

From Keyboards to Neural Networks

从键盘到神经网络

Qcon Beijing
April 21, 2018

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Bloomberg

What is Bloomberg?



The ***Bloomberg Terminal*** delivers a diverse array of information on a single platform to facilitate financial decision-making.

What is Data Technologies Automation?

Item 6. Selected Consolidated Financial Data

The following selected consolidated financial data should be read in conjunction with the consolidated financial statements and the notes thereto in Item 8 of Part II, "Financial Statements and Supplementary Data," and the information contained in Item 7 of Part II, "Management's Discussion and Analysis of Financial Condition and Results of Operations." Historical results are not necessarily indicative of future results.

	Year Ended December 31,				
	2017	2016	2015	2014	2013
(in millions, except per share data)					
Statements of Operations:					
Net sales	\$ 101,006	\$ 88,988	\$ 74,452	\$ 61,093	\$ 48,077
Income from operations	\$ 2,233	\$ 178	\$ 745	\$ 676	\$ 862
Net income (loss)	\$ 390	\$ (243)	\$ 174	\$ (38)	\$ 631
Basic earnings per share (1)	\$ 1.28	\$ (0.52)	\$ 0.60	\$ (0.08)	\$ 1.30
Diluted earnings per share (1)	\$ 1.25	\$ (0.52)	\$ 0.59	\$ (0.08)	\$ 1.37
Weighted-average shares used in computation of earnings per share					
Basic	467	462	457	453	415
Diluted	477	462	465	453	461
Statements of Cash Flows:					
Net cash provided by (used in) operating activities	\$ 11,920	\$ 6,842	\$ 5,475	\$ 4,188	\$ 3,903

	December 31,				
	2017	2016	2015	2014	2013
(in millions)					
Balance Sheets:					
Total assets	\$ 65,444	\$ 54,563	\$ 40,150	\$ 32,555	\$ 25,278
Total long-term obligations	\$ 18,161	\$ 15,675	\$ 7,433	\$ 5,363	\$ 2,625

(1) For further discussion of earnings per share, see Item 8 of Part II, "Financial Statements and Supplementary Data—Note 1—Description of Business and Accounting Policies."



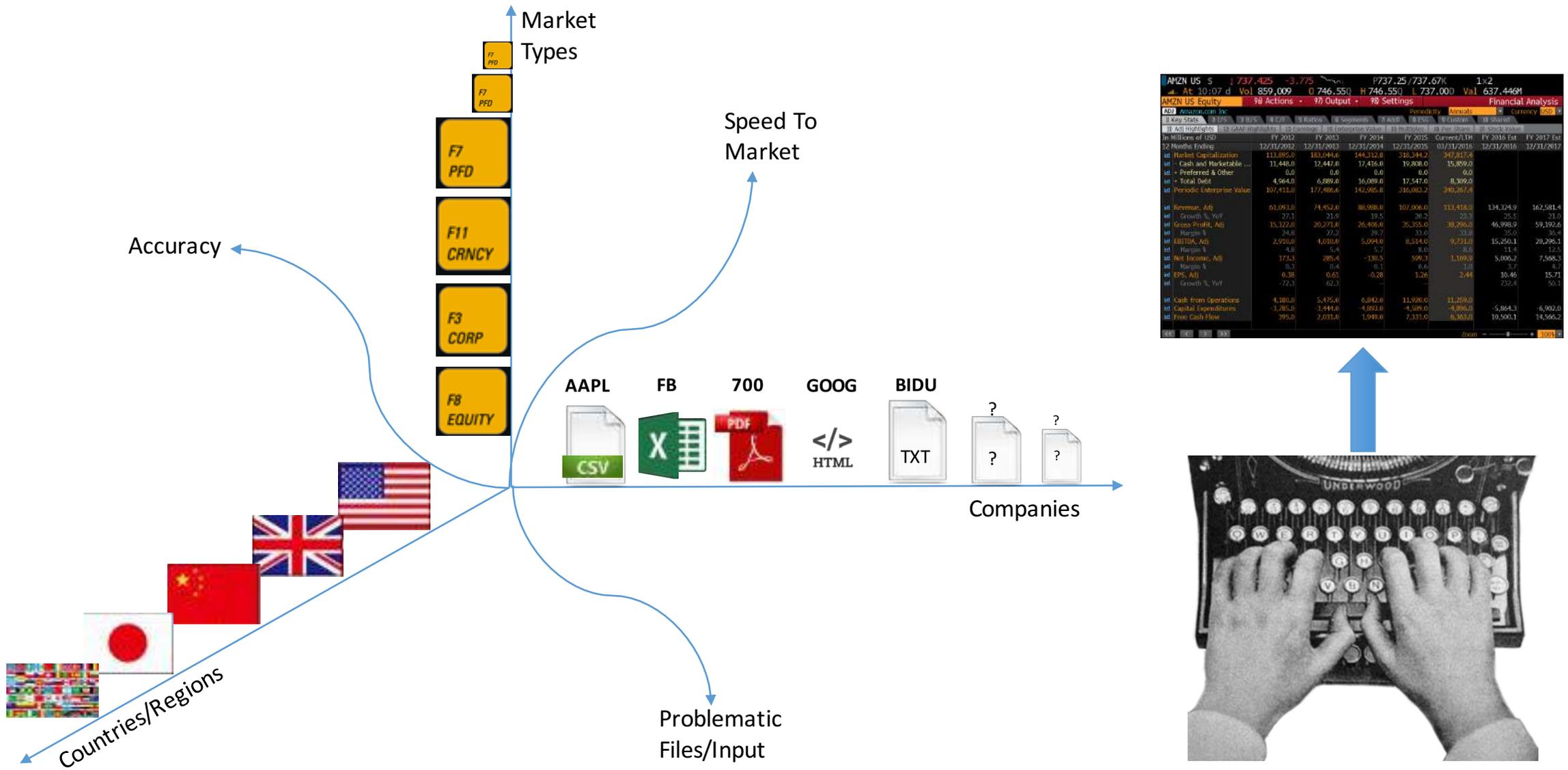
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AMZN US Equity 98 Actions - 98 Output - 98 Settings Financial Analysis

ADJ Amazon.com Inc. Periodicity: Annuals Currency: USD

Key Stats	1/5	2/5	3/5	4/5	5/5	6/5	7/5	8/5	9/5	10/5
Adj Highlights	GAAP Highlights	13F Annals	Enterprise Value	Dividends	Dividend Yield	Dividend Value				
In Millions of USD										
12 Months Ending	FY 2012	FY 2013	FY 2014	FY 2015	Current/LTM	FY 2016 Est	FY 2017 Est			
Market Capitalization	113,895.0	183,044.6	144,312.0	318,344.2	347,817.4					
- Cash and Marketable ...	11,448.0	12,447.0	17,416.0	19,808.0	15,859.0					
+ Preferred & Other	0.0	0.0	0.0	0.0	0.0					
+ Total Debt	4,964.0	6,889.0	16,089.0	17,547.0	8,309.0					
Periodic Enterprise Value	107,411.0	177,486.6	142,985.8	316,083.2	340,267.4					
Revenue, Adj	61,093.0	74,452.0	88,988.0	107,006.0	113,418.0	134,324.9	162,581.4			
Growth % YoY	27.1	21.9	19.5	30.2	23.3	25.5	21.0			
Gross Profit, Adj	15,122.0	20,271.0	26,406.0	35,355.0	38,296.0	46,998.9	59,192.6			
Margin %	24.8	27.2	29.7	33.0	33.8	35.0	36.4			
EBITDA, Adj	2,910.0	4,010.0	5,099.0	8,514.0	9,731.0	15,250.1	20,296.1			
Margin %	4.8	5.4	5.7	8.0	8.6	11.4	12.5			
Net Income, Adj	173.3	285.4	-130.5	599.3	1,169.9	5,006.2	7,568.3			
Margin %	0.3	0.4	0.1	0.6	1.0	3.7	4.7			
EPS, Adj	0.38	0.61	-0.28	1.26	2.44	10.46	15.71			
Growth % YoY	-72.3	62.3				732.4	50.1			
Cash from Operations	4,180.0	5,475.0	6,842.0	11,920.0	11,259.0					
Capital Expenditures	-1,785.0	-1,444.0	-4,893.0	-4,589.0	-4,896.0	-5,864.3	-6,902.0			
Free Cash Flow	395.0	2,031.0	1,949.0	7,331.0	6,363.0	10,500.1	14,566.2			

Challenges – Scale of Financial Information



Modified from https://upload.wikimedia.org/wikipedia/commons/d/dc/UnderwoodKeyboard_%28transparent%29.png
https://upload.wikimedia.org/wikipedia/commons/1/18/1328102022_Document.png
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Challenges – Accuracy Really Matters

January 31, 2018

Federal Reserve issues FOMC statement

For release at 2:00 p.m. EST

Share 

Information received since the Federal Open Market Committee met in December indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. Gains in employment, household spending, and business fixed investment have been solid, and the unemployment rate has stayed low. On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent. Market-based measures of inflation compensation have increased in recent months but remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with further gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market conditions will remain strong. Inflation on a 12-month basis is expected to move up this year and to stabilize around the Committee's 2 percent objective over the medium term. Near-term risks to the economic outlook appear roughly balanced, but the Committee is monitoring inflation developments closely.

In view of realized and expected labor market conditions and inflation, the Committee decided to maintain the target range for the federal funds rate at 1-1/4 to 1-1/2 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.

Federal Reserve will maintain rate at 1.25% to 1.5%

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Federal Reserve will maintain rate at 1.25% to 1.5%

vs.

