

White Paper

The Salesforce Economic Impact: 4.2 Million New Jobs, \$1.2 Trillion of New Business Revenues from 2019 to 2024

Sponsored by: Salesforce

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IN THIS WHITE PAPER

This White Paper forecasts the economic contribution of Salesforce and its ecosystem of partners¹ and customers to local economies in terms of jobs created and business revenue.

The text summarizes the study findings; detailed data tables are provided in the Appendix.

The study relies on IDC's forecasts of job creation from organizational use of cloud computing, IDC's tracking of Salesforce's market share, IDC's published research on the number of ancillary products and services that accompany cloud computing implementations, and a custom economic model that estimates the size of the Salesforce ecosystem.

The IDC premise, which has been driving forecasts of the economic impact of cloud computing since 2012, is that cloud computing generates economic benefits by permitting an increase in IT innovation, which, in turn, supports business innovation that creates new revenue and jobs.

This White Paper updates earlier editions published in 2015, 2016, and 2017. Detailed descriptions of the derivation of the numbers are included in the Appendix B: Methodology section.

EXECUTIVE SUMMARY

- Driving these economic benefits is the growth of cloud computing. From the beginning of 2019 to the end of 2024, worldwide spending on public cloud computing will grow 19% a year, from \$147 billion to \$418 billion. Meanwhile, spending on noncloud software will only grow at 3% a year.
- During this six-year period, Salesforce and its ecosystem are expected to enable the creation of 4.2 million jobs worldwide.
- Over the same period, the use of cloud computing by Salesforce customers will add \$1.2 trillion in new business revenues to their local economies.

¹References to Salesforce's "ecosystem" in this White Paper refer to all firms that add products and services on top of Salesforce subscriptions, including not only official Salesforce consulting and ISV partners but also third-party providers brought in by those partners or the customers themselves.

- Because organizations that spend on cloud computing subscriptions also spend on ancillary products and services, the Salesforce ecosystem in 2019 is more than four times larger than Salesforce itself. By 2024, it will be nearly six times bigger.
- The particular jobs to be created will reflect the current occupational mix by country. The jobs created are across the board in cloud-using companies, but they will also include new jobs driven by digital transformation (e.g., jobs in robotics and artificial intelligence [AI], digital marketing, digital-assisted security, and IoT specialists in the trades).

Cloud Computing, Growing at 19%, Hits the Knee of the Curve

New technologies typically follow an "S curve" of adoption. Slow at first as early adopters experiment, then faster as implementation wrinkles are ironed out, generally when the new technology has supplanted 10-20% of the old technology.² Then the market hits a long period of sustained growth and the substitution rate matches the straight part of the "S." Hence the term "knee of the curve."

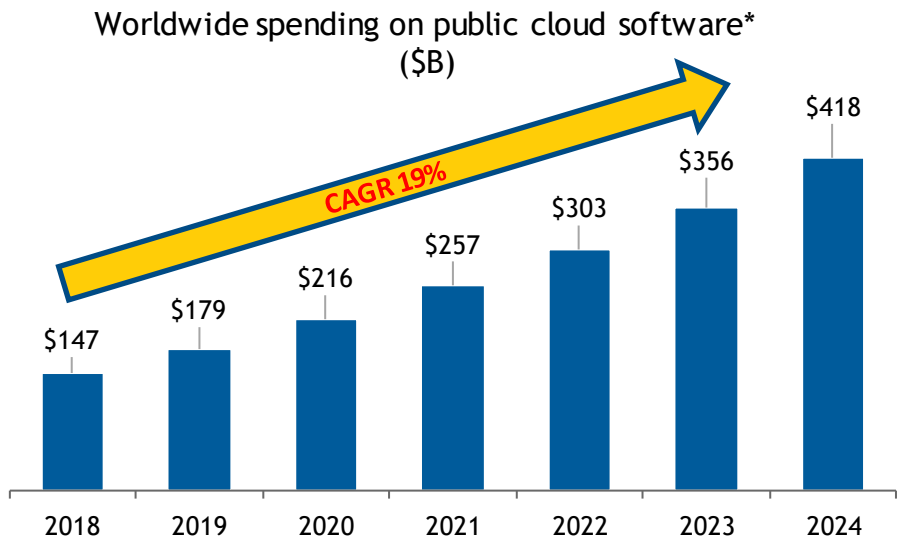
Cloud computing is definitely there, having hit 10% of software spending in 2013 and 20% in 2017. From 2019 to 2024, spending on software delivered via public cloud services will grow 19% a year and, by 2024, will account for nearly half of all software sales. Figure 1 charts this growth.

As early as last year, IDC's *Global CloudView Survey* of 5,740 user organizations in 32 countries found that 60% of organizations surveyed were past the experimental stage of cloud deployment, where projects were mostly ad hoc and targeting individual workgroups and departments. One in seven reported being "cloud native," with "cloud strategies and policies consistently defined and implemented."

²For more information on technology substitution curves, search on "Fisher-Pry Technology Substitution Model."

FIGURE 1

Cloud Computing: Engine for Growth, 2018-2024



*Cloud software, as defined, includes software as a service (SaaS), both applications and infrastructure software, and platform as a service (PaaS), or application development software. Not included is infrastructure as a service, which is basically storage and server capacity sold as a service.

Source: IDC, 2019

Cloud Benefits for Salesforce Customers Pass a Trillion Dollars

By freeing up IT resources from routine IT maintenance and upgrades – which, based on IDC surveys, can account for more than 70% of IT activity – cloud computing also promotes business innovation.

This innovation can drive new ways of reaching customers, streamlining operations, improving sales effectiveness and cross-selling, or improving employee productivity. In today's context, that might include the deployment of Internet of Things technology, digital transformation projects, omni-channel marketing, and the use of AI and cognitive systems.

