

IT Metrics: IT Spending and Staffing Report, 2010

Kurt Potter, Michael Smith, Jamie K. Guevara, Linda Hall, Eric Stegman

This annual report of IT spending and staffing metrics contains information that IT and business leaders can use to compare their IT spending against that of peer organizations. The source of this 2009 (actual) and 2010 (forecast) information is Gartner Consulting's IT Key Metrics Database (ITKMD).

Key Findings

- Despite the 2009 cross-industry forecast that average IT spending as a percentage of revenue would be 4.2%, recession-related actions drove the actual average to just 3.4%. This level of IT spending has not been seen since 2001.
- In 2009, 62% of industries (excluding government) reported declines in actual IT spending as a percentage of revenue, while 90% of industries are forecasting an increase in 2010.
- The database average IT spending as a percentage of revenue forecast for 2010 is estimated at 4.1%, which equals the 2008 actual level.
- 2008 actual IT employees as a percentage of total employees declined from 6.1% in our previous study to 5.5% in 2009 and in this report, which was mostly at the expense of the contract labor component of IT employees.
- Actual IT spending change in 2009 for cross-industry database participants was -0.9%, with 73% of the 22 industries reporting a decline. Forecasts for 2010 show an increase in IT spending of 1.3%, with 64% of industries reporting an increase in IT spending.

Recommendations

- Use this research as a source of comparative data by industry and spending category to assist IT and business leaders with investment and ongoing operational assumptions, best practices and decisions.
- The likelihood that the levels of spending provided in this report will materialize depends largely on how your enterprise and industry were affected by the recent economic downturn, and on your enterprise's plans for a return to growth. Use this information to create assumptions about the future for your enterprise.

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ANALYSIS

1.0 Overview

1.1 Using This Research

This document was revised on 10 May 2010. For more information, see the [Corrections page](#) on gartner.com.

This research was created to help IT and business leaders compare the efficiency of their enterprise IT spending with that of peer organizations. As with any survey data, many potential interpretations and analyses exist. The survey respondents represent a mix of organizations of different sizes and vertical industry segmentations.

Although the number of respondents in this survey represents a statistically valid population size, care must be taken with regard to making blanket assumptions or assertions about the trends that the survey data suggests. Moreover, any survey is dependent on the accuracy and completeness of the data supplied by the respondents.

Most IT organizations follow an annual IT budgeting process, and adjust their budgets based on changing economic and business conditions. In many organizations, IT spending levels are being reviewed and revised on a quarterly or even a monthly basis. Therefore, published IT spending benchmarks represent a "snapshot in time," but do not necessarily indicate what enterprises will ultimately spend on IT in the coming year.

The industry-specific spending profiles published here represent what Gartner calls a "stalking horse" (that is, a position resulting from analysis of data that projects future trends and results). However, each organization should assess its own situation carefully, and should not *arbitrarily* change to conform to survey results (which do not necessarily represent best practices). For example, the metric of an IT operating budget as a percentage of gross revenue does not, by itself, provide valid comparative information that should be used to allocate IT or business resources. Moreover, IT spending statistics alone do not measure IT effectiveness, and are not a gauge of successful IT organizations.

The industry-specific spending metrics published here provide a high-level overview of spending priorities. However, many organizations feel the need to "go deeper" when benchmarking. Many firms decide that a formal benchmarking exercise — one that is highly customized for the individual firm — is a natural follow-on to using the results presented here. In such exercises, companies can be more assured that they are getting an "apples to apples" comparison with a comparable peer group that takes into consideration complexity, industry, enterprise size, platforms, applications and other key variables.

We recommend that organizations consider an investment in such customized or in-depth benchmarking engagements every three to five years, or whenever a significant IT cost-based decision must be made. The information published in this report can be used during the time periods in between these benchmark engagements.

1.2 Points of Clarification

Although we publish *worldwide* vertical-industry-specific IT spending and staffing survey results, we have not published the results of the survey by vertical industries within key geographic regions, because previous research and surveys have shown that spending patterns are somewhat similar by vertical market across regions. So, for example, financial services will tend to spend a relatively high percentage of revenue compared with other vertical industries, whether

the company is in Europe, Asia/Pacific or the U.S. (see Note 1 for details about many of the industry terms used in this report).