Federal Reserve will raise rate to 2%

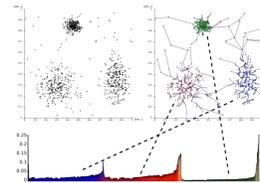
Solution – Evolution Over Time



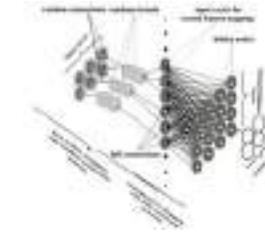
1990s

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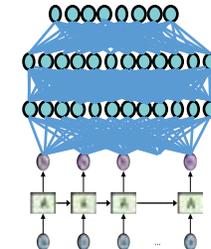
2000s



2010



2016



2017

Data Volume



Back in 2016 – Table Extraction

%PDF-1.3

	Three months ended		Six months ended	
	30 September		30 September	
	2013	2012	2013	2012
	(Unaudited)	(Unaudited)	(Unaudited)	(Audited)
	<i>HK\$'000</i>	<i>HK\$'000</i>	<i>HK\$'000</i>	<i>HK\$'000</i>
Interest charges on:				
Bank borrowings, which contain a repayment on demand clause, wholly repayable within five years	70	86	154	149
Obligation under a finance lease	14	13	31	13
	<u>84</u>	<u>99</u>	<u>185</u>	<u>162</u>

%%EOF



	Three months ended		Six months ended	
	30 September		30 September	
	2013	2012	2013	2012
	(Unaudited)	(Unaudited)	(Unaudited)	(Audited)
	<i>HK\$'000</i>	<i>HK\$'000</i>	<i>HK\$'000</i>	<i>HK\$'000</i>
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Obligation under a finance lease	14	13	31	13
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Tables Look Different

Table 2.

Age-Adjusted and Unadjusted Disability Rates 2005 and 2010

Category	Age-adjusted disability rate			
	2005		2010	
	Estimate	Margin of error (\pm)	Estimate	Margin of error (\pm)
All people	18.6	0.3	18.1	0.3
Male	17.9	0.4	17.6	0.4
Female	19.0	0.3	18.3	0.4
White alone	17.9	0.3	17.4	0.3
Not Hispanic	18.1	0.4	17.6	0.4
Black alone	23.2	0.7	22.2	0.7
Not Hispanic	23.3	0.7	22.3	0.7

Tables Look Different

Amount repayable in one year or less, or on demand (*)

Amount repayable after one year

As at 30 June 2016		
Secured	Unsecured	Total
USD'000	USD'000	USD'000
93,456	4,875	98,331
13	-	13

項 目		12月末	対前月増減
Item		End of December	Changes from previous month
資 産 Assets (A)	外 貨 建 Denominated in foreign currency	1,515,670	- 28,198
	中長期 Long-term	1,234,521	- 31,020
	短期 Short-term	281,149	2,822
	邦 貨 建 Denominated in Yen	288,646	1,465
	中長期 Long-term	164,491	- 2,064
	短期 Short-term	124,155	3,529
	計 Total	1,804,316	- 26,733
	中長期 Long-term	1,399,012	- 33,084
短期 Short-term	405,304	6,351	

Tables Look Different

マネーストック速報（2016年6月） Money Stock (Preliminary Figures for June 2016)

(特に断りのない限り平残前年比伸び率、単位・%)

(Percent changes from a year earlier in average amounts outstanding, unless otherwise noted)

年・期・月 Year, quarter, or month	M2		M3		M1			準通貨 Quasi- money	C D Certificates of deposit (CDs)	広義 流動性 L	同季調済 前期(月)比 年率 (a)
		同季調済 前期(月)比 年率		同季調済 前期(月)比 年率	現金 通貨 Currency in circulation	預金 通貨 Deposit money					
		(a)		(a)							
2014	3.4	-	2.8	-	4.7	3.5	4.9	0.6	6.7	3.5	-
2015	3.7	-	3.0	-	5.2	5.0	5.2	0.7	3.9	4.0	-

Tables Look Different



Results by Business

Europe Retail and Business Banking

Income Statement Information

Adjusted and statutory basis

Total income net of insurance claims

Credit impairment charges and other provisions

Net operating income

Operating expenses (excluding costs to achieve Transform)

Costs to achieve Transform

Operating expenses

Other net (expense)/ income

Loss before tax

Attributable loss¹

Performance Measures

Return on average equity

Return on average risk weighted assets

Cost of income ratio

Loan loss rate (bps)

Balance Sheet Information

Loans and advances to customers at amortised cost

Customer deposits

Total assets

Risk weighted assets

2013 compared to 2012

- Income declined by 6% to £512m reflecting actions taken to reduce the volume of new assets written, particularly in Spain and Italy, to address the continuing economic challenges across Europe, partially offset by an increase due to foreign currency movements. The net interest margin was broadly in line at 79bps (2012: 78bps)
- Credit impairment charges increased by £26m to £209m principally due to foreign currency movements, and higher impairment balances against forbearance and higher risk mortgage customers, reflecting the current economic conditions across Europe. The overall 90 day arrears rate reduced slightly to 91bps (2012: 93bps)
- Operating expenses increased £380m to £982m primarily reflecting costs to achieve Transform of £357m, relating to restructuring costs to significantly downsize the distribution network, with the remaining increase driven by foreign currency movements
- Other net expense increased £145m to £136m due to a valuation adjustment recognised in respect of contractual obligations to trading partners, based in locations affected by our restructuring plans
- Loss before tax increased to £815m (2012: £229m) principally due to costs to achieve Transform and an increase in other net expense

Q3 13 compared to Q2 13

- Loss before tax decreased to £106m (Q2 13: £247m) largely as a result of the decrease in other net expense
- Income reduced 9% to £160m with seasonality driving reduced sales of mortgages and investment products
- Loans and advances reduced 4% to £38.2bn due to actions taken to reduce the volume of new assets written. Customer deposits reduced 5% to £16.7bn due to customer attrition driven by continued competitive pressure
- Total assets reduced 6% to £45.8bn principally due to a reduction in loans and advances and foreign currency movements
- RWAs remained broadly flat at £16.8bn, driven by a reduction in exposures and depreciation of EUR against GBP, offset by a change in risk profile driven by market conditions

¹ Attributable loss includes loss after tax and non-controlling interests

Tables Look Different

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Tables Look Different



Results by Business

Europe Retail and Business Banking

Income Statement Information	Nine Months Ended 30.09.13	Nine Months Ended 30.09.12	% Change
Adjusted and statutory basis	£m	£m	
Total income net of insurance claims	512	547	(6)
Credit impairment charges and other provisions	(209)	(183)	14
Net operating income	303	364	(17)
Operating expenses (excluding costs to achieve Transform)	(625)	(602)	4
Costs to achieve Transform	(357)	-	-
Operating expenses	(982)	(602)	63
Other net (expense)/ income	(136)	9	-
Loss before tax	(815)	(229)	-
Attributable loss ¹	(629)	(198)	-

Performance Measures	As at 30.09.13	As at 30.06.13
Return on average equity	(39.2%)	(12.2%)
Return on average risk weighted assets	(4.9%)	(1.6%)
Cost of income ratio	192%	110%
Loan loss rate (bps)	71	61

Balance Sheet Information	As at 30.09.13	As at 30.06.13
Loans and advances to customers at amortised cost	36.2	39.8
Customer deposits	16.7	17.5
Total assets	45.8	46.7
Risk weighted assets	16.8	16.7

2013 compared to 2012

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¹ Attributable loss includes loss after tax and non-controlling interests

Table Detection – How Do We Do It

Results by Business

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Balance Sheet Information			
	As at 30.09.13	As at 30.06.13	
	£bn	£bn	
Loans and advances to customers at amortised cost	38.2	39.8	
Customer deposits	16.7	17.5	
Total assets	45.8	48.7	
Risk weighted assets	16.8	16.7	

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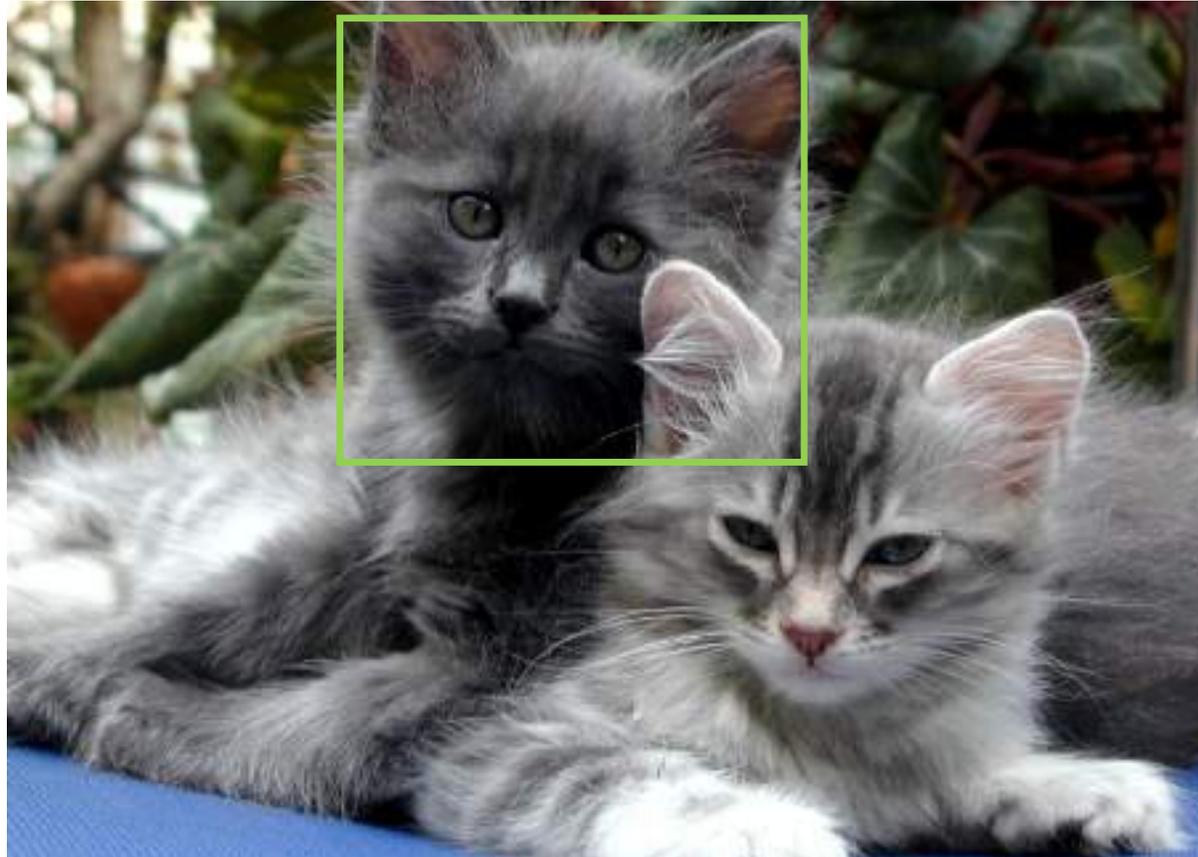
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Computer Vision Tasks