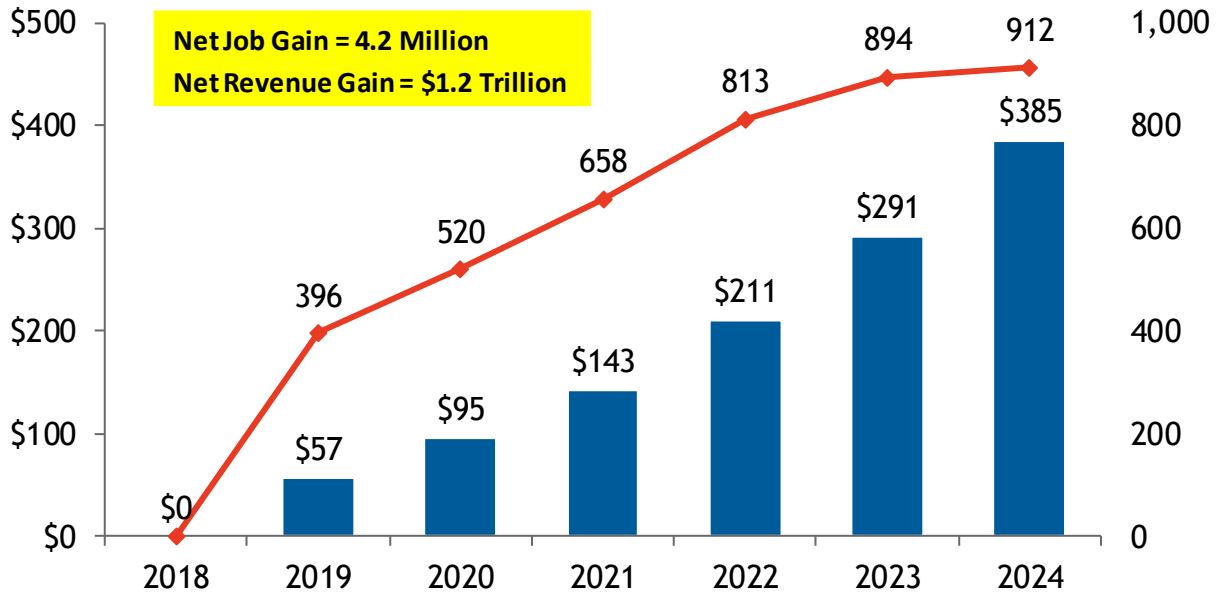
One direct sign of the impact of cloud computing on business innovation can be seen in the percentage of cloud tied to digital transformation initiatives. According to IDC's Digital Transformation Spending Guide, cloud software will account for 30% of software revenue in 2019, but 36% of software involved in digital transformation projects. And IDC predicts that by 2021, 80% of application development will take place in the cloud.³

³IDC infographic, "Multiplied Innovation as Competitive Advantage," 2018 (www.idc.com/promo/thirdplatform).

IDC has been quantifying the economic benefits of cloud computing, in terms of new business revenue and the labor enabled by them and needed to support them, since 2012.⁴ Figure 2 narrows that quantification down to the Salesforce customer base and calculates the new business revenue and jobs – annual revenue and jobs created above and beyond the 2018 levels – Salesforce cloud services customers can expect.

FIGURE 2

The Salesforce Economy: Net-New Business Revenue and Jobs from Using Salesforce Cloud, Year-End 2018 to Year-End 2024



Source: IDC, 2019

For the sake of completion, we should also point out that:

- The 2018 starting point for jobs already created from the use of Salesforce cloud services is 1.27 million and business revenue from the use of Salesforce cloud services in 2018 is tracked at \$130 billion.
- Jobs created from the use of Salesforce cloud services from 2019 through 2024 are predicted to hit 4.2 million.
- Business revenue from the use of Salesforce cloud services from 2019 through 2024 will add up to nearly \$1.2 trillion.

Yes, these are big numbers, but they aren't unreasonable in a global economy with business revenue over \$200 trillion in 2019 and a global workforce adding more than 140 million jobs a year.

⁴IDC first published "Cloud Computing's Role in Job Creation" in March 2012 (news.microsoft.com/download/features/2012/IDC_Cloud_jobs_White_Paper.pdf). Since then similar research has been conducted for The European IT Observatory, Salesforce, and Microsoft. The calculation of the percentage of IT activity devoted to maintenance and upgrades is updated yearly in IDC's IT Economic Impact Model and supported by custom surveys and IDC market data on software deployments, server workloads, and IT spending.

There are also, by the way, additional jobs created in the supply and distribution chains serving those Salesforce customers and from new company employees spending money in the general economy. These jobs, called indirect or induced jobs by economists, are not charted here, but economists generally estimate that every direct job creates one to three indirect or induced jobs.

Detailed figures can be found in the Appendix. In 2019, the number of indirect/induced jobs created by customers using Salesforce cloud services will reach 2.7 million worldwide. The net gain in indirect or induced jobs from 2019 through 2024 will reach 6.6 million.

