White Paper

The Salesforce Economy Forecast: 3.3 Million New Jobs and $859 Billion New Business Revenue to Be Created from 2016 to 2022

Sponsored by: Salesforce

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IN THIS WHITE PAPER

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

The study relies on IDC's forecasts of job creation from organizational use of cloud computing, IDC's understanding 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.

This White Paper updates earlier editions published in 2016 and 2015.

EXECUTIVE SUMMARY

- Worldwide, Salesforce and its ecosystem are expected to enable the creation of 3.3 million jobs within the Salesforce customer base from the use of cloud computing between the end of 2016 and the end of 2022.
- Over the same period, the benefits of cloud computing accruing to Salesforce customers will add $859 billion in new business revenue to their local economies and help drive growth in gross domestic product (GDP).
- Cloud computing generates these benefits primarily by permitting an increase in IT innovation, which in turn supports business innovation that leads to accelerated development schedules, faster project completion, shorter time to market for new products, and lower operational costs.
- Because organizations that spend on cloud computing subscriptions also spend on ancillary products and services, from additional cloud subscription and professional services to supporting software, hardware, and managed services, the Salesforce ecosystem in 2017 is nearly four times bigger than Salesforce itself. By 2022, it will be more than five times bigger.
- The United States, because of its large share of cloud computing implementations and Salesforce's global revenue, will generate about half of the world's financial gain from the Salesforce customer set, but many more jobs will be created in emerging markets where labor costs are low.
- Between 2016 and 2022, the Salesforce economy's largest impacts on industries will be in finance, with the forecast creation of $164 billion in new business revenue and 585,000 new jobs, and manufacturing, with $159 billion in new business revenue and 638,000 in new jobs.

ECONOMIC BENEFITS SUMMARY

Tables 1 and 2 show the summary of the impact of Salesforce as well as its ecosystem of partners and its customers in the countries and industries studied. Detailed definitions are provided in Appendix B.

TABLE 1

Economic Benefits Summary by Country

	Business Revenue Created ($M), YE2016–YE2022	Direct Jobs Created, YE2016–YE2022	Indirect/Induced Jobs Created, YE2016–YE2022	Ecosystem Revenue/ Salesforce Revenue, 2016	Ecosystem Revenue/ Salesforce Revenue, 2022
Canada	17,072	28,208	47,699	3.7	5.9
United States	411,343	408,760	582,361	3.4	5.0
France	24,346	37,115	108,923	3.6	5.7
Germany	17,024	26,291	43,669	3.3	5.4
Netherlands	7,399	9,651	15,735	3.4	5.5
Spain	2,916	6,877	8,788	4.3	6.6
United Kingdom	65,605	114,545	214,615	3.3	5.4
Rest of Western Europe	26,145	53,424	100,048	3.3	5.3
Australia	29,563	26,559	52,680	3.2	5.3
India	17,292	363,110	723,866	3.5	5.6
Japan	108,425	153,387	195,102	3.8	6.0
Singapore	2,962	3,810	7,805	3.6	5.7
Brazil	26,958	195,683	330,448	3.9	5.9
Mexico	10,954	81,069	105,415	5.1	7.3
Rest of World	91,224	1,819,284	2,356,688	3.5	5.6
Worldwide	859,228	3,327,773	4,893,842	3.4	5.2

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 2

Economic Benefits Summary by Industry

	Business Revenue Created ($M), YE2016–YE2022	Direct Jobs Created, YE2016–YE2022	Indirect/Induced Jobs Created, YE2016–YE2022	Ecosystem Revenue/ Salesforce Revenue, 2016	Ecosystem Revenue/ Salesforce Revenue, 2022
Finance	163,769	584,995	860,164	3.1	4.7
Manufacturing	159,055	638,296	938,548	3.8	5.7
Retail/wholesale	92,612	401,355	590,171	3.4	5.2
Communications and media	89,847	360,451	529,761	4.3	5.2
Government	50,931	221,640	326,048	3.8	5.7
Health and life sciences*	68,241	244,096	359,219	3.1	4.7
Other	234,774	876,940	1,289,931	3.4	5.2
Worldwide	859,228	3,327,773	4,893,842	3.4	5.2