Computer Vision Tasks



Computer Vision Tasks

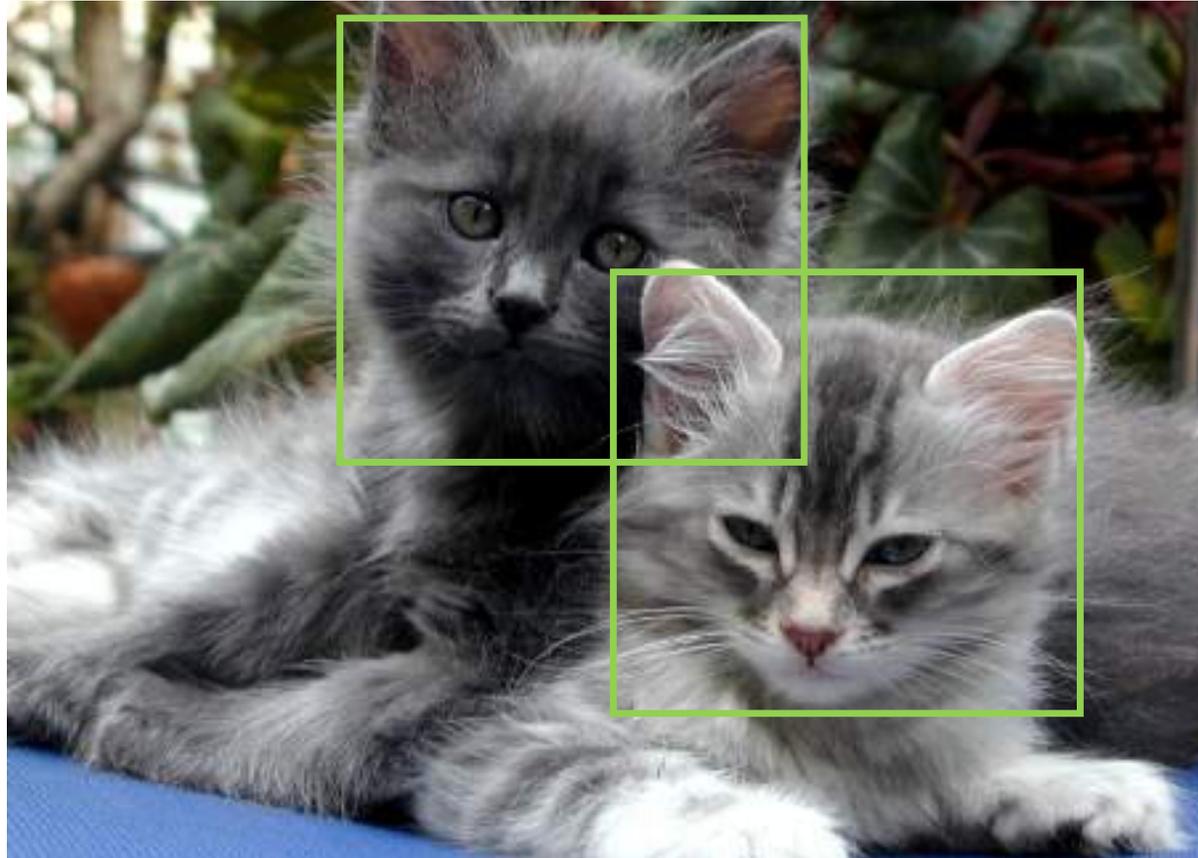
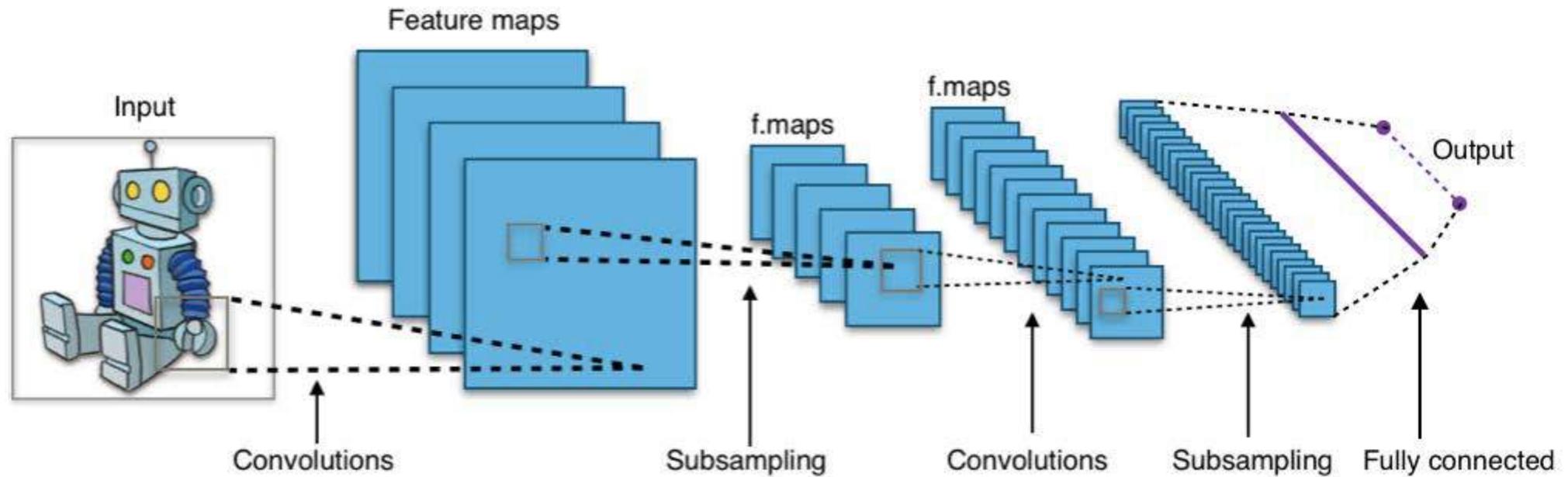