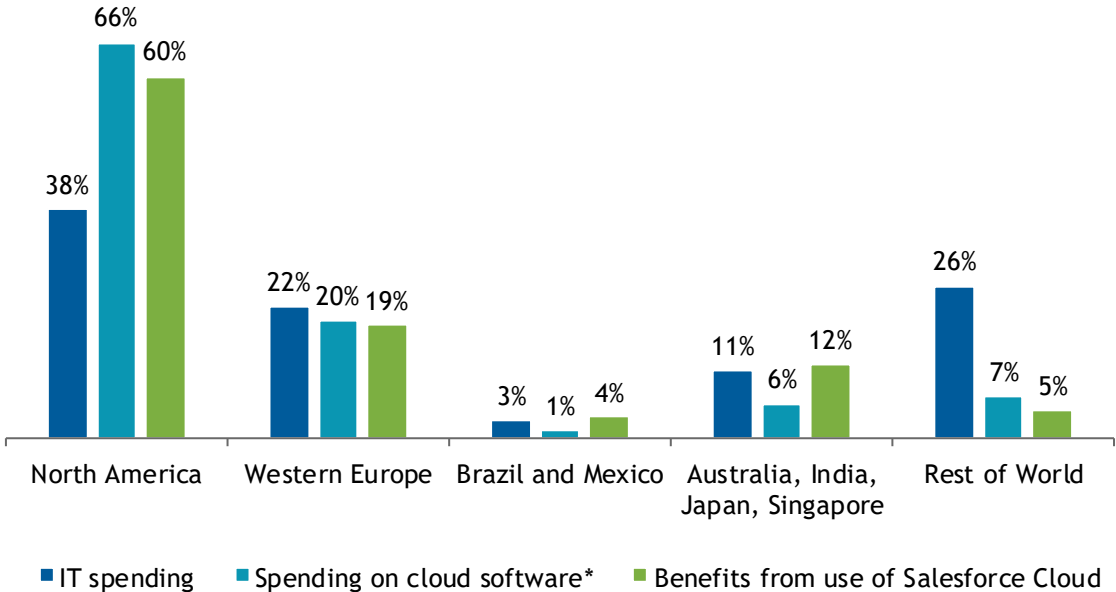
The Developed Markets Still Lead

If IT spending is concentrated in developed economies – and it is – spending on cloud computing is more so. So is Salesforce revenue. It's no surprise then, that the financial benefits of using Salesforce cloud services are as well.

Figure 3 shows, by region, the 2019 share of IT spending, spending on cloud software, and the business revenue benefits from using Salesforce cloud services.

FIGURE 3

The Salesforce Economy: Spending and Benefits Share by Region, 2019



*The data is for PaaS and SaaS.

Source: IDC, 2019

Over time, the emerging markets will catch up as they progress up the technology substitution curve. And, with less legacy IT activity to displace, their use of cloud services might open up even more room for IT innovation.

Finance and Manufacturing Capture More Than a Third of Benefits

The distribution of worldwide business revenue by industry is much more aligned with IT spending and cloud spending than regional distribution.

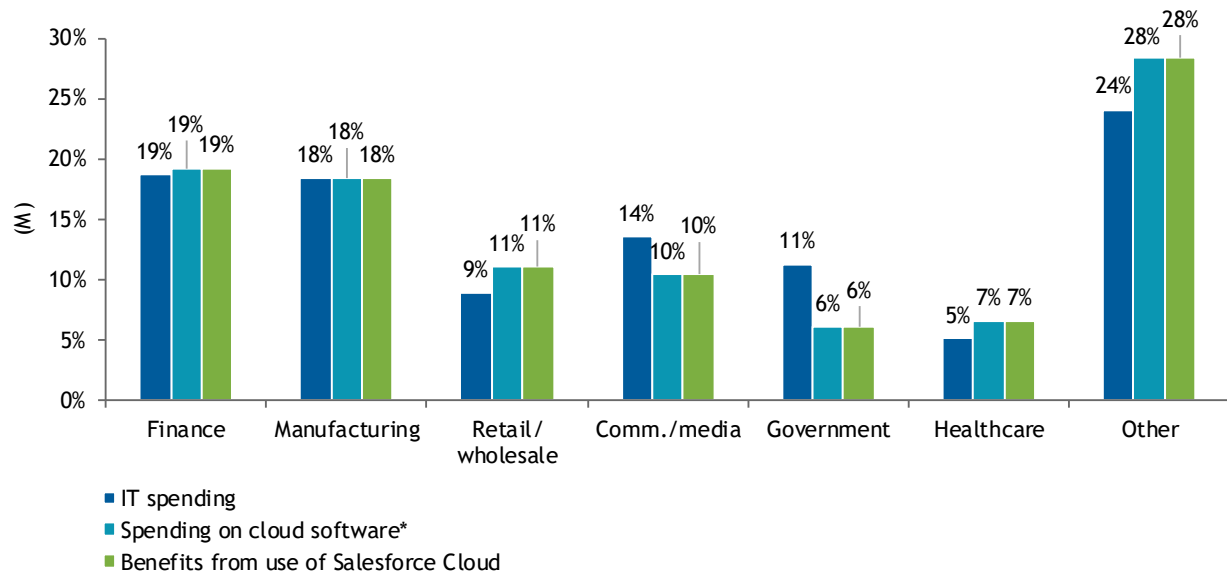
The reasons are twofold:

- The industries sum across regions and thus absorb the disparity in spending on cloud computing by region.
- The industries are adopting cloud computing at roughly similar rates as a percentage of IT spending.

Figure 4 shows the relative spending and business revenue figures by industry for 2019.

FIGURE 4

The Salesforce Economy: Spending and Benefits Share by Industry, 2019



*The data is for PaaS and SaaS.

Source: IDC, 2019

The graph shows that manufacturing and finance account for 38% of the total economic benefit from using Salesforce cloud services – but then they account for 37% of IT spending. They account for less IT spending, but more benefit than the four other enumerated industries combined.

Note that for the purpose of this analysis, healthcare includes private health insurance and life sciences. Life sciences, in turn, harvest spending from pharmaceuticals and biotech, government, education, and professional services. Finance includes banks, insurance companies (excluding health insurance), and securities firms.

