



Arm Limited

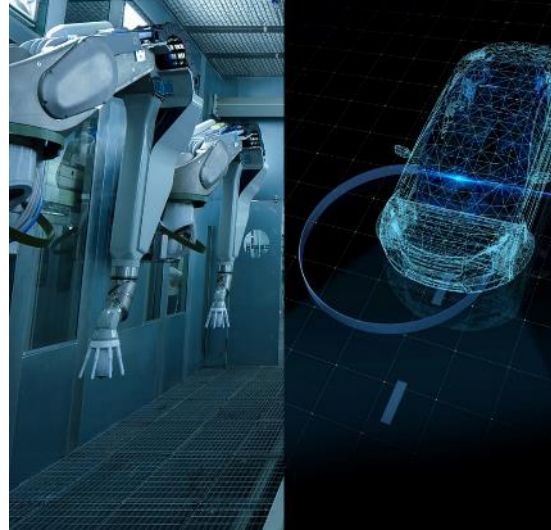
Q3 2018 Roadshow Slides

Arm Limited is a subsidiary of  SoftBank

Technology trends that will redefine all industries



Artificial Intelligence in every device



Autonomous machines



Augmented reality



Hyperscale cloud and connectivity



Security and Privacy

Arm defines the technology that will redefine all industries



	Mobile and Consumer	Networking and Servers	Automotive and Robotics	Internet of Things
Artificial Intelligence in every device	✓	✓	✓	✓
Autonomous machines			✓	✓
Augmented reality	✓		✓	
Hyperscale cloud and connectivity		✓		✓
Security and Privacy	✓	✓	✓	✓

Arm introduction

Global leader in technology licensing

- R&D outsourcing for semiconductor companies

Innovative business model

- Upfront licence fee – flexible licensing models
- Ongoing royalties on partner sales
- Technology reused across multiple applications

Long-term, secular growth markets



>1,650 licences
Growing by >100
every year

**>525 potential
royalty payers**

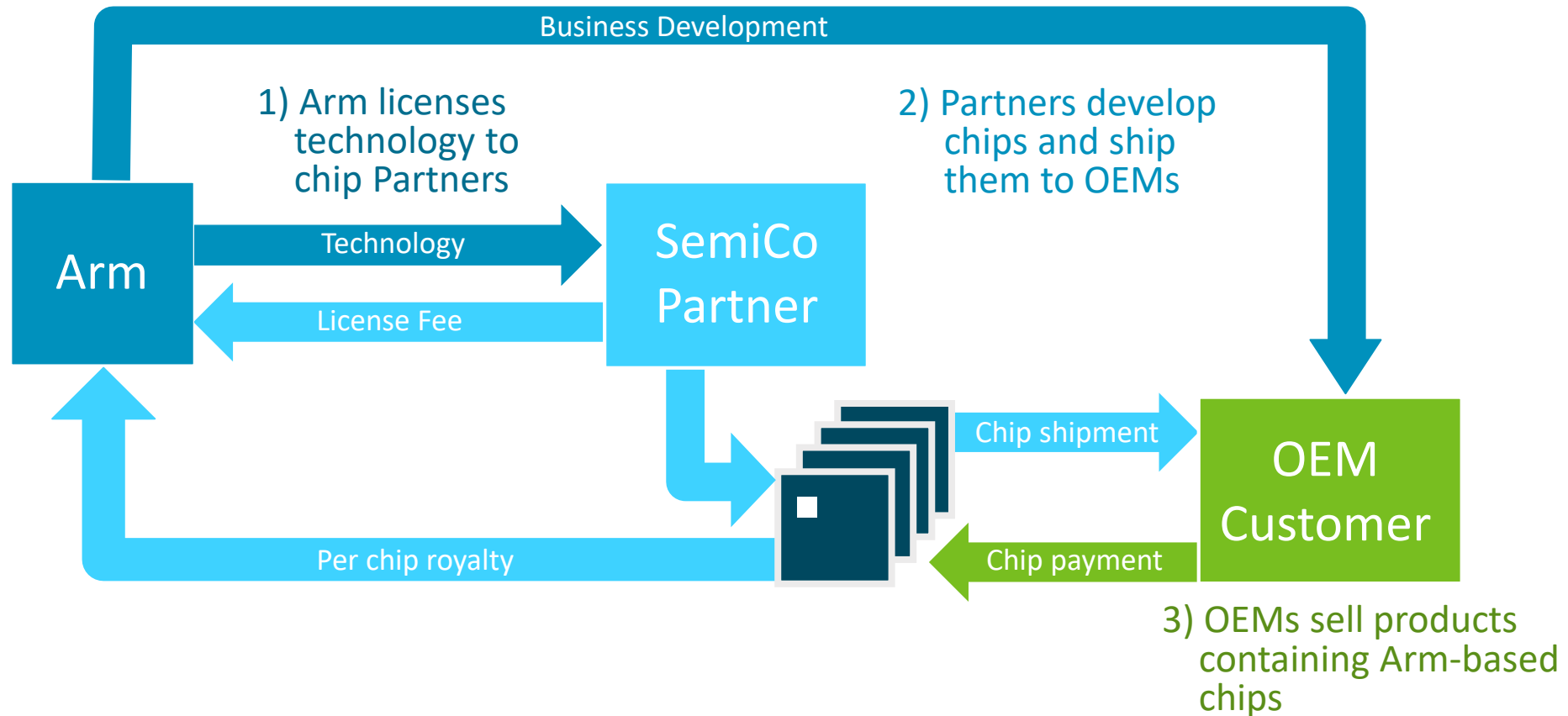
**>21 bn Arm-based chips
shipped in 2017**

**~15% CAGR over
previous 5 years**

Arm's business model

Arm develops technology that is licensed to semiconductor companies

Arm receives an upfront license fee and a royalty on every chip that contains its technology



Arm's strategy

Maintain or gain share in long-term growth markets

- From mobile phones to networking infrastructure and servers to embedded smart devices and automotive

Increase value of Arm technology per smart device

- Invest in developing more advanced processors with higher royalty rates
- Physical IP and multimedia IP further increase Arm's value per chip

Explore and exploit new opportunities in emerging applications created by the Internet of Things

Invest to create a sustainable business, fit for the long term

- Create superior returns by developing new technology that will deliver increased profits and cash generation in the future



Arm's main growth markets

Mobile and Consumer Devices



- Smartphones, tablets and laptops
- Apps processor, modem, connectivity, touchscreen and image sensors
- Growth coming from higher-value Arm technology such as Arm v8-A, octa core, multimedia

Networking & Servers



- Base stations, routers, switches, and servers for cloud and data centres
- Networks evolve to cope with increased data at lower latency: virtualisation, integration and programmability
- Most major chip vendors have announced Arm-based products

Embedded Markets



- Automotive, white-goods, wearables, smart devices in industrial and utilities
- Microcontrollers, smartcards, embedded connectivity chips
- 300 companies have licenced Arm processors for use in embedded computing devices

