



kbv research

**Global
Geographical
Information
System Market
(2017-2023)**

March - 2018

KBV is a focused, knowledge-orientated Research and Analytics company, with a deep focus on market intelligence and actionable analysis of company and industry dynamics. KBV operates as a part of Marqual IT Solutions Pvt. Ltd. With a strong focus on not just the breadth and depth of research through its domain expertise but also on intelligent approach for providing the best rich research experience to the client. KBV focuses on bringing strong thought leadership through its innovations in the sphere of research, through understanding a gamut of issues across industries, and providing deep insights which facilitate the clients to accelerate their business growth, and thereby attain a remarkable position in market leadership and competition drift.

At KBV, we focus on in-depth disciplined research practices and proven analysis models, which help us to help you derive, validate, and implement rewarding growth strategies based on the comprehensive understanding of prevalent and relevant dynamics that affect your business.

Copyright © 2015 KBV

All Rights Reserved. This document contains highly confidential information and is the sole property of KBV. No part of it may be circulated, copied, quoted, or otherwise reproduced without the written approval of KBV.

Table of Contents

Chapter 1. Market Scope & Methodology	5
1.1 Objectives	5
1.2 Market Scope.....	5
1.3 Methodology for the research	5
Chapter 2. Executive Summary.....	6
2.1 Global Geographical Information System Market	6
2.1.1 Global Geographical Information System Market by Region	7
Chapter 3. Global Geographical Information System Market by Vertical	9
3.1 Introduction.....	9
3.2 Global Geographical Information System Market by Vertical	9
3.2.1 Global Geographical Information System in Utilities Market by Region.....	10
3.2.2 Global Geographical Information System in Transportation Market by Region	11
3.2.3 Global Geographical Information System in Government Agencies Market by Region.....	12
3.2.4 Global Geographical Information System in Retail Market by Region	13
3.2.5 Global Geographical Information System in Oil & Gas Market by Region	14
3.2.6 Global Geographical Information System in Healthcare Market by Region	15
3.2.7 Global Geographical Information System in Financial Services Market by Region	16
3.2.8 Global Geographical Information System in Telecom Market by Region	17
3.2.9 Global Geographical Information System in Others Market by Region	18

List of Tables

TABLE 1	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET, 2013 - 2016, USD MILLION	6
TABLE 2	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET, 2017 - 2023, USD MILLION	6
TABLE 3	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET BY REGION, 2013 - 2016, USD MILLION	7
TABLE 4	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET BY REGION, 2017 - 2023, USD MILLION	7
TABLE 5	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET BY VERTICAL, 2013 - 2016, USD MILLION	9
TABLE 6	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET BY VERTICAL, 2017 - 2023, USD MILLION	9
TABLE 7	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN UTILITIES MARKET BY REGION, 2013 - 2016, USD MILLION	10
TABLE 8	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN UTILITIES MARKET BY REGION, 2017 - 2023, USD MILLION	10
TABLE 9	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN TRANSPORTATION MARKET BY REGION, 2013 - 2016, USD MILLION	11
TABLE 10	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN TRANSPORTATION MARKET BY REGION, 2017 - 2023, USD MILLION	11
TABLE 11	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN GOVERNMENT AGENCIES MARKET BY REGION, 2013 - 2016, USD MILLION	12
TABLE 12	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN GOVERNMENT AGENCIES MARKET BY REGION, 2017 - 2023, USD MILLION	12
TABLE 13	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN RETAIL MARKET BY REGION, 2013 - 2016, USD MILLION	13
TABLE 14	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN RETAIL MARKET BY REGION, 2017 - 2023, USD MILLION	13
TABLE 15	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN OIL & GAS MARKET BY REGION, 2013 - 2016, USD MILLION	14
TABLE 16	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN OIL & GAS MARKET BY REGION, 2017 - 2023, USD MILLION	14
TABLE 17	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN HEALTHCARE MARKET BY REGION, 2013 - 2016, USD MILLION	15
TABLE 18	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN HEALTHCARE MARKET BY REGION, 2017 - 2023, USD MILLION	15
TABLE 19	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN FINANCIAL SERVICES MARKET BY REGION, 2013 - 2016, USD MILLION	16