* Includes private health insurance

Source: IDC's Salesforce Economic Impact Model, 2017

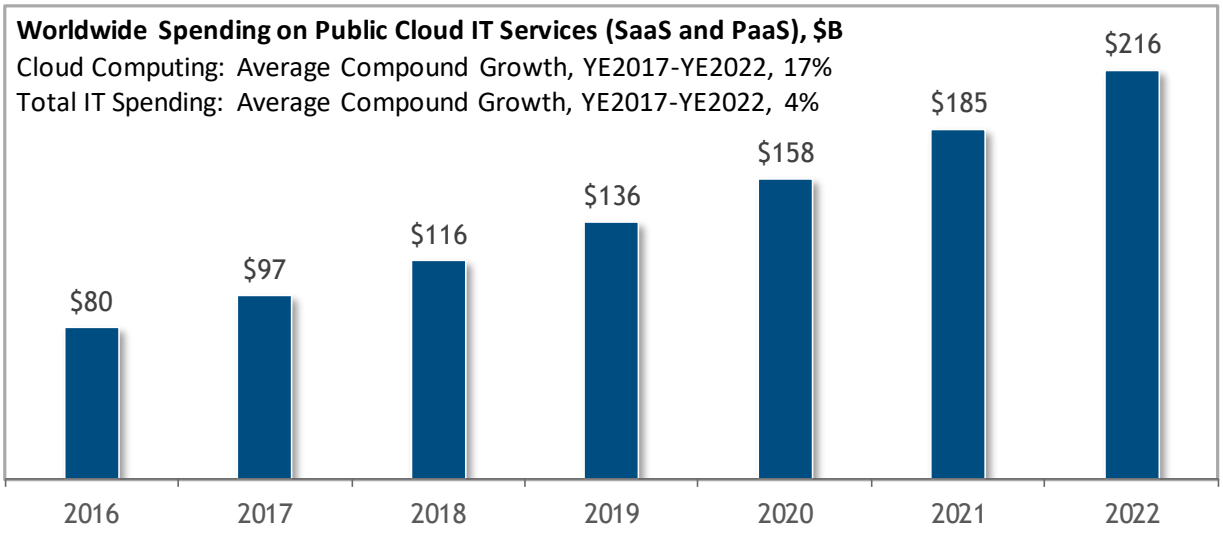
CLOUD COMPUTING: A SOFTWARE ENGINE FOR IT GROWTH

When Salesforce released its first product in 2000, cloud computing was in its infancy, an unproven computing technique. In fact, cloud computing didn't surpass 1% of IT spending until 2009. Even today, public cloud computing accounts for less than 6% of IT spending and only 20% of spending on software.

But despite its small share of the $2.1 trillion IT market, public cloud computing has been a major contributor to *growth* in IT spending, as shown in Figure 1.

FIGURE 1

The Rapid Growth of Cloud Computing Software, 2016–2022



Note: SaaS stands for software as a service, including applications and infrastructure software; PaaS stands for platform as a service, or application development software. Not included is infrastructure as a service, which is basically storage and server capacity sold as a service.

Source: IDC's Salesforce Economic Impact Model, 2017

HOW SALESFORCE CLOUD OFFERINGS DRIVE BENEFITS

IDC has been tracking and predicting the impact of cloud computing on local economies since 2009. That research, along with research by other academics, shows that the economic impact of cloud computing is much larger than just the efficiencies it can bring to an IT organization.

The leverage from cloud computing comes from the fact that so much of traditional IT is tied up with maintenance of legacy systems and routine upgrades – in fact, 71% according to a survey conducted by IDC in 2015.

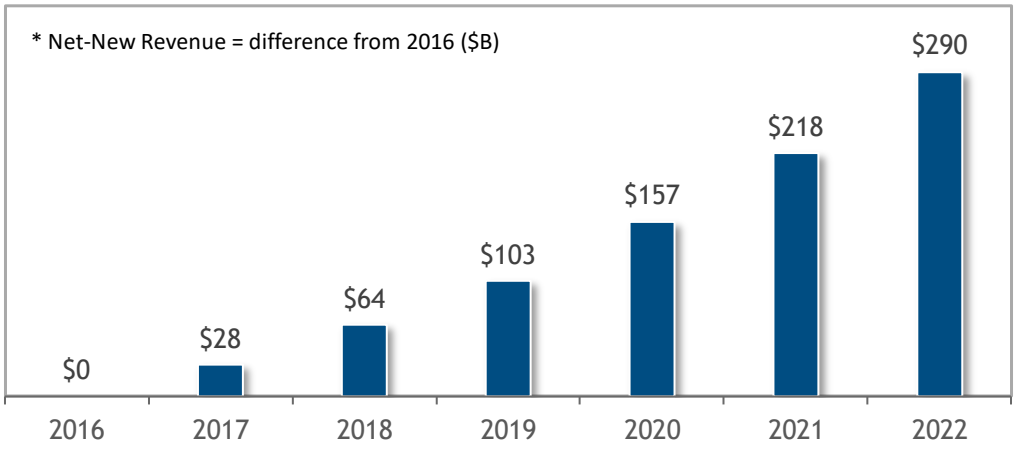
By outsourcing these routine, low-value-add tasks to cloud providers, IT organizations can shift budget and personnel to innovation to support new business opportunities, which in turn drives new business revenue. In fact, IDC estimates that for 2017, public and private IT cloud services will account for $1.2 trillion in business revenue – in a global economy of $180 trillion in revenue.

