

APPENDIX TABLE 6-4

Value added of commercial KI services, by region, country, or economy: 2001–16

(Millions of current dollars)

Region, country, or economy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
World	5,144,488	5,384,004	5,987,024	6,631,846	7,164,483	7,715,196	8,685,581	9,211,631	9,021,000	9,538,473	10,364,505	10,694,121	11,015,690	11,453,772	11,214,091	11,603,987
North America																
Canada	104,990	107,700	127,304	147,879	168,208	193,736	215,324	225,364	204,720	238,423	263,054	266,241	267,933	259,668	231,821	234,076
Mexico	43,752	53,846	51,877	57,079	69,933	77,180	88,590	93,763	79,301	89,173	93,408	91,546	101,711	101,977	90,558	87,234
United States	2,093,129	2,176,045	2,242,879	2,360,336	2,554,458	2,700,102	2,798,520	2,782,103	2,744,513	2,808,594	2,896,087	3,073,178	3,145,323	3,329,223	3,511,380	3,651,827
Central and South America																
Argentina	49,976	16,426	17,160	18,968	23,089	28,621	36,211	45,502	44,512	52,031	60,100	66,561	67,443	56,861	63,416	56,489
Bolivia	880	797	731	724	761	840	956	1,182	1,309	1,469	1,604	1,971	2,256	2,532	2,858	3,542
Brazil	79,070	74,752	77,459	89,047	124,919	156,705	198,410	228,426	235,247	301,756	350,272	332,363	324,495	330,688	243,225	245,755
Chile	10,258	8,902	8,610	10,935	13,505	15,822	19,345	21,786	21,723	26,246	31,665	34,921	37,070	34,285	32,653	33,724
Colombia	11,052	11,163	10,620	13,149	16,543	18,288	24,166	29,099	28,395	34,076	37,996	42,131	43,167	43,064	33,517	32,765
Costa Rica	1,611	1,735	1,869	2,040	2,321	2,750	3,294	3,922	4,209	5,102	5,955	7,053	7,703	7,648	8,537	9,429
Ecuador	2,209	2,750	3,111	3,446	4,082	4,534	4,983	5,610	6,078	6,887	7,939	9,014	9,516	10,440	9,898	9,502
Honduras	772	782	837	932	1,032	1,153	1,325	1,541	1,682	1,781	1,854	1,966	2,055	2,164	2,243	2,301
Panama	2,540	2,645	2,668	2,725	3,064	3,327	3,653	4,145	4,798	5,095	5,625	6,285	6,876	7,696	8,200	9,027
Peru	4,541	5,098	5,347	5,782	6,456	7,448	8,704	10,604	11,484	13,782	15,778	18,188	19,542	20,701	20,303	21,195



Region, country, or economy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Uruguay	3,861	2,561	1,983	2,006	2,567	2,862	3,321	4,169	4,483	5,848	6,937	7,711	8,690	8,733	8,231	8,242
Venezuela	11,300	8,704	7,259	7,901	8,899	12,547	18,174	23,089	27,932	17,332	23,337	31,148	30,598	23,996	39,421	7,521
Europe																
EU	1,286,811	1,425,377	1,754,195	2,039,676	2,134,222	2,273,043	2,652,480	2,796,762	2,588,107	2,515,130	2,672,954	2,553,884	2,657,593	2,756,970	2,441,890	2,467,507
Austria	24,757	27,731	33,476	37,741	40,119	43,341	49,929	56,062	49,929	49,610	53,667	50,627	53,507	54,681	46,846	48,203
Belgium	39,155	43,047	52,358	61,354	64,102	68,001	78,016	85,951	83,898	84,449	90,431	86,211	90,948	93,841	81,323	83,492
Bulgaria	1,087	1,363	1,870	2,402	2,937	3,233	5,078	6,911	6,744	7,550	8,628	7,812	7,941	8,129	7,023	7,225
Czech Republic	6,976	8,999	11,376	13,128	15,207	17,509	22,347	29,741	26,737	27,520	30,177	27,175	27,762	27,395	23,842	24,170
Denmark	19,398	21,148	26,882	30,951	32,438	34,506	39,823	47,101	45,492	44,410	48,662	45,552	48,318	49,623	43,751	44,859
Finland	14,155	15,379	16,922	20,404	19,931	21,671	26,983	29,466	27,096	26,285	28,885	27,969	29,084	30,650	26,577	27,481
France	192,714	215,404	268,957	308,490	320,349	343,568	393,070	423,387	408,078	404,507	433,196	421,344	422,021	422,244	366,750	376,478
Germany	296,234	322,053	387,258	437,795	433,275	449,196	503,946	536,286	498,180	480,863	510,280	486,454	529,290	544,705	467,235	485,160
Greece	13,608	16,364	21,321	27,363	28,017	32,151	37,212	39,088	38,500	33,554	30,918	26,380	25,189	23,704	19,615	19,795
Hungary	5,895	7,910	10,179	12,453	14,046	14,861	17,147	19,533	17,531	17,385	18,155	16,301	16,962	17,316	15,049	15,547
Ireland	18,320	20,183	29,001	35,915	40,667	44,532	53,581	57,208	52,273	53,579	57,476	55,688	59,196	62,851	56,390	60,914
Italy	163,010	178,041	225,726	252,800	261,160	264,715	308,303	336,831	310,938	299,634	317,946	291,841	298,828	302,635	257,774	259,393
Netherlands	66,193	73,371	93,939	106,457	113,080	115,034	128,265	140,460	140,304	139,148	143,977	134,094	138,564	141,070	122,606	124,710
Poland	23,163	23,651	25,832	30,300	36,474	40,024	51,992	65,386	53,291	56,767	61,951	57,952	63,089	67,399	55,912	57,063
Portugal	15,064	16,459	20,640	24,064	25,007	27,779	32,989	37,704	33,369	30,651	32,134	26,603	26,042	25,703	21,985	22,473