The Salesforce Ecosystem

IDC's research⁵ shows that, in almost every case, every cloud subscription sold is accompanied by other products and services provided by Salesforce itself or other third-party providers. These can include additional cloud subscriptions, say for storage or security, additional software, say for cloud services management or add-on analytics, or even hardware or networking, especially for private cloud computing implementations.

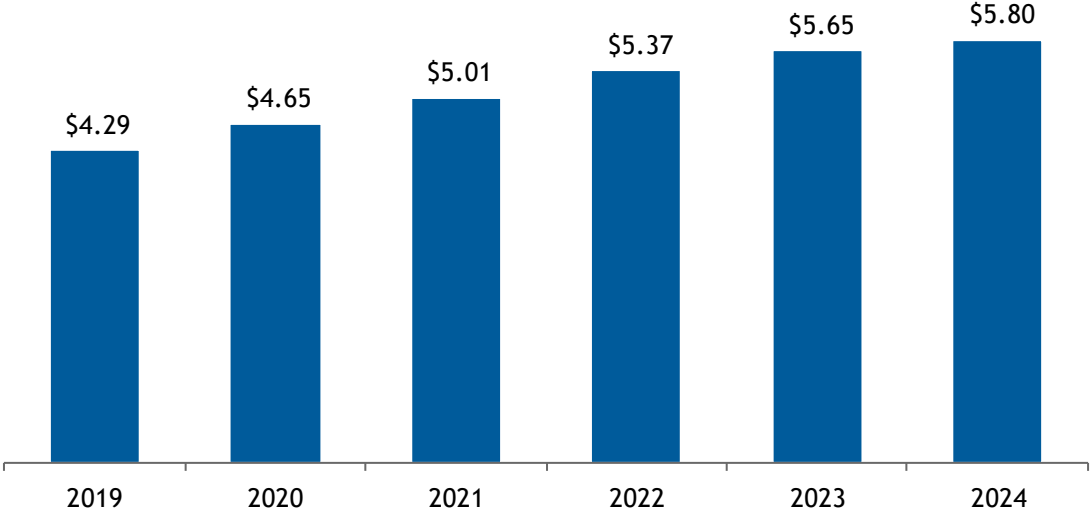
These additional products and services mean that the ecosystem that surrounds Salesforce implementations is larger than Salesforce itself. What's more, as customer implementations become more complex and mission critical, the ecosystem will also grow faster than Salesforce.

In fact, IDC estimates that in 2019 for every \$1 Salesforce will make, the ecosystem will make \$4.29. By 2024, that figure will be \$5.80 (see Figure 5).

FIGURE 5

The Salesforce Ecosystem: An Expanding Universe, 2019-2024

Worldwide ecosystem revenue per \$1 of Salesforce revenue



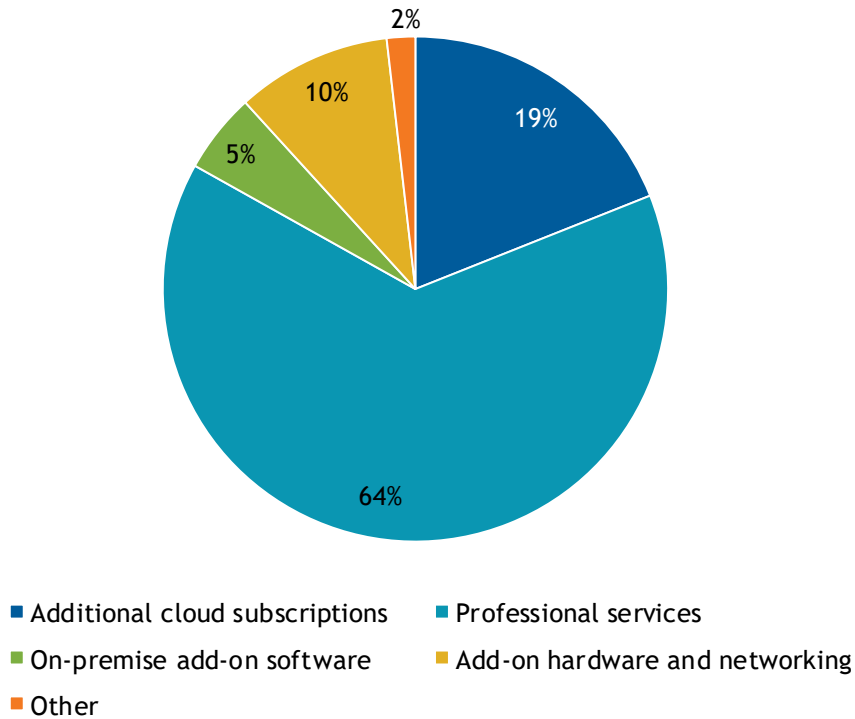
Source: IDC, 2019

⁵In addition to its annual *Global CloudView Survey*, this research includes programs on cloud professional services, cloud IT infrastructure, cloud management software, and cloud security, to name a few.

Based on past surveys conducted by IDC on the constellation of products and services that surround a cloud services implementation, IDC tracks the Salesforce ecosystem by category (see Figure 6).

FIGURE 6

The Ecosystem Building Blocks, 2019



Source: IDC, 2019

New Additions to the Salesforce Equation

IDC ranks Salesforce as the number 1 provider of software as a service and the number 3 provider of platform as a service. Partners routinely rate the company's brand recognition, customer reputation, and product breadth and depth highly. The company's annual customer and partner event gathers more than 170,000 attendees under one roof. And Wall Street is bullish on the company, generally rating its stock a "buy."⁶

One could argue that if the growth of cloud computing is behind the growth of Salesforce, then the reverse is also true: that the growth of Salesforce helps drive the growth of cloud computing.