Many organizations monitor IT spending results using what is sometimes called the "book view," because it represents the IT operating expenditure (opex) budget, including current depreciation (the allocation of prior years' IT capitalized expenses that the company records on its books for the current year). Capital budgets for the year were collected and reported separately. However, this report's key metrics database looks at IT spending from a "cash view," because IT spending is defined as the total of the IT operating budget (excluding depreciation and amortization), plus the planned capital expenditure (capex) for the current year. The ratio of IT operating to capital spending is provided in Figure 25 and Figure 26, so that detailed comparisons can be made.

It should be noted that IT spending as a percentage of revenue in Gartner Consulting's IT Key Metrics Database (ITKMD) is calculated on the basis of the current year's IT spending divided by the previous year's stated revenue. We make the calculation in this way because the IT budget for a future year is based on experience from the current year. However, for practical reasons, we use the previous year's revenue because the current year's financial information is not publicly available to us at the same time as the IT spending numbers are. In a typical year, this has a negligible effect. The global financial crisis made 2009 planning anything but typical. So, while IT spending dropped in 2009 for many enterprises, the effects of the financial crisis weren't shown to the same extent in the 2008 financial numbers. We advise clients to keep this in mind when comparing their IT spending data with Gartner revenue- or operational expense-based metrics.

2.0 More Detailed Information Is Available in Other Reports: Gartner IT Key Metrics Database (ITKMD)

Depending on your subscription level for Gartner services, some clients have gartner.com access to the ITKMD, which contains the same information in this report, by vertical industry. Additional vertical industry information is available to help clients make budget and investment decisions in the section of the ITKMD splash page titled, "Volume 1: Key Industry Measures." Two reports (current year and multiyear) are available by vertical industry categories listed in this report. This information includes:

- Current-year and multiyear analyses for key IT financial metrics.
- Selected IT financial metrics by enterprise-size (revenue thresholds) analyses for each vertical industry, to include analyses by Global 2000/Standard & Poor's (S&P) company size, Fortune 500 enterprises and Dow Jones enterprises.
- In addition to averages, percentile analysis for each vertical industry, to include graphic representations of maximum, minimum, 25th percentile, 75th percentile and median for key IT financial metrics. This is represented by ranges for "maximum/minimum" and "middle quartiles."
- IT spending and staffing distribution by IT domain or technology area, by vertical industry, in the areas of application development, application support, data center, desktop and peripheral, help desk, data network, voice network, IT management, and finance and administration.
- Revenue per employee, income per employee and profitability.

In addition to these key IT financial metrics, a variety of IT productivity and staffing metrics is available in the areas listed below (for current year and multiyear analyses). Some reports show vertical industry tendencies, while others tend to be industry-neutral. Many metrics provided show

averages by the level of productivity or size of the environment (such as the number of servers or number of desktops):

- About IT Key Metrics Data
- Introduction: Executive Summary
- Volume 1: Key Industry Measures
- Volume 2: Key Infrastructure Measures (Mainframe, Wintel Server, Unix Server, Storage, Data Network, WAN, LAN, Internet Access Services, Metropolitan-Area Network [MAN], Voice Network, Voice Premise Technology, Wide-Area Voice, Client and Peripherals, and Help Desk)
- Volume 3: Key Applications Measures (Cost and Staff Profile, Project Measures, ERP/SAP Performance Measures, Work Profiles, Work by Support Type, Life Cycle Distribution, Support Rates, New Development Productivity, Support Quality and Practices, Development Practices, and Staff Profiles)
- Volume 4: Key Information Security Measures (by Region and Industry, and Security Priorities and Processes)
- Volume 5: Key Outsourcing Measures (Overview, and by Geographic Region and Selected Vertical Industries)

