



Altium[®]

ASX Ticker: ALU



UNIVERSITY OF AUCKLAND
**INVESTMENT
CLUB**

Andrew Meng
25 August 2020

Altium is a global leader in electronic design software

Altium



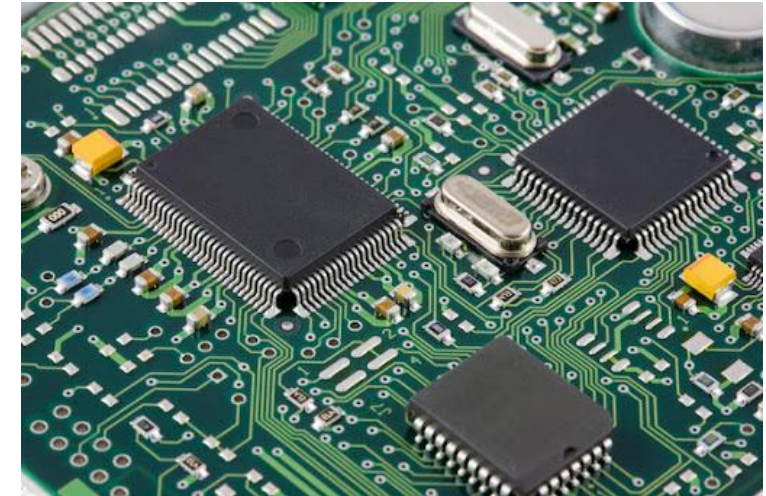
Key Financials:

Price:	\$36.94	Mkt Cap:	\$4.84b
52 Wk. High:	\$42.76	P/E:	112.68
52 Wk. Low:	\$23.11	Div Yield:	1.06%

- Altium is an electronics-design software company specialising in PC-based software tools for the design of printed circuit boards.
- The company was founded in Tasmania, Australia in 1985 and since have expanded globally with over 51,000 current subscribers.
- The company's Altium Designer software is the most widely used printed circuit board design software worldwide.

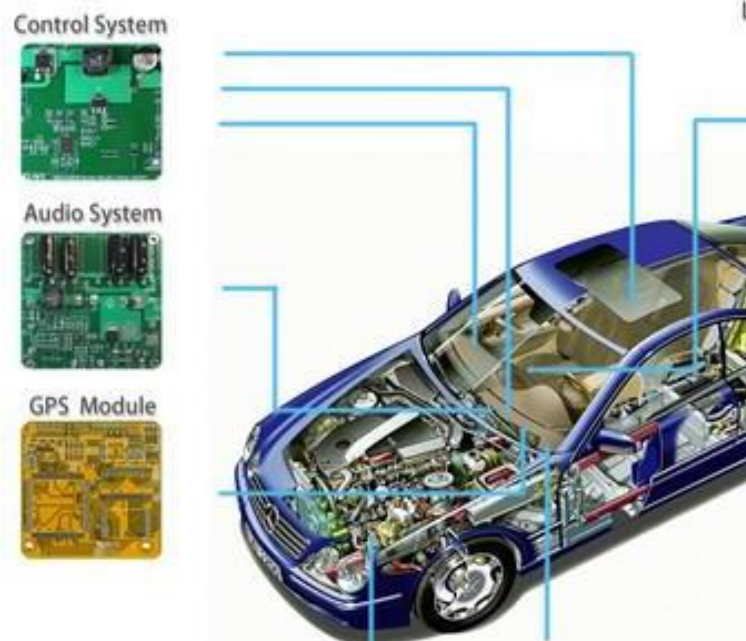
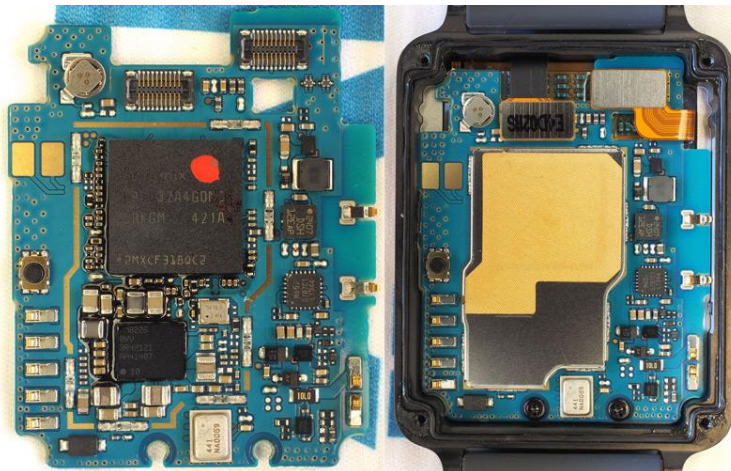
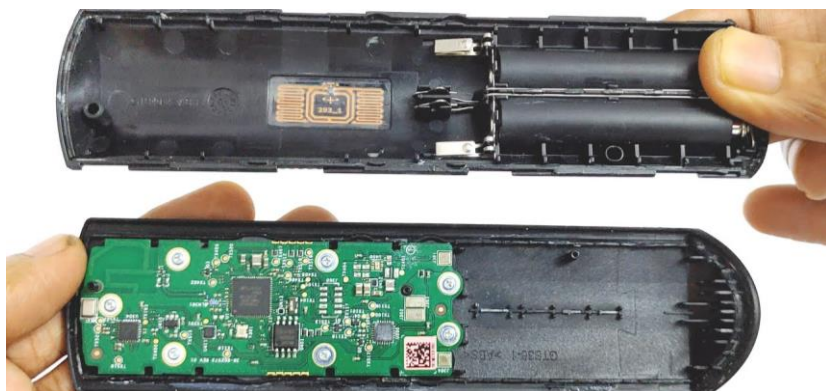
What are Printed Circuit Boards (PCBs)?

- PCBs are devices used to house and connect electronic components.
- Copper pathways conduct electricity and allows a current to flow from component to component.
- PCB design and layout can be customized to meet specific product needs.
- PCBs bring all the electric components together and act as the 'computer' of the device.



First things first

Applications of PCBs are everywhere



Overview

Industry Context

Business Analysis

Summary

Financials

Business Overview



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About Altium

Altium offers a wide range of products all geared for the electronics designer



ALTIUM
DESIGNER



ALTIUM
NEXUS

Oct[#]part

TASKING[®]

DS **SOLIDWORKS** / PCB
*Powered by **Altium**.*



PCB:ng



CIRCUITMAKER

gumstix[®]
dream, design, deliver



ALTIUM
CONCORD PRO

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Altium Board and Systems Segment



RECORDED WITH
SCREENCAST MATIC

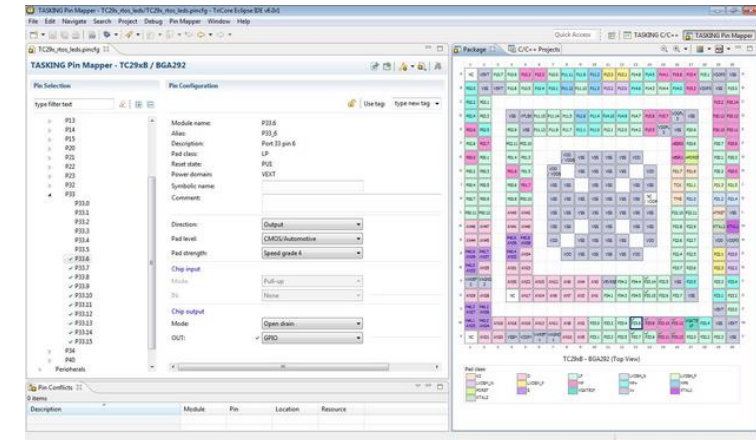
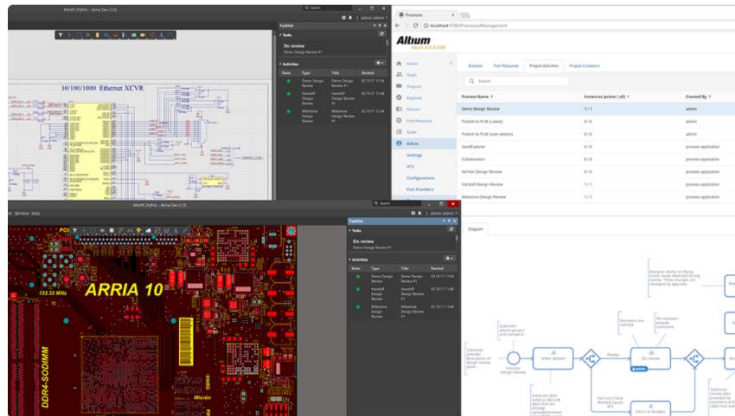
Primary reporting segment with Altium Designer being the flagship product.