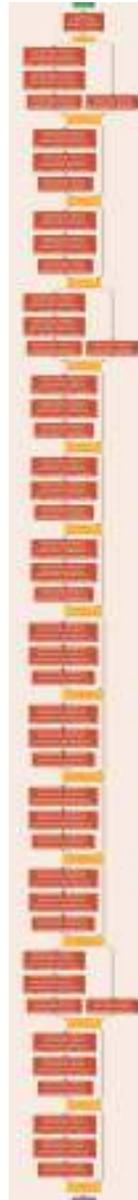
Table Detection Is Object Detection

Deep learning has yielded rapid advancements in computer vision

CNN



ResNet-152



Building Block
Repeat this 50 times



Evolution of Depth

AlexNet 8 Layers
ILSVRC 2012



VGG 19 Layers
ILSVRC 2014



ResNet 152 Layers
ILSVRC 2015



Faster RCNN

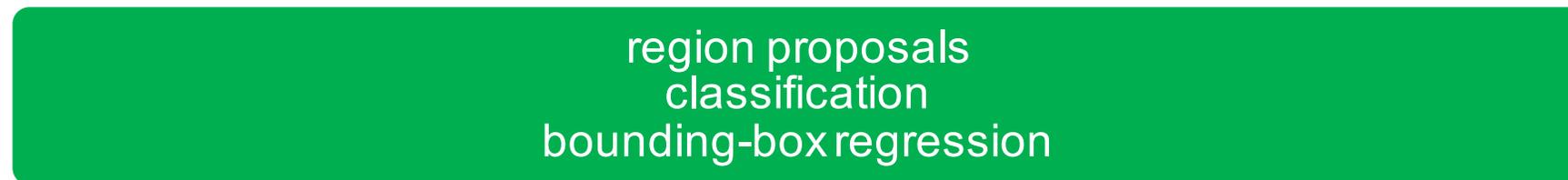
- RCNN



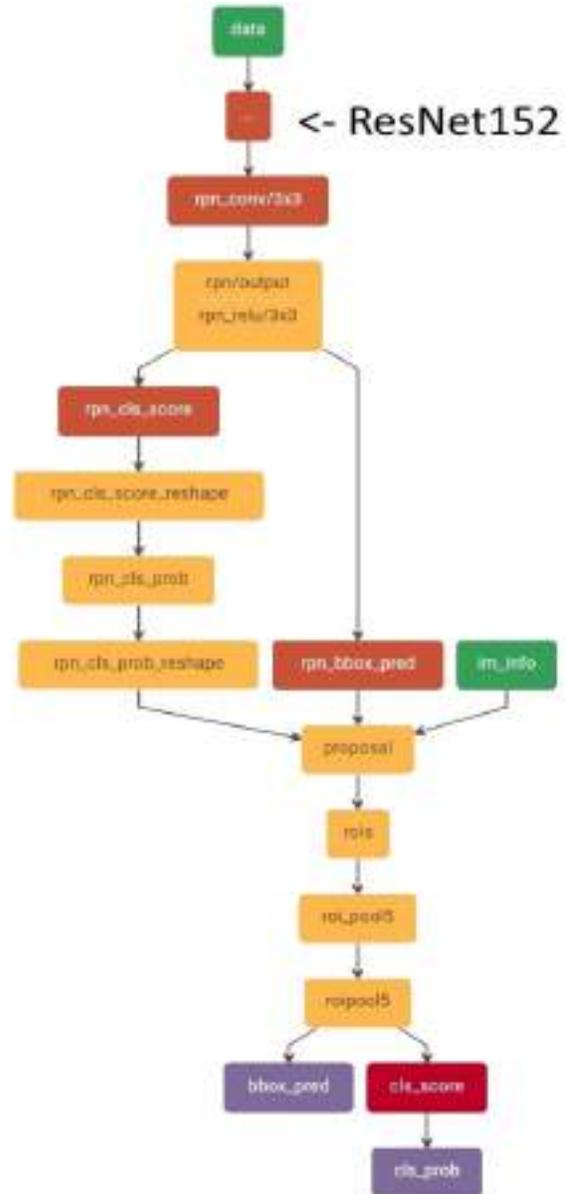
- Fast RCNN



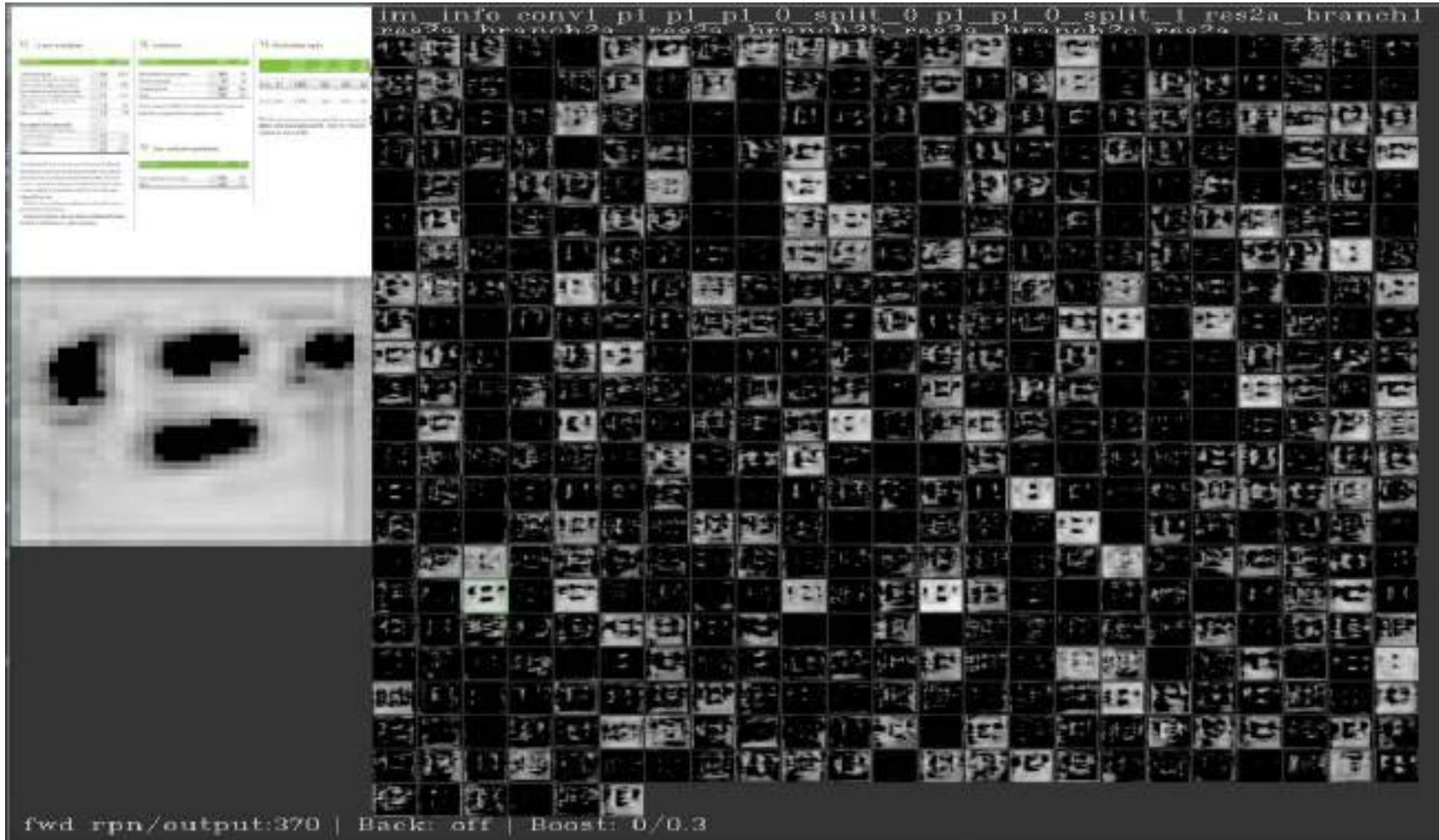
- Faster RCNN



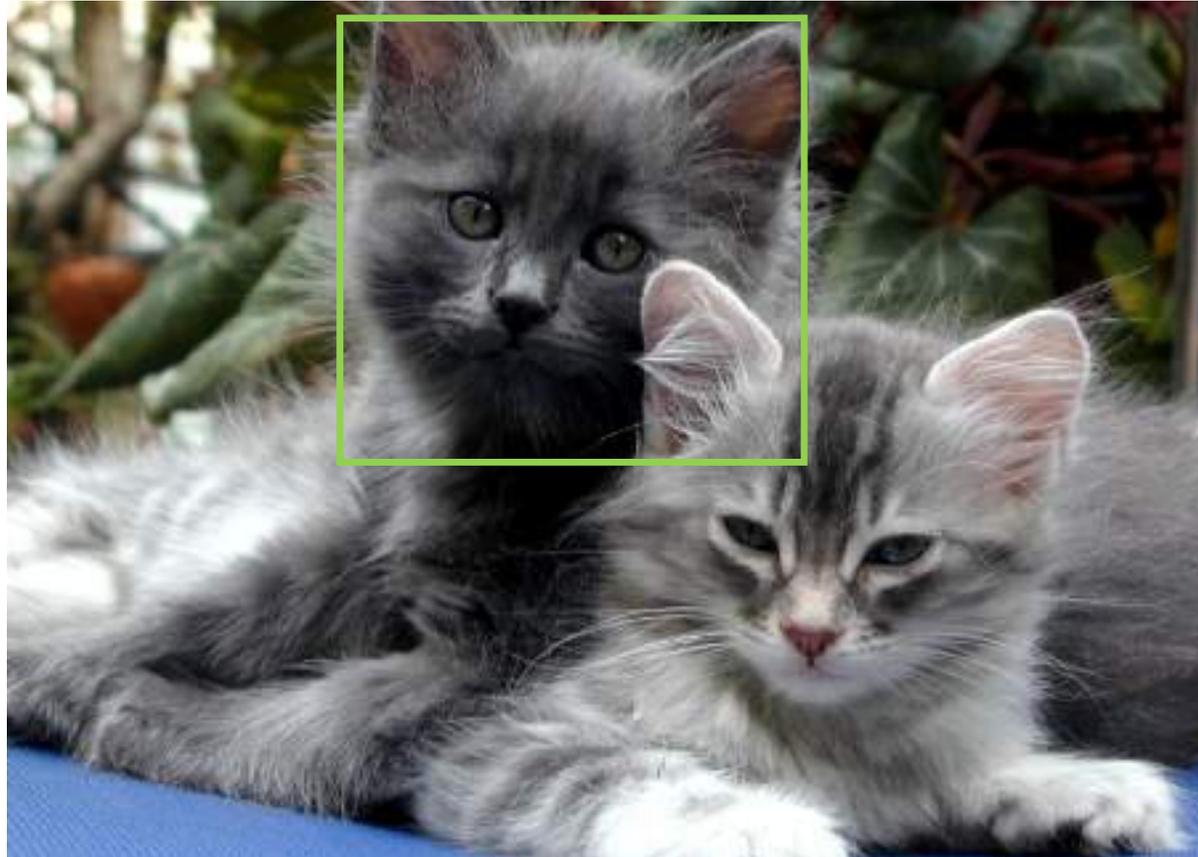
Faster RCNN



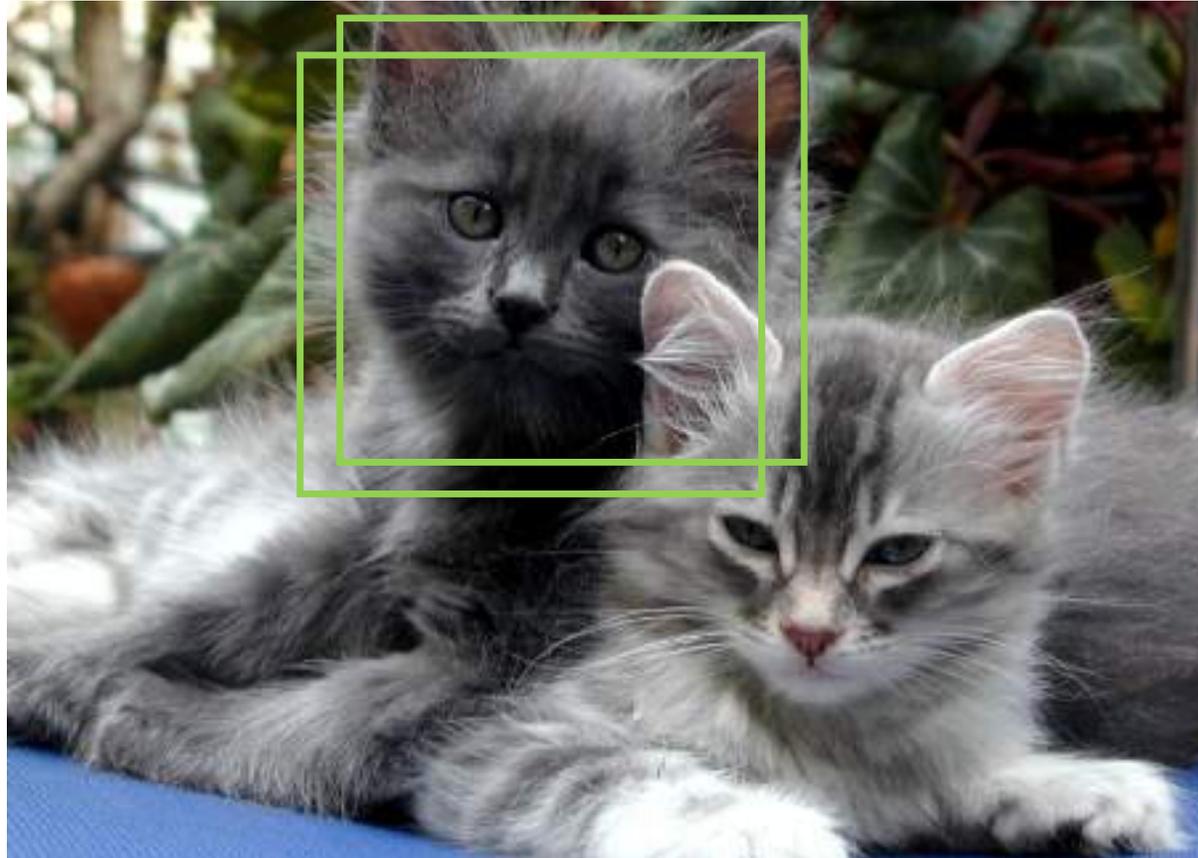
Visualizing Neural Network



Object Detection Good Enough?



Object Detection Good Enough?



Object Detection Good Enough?

Results by Business

Europe Retail and Business Banking	Nine Months Ended 30.09.13	Nine Months Ended 30.09.12	% Change
Income Statement Information			
<i>Adjusted and statutory basis</i>			
Total income net of insurance claims	512	547	(6)
Credit impairment charges and other provisions	(209)	(183)	14
Net operating income	303	364	(17)
Operating expenses (excluding costs to achieve Transform)	(625)	(602)	4
Costs to achieve Transform	(357)	-	-
Operating expenses	(982)	(602)	63
Other net (expense)/ income	(136)	9	-
Loss before tax	(815)	(229)	
Attributable loss ¹	(629)	(198)	
Performance Measures			
Return on average equity	(39.2%)	(12.2%)	
Return on average risk weighted assets	(4.9%)	(1.6%)	
Cost of income ratio	192%	110%	
Loan loss rate (bps)	71	61	

	As at 30.09.13	As at 30.06.13
Balance Sheet Information		
	£bn	£bn
Loans and advances to customers at amortised cost	38.2	39.8
Customer deposits	16.7	17.5
Total assets	45.8	48.7
Risk weighted assets	16.8	16.7

2013 compared to 2012

- Income declined by 6% to £512m reflecting actions taken to reduce the volume of new assets written, particularly in Spain and Italy, to address the continuing economic challenges across Europe, partially offset by an increase due to foreign currency movements. The net interest margin was broadly in line at 79bps (2012: 78bps)
- Credit impairment charges increased by £26m to £209m principally due to foreign currency movements, and higher impairment balances against forbearance and higher risk mortgage customers, reflecting the current economic conditions across Europe. The overall 90 day arrears rate reduced slightly to 91bps (2012: 93bps)
- Operating expenses increased £380m to £982m primarily reflecting costs to achieve Transform of £357m, relating to restructuring costs to significantly downsize the distribution network, with the remaining increase driven by foreign currency movements