Because Salesforce represents nearly 10% of the public cloud software market, and its ecosystem even more, a not insubstantial share of all that revenue will accrue to Salesforce customers.

In fact, IDC estimates that from the end of 2016 to the end of 2022, the use of cloud computing will add $859 billion in revenue – nearly $140 billion a year – to the ongoing revenue streams of Salesforce customers (see Figure 2). The revenue and growth will help drive the gross domestic product of their economies.

FIGURE 2

$859 Billion in Net-New* Global Revenue from Cloud Computing by Salesforce Customers, 2016-2022



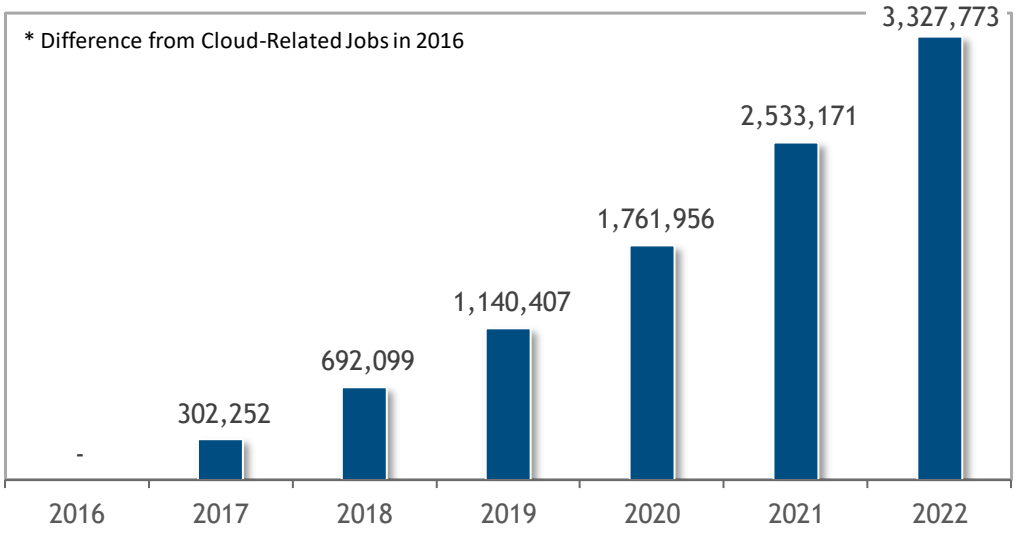
Source: IDC's Salesforce Economic Impact Model, 2017

That revenue in turn generates employment – someone has to design, market, sell, produce, and services the products and services driving revenue.

IDC estimates a net increase in jobs produced in the Salesforce economy of 3.3 million from the end of 2016 to the end of 2022, as shown in Figure 3.

FIGURE 3

3.3 Million in Net-New* Global Jobs from Cloud Computing by Salesforce Customers, 2016-2022



Source: IDC's Salesforce Economic Impact Model, 2017

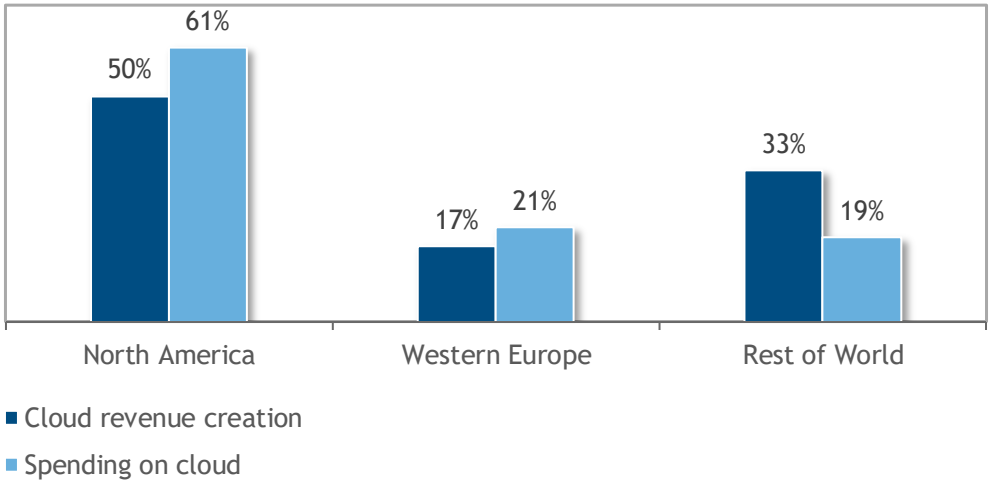
There are also additional jobs created in the supply and distribution chains serving those Salesforce customers and from new company employees spending money in the general economy. These jobs, called *indirect* or *induced* jobs by economists, are not calculated here, but economists generally estimate that every *direct* job creates more than 1-2 *indirect* or *induced* jobs.

