – airlines, hotels, cruise and casino, tech industry fall-out
 - 2008 – investment banks, insurance, local banks
- Strategic buyers with strong balance sheets and cash resources well positioned to take advantage of market conditions – Amazon/Zoox
- Expectation that market correction would be broad based has not been realized – volatility is high
 - Public markets have recovered to pre-COVID levels
 - China IPO market open. US IPO market showing signs of rebound
 - Liquidity needs are the biggest driver of market activity

And the current equity landscape helps inform our thinking...

- Our deal flow remains strong and may pick up as liquidity needs increase
 - Valuations will likely contract over the next 6-12 months
 - CVC's and second tier VC's may pull back in a recessionary environment
- In a CV19 world, we examined capital needs of existing portfolio companies first
- YTD, ICAP has invested in 11 new deals and 19 follow-on deals – with ICAP leading 8 of the new deals
- We continue to support the BU's through strategic investing
 - AI history
- To support 5G in India, we made a \$250M investment in Reliance Jio
 - Jio provides Wireless and Broadband Services to consumers, enterprise and SMB customers
 - Currently 387M wireless subscribers growing to 520M by 2025
 - In process of roll-out of FTTH; targeting 50% attach rate and 100M connected homes
 - Investment made to unlock and expand a \$10B TAM for Intel India and DPG

In areas like AI where winners are still emerging, we have leveraged ICAP to create options...

Leading AI Investment Team...

- Created AI task force in January '17 to increase momentum in AI investing
- >\$270M invested in 25 companies directly aligned in AI, plus >\$120M invested in 24 AI adjacent companies: Most active corporate VC in AI from '15-'19 (3rd most active overall)
- Actively partnered with technical team to monitor the AI market and source investment opportunities
 - Q1'18 "Project Finesse": Evaluated Graphcore, Cerebras, Cambricon, Nextsilicon, Hailo, Habana, Sambanova, Enflame (Suiyuan)
 - Decided to invest in Habana and Sambanova after the evaluations
- Habana was an evolution
 - Strong trust established provided visibility into company operation and culture, leadership team capabilities, execution record
 - Explored collaboration opportunities (OneAPI support, Foundry IOs/packaging technology usage)
- Similar engagements in place with other promising portfolio companies such as NeuroBlade (compute near DRAM)
- We continue to evaluate new AI startups with more SW focus and eye on HW disruption (Optical Neural Networks, Memory related..)