Region, country, or economy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Romania	4,197	4,576	5,453	7,024	8,825	11,548	18,123	22,274	17,415	18,585	22,635	20,248	28,494	29,655	28,098	30,228
Slovakia	1,937	2,667	3,552	4,539	5,410	6,251	8,517	10,784	11,327	11,260	12,268	11,860	12,158	12,518	10,679	10,982
Spain	77,761	88,578	112,949	131,436	141,499	157,024	192,362	218,440	210,881	178,552	180,586	165,104	158,896	165,417	140,992	148,355
Sweden	31,874	33,756	42,269	50,769	52,657	55,717	64,715	68,893	58,895	66,311	78,509	77,344	84,677	85,841	76,120	79,399
United Kingdom	271,313	304,695	364,236	444,290	479,022	522,383	620,083	565,257	497,232	484,511	512,472	517,327	536,626	591,591	573,323	541,581
Other Europe																
Norway	15,785	18,801	23,810	28,074	31,456	33,152	42,059	47,068	45,074	48,906	55,345	58,419	60,909	58,779	48,686	47,518
Russia	26,397	30,429	39,830	55,895	75,751	100,477	141,563	178,336	145,459	163,331	184,618	206,443	227,222	215,206	147,907	146,827
Switzerland	61,994	65,151	77,317	86,058	90,373	96,796	111,294	121,085	119,746	125,231	149,702	145,881	152,492	153,229	146,522	145,137
Turkey	25,958	21,966	25,435	32,507	38,748	42,947	57,361	67,114	64,632	69,984	67,604	72,166	76,434	72,826	70,414	72,909
Ukraine	3,023	3,555	4,578	7,673	8,536	10,810	16,794	23,318	14,361	15,712	16,424	18,898	20,938	14,733	8,614	8,937
Middle East																
Bahrain	2,210	2,259	2,777	3,494	4,154	4,559	5,492	5,858	5,872	6,312	6,339	6,697	7,005	7,371	7,232	7,777
Iran	7,539	10,080	13,188	15,944	18,174	22,761	30,671	37,824	39,303	45,930	57,789	43,108	31,923	37,154	35,244	38,397
Israel	26,726	24,910	25,591	28,751	32,023	33,957	40,120	50,271	50,130	54,559	60,907	60,778	67,944	70,911	69,141	74,315
Jordan	1,371	1,503	1,592	1,809	2,233	2,535	2,884	3,691	3,877	4,463	4,878	5,372	5,899	6,233	6,527	6,786
Kuwait	3,477	4,151	5,793	7,287	11,078	14,422	20,330	20,757	16,237	18,103	15,141	15,514	15,766	16,819	11,914	12,013
Oman	2,040	2,151	2,176	2,333	2,619	3,162	3,779	4,481	4,815	5,433	6,090	7,118	7,894	9,054	9,552	9,256
Qatar	1,211	1,414	1,616	2,223	3,790	5,701	7,660	8,657	9,929	11,203	13,174	14,267	15,379	17,311	20,132	21,142