⁶Based on Yahoo Finance analyst recommendations as of October 20, 2019 (finance.yahoo.com/quote/CRM/analysis?p=CRM).

In addition, two recent Salesforce acquisitions have had an impact on the analysis:

- The acquisition of Tableau Software, a purveyor of analytics, completed in August, instantly adds more than \$1 billion of revenue to Salesforce.⁷ While the majority of that is not cloud based as yet, increased cloud revenue is expected in the future, in line with market trends.
- The acquisition of MuleSoft, a company that offers tools to unlock data from any application, data source, or device – whether that data is in the cloud or on-premise – will also have an impact. As enterprises migrate toward more interdependent solutions, such integration tools should make it easier for partners and customers to connect to the constellation of products and services around their core Salesforce implementations.

CONCLUSION

The world's enterprises are undergoing a digital transformation that started with the dot-com era and extends years into the future. And cloud computing, growing at a much faster pace than IT as a whole, is a major factor in that transformation.

In fact, according to IDC's forecast of today's trillion-dollar market for digital transformation-related technology, the use of cloud-delivered software involved with digital transformation projects is growing at 30% a year. By 2024, nearly 50% of cloud software spending will be tied to digital transformation.

The messages in this study for organizations utilizing or interested in cloud computing are:

- The payoff to the wider organization – in business agility, shaping customer experiences, and bringing new products to new markets – is much greater than the impact on the IT organization, just as digital transformation is more than an IT function.
- Successful implementations require concerted efforts on the part of the customer, cloud providers, and providers of ancillary services and products.
- Salesforce, as a recognized market leader, helps bring all three to the table. The maturity model for cloud computing entails migration from ad hoc projects to a "cloud" approach.
- The breadth and variety of cloud applications and development platforms available today mean that most of an organization's business processes and workflows can be migrated to the cloud. Legacy systems – the large enterprise applications installed in past decades – can become part of the digital transformation.

IDC's forecasts show a significant payback from investments in cloud computing out to 2024. But even by then, spending on public cloud computing will be less than 15% of spending on IT. We may be past the knee of the curve on cloud adoption, but there is still significant growth opportunity ahead.

Salesforce and its ecosystem are well positioned to help customers utilize that headroom.

⁷The U.K. Competition and Markets Authority, as disclosed by Salesforce, is currently reviewing Salesforce's acquisition of Tableau and in connection with this review has issued an Initial Enforcement Order. Pursuant to the terms of this order, while Salesforce is permitted to consolidate Tableau financially, it is holding Tableau operationally separate. For the sake of this White Paper, however, IDC is treating Tableau as part of Salesforce.

APPENDIX A: DATA TABLES

Tables 1 and 2 provide the economic benefits by country and industry, respectively. Tables 3 and 4 provide the details of the economic impact by country and industry, respectively.

TABLE 1

Country Economic Benefits Summary

	Business Revenue Created, YE2019-YE2024	Direct Jobs Created, YE2019-YE2024	Indirect/Induced Jobs Created, YE2019-YE2024	Ecosystem Revenue/SF Revenue 2019	Ecosystem Revenue/SF Revenue 2024
Canada	\$20,132	33,100	54,300	4.61	6.89
United States	\$513,744	868,800	1,197,300	4.22	5.49
North America	\$533,876	901,900	1,251,600	4.22	5.51
France	\$79,028	153,900	406,700	4.52	6.61
Germany	\$30,329	61,700	97,600	4.21	6.21
Netherlands	\$23,126	34,700	54,200	4.34	6.35
Spain	\$17,313	48,600	60,900	5.59	8.22
United Kingdom	\$71,134	143,700	255,300	4.25	6.29
Rest of Western Europe	\$21,549	50,300	83,400	4.16	6.15
Western Europe	\$242,479	492,900	958,100	4.41	6.48
Australia	\$25,753	42,400	77,700	4.11	6.10
India	\$67,223	548,400	1,362,400	4.52	6.58
Japan	\$109,544	199,700	245,900	4.79	7.07
Singapore	\$5,609	8,500	17,000	4.50	6.57
Brazil	\$61,991	491,000	780,100	5.06	7.56
Mexico	\$38,388	223,400	281,000	4.44	6.69
Subtotal	\$308,508	1,513,400	2,764,100	4.64	6.91
Rest of World	\$98,133	1,283,600	1,613,700	4.53	6.58
Worldwide	\$1,182,995	4,191,800	6,587,500	4.29	5.80

Source: IDC, 2019

TABLE 2**Industry Economic Benefits Summary**

	Business Revenue Created, 2019–2024	Direct Jobs Created, 2019–2024	Indirect/Induced Jobs Created, 2019–2024	Ecosystem Revenue/SF Revenue 2019	Ecosystem Revenue/SF Revenue 2024
Finance	\$224,288	730,900	1,148,500	3.86	5.23
Manufacturing	\$211,687	765,800	1,203,500	4.72	6.39
Retail/wholesale	\$134,834	539,700	848,200	4.29	5.81
Communications and media	\$129,707	473,800	744,600	4.29	5.81
Government	\$64,697	254,400	399,800	4.72	6.39
Health and life sciences*	\$68,524	222,600	349,700	3.86	5.23
Other	\$349,257	1,204,600	1,893,200	4.29	5.81
Worldwide	\$1,182,995	4,191,700	6,587,500	4.29	5.80

*Includes health insurance.