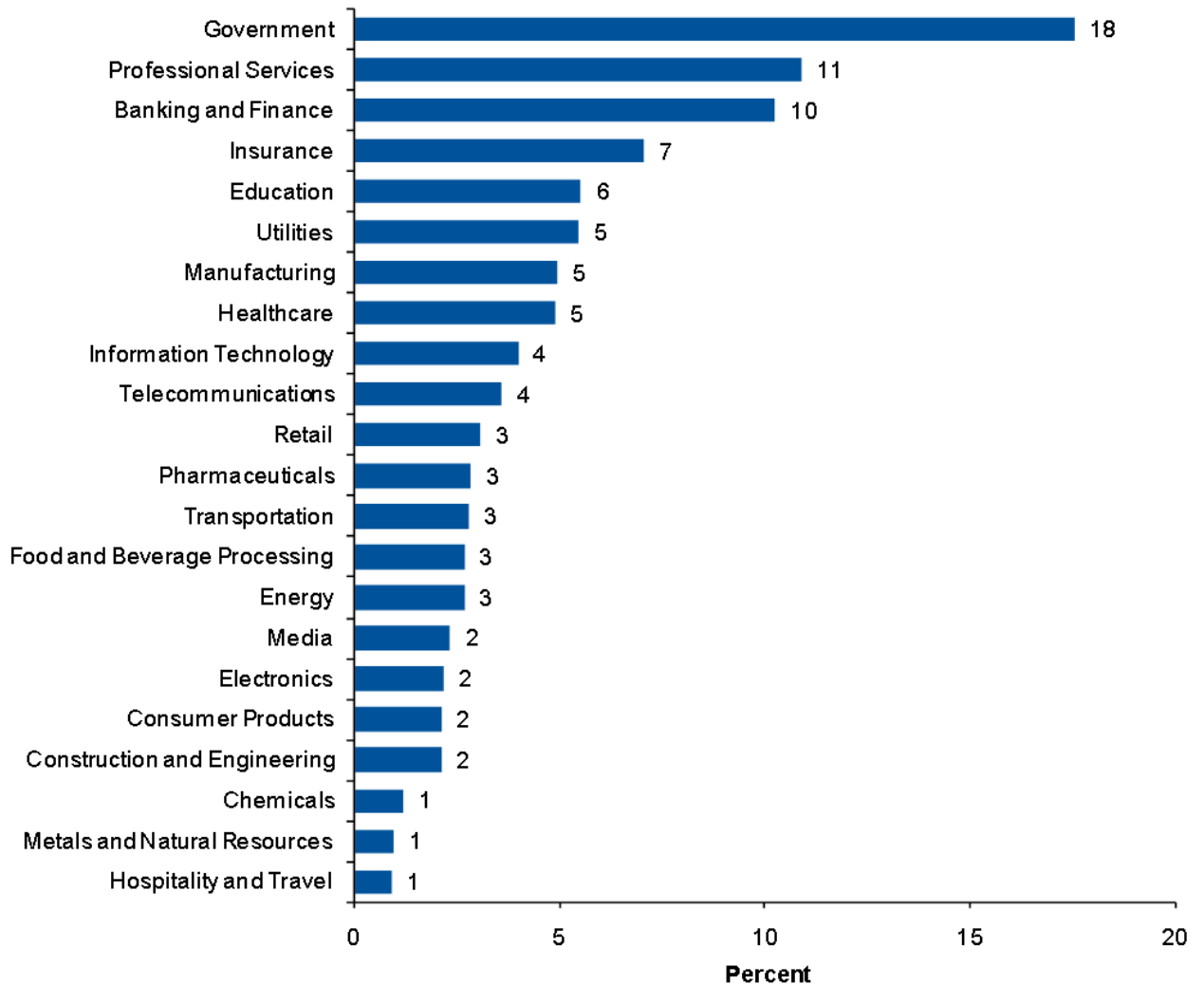
3.0 Key Findings

- Despite overly optimistic projections (some of which were based on pre-financial-crash data) in the "IT Spending and Staffing Report, 2009" of IT spending as a percentage of revenue of 4.2%, cost cutting and project cancellations due to the global recession drove the actual cross-industry database average to just 3.4% in 2009. This level has not been seen since 2001. In 2009, 62% of vertical industries shown in this report (excluding government) reported declines in actual IT spending as a percentage of revenue, while 90% of vertical industries are forecasting an increase in 2010.
- The database average IT spending as a percentage of revenue forecast for 2010 is estimated at 4.1%, which equals the 2008 actual level from the "IT Spending and Staffing Report, 2009." In general, this means a return to normalcy of overall IT spending levels for many enterprises and industries.
- 2008 actual IT employees as a percentage of total employees declined from 6.1% in our previous study to 5.5% in 2009, due to the economic downturn. This decline was mostly at the expense of the contract labor component of IT employees, and less from internal full-time equivalents (FTEs).
- The gross actual IT spending change in 2009 for cross-industry database participants was -0.9%, with 73% of the 22 vertical industries reporting a decline. Forecasts for 2010 show an increase in gross IT spending of 1.3%, with 64% of the 22 vertical industries reporting an increase in IT spending.
- The economic recession has had a minimal effect on the IT spending split between operational expenses and capital expenses, with 30% of IT spending devoted to IT capital expenses and 70% devoted to IT operational expenses.