History of Arm

Joint venture between
Acorn Computers and Apple



1990

Designed into first mobile
phones and then smartphones



1993 onwards

Now all electronic devices can
use smart Arm technology



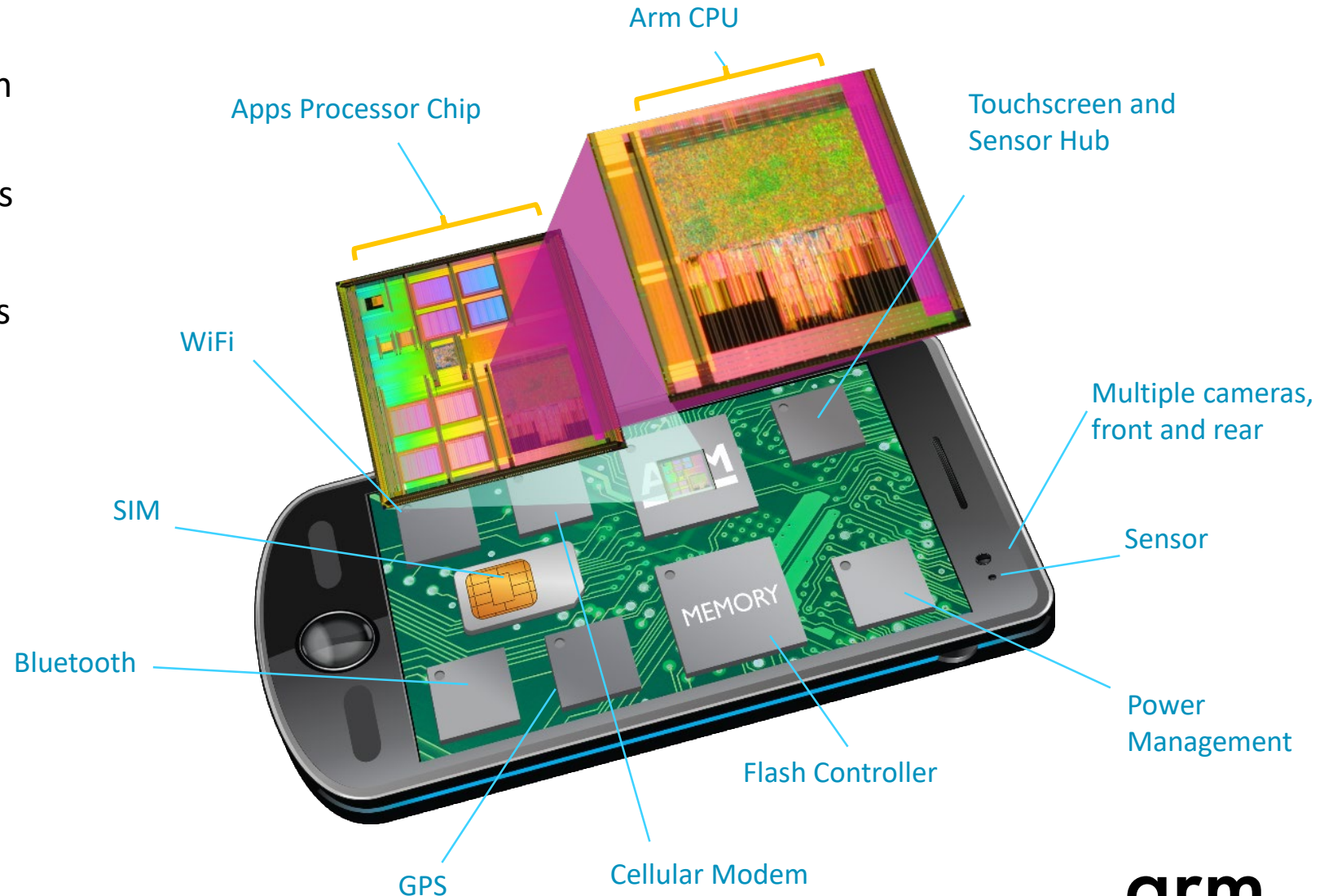
Today

Smart devices contain many Arm processors

Applications Processor chips can contain multiple Arm technologies

- Arm v8-A processor for OS and apps
- Cortex-R controller for modem
- Cortex-M controllers for peripherals
- Arm Mali multimedia processors: GPU, video, display, camera, etc.
- Arm physical IP

When new functions are added to smartphones it creates opportunity for new Arm IP



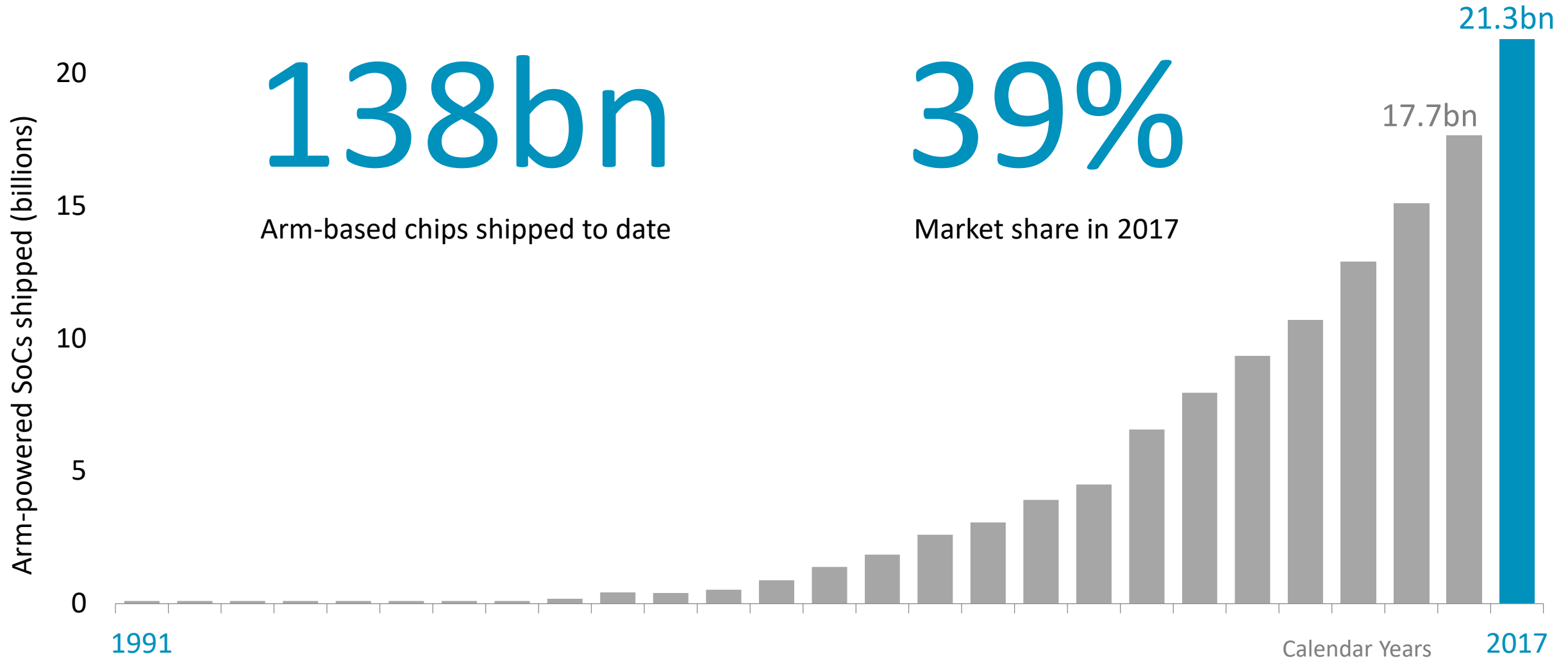
Arm-based chip shipments

138bn

Arm-based chips shipped to date

39%

Market share in 2017

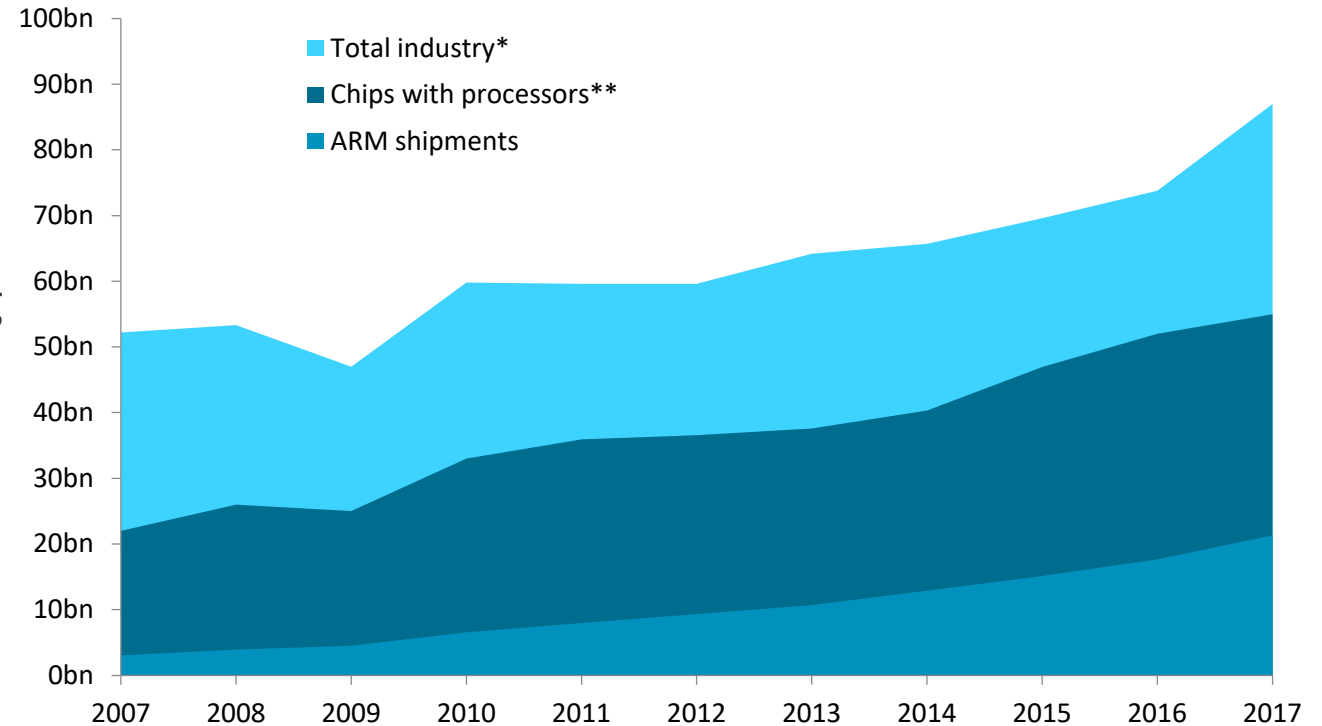


Arm's opportunity continues to broaden

Semiconductor industry continues to grow:
8% by volume, 3% by value over past five years