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Object Detection Good Enough?

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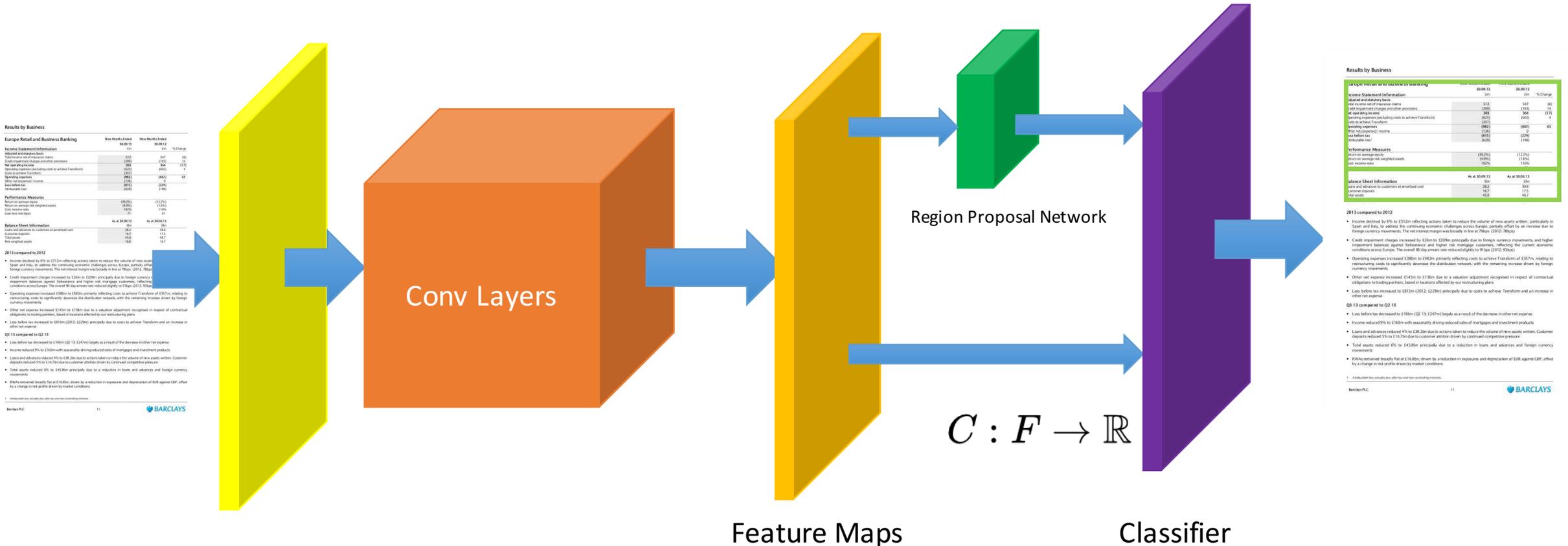
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Object Detection Good Enough?



Results by Business

Europe Retail and Business Banking

	New Month Ended 30/09/13	New Month Ended 30/09/12	% Change
Income Statement Information			
Adjusted earnings before tax	372	347	8%
Total customer net revenue items	1,000	932	7%
Cost of operations (excluding credit and other provisions)	(628)	(585)	5%
Net operating income	344	362	(5%)
Operating expenses (excluding costs to achieve Transform)	(823)	(802)	3%
Costs to achieve Transform	(222)	(222)	0%
Operating expenses	(992)	(982)	1%
Other development income	(11)	(20)	45%
Other income	(4)	(1)	200%
Amortisation	(128)	(139)	8%
Performance Measures			
Return on average equity	(8.2%)	(12.2%)	33%
Return on average assets	(4.9%)	(5.6%)	12%
Cost income ratio	132%	130%	2%
Cost to income ratio	31	31	0%
Balance Sheet Information	As at 30/09/13	As at 30/09/12	
Loans and advances to customers at amortised cost	367	384	(5%)
Customer deposits	142	133	7%
Total assets	468	487	(4%)
Total liabilities	148	147	1%

2013 compared to 2012

- Income declined by 6% to £372m reflecting actions taken to reduce the volume of new assets written, particularly in Spain and Italy, to address the continuing economic challenges across Europe, partially offset by an increase due to foreign currency movements. The net interest margin was broadly in line at 78bps (2012: 79bps).
- Costs to achieve Transform increased by £20m to £222m principally due to foreign currency movements, higher risk mortgage customers, reflecting conditions across Europe. The overall ROI on new assets was reduced slightly to 176p (2012: 180p).
- Operating expenses increased £20m to £992m primarily reflecting costs to achieve Transform of £37m, relating to restructuring costs to significantly diversify the distribution network with the remaining increase driven by foreign currency movements.
- Other net revenue increased £145m to £111m due to a valuation adjustment recognised in respect of contractual obligations to trading partners, based in locations affected by our restructuring plans.
- Loans before tax increased to £367m (2012: £384m) principally due to costs to achieve Transform and an increase in other net revenue.