The distribution of the impact on business revenue can be seen in Figure 4, which compares the share of spending on public cloud computing with the business revenue generated by the use of cloud computing.

The aggregate business revenue in the emerging economies captured in Rest of World is higher as a share of cloud spending than in developed economies because they are dealing with less existing IT infrastructure to hamper IT innovation and are just beginning their journey to the cloud.

FIGURE 4

Share of Aggregate Revenue Creation, 2016-2022



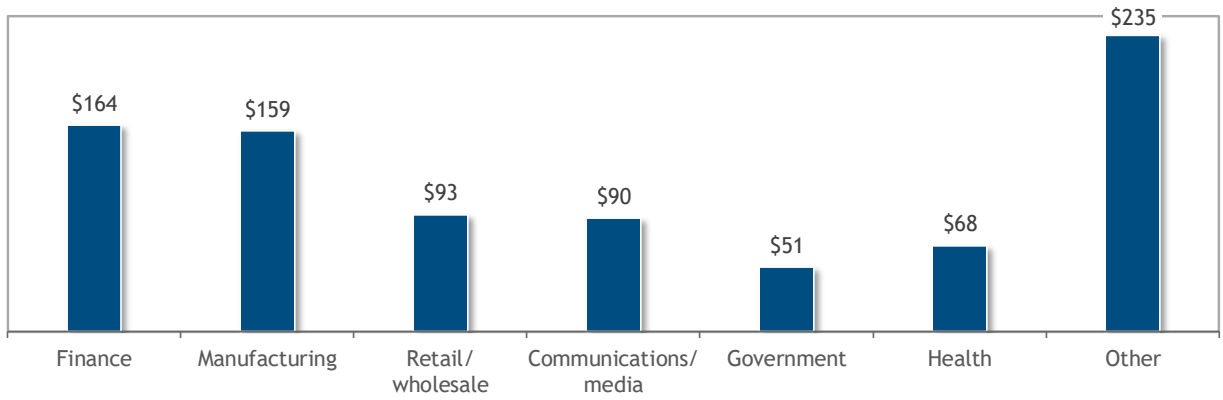
Source: IDC's Salesforce Economic Impact Model, 2017

The impact of the ecosystem by industry is shown in Figure 5. The distribution of business revenue created roughly tracks spending on cloud computing, with some differences by industry. For instance, while finance is forecast to create more revenue than manufacturing, it will create fewer jobs – a function of the higher salaries in finance.

Note that healthcare includes private health insurance and life sciences, which harvest spending from pharmaceuticals and biotech (manufacturing), government, education, and professional services ("other").

FIGURE 5

Aggregate Revenue Creation, 2016-2022 ($B)



Source: IDC's Salesforce Economic Impact Model, 2017

THE SALESFORCE ECOSYSTEM

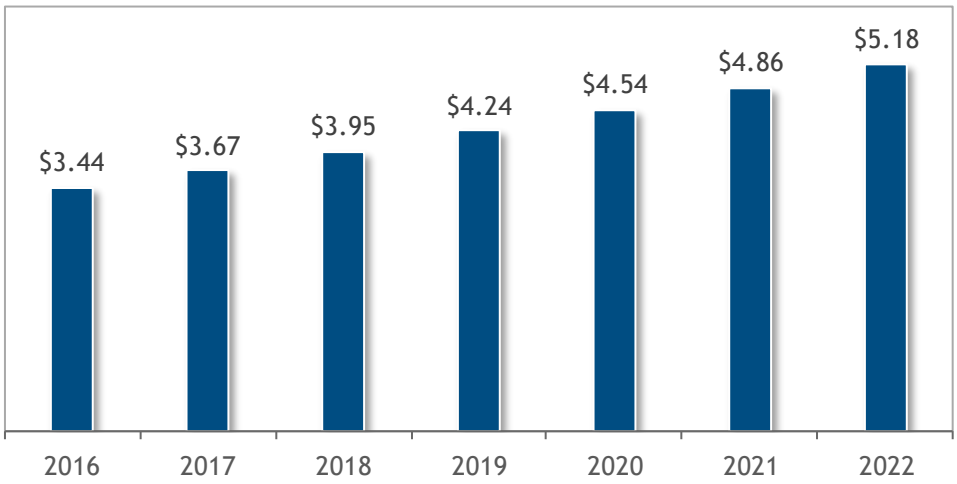
IDC's research shows that, for the most part, every cloud subscription sold is accompanied by other products and services. These can include additional cloud subscriptions, for storage or security; additional software, for cloud services management or add-on analytics; or even hardware or networking, especially for private cloud computing implementations.