TABLE 20	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN FINANCIAL SERVICES MARKET BY REGION, 2017 - 2023, USD MILLION	16
TABLE 21	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN TELECOM MARKET BY REGION, 2013 - 2016, USD MILLION	17
TABLE 22	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN TELECOM MARKET BY REGION, 2017 - 2023, USD MILLION	17
TABLE 23	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN OTHERS MARKET BY REGION, 2013 - 2016, USD MILLION	18
TABLE 24	GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN OTHERS MARKET BY REGION, 2017 - 2023, USD MILLION	18

Chapter 1. Market Scope & Methodology

1.1 Objectives

The report aims at providing stakeholders with an in-depth analysis of the global Geographical Information System market. Current and future market trends would determine the overall attractiveness of the market providing a platform for the companies to exploit the market potency and garner sizable market share. The study provides an in-depth analysis of major driving and restraining factors in the industry and highlight insights on the growth opportunities prevailing in the industry. Market estimation of the current market and estimations through 2017-2023 would provide the complete financial potency of the market.

1.2 Market Scope

The report includes actual historical market size for the period 2013-2015, estimate for 2016, and forecast for the period 2017-2023 of the global Geographical Information System market in the U.S. dollars. The 'forecast period' in the report refers to the period 2017-2023.

1.3 Methodology for the research

- The global Geographical Information System Market study was conducted with a perfect blend of primary and secondary research methodologies. In-depth understanding of the market was gained through rigorous secondary research. The gained insights were then validated with the telephonic interviews held with the key opinion leaders (KoL) such as top level executives and Association members.
- The historical market sizes were estimated based on the published data such as company annual reports, news, articles, press releases and other authentic sources available on secondary domain. The gathered information was verified with the help of detailed primary interviews.
- The market size forecasts were established with an in-depth analysis of the market trends, key influencing factors, historical market growth and strategic moves of the leading market participants. The estimates were scrutinized further during the primary interview sessions to derive the best representation for the Geographical Information System Market worldwide.
- The observed key influencing factors were analyzed to estimate their respective impact on the market size forecasts.

Chapter 2. Executive Summary

Geographic Information System is a tool that is used to collect, manages, analyse and provide required information for managing raw information as per the requirement of end-users. With technological advancements, the price of such system is expected to decrease in years to come. This would offer wide-ranging opportunity for the developing and underdeveloped economies to adopt such system to minimise the security concerns among the citizen of that country.

2.1 Global Geographical Information System Market

TABLE 1 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET, 2013 - 2016, USD MILLION

	2013	2014	2015	2016	CAGR % (2013-2016)
USD Million	7,082.7	7,677.6	8,337.9	9,100.2	8.7

Source: KBV Research and Secondary Research Analysis

TABLE 2 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET, 2017 - 2023, USD MILLION

	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
USD Million	9,992.0	11,061.2	12,355.3	13,912.1	15,776.3	18,016.5	20,701.0	12.9

Source: KBV Research and Secondary Research Analysis

The Global Geographical Information System Market attained a market size of \$9,100.2 million in 2016 and it is expected to reach \$20,701 million by 2023, growing at a CAGR of 12.9% during 2017 -2023.

The global GIS market is bifurcated based on product type, application, vertical and end-users. Software, service and data are the major types of products available in the market. The software segment is further bifurcated into desktop, mobile, cloud-based and other. In 2016, Software segment dominated the global GIS market by type with maximum market share in terms of revenue. Based on estimation, the segment is accounted for approximately half of the total market share within type segment. Service segment on the other hand would register fastest growth during the forecast period (2017-2023).

Furthermore, on the bases of application the market is segmented into disaster management, land information, map viewing (cartography), infrastructure management, business information, military & defence (geopolitics), mineral exploration (geoscience), biological and other. In 2016, adoption of GIS for disaster management dominated the application segment. Based on vertical, the report segments the market into utilities, transportation, government agencies, retail, oil & gas, healthcare, financial services, telecom and other. Utilities segment dominated the global GIS vertical segment in 2016. Public and private sectors are the major end-user of GIS technology.