Proportion of chips with processors is increasing
over the medium term: 65% in 2017

Arm is gaining share within the “chips with
processors” segment of the industry:
39% in 2017

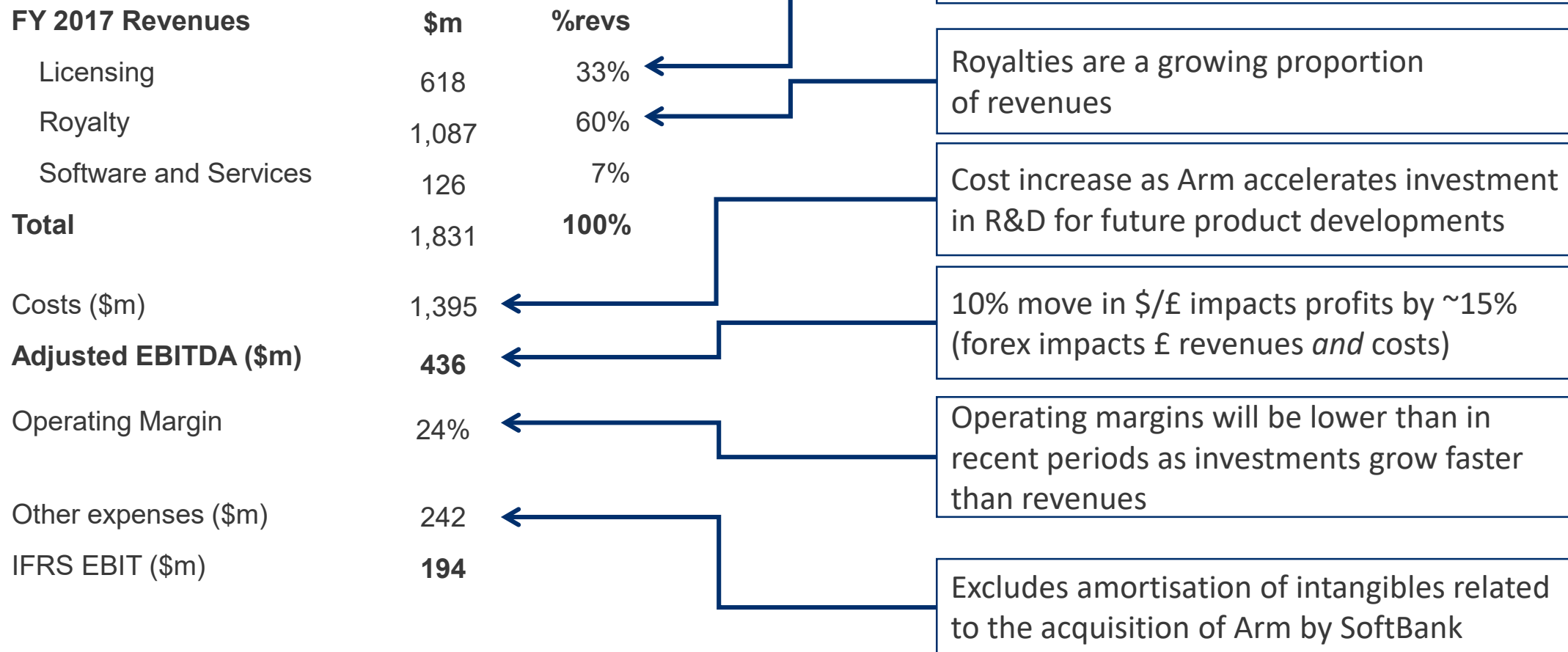


* Data source: WSTS, April 2018 and Arm,
Industry volume excluding analog and memory

** Arm estimates

Calendar years

From revenue to profits



Qtr. ending Dec. 2018 – Financial summary

Revenues (\$m)	Q3 2017	Q3 2018	Growth
Licensing	190	125	-34%
Royalty	297	305	3%
Software and Services	33	56	70%
Total (\$m)	520	486	-7%
<hr/>			
COGS (\$m)	28	34	21%
R&D (\$m)	206	175	-15%
SG&A (\$m)	163	158	-3%
Costs (\$m)	397	367	-8%
Adjusted EBITDA (\$m)	123	119	-3%
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Depreciation & amortisation (\$m)	23	35	52%
Other operating (income) expenses (\$m)	46	5	-89%
IFRS EBIT (\$m)	54	79	46%

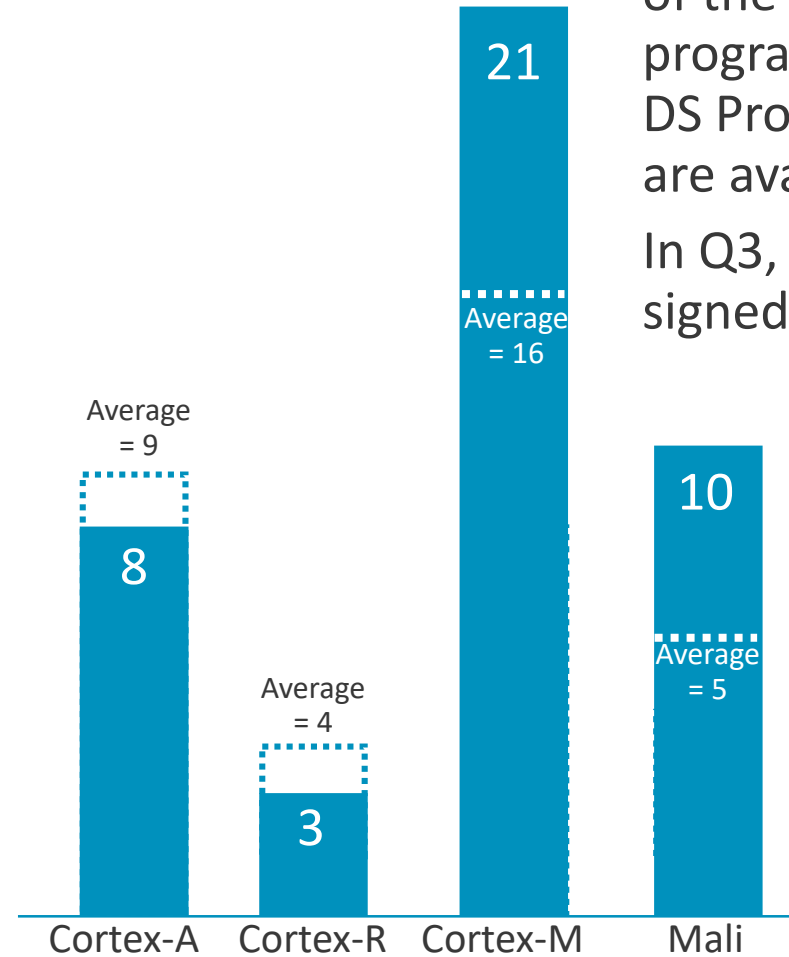
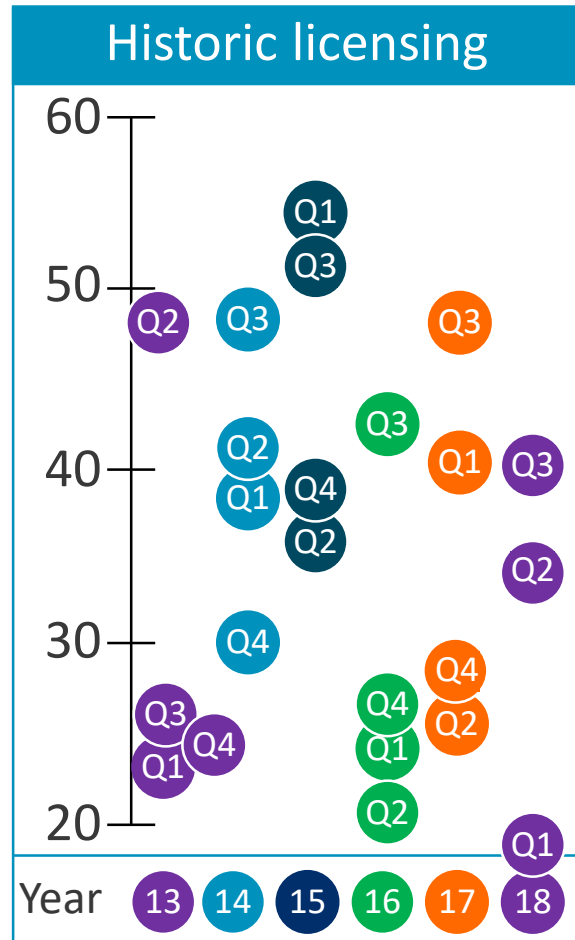
Licensing can fluctuate quarter to quarter. In Q3, customers were worried about potential global industry slowdown in 2019