Altium Designer is the most widely used PCB Design software tool in the world. Used by 30,000 companies and over 100,000 engineers worldwide.

Segment makes up 70% of Altium's total revenue for FY20.

About Altium

Other Altium Reporting Segments and Products



Altium Designer functionality with collaboration tools.

The “Google” of electronic parts search and discovery.

Software for the design of embedded systems.

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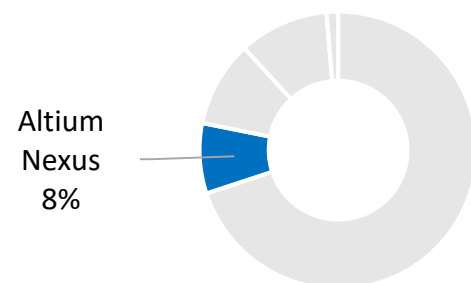
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Other Altium Reporting Segments and Products



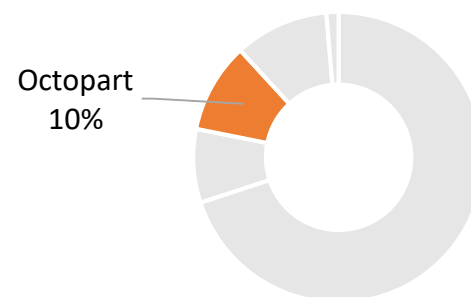
Revenue by Product



Altium Designer functionality with collaboration tools.



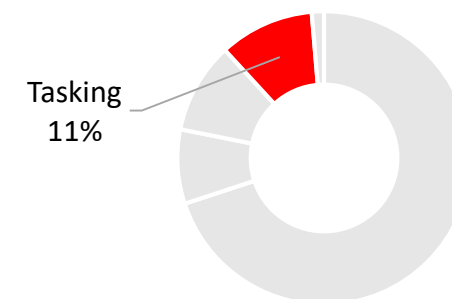
Revenue by Product



The “Google” of electronic parts search and discovery.



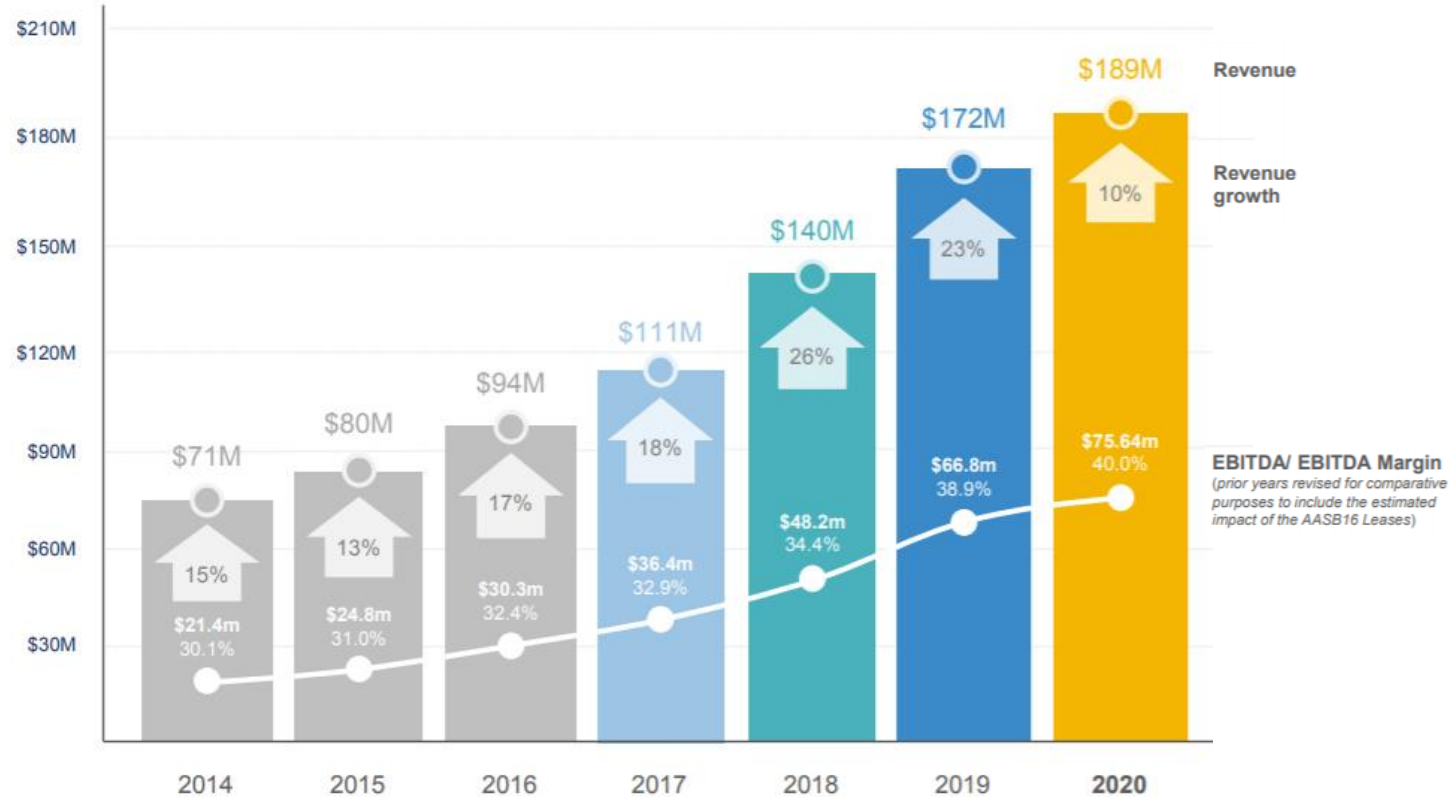
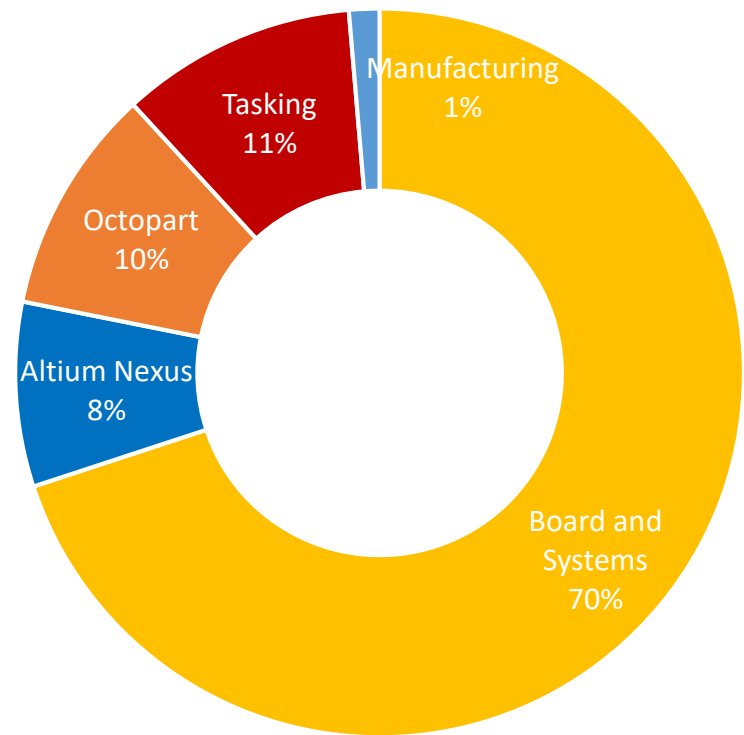
Revenue by Product



Software for the design of embedded systems.