...Well-Rounded Portfolio

AI Acquisitions

- Nervana, 8/16
- Movidius, 11/16
- Habana, 12/19 \$2B

ICAP AI Portcos

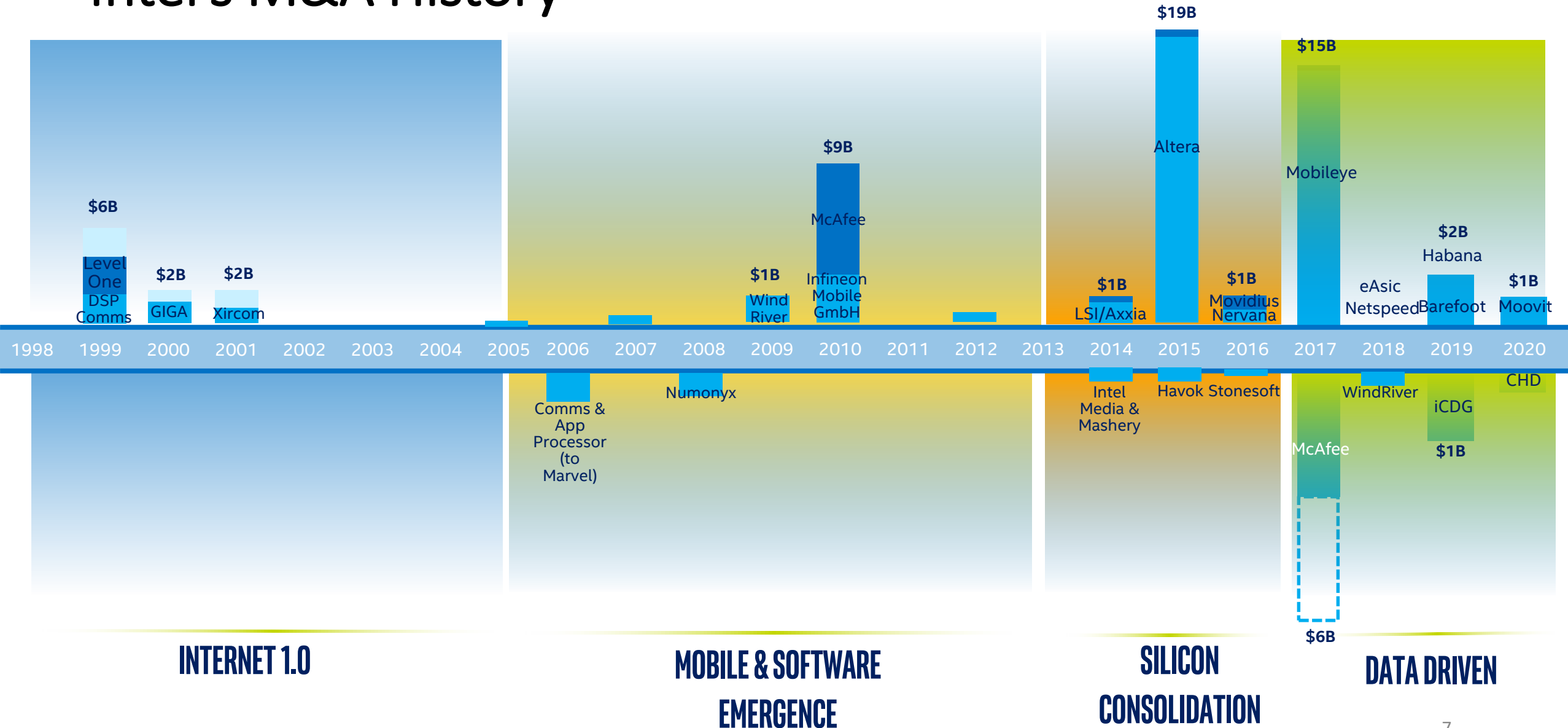
- | | |
|-------------------------|----------------|
| • Amenity | • Landing.ai |
| • Anodot | • Leapmind |
| • Anyscale | • Lilt |
| • Avaamo | • Maana |
| • Babblelabs | • Matroid |
| • Common Sense Machines | • Mesmer |
| • Datarobot | • Neuroblade |
| • Gamalon | • Paperspace |
| • Horizon | • Sambanova |
| • Huiying | • Syntiant |
| • hypersonix.ai | • Untether |
| • Kyndi | • Verta |
| | • Zhuhai eEasy |

AI Adjacent Portcos

- | | | |
|-----------------------|-------------------------|---------------|
| • Aerial Technologies | • Common Sense Machines | • NanoSemi |
| • Aeye | • Duality | • Orcam |
| • Airy3D | • Gloat | • Prophesee |
| • Augtera Networks | • Healx | • Retrace |
| • Bigstream | • Huiying Medical | • Rubikloud |
| • Catalytic | • ICETech | • Verisimlife |
| • Cherre | • KFBIO | |
| • Cloudpick | • MaxQ-AI | |
| | • Mech-Mind | |

We have similar efforts underway in Data Center Networking and 5G –
using ICAP to complement our organic efforts

Intel's M&A History



Intel M&A: How have we done?