Royalty revenue growth driven by market share gains and increasing royalty per chip

Includes \$15m from recent acquisitions of Treasure Data and Stream Technologies

Q3 2017 includes FlexPot which fell into Q22018

Q3 Licensing: 42 is in the normal range



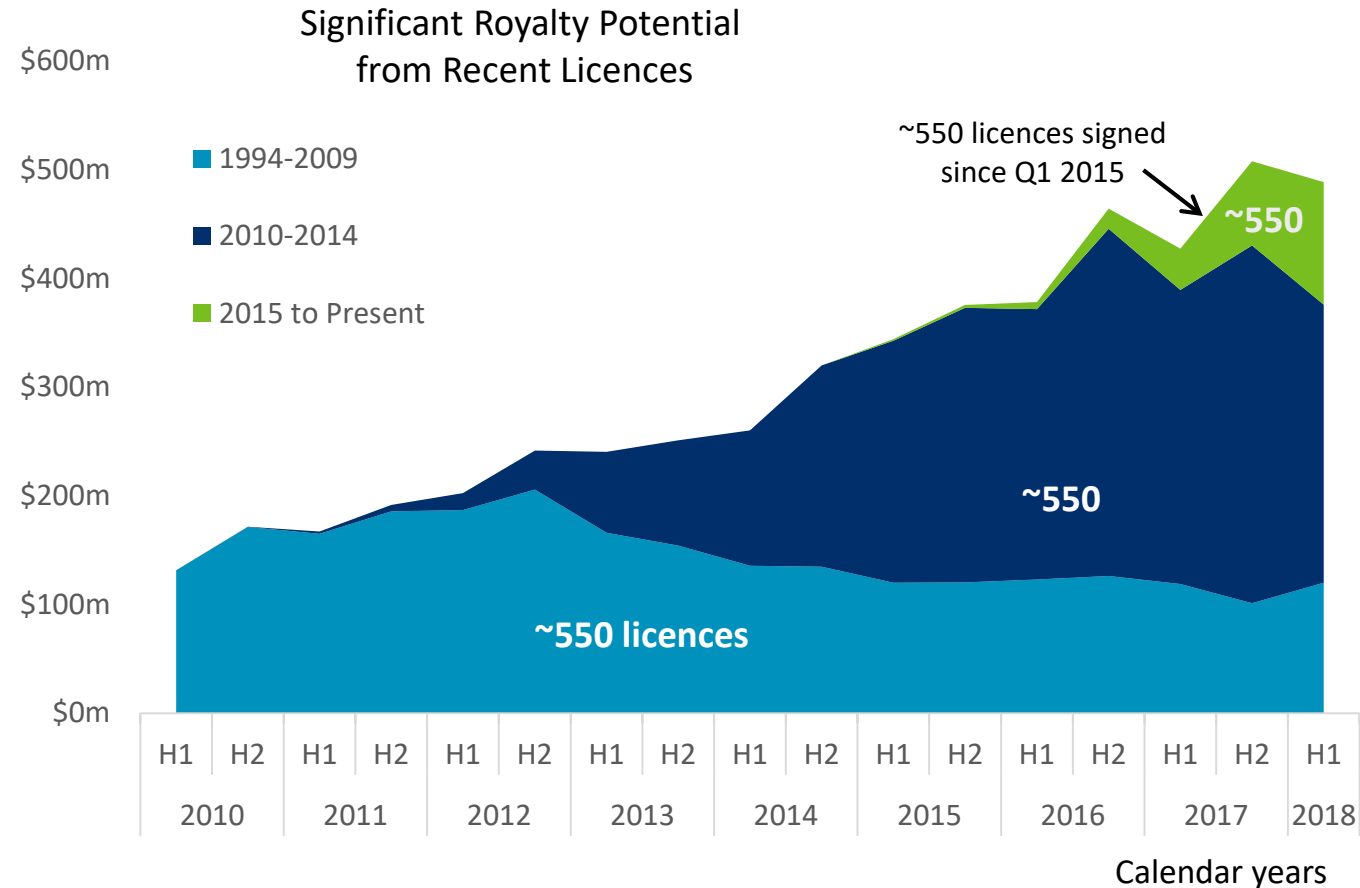
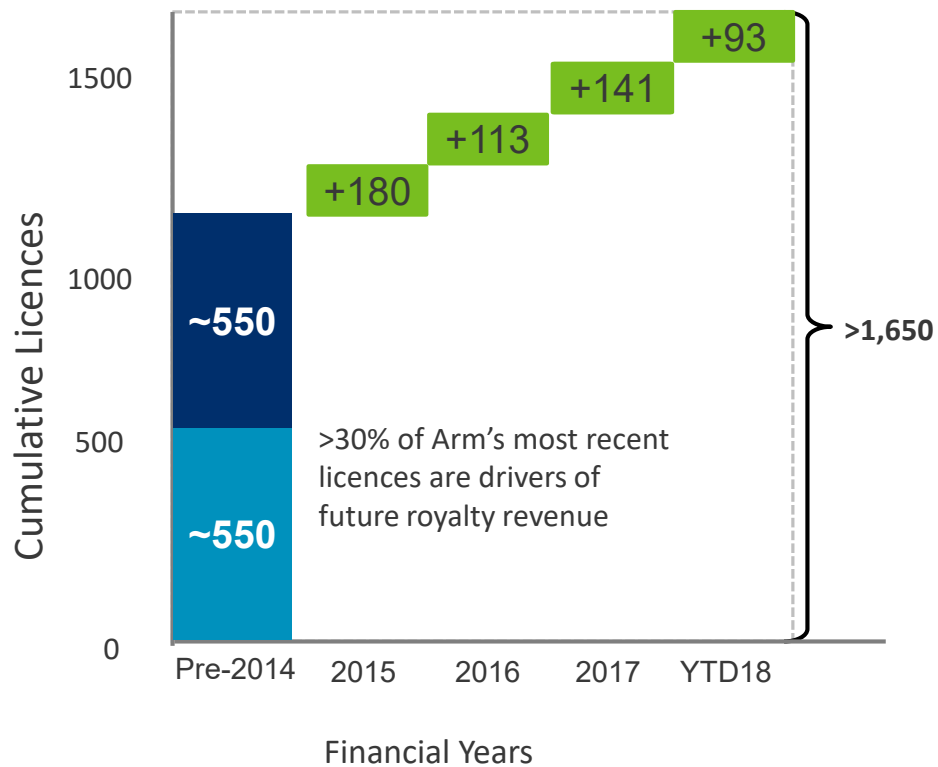
The number of licenses for Cortex-M processors has been reduced since the introduction of the DesignStart Pro (DS Pro) program in June 2017. DS Pro Cortex-M processors are available for no upfront fee. In Q3, 38 DS pro licenses were signed for Cortex-M processors