Breakdown of revenues and recent performance

Revenue by Product



About Altium

Altium's products are used by customers from a wide-range of applications



Automotive



Aerospace & Defence



Life Sciences



Mobile Devices



Consumer Electronics



Electronics & High-Tech



Research & Education



Industrial Controls



Computers



Semiconductors



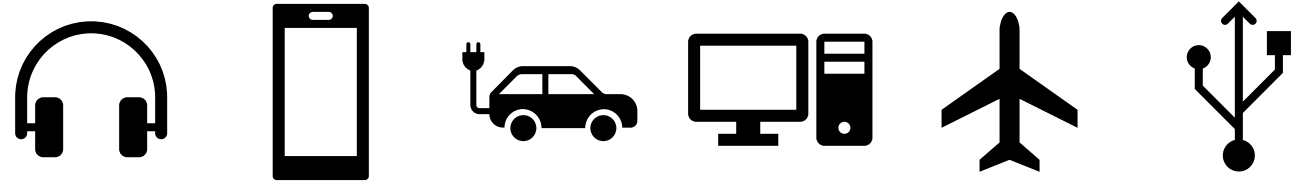
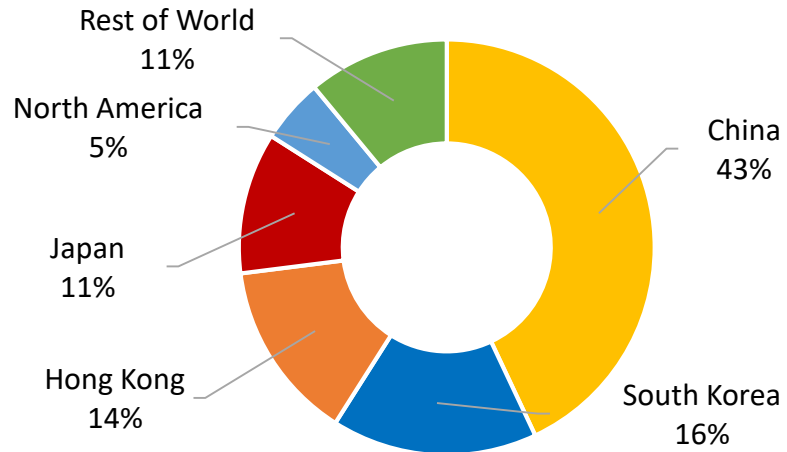
Industry Context



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The PCB Industry is heavily reliant on the performance of other sectors

Where are PCBs Manufactured?

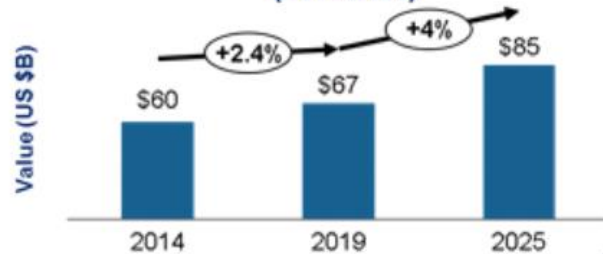


Over 80% of PCBs are manufactured in Asia.

The PCB design industry is expected to grow at a 12% CAGR and reach a value of \$4.5b in 2025.

The value of the PCB industry will be driven by growth in areas such as consumer electronics, industrial automation, automotive industry, medical technology, IoT etc.

Trends and Forecast for the Global PCB Market (US \$B)
(2014-2025)

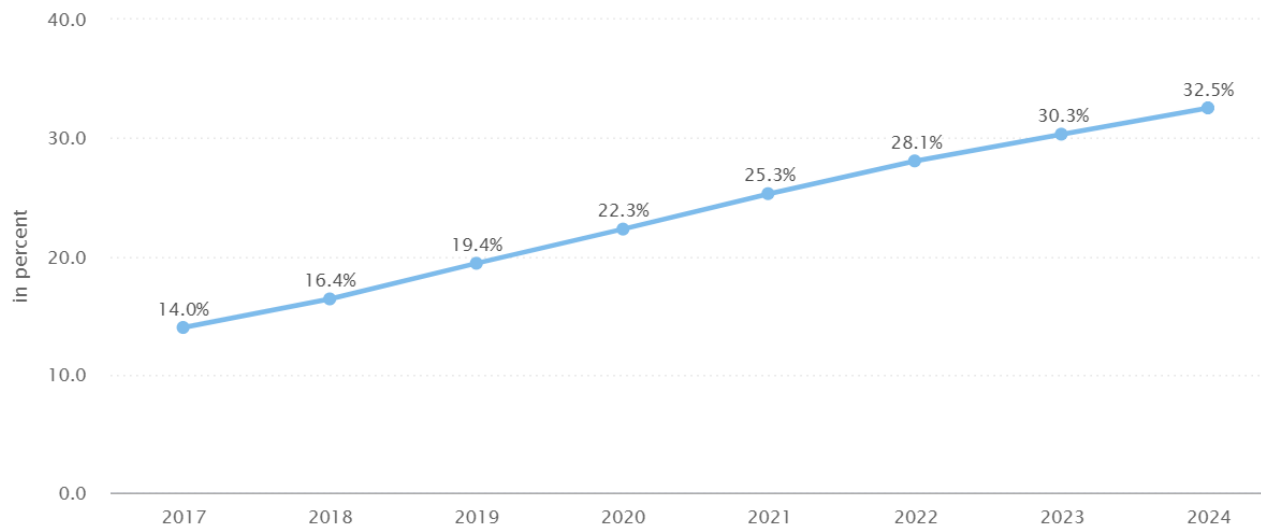


Source: Lucintel

Looking forward

The exploding consumer electronics sector will be a key driver

Penetration Rate



Source: Statista (Forecast adjusted for expected impact of COVID-19), August 2020

Global consumer electronics market is expected to grow at a 6.0% CAGR & reach a value of \$1.8 trillion in 2024.

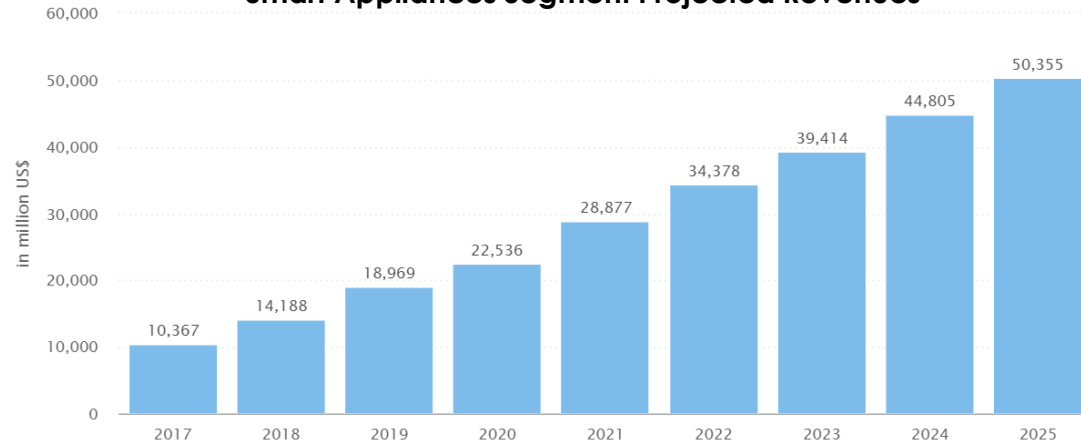
Worldwide mobile subscribers to grow from 5.1 billion in 2018 to 5.8 billion in 2025.

User penetration rate in the global Consumer Electronics segment will grow to 32.5% in 2024.