Q3 13 compared to Q3 12

- Loans before tax decreased to £367m (Q3 12: £374m) largely as a result of the decrease in other net revenue.
- Income reduced 9% to £372m with asset quality deteriorating across mortgages and investment products.
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BARCLAYS

Results by Business

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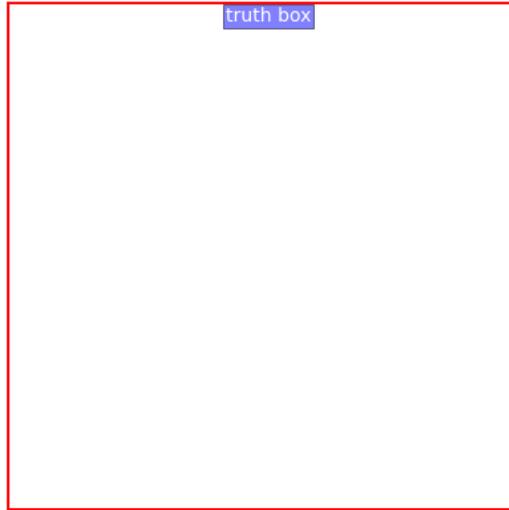
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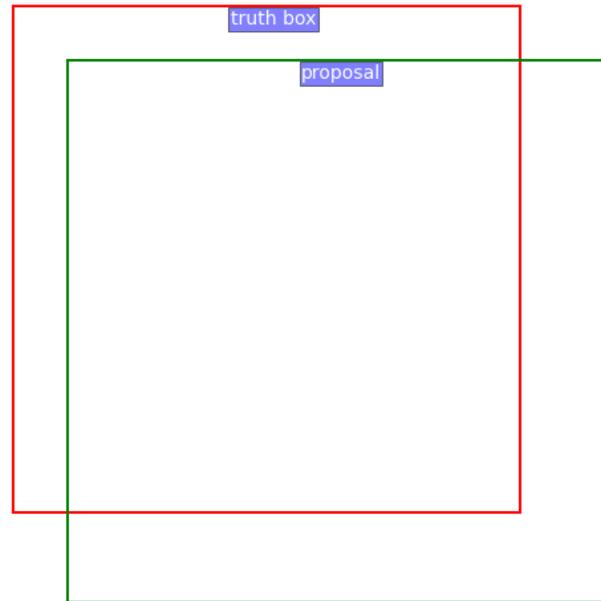
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BARCLAYS

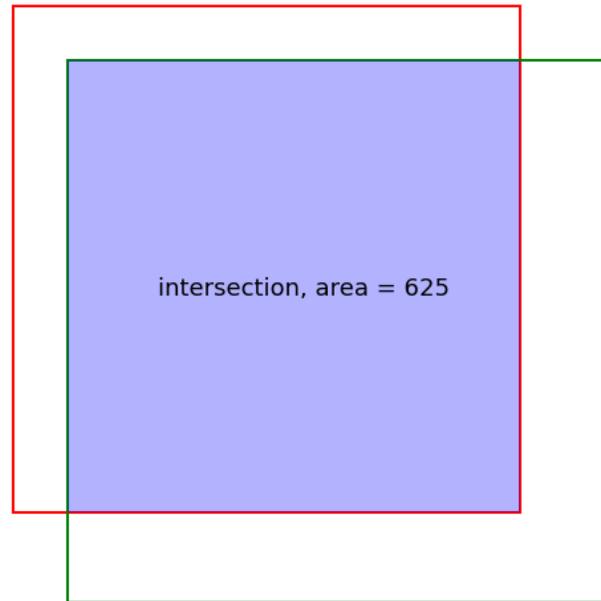
Intersection Over Union



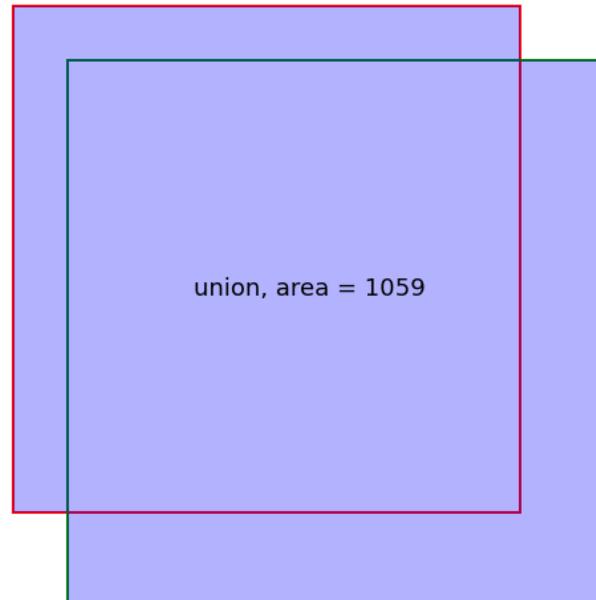
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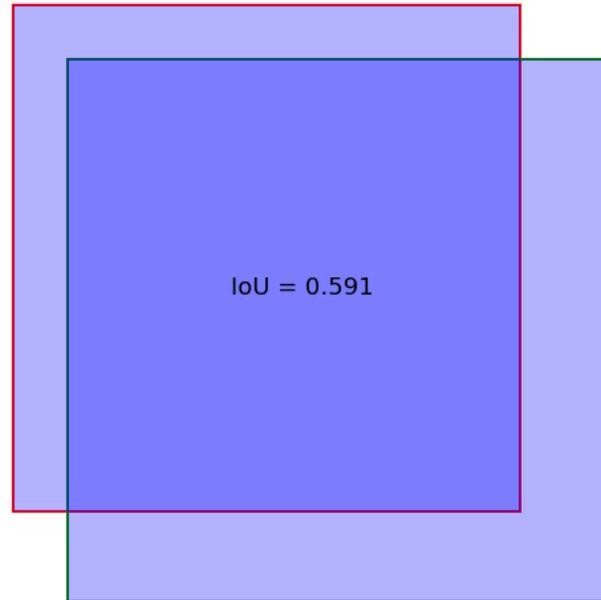
Intersection Over Union



Intersection Over Union



Intersection Over Union



Fuzzy Boundaries

Consolidated income statement BBVA Group
(Million euros)

	Garanti Group consolidated using the equity method	Garanti Group consolidated using the proportional consolidation
	January-September 13	January-September 13
Net interest income	10,294	10,853
Net fees and commissions	3,853	3,292
Net trading income	1,893	1,988
Dividend income	121	122
Income by the equity method	612	376
Other operating income and expenses	(275)	(259)
Gross income	15,798	16,303
Operating expenses	(8,045)	(8,349)
Personnel expenses	(4,210)	(4,364)
General and administrative expenses	(3,026)	(3,147)
Depreciation and amortization	(809)	(830)
Operating income	7,754	7,954
Impairment on financial assets (net)	(4,450)	(4,566)
Provisions (net)	(413)	(434)
Other gains (losses)	28	28
Income before tax	2,857	2,926
Income tax	(600)	(669)
Net income from ongoing operations	2,257	2,257
Net income from discontinued operations	1,400	1,400
Net income	3,657	3,657
Non-controlling interests	(581)	(581)
Net attributable profit	3,077	3,077

Annex

47

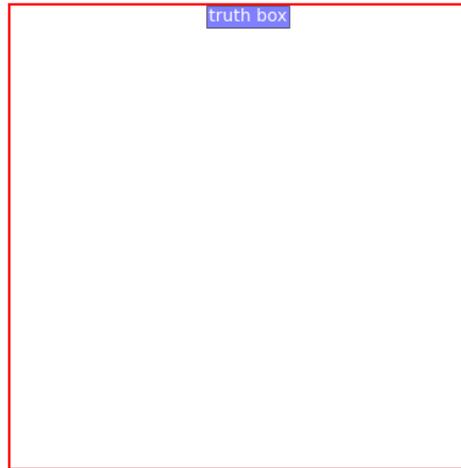
Fuzzy Boundaries

Consolidated income statement BBVA Group

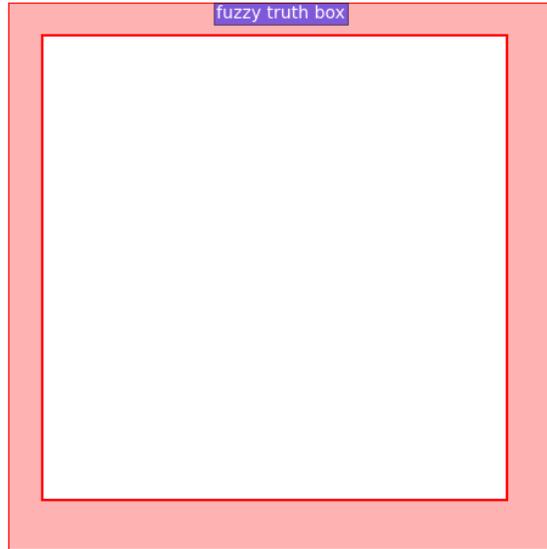
(\$Million)

	World Group, consolidated using the equity method		World Group, consolidated using the cost of sales method	
	January to December 18	January to December 17	January to December 18	January to December 17
Net interest income	11,794	11,886	11,794	11,886
Net fee and commission	1,871	1,771	1,871	1,771
Net trading income	1,081	1,081	1,081	1,081
Dividend income	101	101	101	101
Income by the equity method	462	276	462	276
Other operating income and expenses	1,270	1,270	1,270	1,270
Gross income	16,579	16,585	16,579	16,585
Operating expenses	16,140	16,549	16,140	16,549
Provision for credit losses	16,270	16,868	16,270	16,868
Depreciation and amortization	1,000	1,000	1,000	1,000
Restructuring and impairment	1,000	1,000	1,000	1,000
Operating income	2,169	2,068	2,169	2,068
Income from financial assets held	1,200	1,200	1,200	1,200
Provision for	1,000	1,000	1,000	1,000
Other gains/losses	100	100	100	100
Income before tax	2,469	2,368	2,469	2,368
Income tax	1,000	1,000	1,000	1,000
Net income from ongoing operations	1,469	1,368	1,469	1,368
Income from discontinued operations	100	100	100	100
Net income	1,569	1,468	1,569	1,468
Income from interests	100	100	100	100
Net attributable profit	1,669	1,568	1,669	1,568