Also, for better understanding and penetration of GIS in public and private sector, the market is analysed in different geography and countries including North America (U.S., Canada, Mexico and others), Europe (Germany, U.K., France, Russia, Spain, Italy and others), Asia-Pacific (China, Japan, India, South Korea, Singapore, Malaysia and others) and LAMEA (Brazil, Argentina, UAE, Saudi Arabia, South Africa, Nigeria and other).

2.1.1 Global Geographical Information System Market by Region

TABLE 3 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	3,138.7	3,349.1	3,580.2	3,862.0	7.2
Europe	2,267.2	2,438.6	2,627.9	2,840.8	7.8
Asia Pacific	1,122.0	1,277.2	1,452.1	1,630.3	13.3
LAMEA	554.8	612.6	677.7	767.0	11.4
Total	7,082.7	7,677.6	8,337.9	9,100.2	8.7

Source: KBV Research and Secondary Research Analysis

TABLE 4 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	4,190.6	4,583.6	5,058.2	5,625.9	6,300.9	7,105.6	8,060.8	11.5
Europe	3,089.3	3,386.6	3,745.8	4,176.0	4,688.3	5,300.0	6,027.6	11.8
Asia Pacific	1,840.1	2,092.3	2,398.9	2,770.7	3,220.8	3,768.3	4,433.2	15.8
LAMEA	872.1	998.6	1,152.5	1,339.5	1,566.3	1,842.8	2,179.4	16.5
Total	9,992.0	11,061.2	12,355.3	13,912.1	15,776.3	18,016.5	20,701.0	12.9

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$8,060.8 million by 2023, growing at a CAGR of 11.5 % during the forecast period. North America is a region that adopts new technologies relatively early than other regions. Factors such as technological advancements and increasing adoption of geographic information system in industries such as telecom, government agencies and financial sectors among others are the major drivers for the GIS in the North America region.

The Europe market is expected to witness a CAGR of 11.8% during (2017 - 2023). Germany, Russia and France among others are the major markets for GIS in the European region. Healthy economic condition is one of the major factors driving the implementation of GIS in the European region. Government regulations pertaining to securing of data paired with increasing infrastructure investments would further drive the GIS market in the region.

Additionally, The Asia Pacific market is expected to witness a CAGR of 15.8% during (2017 - 2023). In Asia Pacific region, with limited government initiatives for the implementation of GIS in government and private sectors, the market has enormous potential that can be tapped by early movers in the region.

Currently, LAMEA shows comparatively lower adoption for GIS and other technologically advanced products. Increasing population and rapid growth in industrialization on the other hand would fuel the demand for GIS in emerging markets in the region.

Chapter 3. Global Geographical Information System Market by Vertical

3.1 Introduction

Based on vertical, the global GIS market is segmented into Utilities, transportation, Government agencies, Retail, Oil & Gas, Healthcare, Financial Services, Telecom and Other.

3.2 Global Geographical Information System Market by Vertical

TABLE 5 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET BY VERTICAL, 2013 - 2016, USD MILLION

Vertical	2013	2014	2015	2016	CAGR % (2013-2016)
Utilities	1,884.0	2,007.7	2,142.8	2,297.8	6.8
Transportation	517.0	568.1	625.3	691.6	10.2
Government Agencies	1,437.8	1,539.4	1,650.9	1,779.1	7.4
Retail	687.0	756.2	833.8	923.7	10.4
Oil & Gas	899.5	982.7	1,075.6	1,183.0	9.6
Healthcare	226.6	253.4	283.5	318.5	12.0
Financial Services	361.2	395.4	433.6	477.8	9.8
Telecom	396.6	441.5	491.9	550.6	11.6
Others	672.9	733.2	800.4	878.2	9.3
Total	7,082.7	7,677.6	8,337.9	9,100.2	8.7

Source: KBV Research and Secondary Research Analysis

TABLE 6 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM MARKET BY VERTICAL, 2017 - 2023, USD MILLION