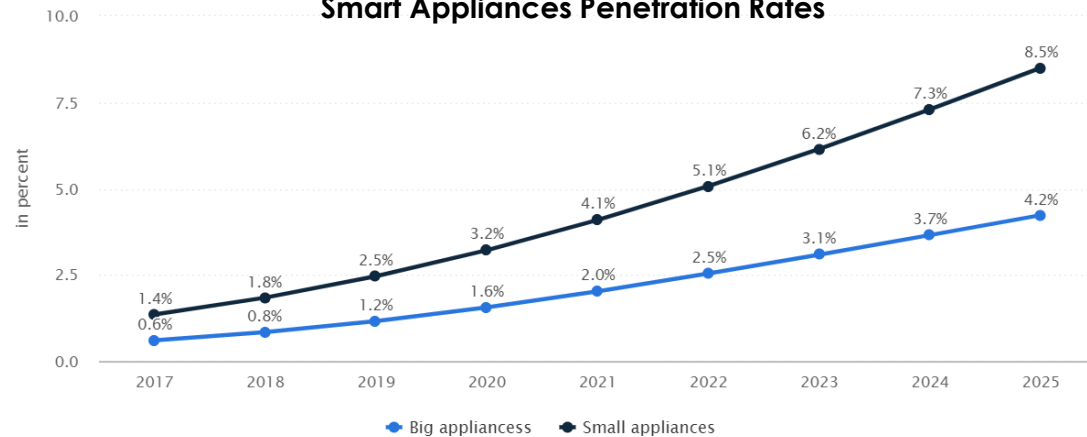
Looking forward

The Rise of Smart Connected Devices and the Emergence of Digital Economy

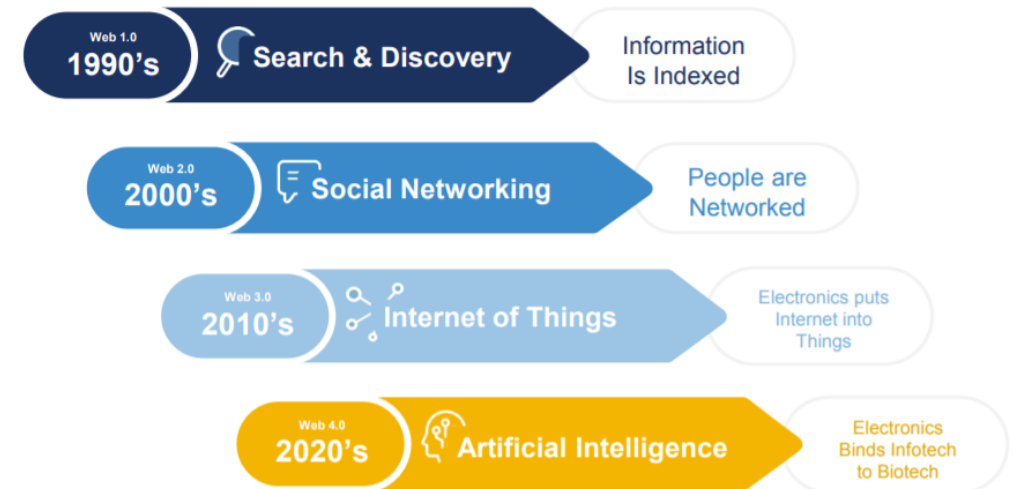
Smart Appliances Segment Projected Revenues



Smart Appliances Penetration Rates



Mega Trends



41.6 billion connected IoT devices generating 79.4 zettabytes of data by 2025.

Driven by emerging markets, growing internet penetration, R&D spending, Industry 4.0.

Source: Statista (Forecast adjusted for expected impact of COVID-19), August 2020

International Data Corporation 15

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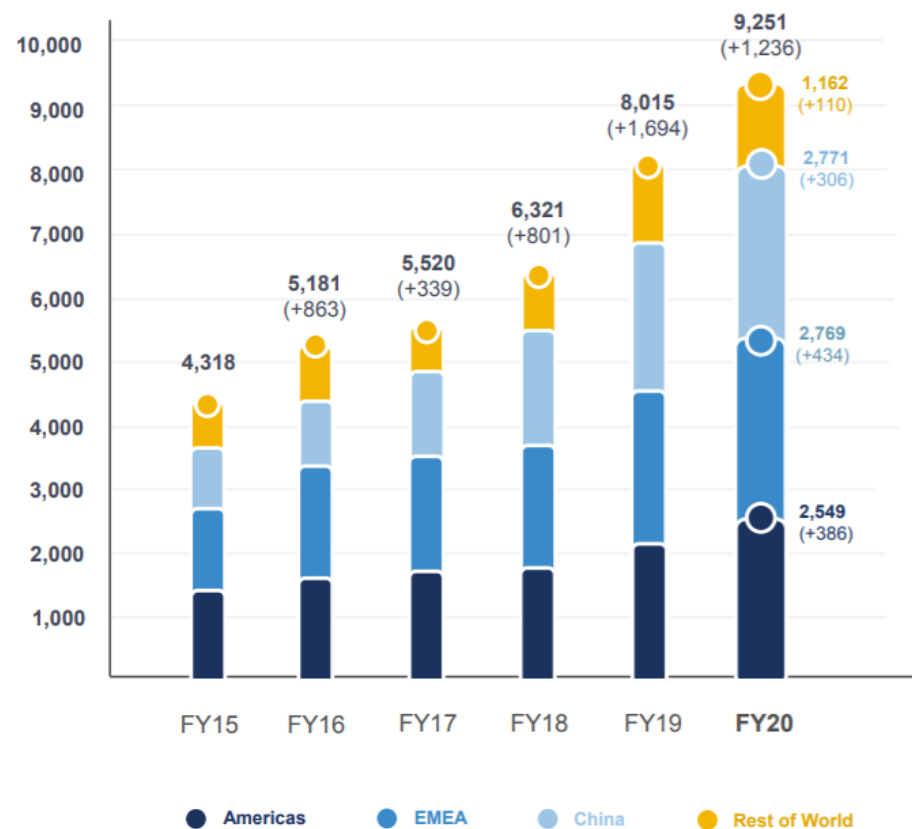
Business Analysis



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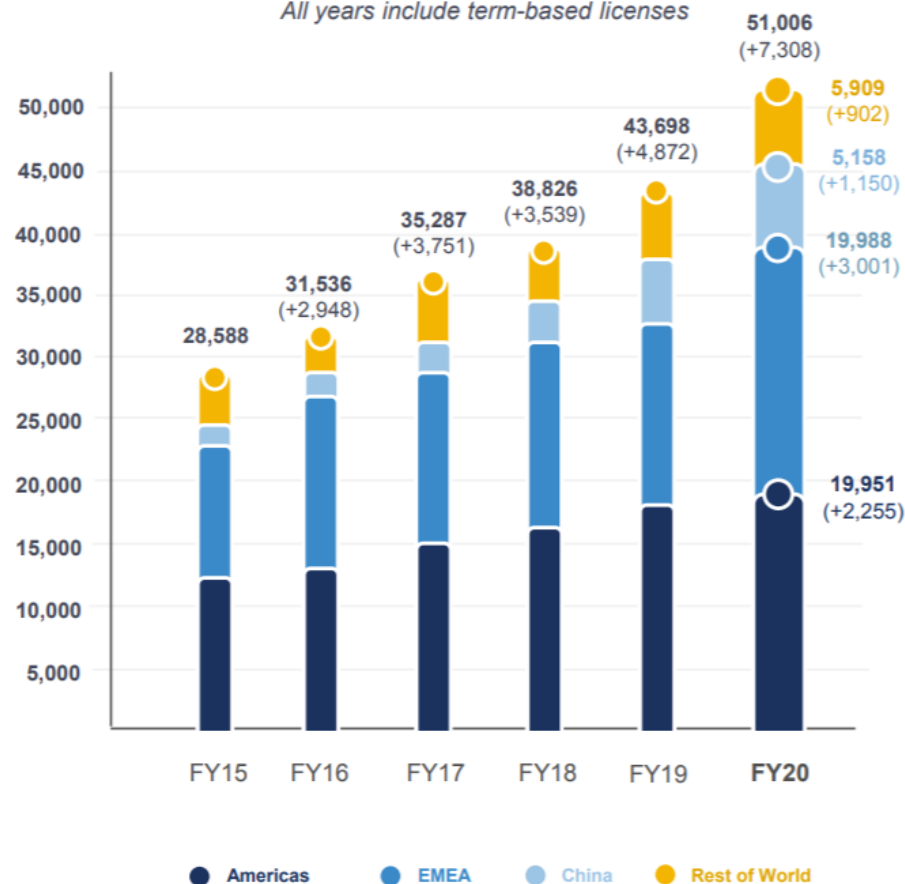
Altium's products are offered through subscription or perpetual licenses