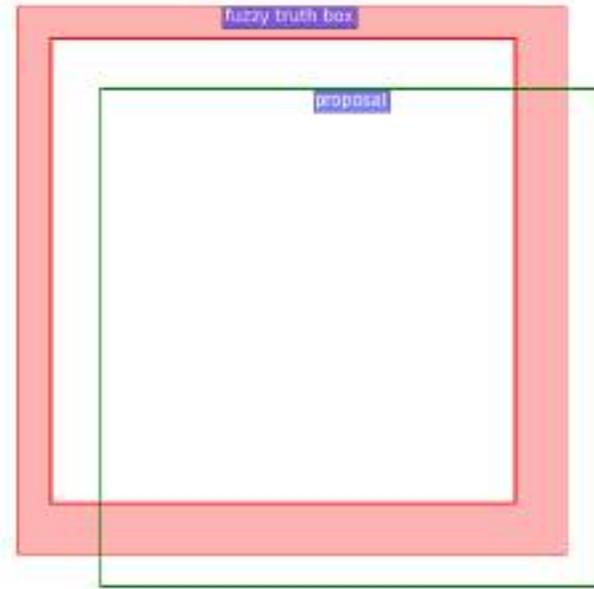
Fuzzy IOU



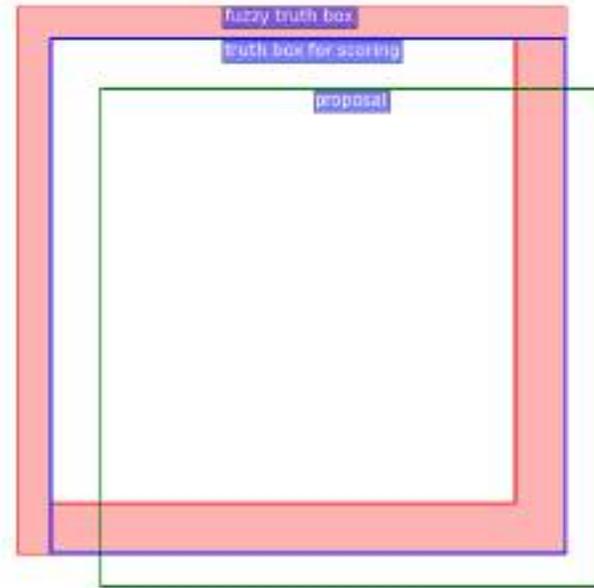
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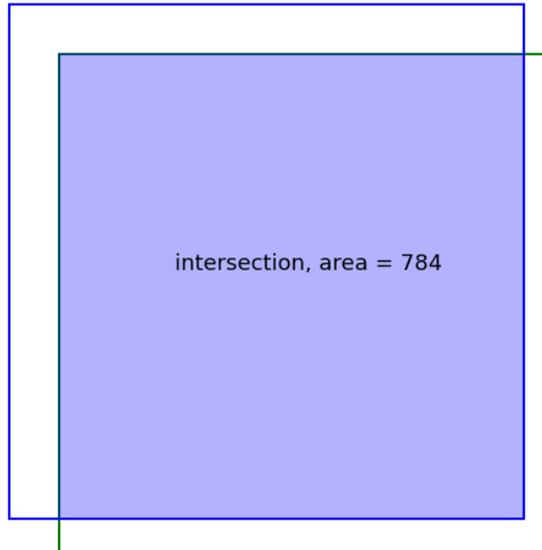
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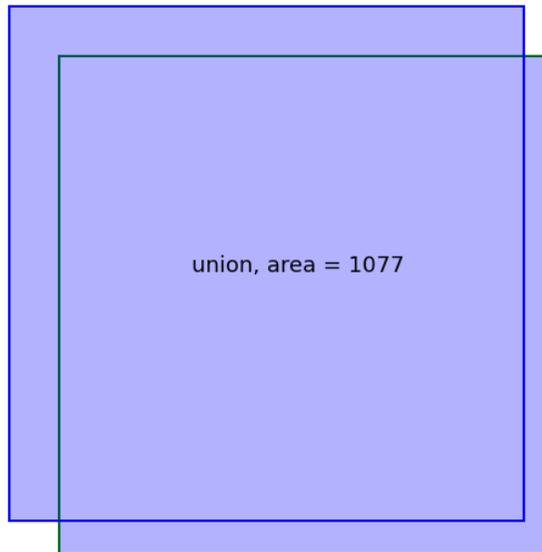
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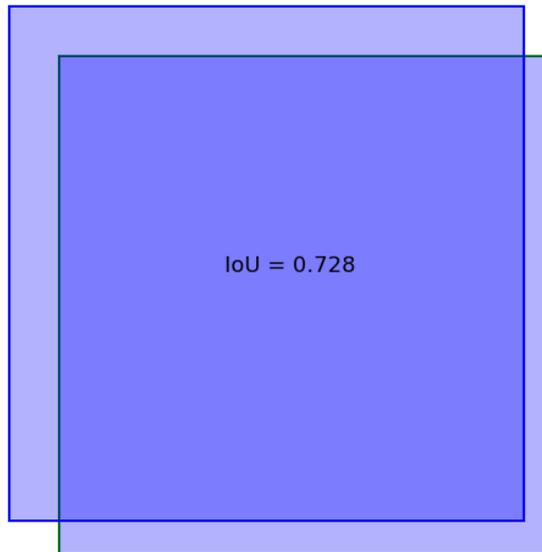
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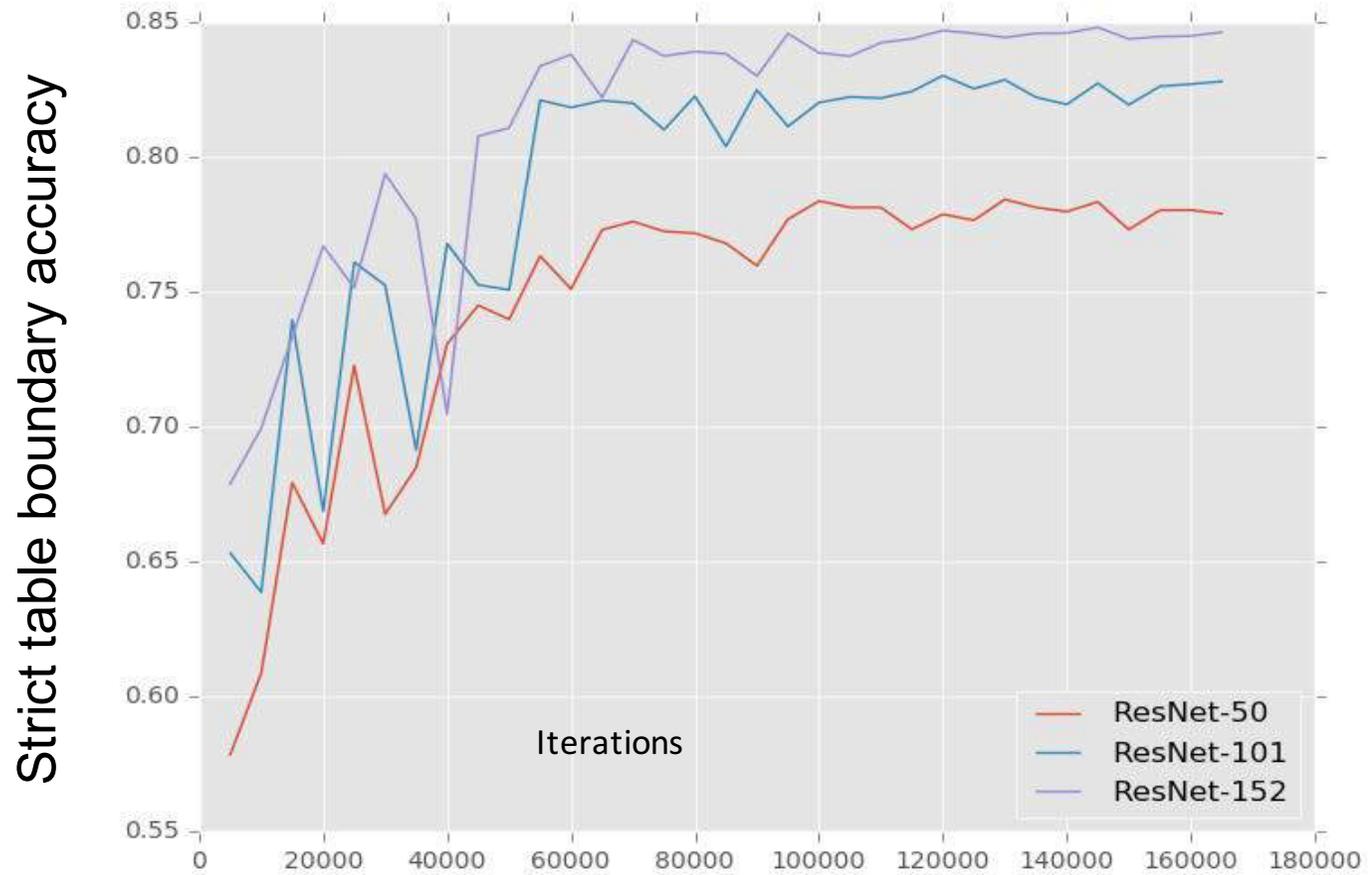
Fuzzy IOU



Fuzzy IOU



Training curves



Performance – Better than Human

	Precision		Recall	
	Machine	Human	Machine	Human
Table Boundary	95%	94%	95%	95%
Perfect Table	87%	82%	94%	94%

- 48,607 pages evaluated

NVIDIA® K80



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Heterogeneous Hardware

V100, K80, Xeon, ...