Licensing enables future royalties

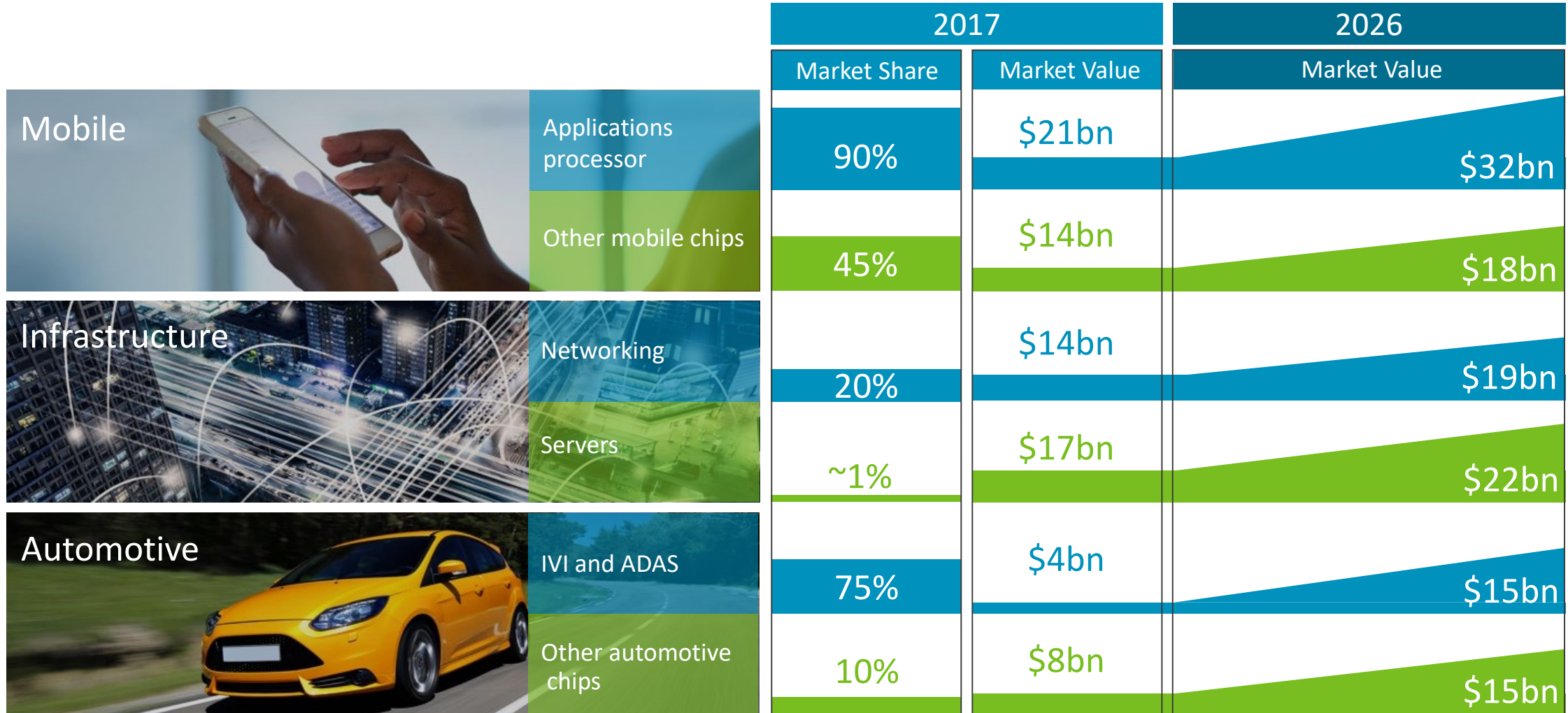
Arm signed 93 licences Q1 to Q3 2018

Arm's current royalty revenues are derived from licences signed many years ago


Growing base yields royalty revenues over long period



Arm's expanding opportunity



Arm's expanding opportunity



Embedded

- Controller in IoT Devices
- Microcontrollers/SIM Cards



Other Markets

- Consumer Electronics
- Other chips



Total Market

- All chips with processors (current TAM)
- All addressable chips (future TAM)

2017		2026
Market Share	Market Value	Market Value
90%	\$7bn	\$24bn
20%	\$17bn	\$21bn
40%	\$21bn	\$27bn
40%	\$7bn	\$10bn
39%	\$130bn	\$200bn
25%	\$165bn	\$220bn

Establishing Arm China JV in Fiscal Q1 2018

Building a bigger business; built on strong foundations

>150

Licensees

10bn

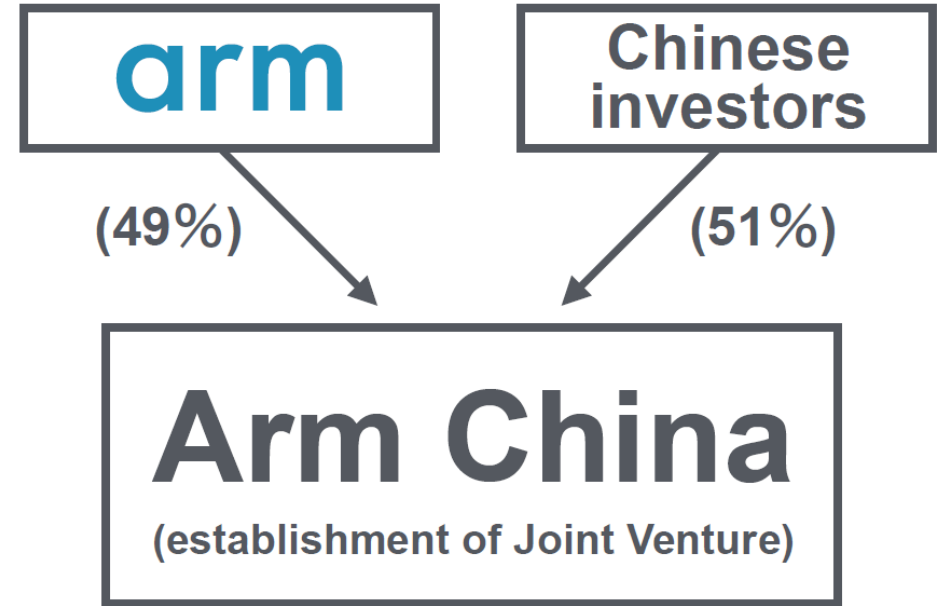
Chips shipped by Chinese partners using
Arm processor technology

95%

Chinese designed SoC based on
Arm processor technology

x140

Growth in volume shipment by Chinese
partners 2006-2017



Arm China will be able to better access new local technology opportunities, especially in server, smart meter/grids and IoT

Establishing Arm China JV in Fiscal Q1 2018

Building a bigger business; built on strong foundations

>150

Customers to novate from
Arm Limited to Arm China

341

Employees transferred
to Arm China in Q1

~20%

Arm's revenue came from
China in 2017

10-20

Licenses signed in a typical
quarter with Chinese customers

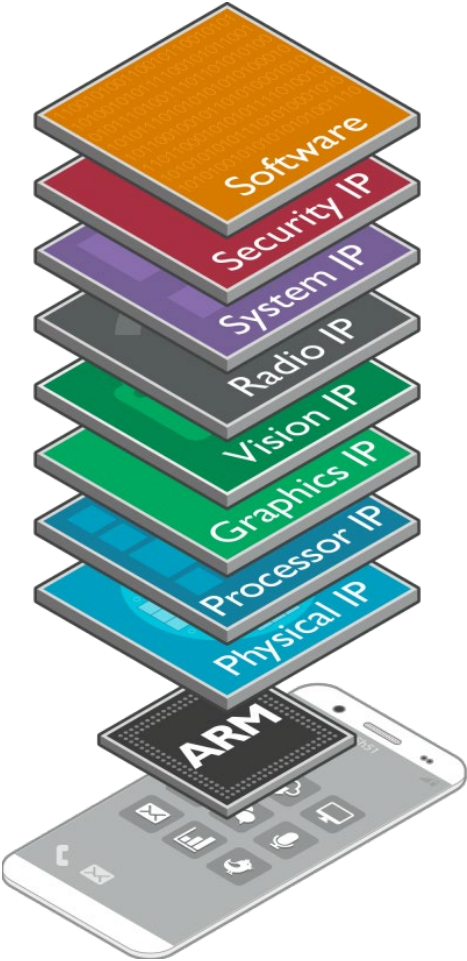
Arm China JV establishment was initiated in early Q1 2018 and completed at the end Q1

Novation (transfer) process of historical contracts resulted in a delay to contract signing in the H1 2018

As expected, licensing started to recover in Q2 and was at a normal level in Q3

Significant proportion of future revenues
will be passed back to Arm Limited

Arm's current business



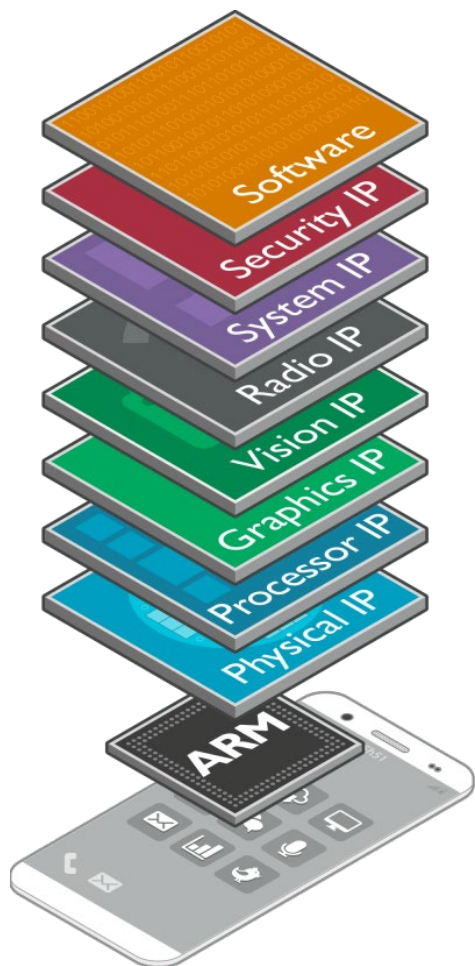
Arm develops **intellectual property** (IP) blocks which are used in silicon chips