These additional products and services mean that the ecosystem that surrounds Salesforce implementations is larger than Salesforce itself. It is also expected to grow faster based on the expected growth of the Salesforce partner network and the expected growth of ancillary products and services needed by customers as their implementations become more complex and mission critical.

In fact, IDC estimates that in 2017, for every dollar Salesforce will make, the ecosystem will make $3.67. By 2022, that figure will be $5.18 (see Figure 6).

FIGURE 6

Worldwide Salesforce Ecosystem Growth, 2016-2022



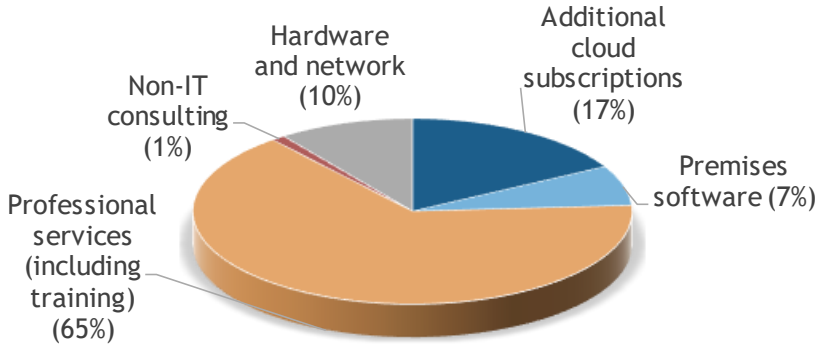
Note: Data is for dollars of ecosystem revenue for a dollar of Salesforce revenue.

Source: IDC's Salesforce Economic Impact Model, 2017

Based on past surveys conducted by IDC in the constellation of products and services that surround a cloud services implementation, IDC tracks the Salesforce ecosystem by category, as shown in Figure 7. Over time, the category percentages will change somewhat – less hardware, more premises software – but not by much.

FIGURE 7

The Salesforce Makeup by Category, 2017



Total = 100%

Source: IDC's Salesforce Economic Impact Model, 2017

Note that the Salesforce ecosystem includes all companies that provide the products and services that surround a Salesforce implementation. Many, but not all, will be recognized Salesforce partners. The others may be brought into the project by partners or by the end-user organizations themselves. And any single Salesforce partner could well make a higher multiple of Salesforce than the aggregate ecosystem average.

What drives the partners?

First there's the chance to grow revenue. In a survey of 75 partners in 2016, respondents reported a 48% increase in revenue year on year. Ecosystem revenue as a whole is expected to more than triple from 2016 to 2022.

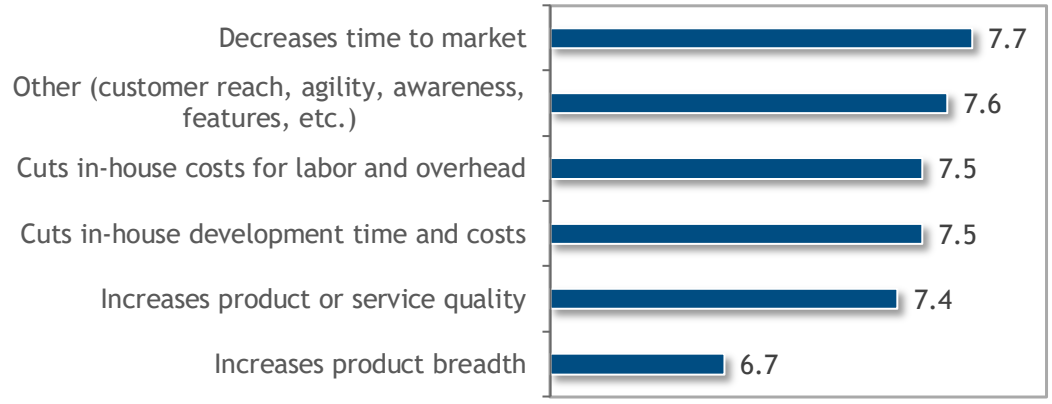
The partners cited other specific benefits from working with Salesforce, such as:

- Using the Salesforce Platform development tools cut their development time 40% compared with traditional development methods.
- Using the Salesforce Platform allowed them to cut the cost of quality assurance by 45% and decrease time to market by 39%.
- Using the Salesforce AppExchange allowed them to increase market reach 13% and improve their sales closing rate by 39%.