4.0 Demographics: The Richest Dataset Available

This year, we collected enterprise-level total IT investment figures from 1,756 companies from more than 65 countries in 22 industry sectors (see Figure 1 and Figure 2). The result is the most comprehensive and authoritative IT spending, staffing and performance data in the industry. It has been added to the historical database of the more than 10,000 companies that have submitted enterprise-level data to Gartner.

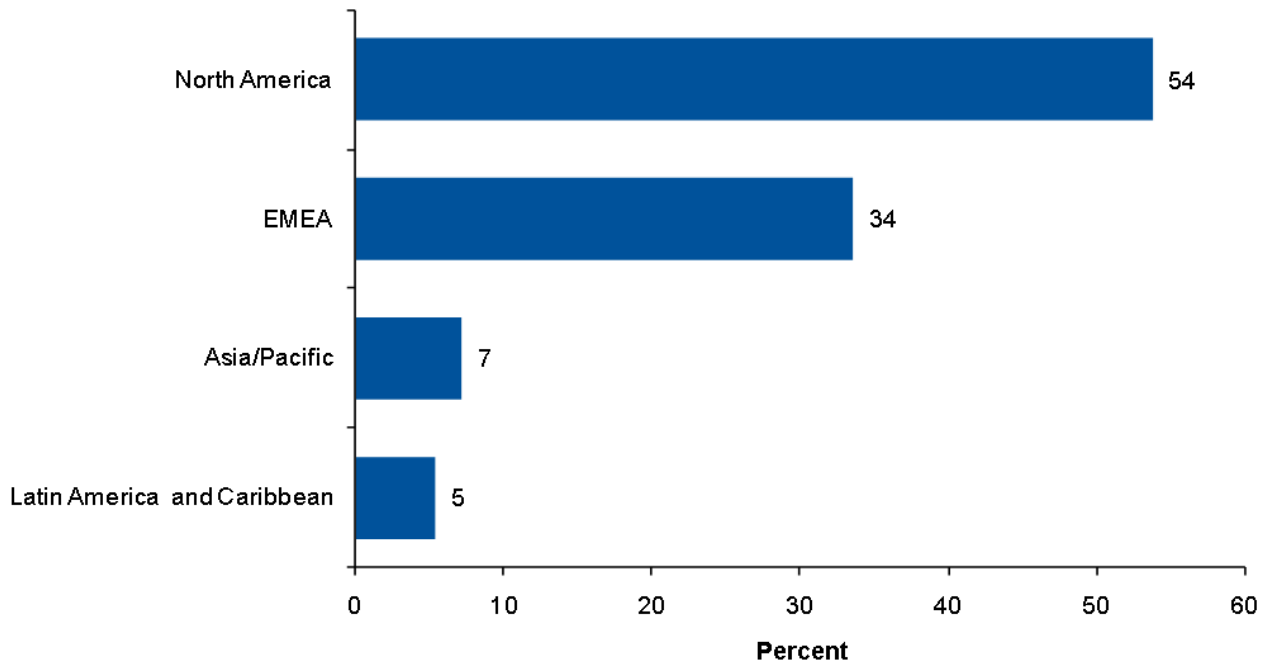
Figure 1. Demographics: Key Industry Measures — Distribution, by Industry, 2009



N = 1,756

Source: Gartner ITKMD (January 2010)

Figure 2. Demographics: Key Industry Measures — Distribution, by Region, 2009



N = 1,756

Source: Gartner ITKMD (January 2010)

Table 1 shows the average size of the organizations that responded in each industry (annual revenue and number of employees).

Table 1. Revenue and Enterprise Employees, by Industry (Averages)

Industry	2008 Revenue (Billions of \$)	2009 Employees (Enterprise FTEs)
Database Average	\$8.2	16,984
Banking and Finance	10.1	16,035
Chemicals	9.8	13,288
Construction and Engineering	4.5	15,556
Consumer Products	6.0	19,719
Education	0.7	5,830
Electronics	4.5	13,579
Energy	52.1	24,128
Food and Beverage Processing	6.6	20,561
Government (<i>Operating Expenses</i>)	4.0	15,749
Healthcare	6.9	17,248
Hospitality and Travel	1.4	13,841
Information Technology	4.3	10,425
Insurance	5.1	7,693

Industry	2008 Revenue (Billions of \$)	2009 Employees (Enterprise FTEs)
Manufacturing	17.7	46,394
Media	2.5	6,744
Metals and Natural Resources	10.3	18,358
Pharmaceuticals	12.5	27,618
Professional Services	1.2	9,125
Retail	9.3	45,357
Telecommunications	10.1	23,801
Transportation	7.3	29,734
Utilities	5.6	7,408

Notes: (1) Revenue figures for 2008 are reported as final and official; 2009 figures for most enterprises shown in the ITKMD had not been announced at the time of this publication. (2) Government operating budget is used as a proxy for "revenue"; however, it is not included in the all-industry average for revenue. (3) All industries' enterprise FTE average includes government FTEs.