Altium Designer New Seats Sold



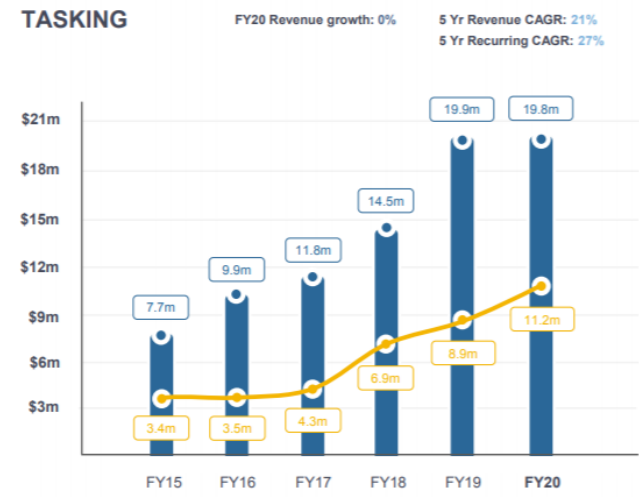
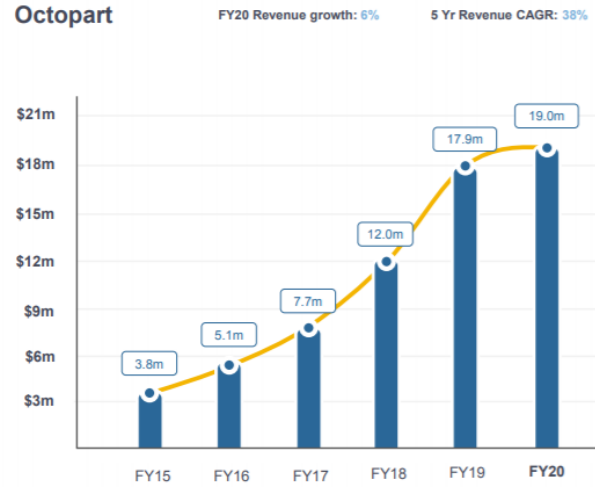
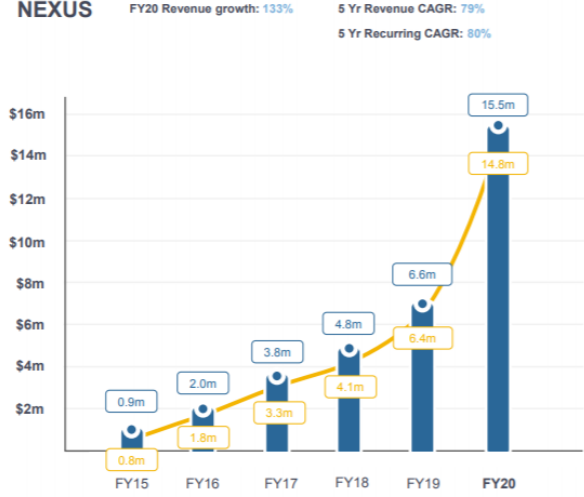
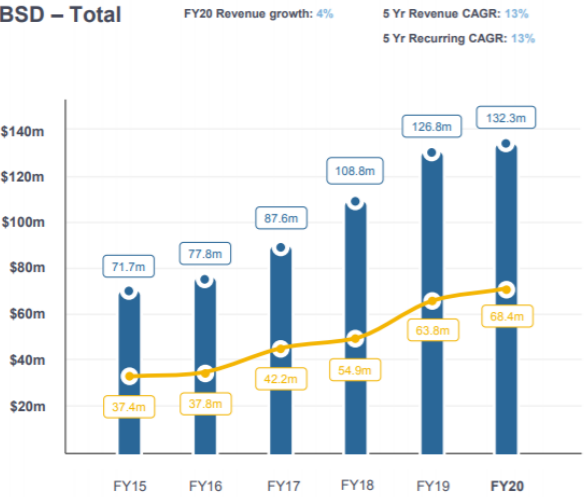
Subscription Pool

All years include term-based licenses



Business Drivers

60% of Altium's revenue is generated from recurring sources

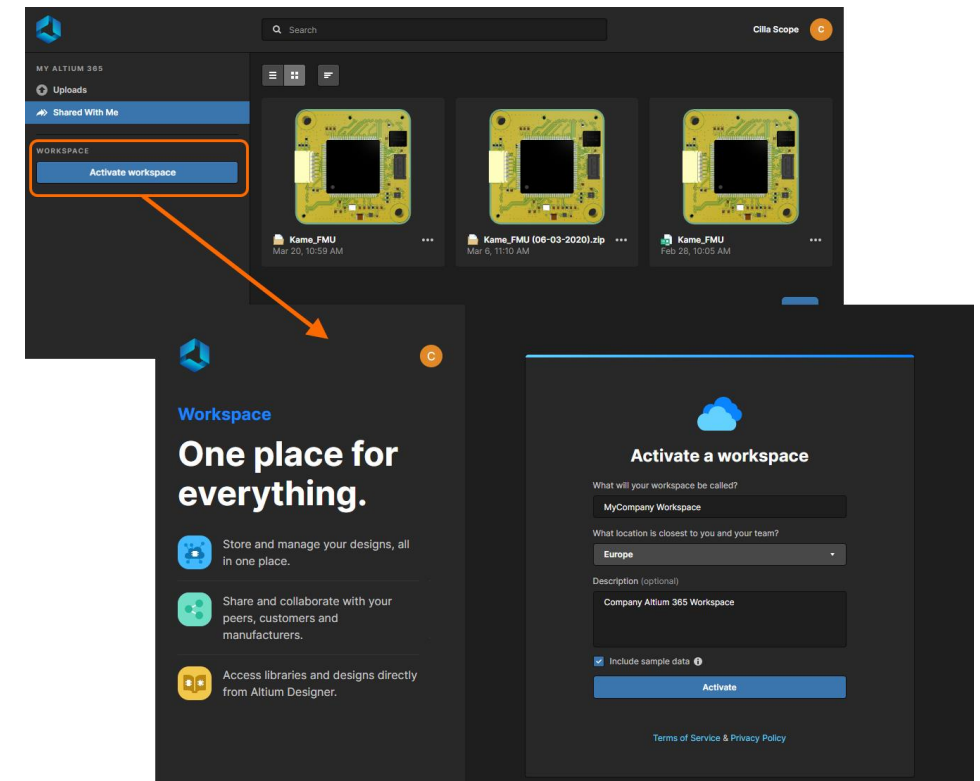
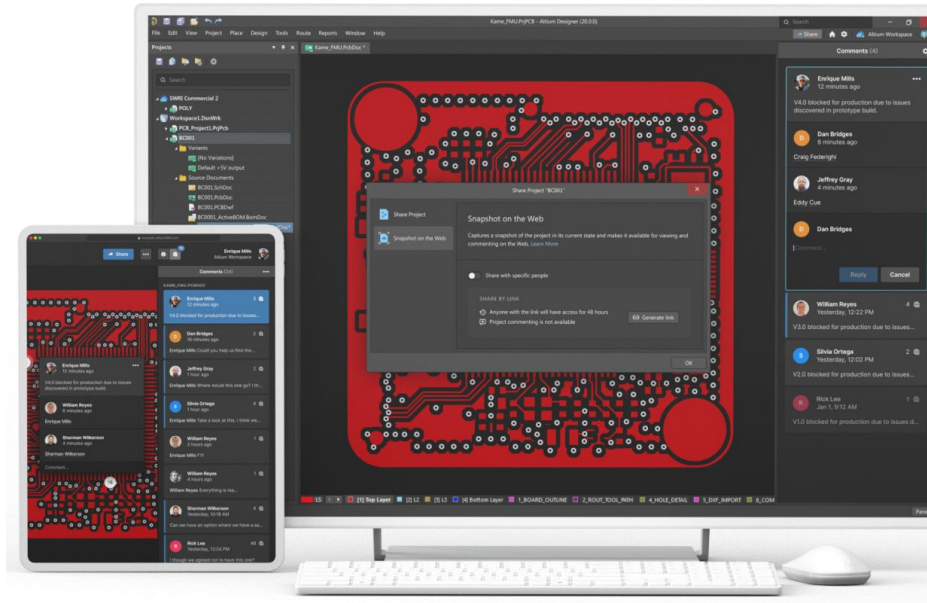


● Recurring ● Revenue

Recurring sources include term licenses, subscription/maintenance fees, and advertising.