Vertical	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
Utilities	2,478.0	2,693.4	2,952.9	3,262.4	3,628.6	4,062.7	4,574.9	10.8
Transportation	769.4	862.8	976.1	1,113.0	1,277.9	1,477.4	1,718.2	14.3
Government Agencies	1,928.5	2,107.2	2,322.8	2,580.7	2,887.1	3,252.0	3,684.8	11.4
Retail	1,029.2	1,155.9	1,309.7	1,495.5	1,719.6	1,990.8	2,318.5	14.5
Oil & Gas	1,309.0	1,460.1	1,643.3	1,864.2	2,129.8	2,450.3	2,836.0	13.8
Healthcare	359.7	409.3	469.5	542.6	631.1	738.7	869.4	15.8
Financial Services	529.6	591.8	667.2	758.2	867.7	999.9	1,159.3	13.9
Telecom	619.5	702.4	803.1	925.2	1,072.8	1,252.2	1,469.8	15.5

Others	969.2	1,078.5	1,210.8	1,370.3	1,561.9	1,792.6	2,070.1	13.5
Total	9,992.0	11,061.2	12,355.3	13,912.1	15,776.3	18,016.5	20,701.0	12.9

Source: KBV Research and Secondary Research Analysis

The Utilities market dominated the Global Geographical Information System Market by Vertical in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$4,574.9 million by 2023, growing at a CAGR of 10.8 % during the forecast period. The Retail market is expected to witness a CAGR of 14.5% during (2017 - 2023). Additionally, The Healthcare market is expected to witness highest CAGR of 15.8% during (2017 - 2023).

3.2.1 Global Geographical Information System in Utilities Market by Region

Based on estimation, in 2016, Utilities vertical segment would be the largest revenue generating vertical in for the global GIS market. The segment includes water, sewer, storm water, electric, gas; telephone, CATV, data communications and steam systems.

TABLE 7 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN UTILITIES MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	834.9	875.8	920.1	975.2	5.3
Europe	603.1	637.7	675.4	717.3	6.0
Asia Pacific	298.4	334.0	373.2	411.7	11.3
LAMEA	147.6	160.2	174.2	193.7	9.5
Total	1,884.0	2,007.7	2,142.8	2,297.8	6.8

Source: KBV Research and Secondary Research Analysis

TABLE 8 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN UTILITIES MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	1,039.3	1,116.1	1,208.9	1,319.3	1,449.2	1,602.3	1,781.4	9.4
Europe	766.1	824.6	895.2	979.3	1,078.3	1,195.1	1,332.1	9.7
Asia Pacific	456.3	509.5	573.3	649.7	740.8	849.7	979.7	13.6
LAMEA	216.3	243.2	275.5	314.1	360.2	415.5	481.7	14.3
Total	2,478.0	2,693.4	2,952.9	3,262.4	3,628.6	4,062.7	4,574.9	10.8

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Utilities Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$1,781.4 million by 2023, growing at a CAGR of 9.4 % during the forecast period. The Europe market is expected to witness a CAGR of 9.7% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 13.6% during (2017 - 2023).

3.2.2 Global Geographical Information System in Transportation Market by Region

Transportation segment is one of the emerging vertical for the application of geographic information system. Information’s such as vehicle location information, speed information among other can be easily accessible through the adoption of GIS technology. This helps the transportation industry to acquire important information about their vehicles and other related data.

TABLE 9 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN TRANSPORTATION MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	229.1	247.8	268.5	293.5	8.6
Europe	165.5	180.5	197.1	215.9	9.3
Asia Pacific	81.9	94.5	108.9	123.9	14.8
LAMEA	40.5	45.3	50.8	58.3	12.9
Total	517.0	568.1	625.3	691.6	10.2

Source: KBV Research and Secondary Research Analysis

TABLE 10 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN TRANSPORTATION MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	322.7	357.5	399.6	450.1	510.4	582.7	669.0	12.9
Europe	237.9	264.2	295.9	334.1	379.8	434.6	500.3	13.2
Asia Pacific	141.7	163.2	189.5	221.7	260.9	309.0	368.0	17.2
LAMEA	67.2	77.9	91.0	107.2	126.9	151.1	180.9	18.0
Total	769.4	862.8	976.1	1,113.0	1,277.9	1,477.4	1,718.2	14.3

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Transportation Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of

\$669 million by 2023, growing at a CAGR of 12.9 % during the forecast period. The Europe market is expected to witness a CAGR of 13.2% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 17.2% during (2017 - 2023).