Source: Gartner ITKMD (January 2010)

4.1 Where Does the Data Come From?

Information for IT key metrics data is collected year-round via surveys on gartner.com and at Gartner events, in addition to direct fact finding (primary research) through our many research, benchmarking and consulting engagements. Financial information, such as gross revenue and income, is also collected from secondary research sources, such as annual reports.

4.2 Arithmetic Problems in Working With Averages: Why You Cannot "Check the Math"

Each year, clients that have performed their own calculations using these published metrics ask us why they arrived at different answers using our published research. For instance, the stated average that we publish for IT spending as a percentage of revenue differs from calculations performed by these clients, because our published figure for *average IT spending* (which is arrived at via reverse engineering) is divided by our published figure for *average revenue*. It is important to understand that the calculation performed by Gartner is to obtain an average figure for IT spending as a percentage of revenue for each survey respondent, and then to calculate the averages applicable to the vertical industry grouping by averaging these averages in turn. These calculations are not the same, as expressed in Figure 3.

Figure 3. Calculating the Average IT Spending as a Percentage of Revenue

$$\frac{\sum_{j=1}^n \frac{S_j}{R_j}}{n} \neq \frac{\sum_{j=1}^n S_j}{n} \div \frac{\sum_{j=1}^n R_j}{n}$$

Source: Gartner (February 2010)

This can be illustrated via an example (see Table 2), assuming that there are four respondents with the reported IT spending and revenue.

Table 2. Sample Data for Calculating the Average IT Spending as a Percentage of Revenue

	Respondent No. 1	Respondent No. 2	Respondent No. 3	Respondent No. 4	Average
IT Spending	5,000,000	120,000,000	2,250,000	1,000,000	32,062,500
Revenue	150,000,000	2,000,000,000	30,000,000	180,000,000	590,000,000
IT Spending as a Percentage of Revenue	3.33%	6.00%	7.50%	0.56%	4.35%

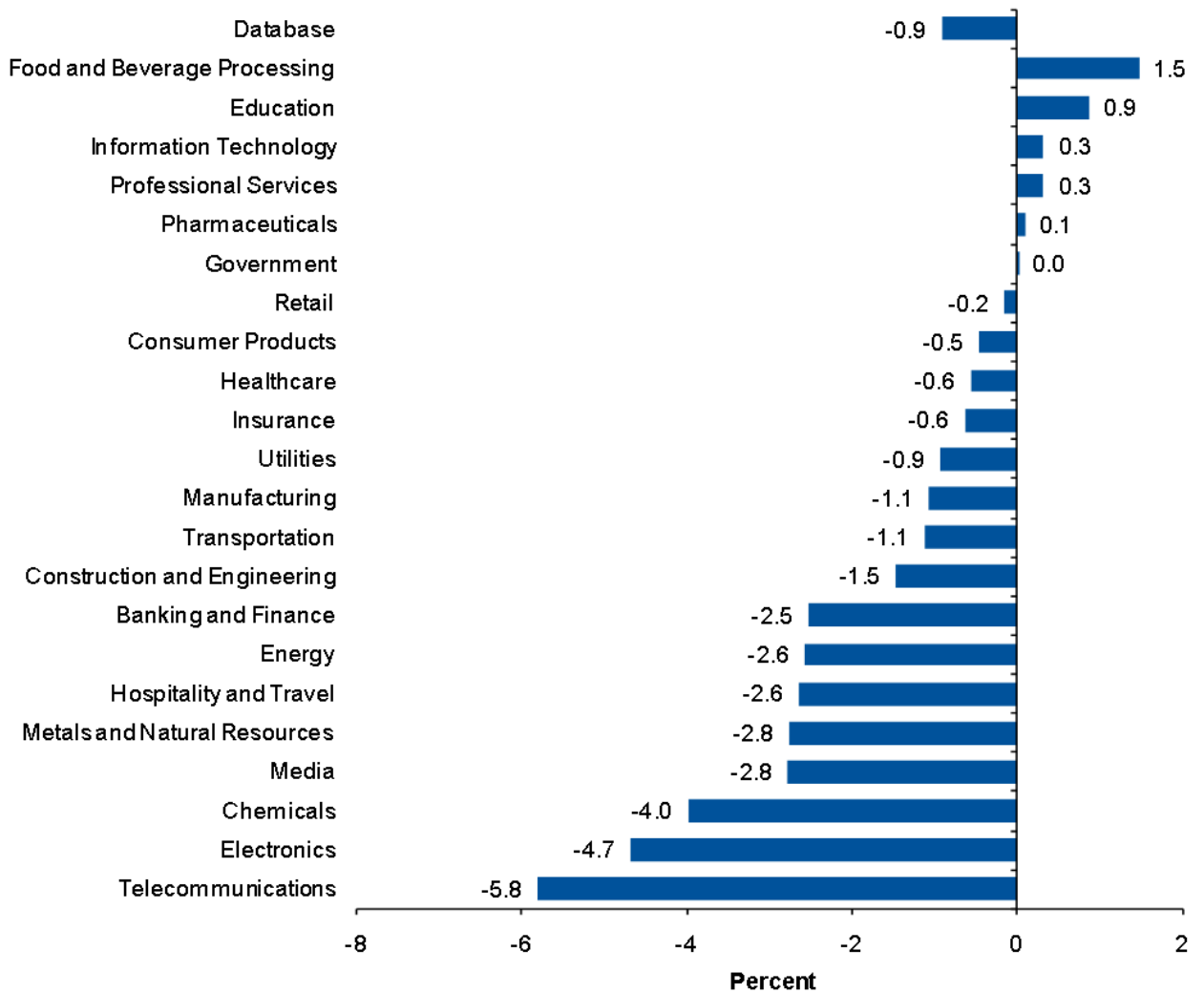
Source: Gartner (February 2010)