Specific developer ratings of the Salesforce advantage can be seen in ratings from the 2016 survey, as shown in Figure 8.

FIGURE 8

Benefits of Developing Using Salesforce Tools



n = 75

Note: Mean scores are based on a scale of 1-10, with 10 being most important.

Source: IDC's *Salesforce ISV Partner Survey,* July 2016

Other advantages mentioned by Salesforce partners in the 2016 survey and interviews include:

- Salesforce brand recognition and reputation
- Product quality and ease of integration, as well as depth and breadth
- The ability to reach the market using AppExchange
- Increased leverage with lines of business and C-suite executives
- Analytics and marketing support

CONCLUSION

The world's enterprises are in the midst of a major transformation: a digital transformation that started with the dot-com era and will extend 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, it is helping anchor a forecast 17% annual growth for products and services supporting digital transformation projects, which will reach $2 trillion by 2020.

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

- The payoff to the larger 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 customers, 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. Organizations on this journey need suppliers that can support them all the way.
- 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 2022. But even by then, spending on public cloud computing will be less than 13% of spending on IT. We are still on the ground floor of cloud computing, with lots of headroom for more payback.

Salesforce and its ecosystem are well positioned to help customers take advantage of that headroom.

APPENDIX A: DETAILED BENEFITS DATA

Tables 3–18 show IDC's estimates of the impact of the Salesforce economy by country.

TABLE 3

U.S. Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	216,979	262,142	316,012	375,013	446,249	528,425	625,739
Business revenue created ($M)*	61,930	75,837	93,121	112,728	137,710	165,878	197,652
Indirect/induced jobs	293,115	363,209	429,975	509,116	628,007	700,368	875,476
Ecosystem-to-Salesforce revenue ratio	3.40	3.61	3.87	4.13	4.40	4.67	4.95

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 4

Canada Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	15,690	18,617	21,536	25,188	30,414	36,506	43,898
Business revenue created ($M)*	2,856	3,452	4,058	4,820	5,896	7,206	8,778
Indirect/induced jobs	24,437	29,921	33,980	39,720	50,105	56,226	72,136
Ecosystem-to-Salesforce revenue ratio	3.74	4.03	4.36	4.70	5.07	5.46	5.87

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 5

France Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	11,454	13,627	17,359	26,570	32,343	39,662	48,569
Business revenue created ($M)*	1,720	2,518	3,266	5,078	6,274	7,813	9,720
Indirect/induced jobs	19,377	23,808	29,633	70,811	88,804	99,360	128,300
Ecosystem-to-Salesforce revenue ratio	3.59	3.87	4.20	4.54	4.92	5.31	5.72

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 6

Germany Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	10,081	12,609	16,331	19,854	24,371	29,844	36,372
Business revenue created ($M)*	1,805	2,406	3,162	3,918	4,866	6,035	7,465
Indirect/induced jobs	15,969	20,580	26,054	31,553	40,402	45,884	59,638
Ecosystem-to-Salesforce revenue ratio	3.30	3.57	3.89	4.23	4.59	4.97	5.37

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 7

Netherlands Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	3,766	4,545	5,807	7,190	8,859	10,919	13,417
Business revenue created ($M)*	719	1,000	1,292	1,623	2,034	2,557	3,208
Indirect/induced jobs	5,886	7,305	9,128	11,258	14,428	16,572	21,621
Ecosystem-to-Salesforce revenue ratio	3.41	3.68	4.01	4.34	4.70	5.09	5.49

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 8

Spain Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	2,063	2,712	3,521	4,435	5,580	7,048	8,940
Business revenue created ($M)*	293	380	505	643	813	1,031	1,302
Indirect/induced jobs	2,556	3,423	4,386	5,514	7,122	8,602	11,344
Ecosystem-to-Salesforce revenue ratio	4.33	4.62	5.00	5.36	5.76	6.18	6.62

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 9

U.K. Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	48,380	59,375	73,800	90,190	109,793	134,065	162,925
Business revenue created ($M)*	8,282	10,295	13,040	16,169	20,006	24,971	30,816
Indirect/induced jobs	85,660	108,495	131,603	160,234	204,567	229,791	300,275
Ecosystem-to-Salesforce revenue ratio	3.32	3.60	3.94	4.28	4.64	5.02	5.42