Our partners combine Arm IP with their own IP to create complete chip designs

We earn **license fees** when we deliver Arm IP to our partners and **royalties** when our partners ship chips that contain Arm IP

Highly **profitable and cash generative**

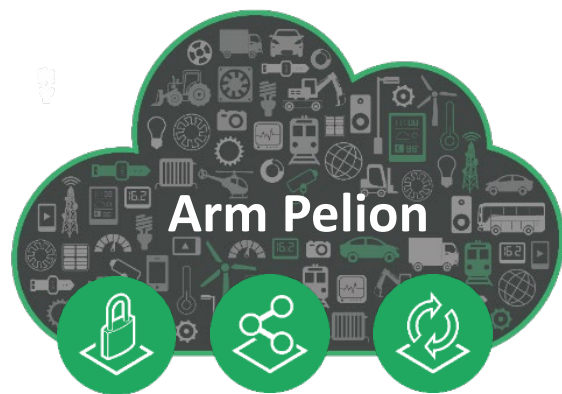
Accelerating investment to increase share gains



Generating profits and cash to be reinvested

Investing to create new revenue streams

- Arm Pelion IoT Platform SaaS business
- Early-stage investment but many years in research
- Securely connect and manage any device, using any communications technology, supporting any cloud platform
 - Device Management: secure device identification, on-boarding and configuring
 - Connectivity Management: manage IoT networks using standard-based comms
 - Data Management: Ingestion and aggregation of data



Arm Pelion Partners



KEPCO

ADVANTECH

TOSHIBA



arm

Arm IoT Services

Secure and scalable innovation from
Device to Data

- + > 30 PB of customer data managed
- + > 2 million records per second ingested
- + > 300K queries per day
- + 55 TB network data flow per month
- + Smart grid technology partnership with KEPKO, the largest electric power utility in South Korea
- + China Unicom partnership for China based services



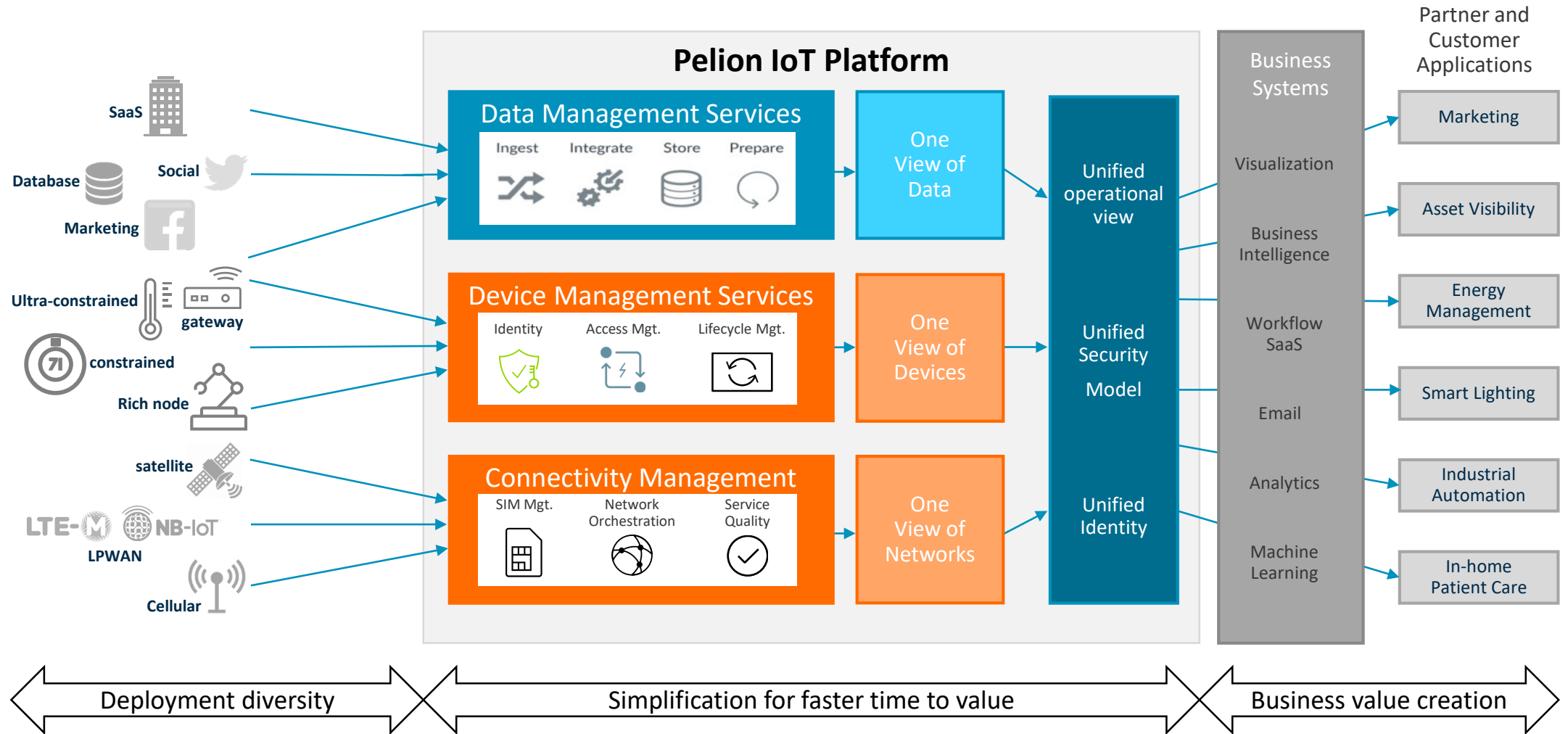
800+
customers

140+
Ecosystem partners



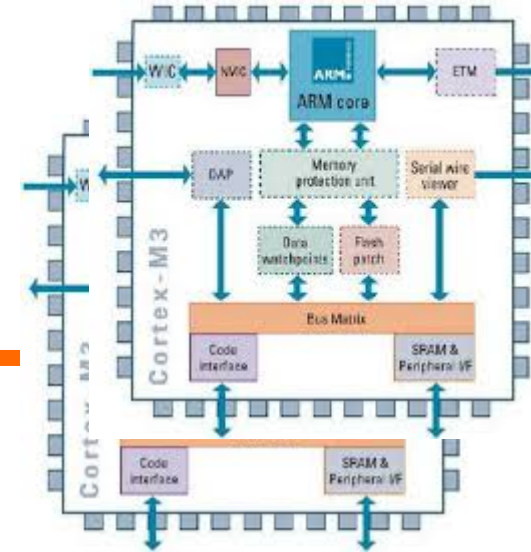
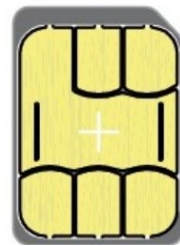
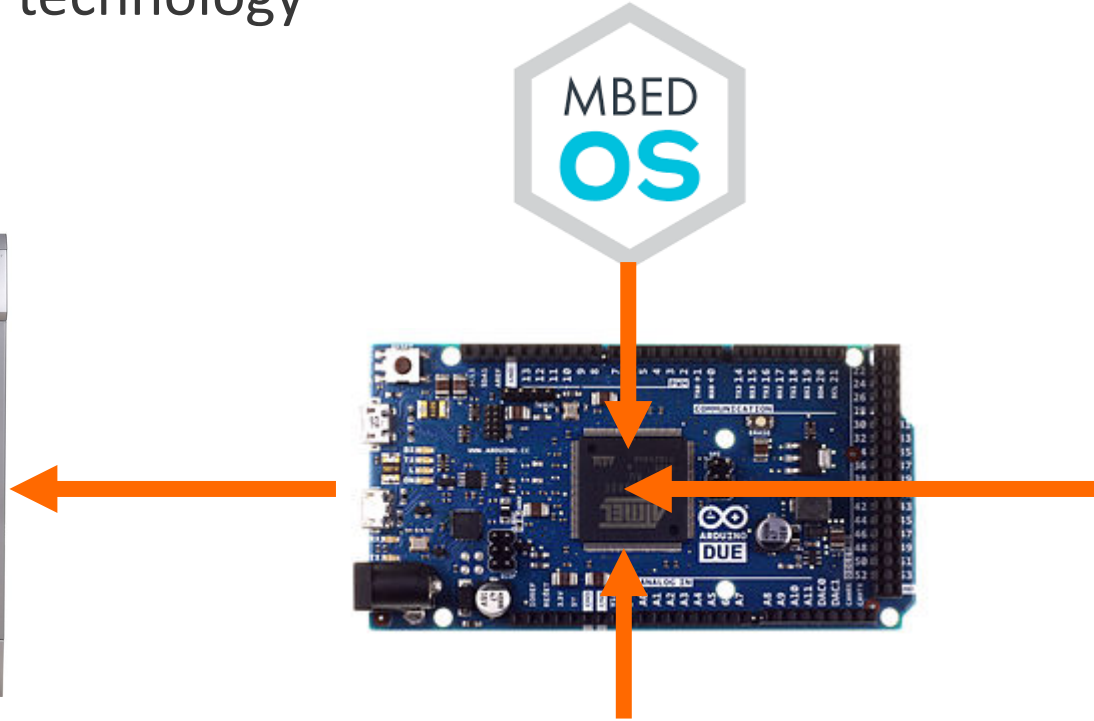
350k+
Developers