The correct average spending in this example is 4.35% of revenue. However, if a calculation were performed by dividing average IT spending into average revenue, then the result would be 5.43% — a significant overstatement of more than 25%. The magnitude of this error increases with the spread of the data, so Gartner strongly advises clients against making any business decisions on the basis of numbers calculated in this fashion.

5.0 IT Spending: Key Metrics and Trends

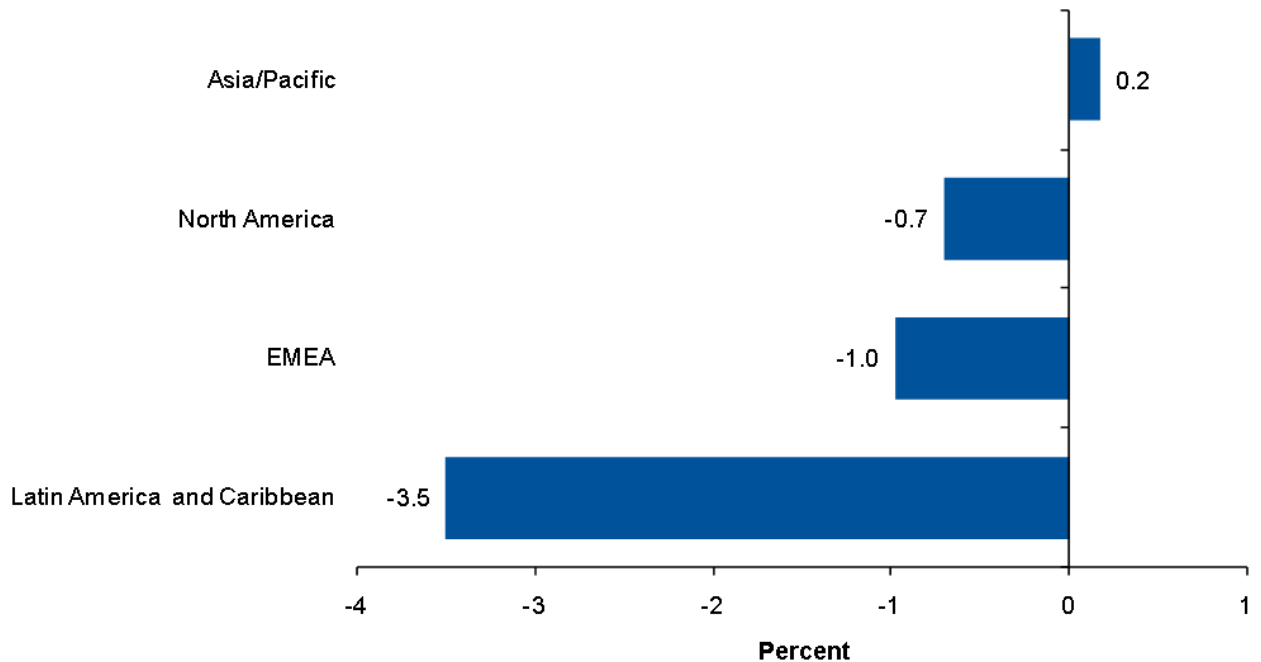
Gross actual IT spending change in 2009 for cross-industry database participants was -0.9%, with 73% of the 22 vertical industries reporting a decline (see Figure 4). In the "IT Spending and Staffing Report, 2009," only one out of 22 vertical industries reported a decline. Regardless of the economic recession, five vertical industries (food and beverage processing, education, information technology, professional services, and pharmaceuticals) showed an increase in IT spending, but only between 0.1% and 1.5%. By region (see Figure 5), Asia/Pacific showed a modest increase of 0.2%, while the listed world regions showed declines, with Latin America and the Caribbean region showing the biggest decline at -3.5%.