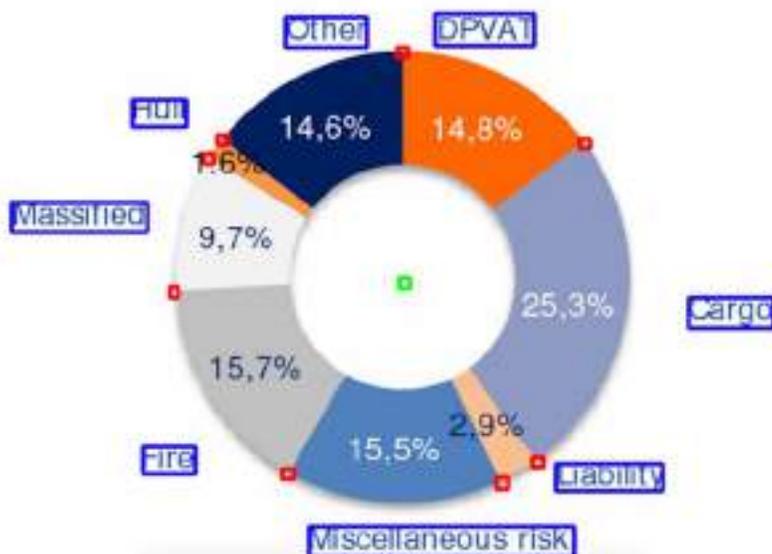
kubernetes



Back to 2018

Segment breakdown 1Q11

Total | R\$120.3 million



11. Pursuant to a shareholders resolution passed on 19 March 2011, subject to the share premium account of the Company being credited as a result of the issue of Floating Shares under the Placing, an amount not defined by (g) below, the directors were authorized to allot and issue a total of 182,748,900 shares (rounded as fully paid) at par to each holder of the shares on 19 March 2011 on proportion to their shareholdings (save that no shareholder shall be entitled to be allotted or issued by fraction of a share) by way of capitalisation of the sum of HK\$2,937,499 (standing to the credit of the share premium account of the Company, and the share to be allotted and issued shall rank pari passu in all respects with the existing issued shares (the "Capitalisation"). Upon the Capitalisation, the issued share capital of the Company would become HK\$2,256,900 divided into 225,690,000 shares of HK\$10 each.

12. On 19 April 2011, 75,000,000 new shares of HK\$10 each of the Company were issued to the public by way of placing at HK\$1.31 each (the "Placing"). Upon the Capitalisation and the Placing, the issued share capital of the Company would become HK\$4,000,000 divided into 400,000,000 shares of HK\$10 each.

13. RELATED PARTY TRANSACTIONS

14. During the period, the Group entered into the following transactions:

	Three months ended 30 September 2011		Six months ended 30 September 2011	
	(Unaudited) HK\$'000	(Unaudited) HK\$'000	(Unaudited) HK\$'000	(Unaudited) HK\$'000
Service income received from a related party	2	2	36	36
Underwriting commission paid to the related company	-	-	6,825	6,825

15. Mr. Pan Chek is a director of the related party, Mr. Cheung Tin Hing, Victor, is a director of the related party and resigned on 16 August 2011.

16. Compensation of key management personnel

	Three months ended 30 September 2011		Six months ended 30 September 2011	
	(Unaudited) HK\$'000	(Unaudited) HK\$'000	(Unaudited) HK\$'000	(Unaudited) HK\$'000
Total remuneration of directors during the period	289	198	428	431
— Short-term employee benefits	4	4	8	8
— Post-employment benefits	285	194	420	423

The directors consider that other than remuneration, the Group had no other key management personnel.

17. RESERVES

The accounts of the Group's consolidated reserves and the movements therein for the current and the same period of previous year are presented in the consolidated consolidated statement of changes in equity of the financial statements.

9. EARNINGS PER SHARE

Continuing, except shares in ordinary and/or share results in million	For the three months ended June 30, 2011		For the six months ended June 30, 2011	
	Basic	Diluted	Basic	Diluted
Income based from continuing operations	\$18,766	\$18,766	3,801	3,801
Loss from discontinued operations	(520)	(520)	(9)	(9)
Loss from discontinued operations attributable to non-controlling interests	146	146	13	13
Net income (loss) attributable to equity holders of Bank of East Asia Corporation	\$18,392	\$18,392	3,795	3,795
Weighted average shares outstanding	1,801	1,801	1,800	1,800
Effect of dilutive securities (stock options)	-	-	-	-
Earnings per share data attributable to the equity holders of Bank of East Asia Corporation				
Income based from continuing operations	\$10.21	\$10.21	\$2.13	\$2.13
Loss from discontinued operations	(0.29)	(0.29)	(0.005)	(0.005)
Net income (loss)	\$9.92	\$9.92	\$2.13	\$2.13

10. OTHER CHARGES

A. Other Charges (continued)

	For the three months ended June 30, 2011		For the six months ended June 30, 2011	
	2011	2010	2011	2010
Operating expense	\$ 50	\$ 40	\$ 70	\$ 60
Corporate social responsibility	79	71	40	38
Change in available-for-sale investments	140	6	750	6
Currency translation loss	29	9	81	-
Goodwill impairment	41	-	76	-
Provision and expenses charge	27	-	53	-
Other	71	180	79	130
Other income	(20)	(21)	(25)	(19)
Other operating items	30	27	102	77
Total	\$ 226	\$ 224	\$ 1,147	\$ 1,091

B. Impairment Charges

	For the three months ended June 30, 2011		For the six months ended June 30, 2011	
	2011	2010	2011	2010
Impairment of goodwill	\$ 6,596	\$ -	\$ 6,596	\$ -
Impairment of other intangible assets	33	-	10	-
Impairment of investment in other subsidiaries	-	-	-	39
Impairment of goodwill	7,048	-	7,048	-
Impairment of goodwill	2,264	-	2,264	-
Impairment of available-for-sale investments	16	79	20	36
Total	\$ 9,917	\$ 79	\$ 15,928	\$ 75

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January 31, 2018

Federal Reserve issues FOMC statement

For release at 2:00 p.m. EST

Share 

Information received since the Federal Open Market Committee met in December indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. Gains in employment, household spending, and business fixed investment have been solid, and the unemployment rate has stayed low. On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent. Market-based measures of inflation compensation have increased in recent months but remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

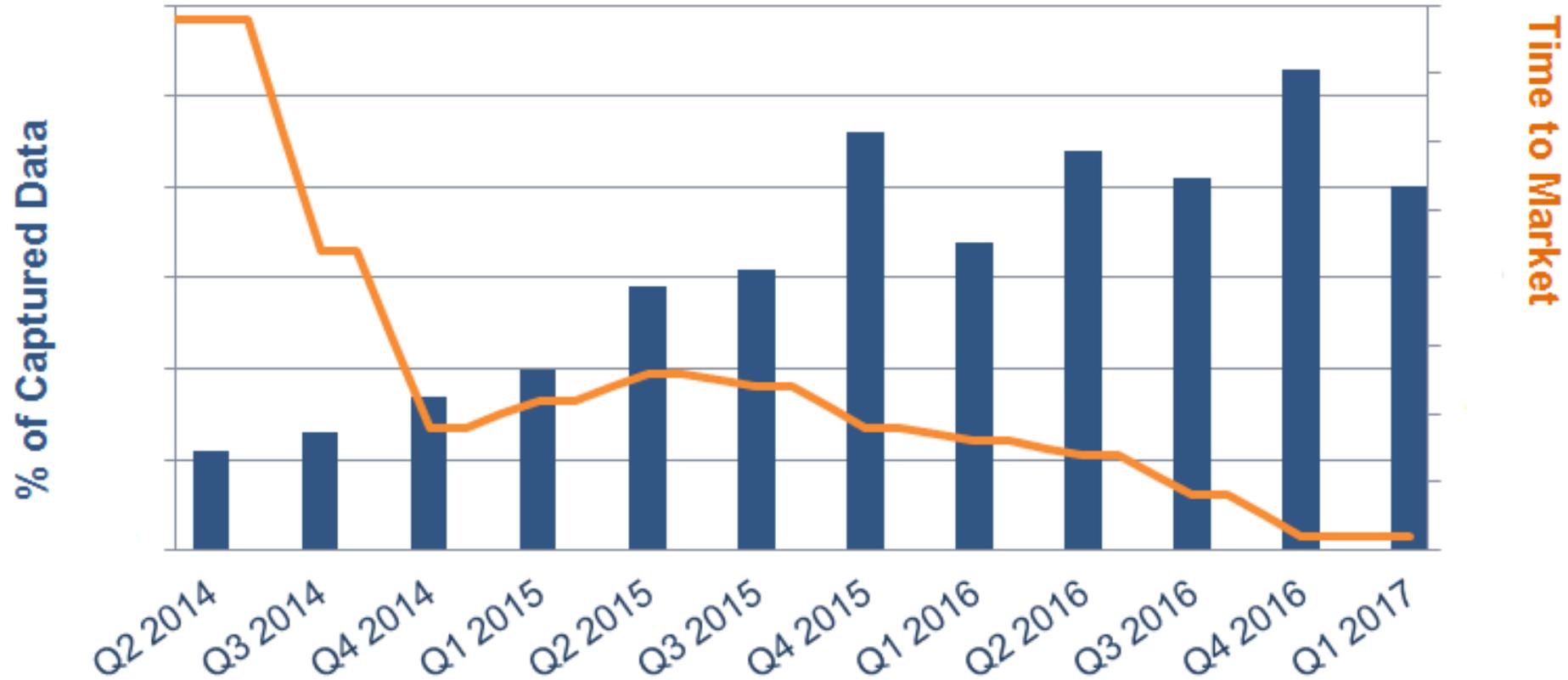
Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with further gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market conditions will remain strong. Inflation on a 12-month basis is expected to move up this year and to stabilize around the Committee's 2 percent objective over the medium term. Near-term risks to the economic outlook appear roughly balanced, but the Committee is monitoring inflation developments closely.

In view of realized and expected labor market conditions and inflation, the Committee decided to maintain the target range for the federal funds rate at 1-1/4 to 1-1/2 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.



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Final Notes



Final Notes

Deep Learning can achieve superhuman accuracy for the right problems

Automation is the only way to keep up with the exponential growth of data

QUESTIONS?

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