Pelion IoT Platform Overview



How Arm makes money from IoT Devices

Semiconductor technology

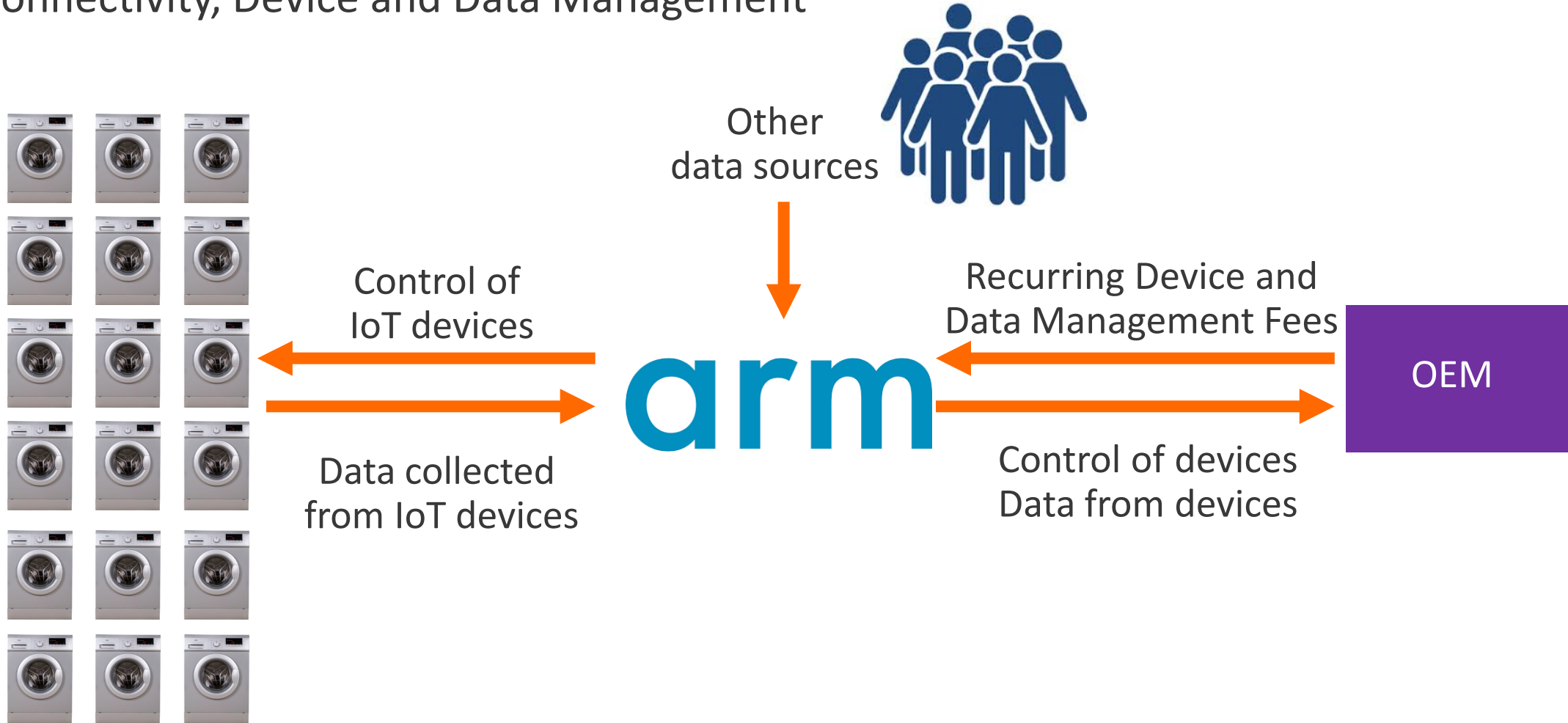


2x Arm Cortex-M3

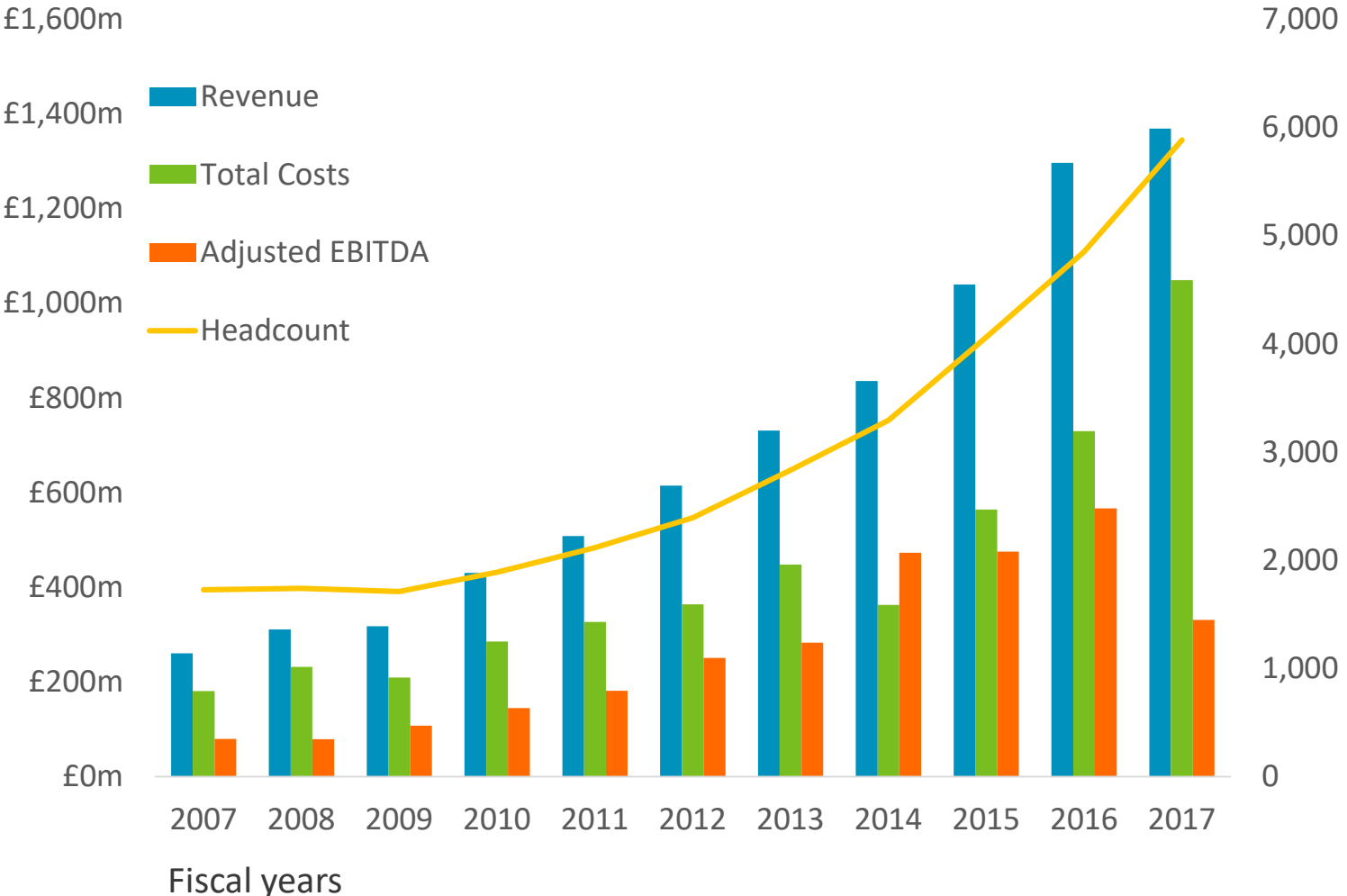
Arm Integrated SIM technology
(Arm iSIM)