Figure 4. Change in IT Spending, by Industry, 2008 to 2009 (Average)



Source: Gartner ITKMD (January 2010)

Figure 5. IT Spending Change, by Region, 2008 to 2009 (Average)

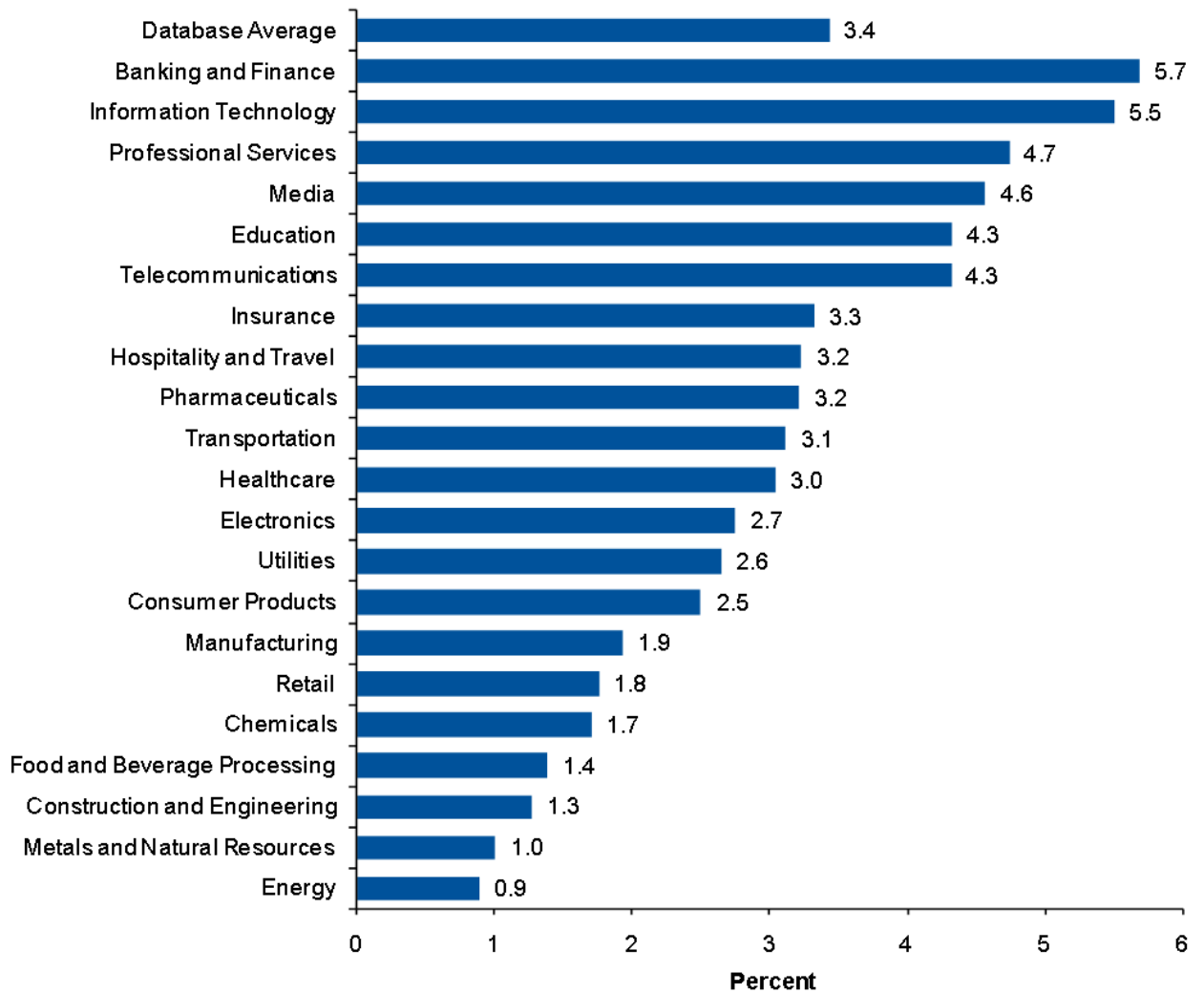


Source: Gartner ITKMD (January 2010)

5.1 IT Spending as a Percentage of Revenue

The most common measure of IT efficiency is IT spending as a percentage of revenue. Despite the database-average optimism from the "IT Spending and Staffing Report, 2009" of a projected IT spending as a percentage of revenue level of 4.2% in 2009, cost cutting and project cancellations due to the global recession drove the actual cross-industry database average to just 3.4% in 2009 (see Figure 6). This level of 3.4% has