Source: IDC, 2019

TABLE 3

Economic Impact Details by Country, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
France								
Direct jobs	44,100	69,000	90,300	112,800	149,700	174,100	198,000	153,900
Business revenue created (\$M)	\$8,341	\$12,155	\$14,566	\$17,755	\$22,398	\$27,930	\$34,271	\$79,028
Indirect/induced jobs	73,900	184,100	240,200	288,400	377,000	434,100	480,600	406,700
Ecosystem-to-Salesforce revenue ratio	4.09	4.52	5.03	5.49	5.97	6.36	6.61	
Germany								
Direct jobs	16,500	21,700	28,300	35,800	46,700	60,000	78,200	61,700
Business revenue created (\$M)	\$2,710	\$4,203	\$5,130	\$6,356	\$8,112	\$10,192	\$12,597	\$30,329
Indirect/induced jobs	25,800	34,600	45,600	56,500	73,900	95,600	123,400	97,600
Ecosystem-to-Salesforce revenue ratio	3.79	4.21	4.65	5.10	5.56	5.95	6.21	
Netherlands								
Direct jobs	8,100	11,400	15,100	20,000	26,700	34,200	42,800	34,700
Business revenue created (\$M)	\$2,138	\$3,310	\$3,990	\$4,940	\$6,247	\$7,820	\$9,645	\$23,126
Indirect/induced jobs	12,600	18,000	24,100	31,200	41,800	53,900	66,800	54,200
Ecosystem-to-Salesforce revenue ratio	3.92	4.34	4.78	5.23	5.70	6.10	6.35	

TABLE 3

Economic Impact Details by Country, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
Spain								
Direct jobs	11,800	16,600	22,200	29,400	38,700	49,100	60,400	48,600
Business revenue created (\$M)	\$1,470	\$2,291	\$2,803	\$3,520	\$4,547	\$5,780	\$7,195	\$17,313
Indirect/induced jobs	14,700	20,800	28,100	36,700	48,400	61,700	75,600	60,900
Ecosystem-to-Salesforce revenue ratio	5.02	5.59	6.18	6.78	7.40	7.91	8.22	
United Kingdom								
Direct jobs	40,700	54,300	69,100	88,900	114,100	146,600	184,400	143,700
Business revenue created (\$M)	\$6,871	\$10,612	\$12,718	\$15,529	\$19,589	\$24,275	\$29,640	\$71,134
Indirect/induced jobs	71,300	97,000	125,400	157,400	202,600	262,500	326,600	255,300
Ecosystem-to-Salesforce revenue ratio	3.81	4.25	4.70	5.15	5.62	6.02	6.29	
Rest of Western Europe								
Direct jobs	11,700	16,000	19,600	25,300	34,700	47,800	62,000	50,300
Business revenue created (\$M)	\$1,827	\$2,834	\$3,469	\$4,359	\$5,628	\$7,179	\$9,043	\$21,549
Indirect/induced jobs	19,200	26,800	33,200	41,900	57,500	79,900	102,600	83,400
Ecosystem-to-Salesforce revenue ratio	3.75	4.16	4.60	5.04	5.50	5.89	6.15	

TABLE 3

Economic Impact Details by Country, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
Western Europe Total								
Direct jobs	132,900	189,000	244,600	312,200	410,600	511,800	625,800	492,900
Business revenue created (\$M)	\$23,358	\$35,405	\$42,676	\$52,459	\$66,522	\$83,176	\$102,393	\$242,479
Indirect/induced jobs	217,500	381,300	496,600	612,100	801,200	987,700	1,175,600	958,100
Ecosystem-to-Salesforce revenue ratio	3.96	4.41	4.87	5.33	5.82	6.22	6.48	
United States								
Direct jobs	345,700	461,500	568,300	714,500	920,700	1,082,000	1,214,500	868,800
Business revenue created (\$M)	\$75,560	\$109,873	\$124,072	\$142,004	\$167,432	\$196,139	\$227,587	\$513,744
Indirect/induced jobs	465,600	632,100	787,600	974,200	1,258,800	1,491,100	1,662,900	1,197,300
Ecosystem-to-Salesforce revenue ratio	3.90	4.22	4.55	4.86	5.17	5.39	5.49	
Canada								
Direct jobs	14,800	20,100	22,400	27,700	35,000	42,700	47,900	33,100
Business revenue created (\$M)	\$2,228	\$3,325	\$3,907	\$4,692	\$5,819	\$7,145	\$8,613	\$20,132
Indirect/induced jobs	23,000	31,900	36,200	44,000	55,900	69,200	77,300	54,300
Ecosystem-to-Salesforce revenue ratio	4.14	4.61	5.11	5.62	6.14	6.60	6.89	

TABLE 3

Economic Impact Details by Country, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
Australia								
Direct jobs	18,100	22,600	28,200	36,500	45,700	54,100	60,500	42,400
Business revenue created (\$M)	\$3,771	\$4,577	\$5,697	\$7,151	\$8,685	\$10,305	\$11,962	\$25,753
Indirect/induced jobs	32,200	41,200	52,400	66,200	83,100	99,400	109,900	77,700
Ecosystem-to-Salesforce revenue ratio	3.68	4.11	4.56	5.00	5.47	5.85	6.10	
India								
Direct jobs	220,300	275,000	349,200	441,500	544,700	655,900	768,700	548,400
Business revenue created (\$M)	\$4,793	\$6,385	\$8,777	\$12,140	\$16,996	\$22,565	\$29,116	\$67,223
Indirect/induced jobs	554,900	690,400	874,700	1,103,000	1,359,300	1,636,500	1,917,300	1,362,400
Ecosystem-to-Salesforce revenue ratio	4.06	4.52	4.98	5.44	5.91	6.31	6.58	
Japan								
Direct jobs	88,500	106,000	135,900	155,900	191,100	242,700	288,200	199,700
Business revenue created (\$M)	\$8,139	\$11,122	\$15,352	\$20,895	\$28,402	\$36,429	\$46,176	\$109,544
Indirect/induced jobs	107,300	130,400	169,300	190,800	234,500	299,600	353,200	245,900
Ecosystem-to-Salesforce revenue ratio	4.33	4.79	5.28	5.77	6.30	6.75	7.06	