3.2.3 Global Geographical Information System in Government Agencies Market by Region

The government agencies use the GIS to enrich their overall operations, meet the objective and communicate the same with the public. Regional governments use the software for green energy planning and civic engagement. In addition, GIS offer data management and mapping tools for accurate asset and work management.

TABLE 11 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN GOVERNMENT AGENCIES MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	637.2	671.5	708.9	755.0	5.8
Europe	460.2	488.9	520.3	555.4	6.5
Asia Pacific	227.8	256.1	287.5	318.7	11.9
LAMEA	112.6	122.8	134.2	149.9	10.0
Total	1,437.8	1,539.4	1,650.9	1,779.1	7.4

Source: KBV Research and Secondary Research Analysis

TABLE 12 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN GOVERNMENT AGENCIES MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	808.8	873.2	950.9	1,043.6	1,153.1	1,282.6	1,434.8	10.0
Europe	596.2	645.2	704.2	774.7	858.0	956.6	1,072.9	10.3
Asia Pacific	355.1	398.6	451.0	514.0	589.4	680.2	789.1	14.2
LAMEA	168.3	190.2	216.7	248.5	286.6	332.6	387.9	14.9
Total	1,928.5	2,107.2	2,322.8	2,580.7	2,887.1	3,252.0	3,684.8	11.4

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Government Agencies Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$1,434.8 million by 2023, growing at a CAGR of 10 % during the forecast period. The Europe market is expected to witness a CAGR of 10.3% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 14.2% during (2017 - 2023).

3.2.4 Global Geographical Information System in Retail Market by Region

Retail industry has witnessed a high growth majorly in developed countries, and is expected to have exponential growth in the emerging countries. Highly promising retail sector indicates that retailers need to monitor and track their trade areas, assess the competition in the market and strategically decide their new store locations. GIS helps the retailer to manage, display and analyze their business information spatially and the same is emerging as a powerful tool as a location intelligence. GIS also helps the It helps retailer to identify trends, patterns and opportunities for the business.

TABLE 13 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN RETAIL MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	304.5	329.9	358.0	392.0	8.8
Europe	219.9	240.2	262.8	288.3	9.5
Asia Pacific	108.8	125.8	145.2	165.5	15.0
LAMEA	53.8	60.3	67.8	77.8	13.1
Total	687.0	756.2	833.8	923.7	10.4

Source: KBV Research and Secondary Research Analysis

TABLE 14 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN RETAIL MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	431.6	479.0	536.2	604.8	686.8	785.2	902.8	13.1
Europe	318.2	353.9	397.1	448.9	511.0	585.6	675.1	13.4
Asia Pacific	189.5	218.6	254.3	297.8	351.1	416.4	496.5	17.4
LAMEA	89.8	104.4	122.2	144.0	170.7	203.6	244.1	18.1
Total	1,029.2	1,155.9	1,309.7	1,495.5	1,719.6	1,990.8	2,318.5	14.5

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Retail Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$902.8 million by 2023, growing at a CAGR of 13.1 % during the forecast period. The Europe market is expected to witness a CAGR of 13.4% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 17.4% during (2017 - 2023).

3.2.5 Global Geographical Information System in Oil & Gas Market by Region

Oil & Gas is a very vital part of the global economy. Oil & Gas sector is the most capital intensive industry. The sector is always on the headlines for unforeseen accidents and the hazards caused to the environment. The ever changing dynamics of the oil & gas industry drives an increased efficiencies and risk mitigation. The industry has an estimated 80% data having spatial component. This would offer wide growth opportunity for the adoption of GIS in the oil & gas having spatial information at every point of operation. Geodatabase is used to store, collect and visualize physical location of the pipelines, wells and spatial data related to the oil & gas industry.