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 10

Rest of Western Europe Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	21,868	27,045	33,605	40,355	48,214	60,290	75,292
Business revenue created ($M)*	3,545	4,402	5,484	6,636	8,017	10,104	12,769
Indirect/induced jobs	38,717	49,420	59,925	71,696	89,833	103,339	138,765
Ecosystem-to-Salesforce revenue ratio	3.29	3.55	3.87	4.18	4.53	4.90	5.28

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 11

Australia Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	11,666	14,231	17,351	21,140	25,793	31,500	38,225
Business revenue created ($M)*	4,634	4,800	5,787	6,555	10,786	13,265	16,170
Indirect/induced jobs	21,340	27,127	32,142	39,023	50,400	55,964	74,020
Ecosystem-to-Salesforce revenue ratio	3.19	3.48	3.81	4.14	4.50	4.88	5.28

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 12

India Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	193,313	224,610	279,042	317,735	398,897	473,204	556,423
Business revenue created ($M)*	1,769	2,265	3,037	3,734	4,964	6,237	7,669
Indirect/induced jobs	353,604	428,160	516,918	586,509	779,449	840,728	1,077,470
Ecosystem-to-Salesforce revenue ratio	3.46	3.74	4.07	4.41	4.78	5.17	5.57

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 13

Japan Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	69,776	88,617	107,889	126,171	153,725	186,255	223,163
Business revenue created ($M)*	11,672	16,046	21,066	25,178	31,065	38,378	46,726
Indirect/induced jobs	84,909	110,488	132,113	153,994	194,316	221,828	280,011
Ecosystem-to-Salesforce revenue ratio	3.81	4.12	4.46	4.81	5.19	5.58	6.00

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 14

Singapore Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	2,649	3,164	3,789	4,383	4,974	5,674	6,459
Business revenue created ($M)*	481	605	744	884	1,039	1,202	1,374
Indirect/induced jobs	5,036	6,238	7,281	8,406	10,092	10,434	12,841
Ecosystem-to-Salesforce revenue ratio	3.56	3.84	4.18	4.52	4.89	5.27	5.68

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 15

Brazil Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	114,692	139,981	177,448	218,783	263,658	317,901	310,375
Business revenue created ($M)*	3,236	4,069	5,287	6,643	8,206	10,005	12,166
Indirect/induced jobs	180,749	227,117	282,439	347,628	436,295	493,004	511,197
Ecosystem-to-Salesforce revenue ratio	3.86	4.12	4.45	4.78	5.15	5.53	5.94

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 16

Mexico Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	31,459	38,431	46,972	56,437	68,781	87,976	112,528
Business revenue created ($M)*	1,292	1,628	2,044	2,511	3,147	4,092	5,281
Indirect/induced jobs	38,206	47,900	57,802	69,458	87,610	106,718	143,621
Ecosystem-to-Salesforce revenue ratio	5.06	5.34	5.74	6.16	6.52	6.90	7.29

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 17

Rest of World Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	561,078	707,460	886,551	1,121,877	1,455,219	1,898,816	2,380,362
Business revenue created ($M)*	12,280	14,764	18,471	22,535	28,296	35,245	45,594
Indirect/induced jobs	681,415	881,764	1,090,962	1,380,729	1,853,584	2,303,320	3,038,103
Ecosystem-to-Salesforce revenue ratio	3.53	3.80	4.12	4.45	4.81	5.19	5.59

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 18

Worldwide Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	1,314,914	1,617,166	2,007,013	2,455,321	3,076,870	3,848,085	4,642,687
Business revenue created ($M)*	116,514	144,469	180,365	219,655	273,119	334,019	406,689
Indirect/induced jobs	1,850,976	2,334,955	2,844,341	3,485,649	4,535,014	5,292,138	6,744,818
Ecosystem-to-Salesforce revenue ratio	3.44	3.67	3.95	4.24	4.54	4.86	5.18

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

Tables 19–26 show IDC's estimates of the impact of the Salesforce economy by industry. Note that health and life sciences includes private health insurance.