ALTERA

DEAL THESIS

- Custom accelerators will improve performance in the data center
- Intel process technology will move relative share in FPGA's

ADVANCING OUR STRATEGY



FPGA's are becoming more prevalent in the data center and in telecommunications networking

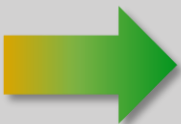
FINANCIAL PERFORMANCE



\$2B LTM 1Q20 revenue, down 6% y-o-y

14 nm for 5+ years

TECH INFLECTIONS



New custom silicon taking some data center share from FPGAs

MOBILEYE

- The autonomous car will be the next major form factor of compute – Intel must win
- Leverages Intel's computing, data center, AI and connectivity



Market opportunity in automotive space, now driving our data centric strategy



~\$900m revenue today, up 100% since 2016

Record revenue in Q1'20 on ADAS adoption



Data from autonomous cars will be very valuable over time. We need to capitalize.

AI

- AI and computer vision will be increasingly important in a 5G world
- Both leverage Intel strengths



Habana: deep learning accelerators for data center

Movidius: computer vision

Nervana: training and inference

Intel Capital Investments



Over \$3.5B of AI-driven data centric revenue in 2019, primarily Xeon; going to \$14B in 2024.



AI products spanning from data center to the edge – will create new markets

How well is our M&A process working? We grade ourselves against our investment thesis..

HABANA

DEAL THESIS



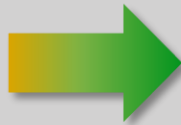
- Purpose-built, programmable, deep learning accelerators for both AI training and inference segments, with a single unified architecture; to replace AIPG offerings that were lagging the competition

PEOPLE



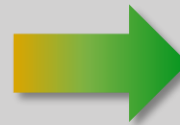
- All key players retained
- 100% rest of population retained

FINANCIAL PERFORMANCE



- COVID-19 slowing down Gaudi POC activity with CSPs and pushing out volumes by 1 quarter

PRODUCT & TECH



- Gaudi 1 PRQ on track
- Barcelona 1 release pushed to Q4'20
- Goya 2 tapeout pushed due to complexity in final integration of large 7nm design

BAREFOOT



- Programmable switch products and technology required for DCG's end-to-end connectivity



- Craig Barratt resigned effective 5/1/2020; other keys on track
- Continued erosion of SW/HW Engineers



- POR revenue revised down, but seeing sales growth to support
- Reduced spending inline with current milestone plan



- Tofino 2 B-step Silicon was delayed
- Pickup in Tofino 1 orders for 5G in the PRC.
- Tofino 2 has seen yield improvements

NETSPEED



- Flexible Network on Chip Fabric, tools, and IP to accelerate SoC design, development, and testing



- 75% of key players retained
- 2 Keys moved to other roles at Intel
- CEO Sundar Mitra has taken on greatly expanded R&Rs



- Aggressively closed all NetSpeed contracts and let customer pre-buy royalty



- IP used in 8 SoC projects inside Intel since acquisition, 4 more in exploration