TABLE 15 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN OIL & GAS MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	398.6	428.7	461.8	502.1	8.0
Europe	287.9	312.1	339.0	369.3	8.7
Asia Pacific	142.5	163.5	187.3	211.9	14.2
LAMEA	70.5	78.4	87.4	99.7	12.3
Total	899.5	982.7	1,075.6	1,183.0	9.6

Source: KBV Research and Secondary Research Analysis

TABLE 16 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN OIL & GAS MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	549.0	605.0	672.7	753.9	850.6	966.4	1,104.3	12.4
Europe	404.7	447.0	498.2	559.6	632.9	720.8	825.8	12.6
Asia Pacific	241.1	276.2	319.0	371.3	434.8	512.5	607.4	16.7
LAMEA	114.2	131.8	153.3	179.5	211.4	250.6	298.6	17.4
Total	1,309.0	1,460.1	1,643.3	1,864.2	2,129.8	2,450.3	2,836.0	13.8

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Oil & Gas Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$1,104.3 million by 2023, growing at a CAGR of 12.4 % during the forecast period. The Europe market is expected to witness a CAGR of 12.6% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 16.7% during (2017 - 2023).

3.2.6 Global Geographical Information System in Healthcare Market by Region

GIS technology has significantly impacted the medical industry. GIS software offers healthcare professionals to identify health related trends. In addition, GIS software helps the healthcare sector to provide demographic data including home address, workplace, cancer type, and data which is collected about the patients and is maintained into the system.

TABLE 17 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN HEALTHCARE MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	100.4	110.5	121.7	135.2	10.4
Europe	72.6	80.5	89.3	99.4	11.1
Asia Pacific	35.9	42.1	49.4	57.1	16.7
LAMEA	17.8	20.2	23.0	26.8	14.8
Total	226.6	253.4	283.5	318.5	12.0

Source: KBV Research and Secondary Research Analysis

TABLE 18 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN HEALTHCARE MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	150.9	169.6	192.2	219.4	252.0	291.3	338.6	14.4
Europe	111.2	125.3	142.3	162.9	187.5	217.3	253.2	14.7
Asia Pacific	66.2	77.4	91.2	108.1	128.8	154.5	186.2	18.8
LAMEA	31.4	36.9	43.8	52.2	62.7	75.6	91.5	19.5
Total	359.7	409.3	469.5	542.6	631.1	738.7	869.4	15.8

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Healthcare Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$338.6 million by 2023, growing at a CAGR of 14.4 % during the forecast period. The Europe market is expected to witness a CAGR of 14.7% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 18.8% during (2017 - 2023).

3.2.7 Global Geographical Information System in Financial Services Market by Region

A geographic information system has witnessed increased adoption in the financial sector. Financial sector is expected to witness fastest growth during the forecast period. GIS helps the financial service providers to acquire various available opportunities in the market when they combine their datasets with the financial access data point with other GIS information. The GIS enhances the financial service provider the risk associated, customer interaction, and economic conditions using spatial models.

TABLE 19 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN FINANCIAL SERVICES MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	160.1	172.5	186.2	202.8	8.2
Europe	115.6	125.6	136.6	149.1	8.9
Asia Pacific	57.2	65.8	75.5	85.6	14.4
LAMEA	28.3	31.6	35.2	40.3	12.5
Total	361.2	395.4	433.6	477.8	9.8

Source: KBV Research and Secondary Research Analysis

TABLE 20 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN FINANCIAL SERVICES MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	222.1	245.2	273.1	306.6	346.6	394.4	451.4	12.5
Europe	163.7	181.2	202.3	227.6	257.9	294.1	337.5	12.8
Asia Pacific	97.5	111.9	129.5	151.0	177.1	209.1	248.3	16.9
LAMEA	46.2	53.4	62.2	73.0	86.1	102.3	122.0	17.6
Total	529.6	591.8	667.2	758.2	867.7	999.9	1,159.3	13.9

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Financial Services Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of

\$451.4 million by 2023, growing at a CAGR of 12.5 % during the forecast period. The Europe market is expected to witness a CAGR of 12.8% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 16.9% during (2017 - 2023).