TABLE 19

Finance Industry Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	228,144	281,061	349,112	428,573	538,304	673,610	813,139
Business revenue created ($M)*	21,915	27,222	34,019	41,573	51,807	63,400	77,240
Indirect/induced jobs	321,152	405,814	494,764	608,413	793,410	926,393	1,181,316
Ecosystem-to-Salesforce revenue ratio	3.10	3.32	3.57	3.83	4.10	4.38	4.67

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 20

Manufacturing Industry Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	249,314	305,619	378,822	462,890	580,721	731,003	887,610
Business revenue created ($M)*	21,554	26,640	33,223	40,412	50,300	61,921	75,882
Indirect/induced jobs	350,955	441,266	536,863	657,137	855,927	1,005,323	1,289,503
Ecosystem-to-Salesforce revenue ratio	3.79	4.05	4.36	4.68	5.01	5.36	5.71

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 21

Communications and Media Industry Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	135,312	167,035	208,373	256,127	322,769	407,291	495,763
Business revenue created ($M)*	11,698	14,560	18,274	22,361	27,957	34,500	42,383
Indirect/induced jobs	190,476	241,175	295,306	363,606	475,730	560,133	720,237
Ecosystem-to-Salesforce revenue ratio	4.33	4.62	5.00	5.36	5.76	6.18	5.19

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 22

Retail/Wholesale Industry Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016–2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	157,182	194,462	242,440	296,973	371,876	464,029	558,537
Business revenue created ($M)*	12,354	15,410	19,329	23,570	29,283	35,733	43,409
Indirect/induced jobs	221,262	280,775	343,587	421,592	548,110	638,163	811,433
Ecosystem-to-Salesforce revenue ratio	3.45	3.68	3.96	4.25	4.56	4.87	5.19

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 23

Health and Life Sciences Industry Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	101,987	123,687	152,061	184,703	231,708	288,294	346,083
Business revenue created ($M)*	9,797	11,980	14,818	17,917	22,300	27,134	32,874
Indirect/induced jobs	143,565	178,586	215,502	262,209	341,516	396,480	502,784
Ecosystem-to-Salesforce revenue ratio	3.10	3.32	3.57	3.83	4.10	4.38	4.67

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 24

Government Industry Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	89,864	110,187	136,825	166,722	207,121	258,628	311,504
Business revenue created ($M)*	7,063	8,732	10,909	13,232	16,309	19,916	24,210
Indirect/induced jobs	126,500	159,095	193,909	236,683	305,277	355,683	452,548
Ecosystem-to-Salesforce revenue ratio	3.79	4.05	4.36	4.68	5.01	5.36	5.71

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 25

Other Industry Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	353,111	435,115	539,380	659,333	824,371	1,025,230	1,230,051
Business revenue created ($M)*	32,134	39,925	49,793	60,591	75,163	91,415	110,692
Indirect/induced jobs	497,066	628,244	764,410	936,009	1,215,044	1,409,963	1,786,997
Ecosystem-to-Salesforce revenue ratio	3.45	3.68	3.96	4.25	4.56	4.87	5.19

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

TABLE 26

Worldwide Industry Job Creation and Business Revenue from the Use of Cloud Computing and Salesforce Ecosystem Ratio, 2016-2022

	2016	2017	2018	2019	2020	2021	2022
Direct jobs	1,314,914	1,617,166	2,007,013	2,455,321	3,076,870	3,848,085	4,642,687
Business revenue created ($M)*	116,514	144,469	180,365	219,655	273,119	334,019	406,689
Indirect/induced jobs	1,850,976	2,334,955	2,844,341	3,485,649	4,535,014	5,292,138	6,744,818
Ecosystem-to-Salesforce revenue ratio	3.44	3.67	3.95	4.24	4.54	4.86	5.18

* Business revenue differs from GDP as it includes business-to-business sales, not just value added.

Source: IDC's Salesforce Economic Impact Model, 2017

APPENDIX B: METHODOLOGY

The Benefits of Cloud Computing

Since 2002, IDC has maintained an internal tool called the IDC 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 2009, 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

The following contains definitions of terms used in tables and figures throughout this White Paper:

- 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 2016 to year-end 2022. For revenue, it is the aggregate difference from each year to 2016.
- 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 Salesforce ecosystem includes those selling the following in conjunction with Salesforce implementations:
  - Additional cloud subscriptions (e.g., storage and security)
  - Professional services and/or business consulting supporting implementation, integration, and training
  - Additional hardware, software, or networking in support of implementations, including integration with private clouds
- Many, but not all, Salesforce ecosystem companies are registered partners with Salesforce.

Supporting Surveys

Inputs to the Salesforce Economic Impact Model include data from IDC's CloudView series of global surveys. The 2017 survey polled 6,064 enterprise users of cloud computing in 31 countries.

Also, in the summer of 2016, IDC conducted a survey of 75 Salesforce partners across English-speaking countries and a half dozen in-depth interviews. The interviews explored partner investments in various aspects of supporting Salesforce implementations, the revenue growth of partners, and the attitudes and opinions of partners regarding their relationship with Salesforce.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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