Business Drivers

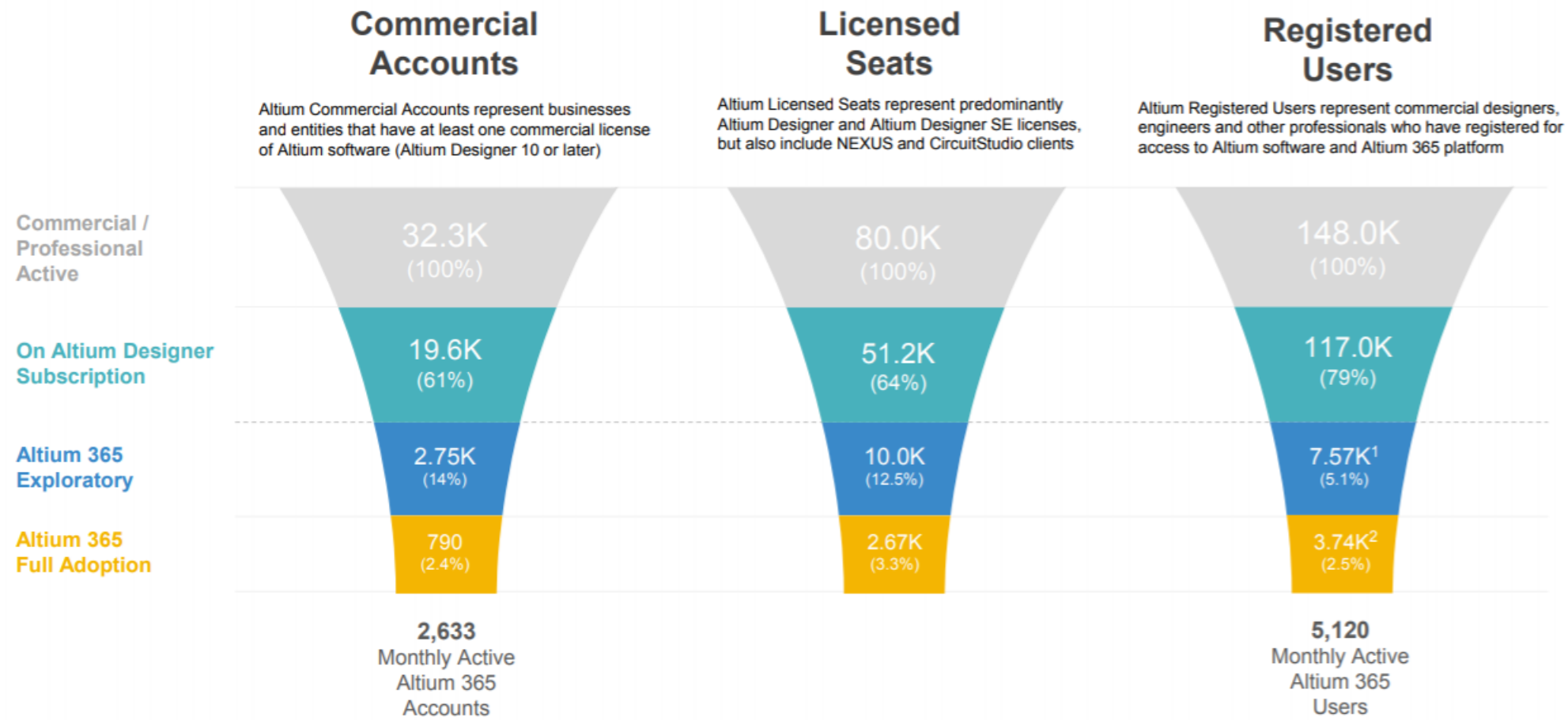
Altium 365 is the world's first cloud platform for PCB design and realization



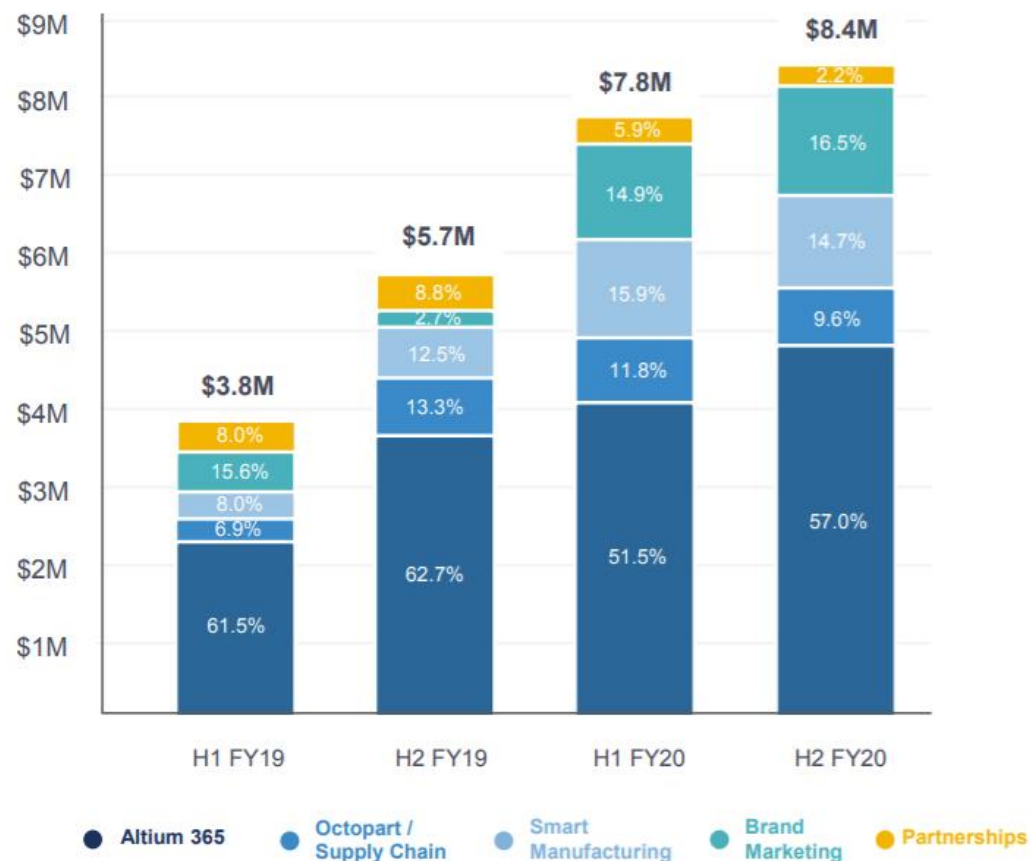
Cloud platform launched in May 2020 aiming to bring the power of CAD and Cloud together.

Connect the Electronics industry Value Chain from parts to manufacturing to increase productivity and reduce financial risk.

Altium 365 is the world's first cloud platform for PCB design and realization



Altium are making strategic investments to ensure a healthy R&D pipeline



Under the “Rule of 50”, Altium is making strategic investments for long-term growth to support its drive for transformation through dominance. Currently, these include:

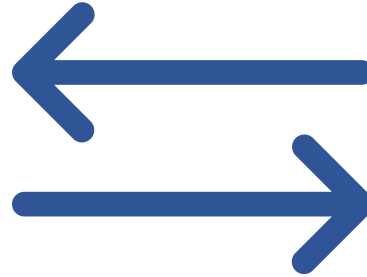
- **Altium 365** - Our Cloud Platform, Altium 365 which includes product development and the productization of our subscription business
- **Octopart / Supply Chain** – this includes building a new platform for all data related Parts and CAD model to support transformation
- **Brand Marketing** – this includes increasing Altium Brand awareness to expand reach across all markets for dominance
- **Partnerships** - this includes product development and relationship management with Dassault and other 3rd parties
- **Smart Manufacturing** - investments in manufacturing

High calibre clients & switching costs provide moats over competitors



Market Leading Clientele

Market leading clients in a wide range of industries put Altium in prime position for projected industry forecasts.