Region, country, or economy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Saudi Arabia	18,292	19,127	20,115	23,225	26,356	30,168	34,585	39,836	45,384	48,592	52,059	59,506	66,531	71,740	65,915	61,336
United Arab Emirates	13,885	15,749	17,775	21,373	26,488	31,254	41,162	46,133	44,715	45,300	48,785	53,159	58,745	60,686	57,711	59,395
Africa																
Cameroon	660	746	758	858	907	903	1,006	1,181	1,195	1,228	1,403	1,390	1,576	1,733	1,535	1,687
Egypt	15,581	12,967	10,901	12,784	13,665	14,706	16,851	20,667	23,063	25,667	29,867	31,552	30,606	33,625	35,718	32,001
Ghana	604	704	872	1,013	1,233	1,471	1,819	2,107	1,989	2,749	3,099	3,683	4,584	4,609	5,162	5,755
Kenya	1,396	1,377	1,696	1,577	1,839	2,344	2,897	3,328	3,419	3,631	3,584	4,370	5,048	5,576	5,565	6,261
Morocco	4,751	5,139	6,041	7,022	7,874	8,766	10,657	11,743	12,327	12,315	13,319	13,205	13,718	14,151	12,823	12,831
Nigeria	10,908	12,140	13,612	18,465	23,890	33,419	41,307	53,354	55,915	63,738	66,218	76,765	88,306	100,890	93,357	78,968
Senegal	411	466	626	792	901	1,032	1,258	1,513	1,423	1,429	1,579	1,541	1,677	1,754	1,565	1,864
South Africa	16,945	15,890	25,131	33,156	37,678	40,262	45,963	42,100	41,694	53,700	60,037	56,899	51,630	50,670	45,163	42,919
Tunisia	2,936	3,187	3,797	4,298	4,515	4,927	5,580	6,414	6,330	6,650	6,911	6,760	6,836	7,114	6,330	6,241
Asia																
Bangladesh	3,300	3,467	3,773	4,032	4,191	6,114	6,926	7,823	8,838	10,036	10,696	11,737	14,196	16,359	18,673	21,202
China	167,829	180,123	203,280	224,947	261,366	332,981	464,210	583,173	668,317	786,622	977,192	1,154,128	1,373,911	1,560,919	1,806,011	1,934,749
India	52,109	55,694	66,023	77,697	89,531	101,776	130,122	148,026	154,966	192,932	217,684	220,407	240,528	261,406	264,736	294,010
Indonesia	12,865	17,338	21,242	23,728	26,276	32,660	38,274	43,673	46,915	62,793	72,776	77,632	78,451	76,038	75,769	84,928
Japan	700,671	687,196	747,991	795,629	789,941	761,102	771,649	827,214	873,148	922,903	993,828	989,156	800,278	736,199	674,732	751,222
Malaysia	13,890	15,583	16,704	17,848	19,207	22,169	25,559	28,830	29,343	36,172	40,421	43,787	45,710	47,122	41,136	41,923



Region, country, or economy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pakistan	4,511	5,427	6,076	6,991	8,949	13,400	15,224	15,664	16,154	16,963	19,520	20,737	20,026	23,161	24,482	26,903
Philippines	8,676	9,438	9,981	10,977	12,877	15,715	19,500	22,485	22,030	26,082	29,520	33,727	37,543	39,231	41,135	42,858
Singapore	14,826	15,008	15,835	17,636	19,514	23,364	29,556	32,626	33,670	39,303	46,038	49,760	54,165	57,453	55,904	55,557
South Korea	62,933	78,741	86,802	92,189	110,423	124,743	138,664	123,887	109,325	129,351	142,909	148,560	154,490	168,734	166,445	169,833
Sri Lanka	883	1,280	1,419	1,492	1,747	2,264	2,694	3,258	3,502	4,126	3,898	4,301	4,639	5,041	5,216	5,450
Taiwan	43,257	42,865	43,029	46,444	50,047	50,483	52,399	53,875	47,899	53,267	58,870	59,676	61,227	63,373	62,011	63,264
Thailand	11,448	13,644	15,669	17,767	19,946	22,967	27,141	29,547	29,457	33,889	38,081	42,143	47,463	47,608	46,512	49,313
Vietnam	1,502	1,619	1,789	2,036	2,249	2,571	2,997	3,802	4,112	9,211	10,437	11,756	13,270	14,047	14,745	15,874
Australia and Oceania																
Australia	66,515	73,341	94,745	116,508	131,201	145,593	178,493	192,323	187,679	234,629	277,292	291,520	278,802	264,831	217,427	226,015
New Zealand	8,419	10,093	13,728	16,688	18,675	17,809	21,623	21,525	20,262	23,305	25,906	27,445	39,956	43,429	38,274	40,482

EU = European Union; KI = knowledge intensive.

Note(s)

Value added is the amount contributed by a country, firm, or other entity to the value of a good or service and excludes purchases of domestic and imported materials and inputs. KI services include business, financial, information, education, and health formerly classified by the Organisation for Economic Co-operation and Development. Commercial KI services include business, financial, and information. Data are not available for EU members Cyprus, Estonia, Latvia, Lithuania, Luxembourg, Malta, and Slovenia. China includes Hong Kong. Detail may not add to total because of rounding or minor discrepancies. See Appendix Table 6-1 for a full list of countries and economies in each region.

Source(s)

IHS Global Insight, World Industry Service database, accessed 17 July 2017.

Science and Engineering Indicators 2018