TABLE 3

Economic Impact Details by Country, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
Singapore								
Direct jobs	4,200	5,000	5,800	7,100	8,200	10,600	12,700	8,500
Business revenue created (\$M)	\$841	\$1,016	\$1,249	\$1,577	\$1,982	\$2,283	\$2,544	\$5,609
Indirect/induced jobs	7,900	9,600	11,500	13,600	15,900	21,000	24,900	17,000
Ecosystem-to-Salesforce revenue ratio	4.07	4.50	4.96	5.41	5.89	6.30	6.57	
Brazil								
Direct jobs	138,600	179,400	253,900	318,700	397,400	508,000	629,600	491,000
Business revenue created (\$M)	\$2,977	\$3,864	\$6,653	\$8,968	\$12,926	\$19,005	\$28,440	\$61,991
Indirect/induced jobs	217,000	284,800	408,600	503,700	629,700	811,100	997,100	780,100
Ecosystem-to-Salesforce revenue ratio	4.54	5.06	5.62	6.17	6.74	7.25	7.56	
Mexico								
Direct jobs	48,700	64,500	91,100	117,000	155,500	208,200	272,100	223,400
Business revenue created (\$M)	\$2,020	\$2,816	\$4,838	\$6,354	\$8,678	\$11,880	\$15,940	\$38,388
Indirect/induced jobs	59,300	79,800	114,100	144,700	193,300	261,200	340,300	281,000
Ecosystem-to-Salesforce revenue ratio	3.98	4.44	4.93	5.43	5.95	6.40	6.69	

TABLE 3

Economic Impact Details by Country, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
Rest of World								
Direct jobs	253,200	338,200	481,500	707,900	942,600	1,229,100	1,536,800	1,283,600
Business revenue created (\$M)	\$6,179	\$8,758	\$12,039	\$16,455	\$23,208	\$32,382	\$42,364	\$98,133
Indirect/induced jobs	308,300	418,100	602,900	875,500	1,172,000	1,542,300	1,922,000	1,613,700
Ecosystem-to-Salesforce revenue ratio	4.09	4.53	4.99	5.44	5.92	6.32	6.57	
Worldwide								
Direct jobs	1,265,000	1,661,300	2,180,900	2,839,000	3,651,500	4,545,100	5,456,800	4,191,800
Business revenue created (\$M)	\$129,866	\$187,142	\$225,260	\$272,695	\$340,650	\$421,309	\$515,134	\$1,182,995
Indirect/induced jobs	1,993,000	2,699,600	3,553,900	4,527,800	5,803,700	7,219,100	8,580,500	6,587,500
Ecosystem-to-Salesforce revenue ratio	3.93	4.29	4.65	5.01	5.37	5.65	5.80	

Note: Data shows job creation and business revenue from the use of cloud computing by Salesforce clients.

Source: IDC, 2019

TABLE 4

Economic Impact Details by Industry, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
Finance								
Direct jobs	224,000	293,700	384,600	499,500	640,700	796,400	954,900	730,900
Business revenue created (\$M)	\$24,972	\$35,929	\$43,137	\$52,101	\$64,902	\$80,167	\$97,887	\$224,288
Indirect/induced jobs	353,000	477,300	626,800	796,700	1,018,300	1,265,000	1,501,500	1,148,500
Ecosystem-to-Salesforce revenue ratio	3.5	3.9	4.2	4.5	4.8	5.1	5.2	
Manufacturing								
Direct jobs	240,000	312,800	408,200	529,000	678,300	841,000	1,005,800	765,800
Business revenue created (\$M)	\$24,072	\$34,435	\$41,201	\$49,658	\$61,839	\$76,191	\$92,795	\$211,687
Indirect/induced jobs	378,000	508,300	665,200	843,700	1,078,000	1,335,800	1,581,500	1,203,500
Ecosystem-to-Salesforce revenue ratio	4.3	4.7	5.1	5.5	5.9	6.2	6.4	
Retail/wholesale								
Direct jobs	155,600	206,400	272,400	356,200	460,400	576,100	695,300	539,700
Business revenue created (\$M)	\$14,189	\$20,658	\$24,992	\$30,396	\$38,161	\$47,446	\$58,313	\$134,834
Indirect/induced jobs	245,100	335,400	443,800	568,100	731,800	915,000	1,093,300	848,200
Ecosystem-to-Salesforce revenue ratio	3.9	4.3	4.7	5.0	5.4	5.7	5.8	

TABLE 4

Economic Impact Details by Industry, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
Communications and media								
Direct jobs	133,500	177,000	235,200	308,400	399,500	501,500	607,300	473,800
Business revenue created (\$M)	\$13,393	\$19,485	\$23,742	\$28,950	\$36,424	\$45,435	\$56,028	\$129,707
Indirect/induced jobs	210,300	287,600	383,300	491,900	635,000	796,600	954,900	744,600
Ecosystem-to-Salesforce revenue ratio	3.9	4.3	4.7	5.0	5.4	5.7	5.8	
Government								
Direct jobs	89,000	114,000	146,600	187,600	238,000	291,100	343,400	254,400
Business revenue created (\$M)	\$8,112	\$11,413	\$13,452	\$16,011	\$19,724	\$23,972	\$28,799	\$64,697
Indirect/induced jobs	140,100	185,300	238,900	299,200	378,200	462,300	539,900	399,800
Ecosystem-to-Salesforce revenue ratio	4.3	4.7	5.1	5.5	5.9	6.2	6.4	
Health and life sciences*								
Direct jobs	78,600	100,100	128,100	163,500	207,000	254,300	301,200	222,600
Business revenue created (\$M)	\$8,763	\$12,246	\$14,363	\$17,053	\$20,972	\$25,593	\$30,875	\$68,524
Indirect/induced jobs	123,900	162,700	208,700	260,800	329,000	403,800	473,600	349,700
Ecosystem-to-Salesforce revenue ratio	3.5	3.9	4.2	4.5	4.8	5.1	5.2	