High Switching Costs

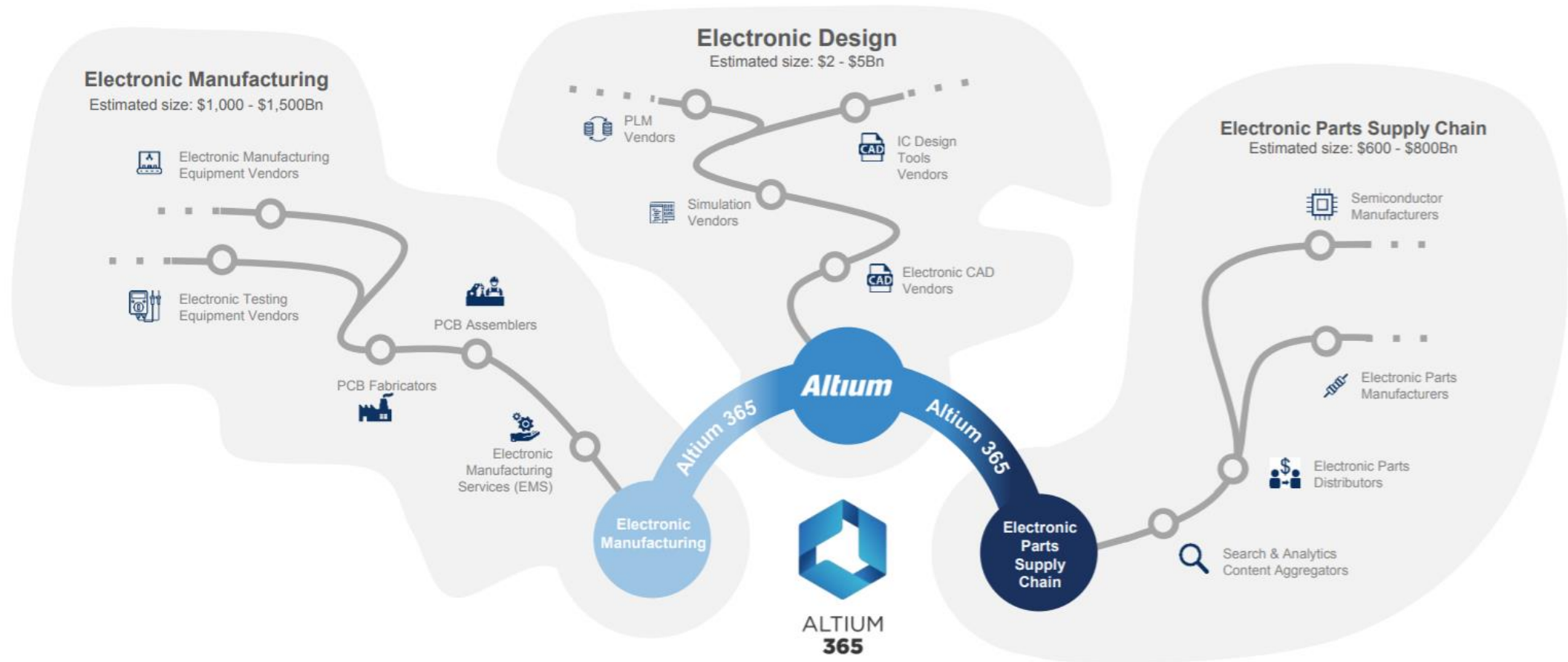
Switching software means retraining staff, redesigning processes, and transferring existing designs.



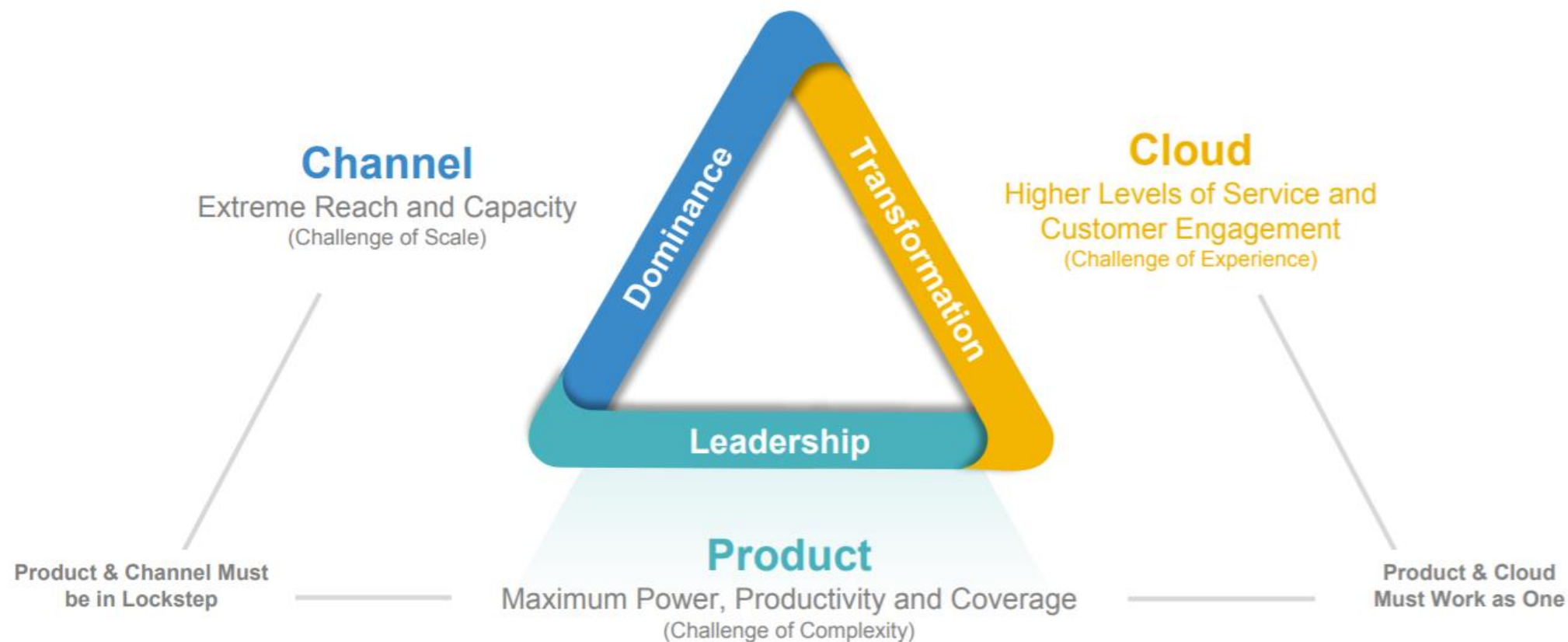
Strong Balance Sheet

Zero debt and a growing cash reserve means stability and flexibility for capital allocation decisions.

Altium are targeting 100,000 subscribers & \$500m revenue by 2025



Altium are targeting 100,000 subscribers & \$500m revenue by 2025



The major risks facing Altium's business model

Risks	Mitigations
1. Failure to innovate	✓ R&D expenditures in excess of 12% of revenues every year. Emphasis on high-performance culture and incentive compensation to attract and retain key personnel.
2. Security of sensitive information	✓ Newly appointed senior level Director of Cyber Security. Internal review process and oversight of Cyber Risk led by Executive Directors with accountability held by the full Board.
3. Compliance and regulatory	✓ Altium works with several external experts world-wide to ensure compliance with specific accounting, compliance and regulatory reporting requirements.
4. Inability to obtain new customers	✓ Dedicated strategy to ensuring the capture of customers in high-growth regions. Commitment to continued delivery of innovative, market-leading solutions.

Summary



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Investment Thesis Highlights

Unparalleled product family

Product offerings includes the world's most used PCB design software and the first Cloud based PCB design platform.

Category killer client list

Altium boasts a clientele of a who's who of innovative industry leaders across more than 10 industries.

Sticky brand with strong customer retention

High switching costs builds customer retention and loyalty, translating to sticky and recurring revenues.

Attractive trends in a number of industries

Strong growth forecasted for consumer electronics and smart devices will be key drivers for the PCB industry.