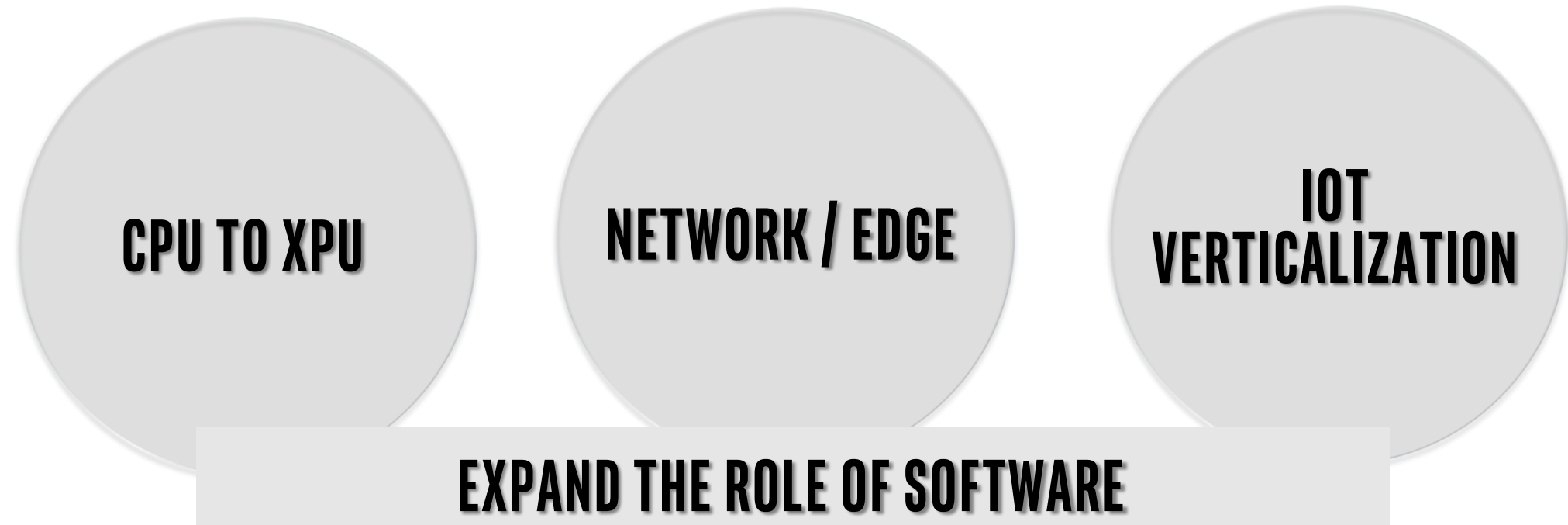
We use our M&A lessons learned to consistently update our... M&A Ten Commandments

1. Must have BU sponsor and deal champion – demand pull by the BU for the acquisition
2. Identify strategic gap and/or market potential (TAM)
3. Create “deal thesis” and value drivers and diligence it. Track progress on ongoing basis
4. Continue to revisit and adjust the value drivers. Report them to ELT and the Board
5. Empower an EIR to ensure value capture against the deal thesis when appropriate
6. Develop alternatives and options (make, license, buy); empower a devil’s advocate/deal skeptic
7. Do NOT let the GM negotiate – have a committed valuation process; adjust valuation if necessary
8. Identify critical diligence areas and key deal risks. Develop a mitigation plan
9. Focus on keeping the team – this is more than retention money; must create a succession plan
10. Don’t allow short term budget decisions that starve the acquired asset

Nervana Learnings

- We purchased Nervana in 2016 to augment our Xeon Phi AI strategy
 - At that time, AI strategy called for Xeon HPC product family to address AI segment.
 - **Learning: Don't have head in the sand. Recognize and embrace market disruption**
- We were not committed to Nervana's business model – and pivoted their plan almost immediately
 - From DLaaS to integrating (unproven) ASIC IP into Xeon Phi for high performance computing (HPC).
 - Detailed execution plans not comprehended as part of deal; no assessment of gaps to execute new business model
 - **Learning: Integration into Intel is hard enough – don't immediately change the business plan**
- AI Strategy evolved and execution commenced without reassessing team skills
 - Once we reluctantly recognized need for dedicated accelerators, we revectorized the Nervana team Xeon HPC, but they did not have experience with complex SoC development.
 - **Learning: Need to ensure team capability is constantly assessed and adjusted**
- Integration
 - Nervana immediately integrated into DCG, then carved out, then integrated again
 - **Learning: Preserve team DNA, do not impede autonomy, assign EIR**
- Alternatives at time of Nervana acquisition limited
 - Intel was underinvested in DL capabilities. Competitive market / limited availability of AI talent was an obstacle to quickly ramping DL expertise. No obvious alternative to Nervana for DC applications
 - **Learning: Nervana deal thesis was accurate. Nervana was not the sole solution – it was part of a journey... allowing us to learn about AI products, customers, and competitors. Utilize ICAP better in emerging spaces**

Build Upon Partnership Between ICAP/Fellows



Sustained dialogue on inorganic opportunities



Q&A