3.2.8 Global Geographical Information System in Telecom Market by Region

Need of information sharing between different companies and interoperability between systems has been recognized by the telecom industry since decades. Telecom is other vertical that has witnessed increase adoption of GIS technology in the recent past years. To stay competitive, telecom service provider depend on smooth functioning and integrating information about marketing, demand forecast, market engineering, customer management, operational support, and fleet management.

TABLE 21 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN TELECOM MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	175.8	192.6	211.2	233.7	10.0
Europe	127.0	140.2	155.0	171.9	10.6
Asia Pacific	62.8	73.4	85.7	98.6	16.2
LAMEA	31.1	35.2	40.0	46.4	14.3
Total	396.6	441.5	491.9	550.6	11.6

Source: KBV Research and Secondary Research Analysis

TABLE 22 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN TELECOM MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	259.8	291.1	328.8	374.1	428.5	493.8	572.3	14.1
Europe	191.5	215.1	243.5	277.7	318.8	368.3	428.0	14.3
Asia Pacific	114.1	132.9	155.9	184.2	219.0	261.9	314.8	18.4
LAMEA	54.1	63.4	74.9	89.1	106.5	128.1	154.7	19.2
Total	619.5	702.4	803.1	925.2	1,072.8	1,252.2	1,469.8	15.5

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Telecom Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$572.3 million by 2023, growing at a CAGR of 14.1 % during the forecast period. The Europe market is expected to witness a CAGR of 14.3% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 18.4% during (2017 - 2023).

3.2.9 Global Geographical Information System in Others Market by Region

Other verticals include real estate, education and consultants among others. Geographic information system helps these industries to acquire accurate information about the external environment for decision making.

TABLE 23 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN OTHERS MARKET BY REGION, 2013 - 2016, USD MILLION

Region	2013	2014	2015	2016	CAGR % (2013-2016)
North America	298.2	319.8	343.7	372.7	7.7
Europe	215.4	232.9	252.3	274.1	8.4
Asia Pacific	106.6	122.0	139.4	157.3	13.9
LAMEA	52.7	58.5	65.1	74.0	12.0
Total	672.9	733.2	800.4	878.2	9.3

Source: KBV Research and Secondary Research Analysis

TABLE 24 GLOBAL GEOGRAPHICAL INFORMATION SYSTEM IN OTHERS MARKET BY REGION, 2017 - 2023, USD MILLION

Region	2017	2018	2019	2020	2021	2022	2023	CAGR % (2017-2023)
North America	406.5	446.9	495.7	554.2	623.8	707.0	806.1	12.1
Europe	299.7	330.2	367.1	411.3	464.1	527.3	602.8	12.4
Asia Pacific	178.5	204.0	235.1	272.9	318.9	374.9	443.3	16.4
LAMEA	84.6	97.4	112.9	131.9	155.1	183.4	217.9	17.1
Total	969.2	1,078.5	1,210.8	1,370.3	1,561.9	1,792.6	2,070.1	13.5

Source: KBV Research and Secondary Research Analysis

The North America market dominated the Global Geographical Information System in Others Market by Region in 2016, and would continue to be a dominant market till 2023; thereby, achieving a market value of \$806.1 million by 2023, growing at a CAGR of 12.1 % during the forecast period. The Europe market is expected to witness a CAGR of 12.4% during (2017 - 2023). Additionally, The Asia Pacific market is expected to witness a CAGR of 16.4% during (2017 - 2023).

Disclaimer

KBV Research makes all efforts to ensure the high quality of the research data. KBV Research ensures that it follows credible and tested methodologies with strong quality check. However, KBV Research does not take any liability or responsibility for any discrepancy and inaccuracy observed in the facts quoted in the reports. KBV Research does not intend for any warranties w.r.t the views and information (implied or expressed) and hence is not responsible pertaining to the loss(es) incurred due to the usage of the information and/or data graphics available on the website.

User is solely responsible for use of any external links available on our websites. KBV Research recommends for the check of authenticity of the information available on its website and the available external links before using the information accessible through the same.

For information regarding permissions and other queries,

Kindly write to: query@kbvresearch.com

US Contact: +1 (646) 661 -6066

© Copyright 2018 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

4AA7-2787EEE