Financial Statements



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Altium

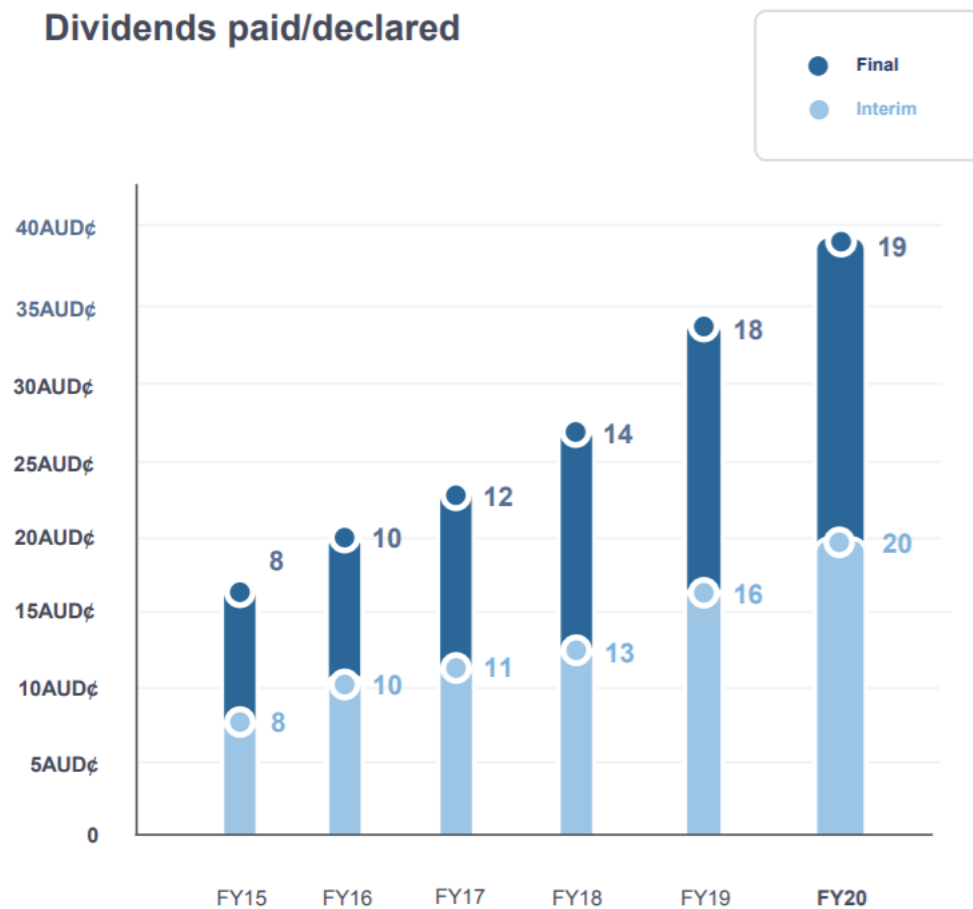
Key Metrics

USD millions	FY20	FY19	+/- %	FY18	FY17	FY16
Revenue	189.1	171.8	10%	140.2	110.9	93.6
Reported expenses	113.5	109.1	4%	95.3	77.6	66.2
EBITDA	75.6	62.7	21%	44.9	33.3	27.4
Depreciation and amortization	11.1	5.8	91%	5.3	3.8	2.7
EBIT	64.5	56.9	13%	39.6	29.5	24.7
Net interest	0.1	0.7	-86%	0.1	-	(0.1)
Profit before income tax	64.6	57.6	12%	39.7	29.5	24.6
Income tax expense	33.8	4.7	619%	2.2	1.4	1.6
Profit after income tax	30.9	52.9	-42%	37.5	28.1	23.0

	FY20	FY19	FY18	FY17	FY16
Reported EPS	23.60	40.57	28.86	21.70	17.89
Normalized EPS ¹	42.45	40.40	28.90	21.20	16.90
Dividends (AU cents)	39	34	27	23	20
Key Margin Analysis					
EBITDA margin	40.0%	36.5%	32.0%	30.0%	29.3%
EBITDA margin (Underlying) ²	35.8%	36.6%	35.5%	32.3%	30.9%
Net profit before tax margin	34%	34%	28%	27%	26%
Net profit after tax margin	16%	31%	27%	25%	25%
Effective tax rate	52.3%	8.2%	5.6%	4.7%	6.5%
Balance Sheet (USD millions)					
Cash and equivalents	93.1	80.5	52.5	44.3	38.1
Net assets	184.3	184.6	152.6	140.0	130.8
Operating cash flows	56.5	69.1	48.5	35.9	14.1

Cash flows and dividend history

Dividends paid/declared



	FY20	FY19	FY18	FY17
	\$ '000	\$ '000	\$ '000	\$ '000
Receipts from customers	189,638	178,215	147,685	(4,343)
Payments to suppliers and employees	(126,200)	(106,819)	(96,578)	(77,635)
Payments for expenses relating to acquisitions	-	(244)	(572)	(145)
Net interest received	855	933	192	92
Interest and other finance costs paid	(582)	(1)	(2)	(87)
Net income taxes paid	(7,180)	(3,018)	(2,243)	(2,800)
Operating cash flows	56,531	69,066	48,482	35,861
Capital Expenditure				
Payments for property, plant and equipment	(3,871)	(5,095)	(2,824)	(4,343)
Payments for intangibles	(1,253)	(17)	(748)	(515)
Free Cash Flow	51,407	63,954	44,910	31,003
Cash flows from investing activities				
Payments for purchase of subsidiary, net of cash acquired	-	(2,421)	(3,681)	(1,338)
Payments on contingent and deferred considerations	-	(5,471)	(7,455)	(2,845)
Cash flows from financing activities				
Dividends paid	(33,634)	(28,128)	(25,633)	(20,791)
Repayment of borrowings	(5,050)	(7)	(9)	(51)
Increase/(decrease) in cash and cash equivalents	12,723	27,927	8,132	5,978
Effects of exchange rate changes	(171)	145	54	156
Total increase/(decrease) in cash and cash equivalents	12,552	28,072	8,186	6,134

Altium

Balance Sheet

	Jun-20	Jun-19	Jun-18	Jun-17
	\$ '000	\$ '000	\$ '000	\$ '000
Cash and cash equivalents	93,083	80,531	52,459	44,273
Trade and other receivables	59,655	45,833	38,799	32,672
Other current assets	7,455	5,108	4,171	2,861
Total current assets	160,193	131,472	95,429	79,806
Trade and other receivables	3,343	2,285	1,952	2,531
Property, plant and equipment	21,113	7,762	5,712	5,054
Intangible assets	49,690	51,534	49,068	40,459
Other non-current assets	61,723	84,873	82,120	82,946
Total non-current assets	135,869	146,454	138,852	130,990
Total assets	296,062	277,926	234,281	210,796
Trade and other payables	16,629	16,278	12,147	10,179
Tax liabilities	6,587	5,705	772	1,008
Provisions	2,792	2,109	6,784	7,600
Lease liabilities	5,480	-	-	-
Deferred revenue	50,193	48,277	43,989	38,436
Total current liabilities	81,681	72,369	63,692	57,223
Deferred tax	8,820	5,833	5,566	5,276
Provisions	2,755	6,407	3,974	703
Deferred revenue	10,013	6,875	6,035	6,958
Other liabilities	8,460	1,884	2,098	674
Total non-current liabilities	30,048	20,999	17,673	13,611
Total liabilities	111,729	93,368	81,365	70,834
Net assets	184,333	184,558	152,916	139,962

Altium

Income Statement

		Consolidated	
	Note	2020 US\$'000	2019 US\$'000
Revenue	3	189,124	171,819
Interest income		855	933
Expenses			
Employee benefits expense		(80,312)	(70,581)
Depreciation and amortisation expense	4	(11,103)	(5,842)
Marketing expense		(7,350)	(5,038)
Software and equipment expense		(6,207)	(5,026)
Share-based payments	31	(4,377)	(6,943)
Communication expense		(4,118)	(3,511)
Professional advice expense	4	(3,877)	(3,350)
Cost of sales		(3,833)	(2,486)
Travel expense		(3,541)	(4,857)
Rental and occupancy expense		(1,510)	(5,095)
Finance costs	4	(744)	(200)
Net foreign exchange gain		1,480	119
Re-measurement of contingent consideration	15	2,886	55
Other expenses		(2,731)	(2,385)
Profit before income tax expense		64,642	57,612

Income tax expense	5	(33,761)	(4,719)
Profit after income tax expense for the year attributable to the owners of Altium Limited	20	30,881	52,893
Other comprehensive income			
<i>Items that may be reclassified subsequently to profit or loss</i>			
Exchange differences on translation of foreign operations		(476)	(349)
Other comprehensive income for the year, net of tax		(476)	(349)
Total comprehensive income for the year attributable to the owners of Altium Limited		30,405	52,544
		Cents	Cents
Basic earnings per share	30	23.60	40.57
Diluted earnings per share	30	23.57	40.39



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