How Arm makes money from IoT Services

Connectivity, Device and Data Management



Revenues, investments and profits



Until 2016 revenues grew faster than costs as Arm constrained investment in R&D to enable increasing profits

For the current phase of investment Arm expects costs to grow faster than revenues

This should yield even greater profits in the future

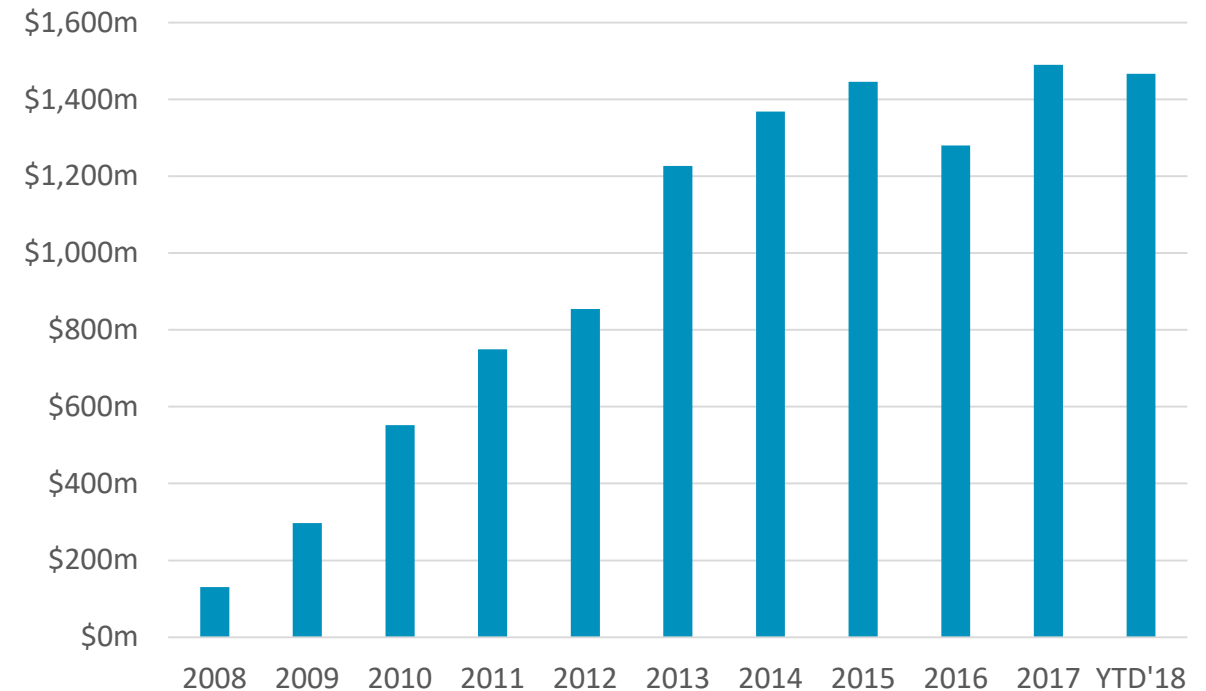


Investment philosophy

“Now is the time to be sowing, not harvesting”

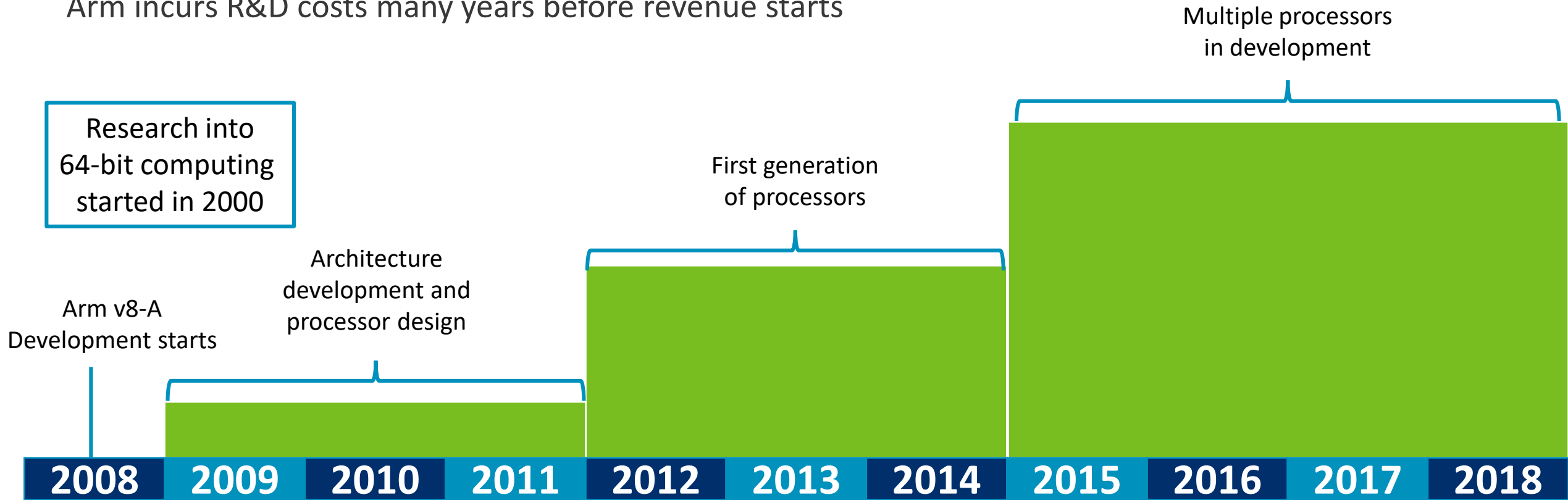
- Rate of investment is discretionary and under Arm's control
- SoftBank has asked Arm to accelerate investments and to increase risk appetite
- All costs are expected to be financed from IP business' revenue streams
- During this accelerated investment phase, costs are expected to grow faster than revenues

Arm has over \$1.4bn of net cash and no debt



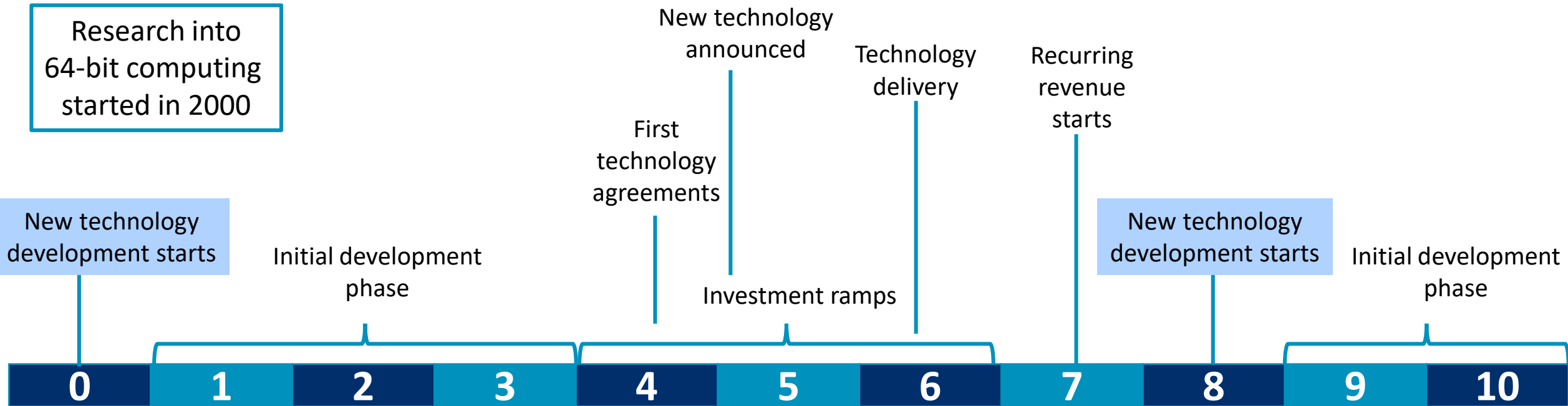
Return on Investments – Arm v8-A case study

Arm incurs R&D costs many years before revenue starts



Return on Investments – General case

Arm incurs R&D costs many years before revenue starts



Revenue continues for many years after the investment phase, yielding high profits over time

Investing in people, infrastructure to create new products

Costs are expected to be higher in FY2018 as Arm expands R&D capability

Cost increases are expected to be consistent with increases in headcount



*Part of Arm employee remuneration was accrued in Q2 2018. In 2017 this accrual was in Q3.



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