TABLE 4

Economic Impact Details by Industry, 2018-2024

	2018	2019	2020	2021	2022	2023	2024	Six-Year Gain, 2019–2024
Other								
Direct jobs	344,300	457,300	605,800	794,800	1,027,600	1,284,700	1,548,900	1,204,600
Business revenue created (\$M)	\$36,365	\$52,976	\$64,373	\$78,526	\$98,628	\$122,505	\$150,437	\$349,257
Indirect/induced jobs	542,600	743,000	987,200	1,267,400	1,633,400	2,040,600	2,435,800	1,893,200
Ecosystem-to-Salesforce revenue ratio	3.9	4.3	4.7	5.0	5.4	5.7	5.8	
World								
Direct jobs	1,265,000	1,661,300	2,180,900	2,839,000	3,651,500	4,545,100	5,456,800	4,191,800
Business revenue created (\$M)	\$129,866	\$187,142	\$225,260	\$272,695	\$340,650	\$421,309	\$515,134	\$1,182,995
Indirect/induced jobs	1,993,000	2,699,600	3,553,900	4,527,800	5,803,700	7,219,100	8,580,500	6,587,500
Ecosystem-to-Salesforce revenue ratio	3.9	4.3	4.7	5.0	5.4	5.7	5.8	

*Includes private health insurance, pharmaceuticals, some academic and government research, biotech, and contract research organizations.

Note: Data shows job creation and business revenue from the use of cloud computing.

Source: IDC, 2019

APPENDIX B: METHODOLOGY

The Benefits of Cloud Computing

Since 2002, IDC has maintained an internal tool called the IDC IT Economic Impact Model (EIM), which takes inputs from IDC's market research on IT spending, exchange rates, and vendor market share, along with public inputs such as GDP, tax rates, and overall labor force from other sources. The output of the EIM is IT company and employee counts by geographic region.

In 2012, IDC added inputs for spending on cloud computing, percentage of IT resources available for innovation (the rest used on legacy system support and upgrades), and business revenue as a multiple of GDP per country.

Using research-driven algorithms that compare total IT spending with spending on cloud computing and IT budgets with business revenue; the degree to which IT innovation drives business innovation; and estimates of business benefits from accelerated development schedules, faster project completion, and shorter time to market for new products, the model generates job head counts and business revenue in the general economy because of the use of cloud computing to free up IT resources.

In short, increased IT innovation leads to increased business innovation, which leads to increased revenue, which creates new jobs. Outputs from the cloud-infused EIM have been published in various IDC research projects and are a critical input to the European Union's Digital Agenda for Europe.

The Salesforce Economy

As a major vendor of cloud services, Salesforce accounts for a significant share of the benefits to the general economy from cloud computing. That share is enhanced by other contributions from the ecosystem described in this White Paper.

The Salesforce Economic Impact Model is an extension to IDC's IT Economic Impact Model. It estimates Salesforce's current and future share of the benefits to the general economy generated by cloud computing, and it also estimates the size of the ecosystem supporting Salesforce using IDC's market research on the ratio of spending on professional services to cloud subscriptions; the ratio of sales of hardware, software, and networking to spending on public and private cloud computing; and the ratio of spending on application development tools to applications developed.

Note that the ecosystem may include companies that are not formal business partners of Salesforce but that nevertheless sell products or services associated with the Salesforce implementations.

Key Definitions in Support of Tables and Figures

- Direct jobs are those created in the Salesforce and Salesforce ecosystem customer bases from the use of cloud computing.
- Indirect/induced jobs are those created by spending in the general economy by people filling the direct jobs.
- Net gain in jobs is the difference from year-end 2019 to year-end 2024. For revenue, it is the aggregate difference from each year to 2019.
- Business revenue is the revenue created in the Salesforce and Salesforce ecosystem customer bases from the use of cloud computing. It does not equate directly to GDP.
- The Salesforce revenue forecast is based on Wall Street forecasts and internal IDC estimates. It is not for publication.

The CloudView Survey

Inputs to the Salesforce Economic Impact Model include data from IDC's CloudView series of global surveys; the 2018 survey polled 5,740 enterprise users of cloud computing in 32 countries.

Differences between the 2017 study and the 2019 study are discussed in this section.

This study follows the same methodology as the study mentioned before that was published in 2017, but there are significant differences in the input data that preclude comparing the numbers presented in the two studies. These include:

- Changing IDC forecasts of cloud spending, especially in out years
- Changing IDC forecasts by country
- Changing exchange rates
- Changing IDC estimates of Salesforce revenue by country

Each of these will affect the final calculation of jobs and business revenue created, but the area that changed the most was IDC's allocation of Salesforce software revenue by country in its annual IDC Software Tracker.

It is customary, when new information comes available, that IDC restates prior years. Sometimes the restatement derives from new information on growth rates, sometimes on new information on spending. In this case, year-to-year growth rates were preserved, but not annual revenue. Particularly affected in the restatement were Canada, France, India, Netherlands, Spain, the United Kingdom, and the rest of the world category.

Readers of both documents are therefore advised not to make decisions or assumptions about the nature of the Salesforce economy by comparing both documents. Rather, rely on the most current one.

About IDC

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