not been seen since 2001. In 2009, 62% of vertical industries shown in this report (excluding government) reported declines in actual IT spending as a percentage of revenue, while 90% of vertical industries are forecasting an increase in 2010 (see Figure 19). The database-average IT spending as a percentage of revenue forecast for 2010 is estimated at 4.1%, which equals the 2008 actual level from the "IT Spending and Staffing Report, 2009." In general, this means a return to normalcy of overall IT spending levels for many enterprises and industries (see Figure 7).

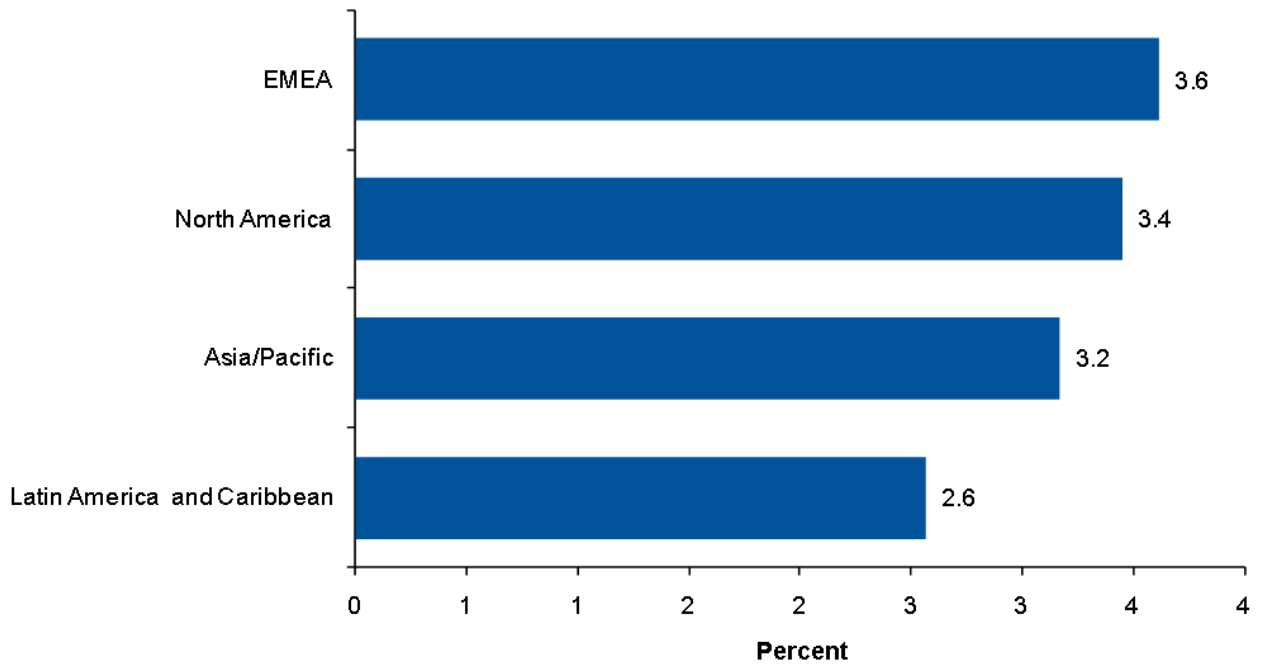
Figure 6. IT Spending as a Percentage of Revenue, by Industry, 2009 (Average)



Note: Because of issues with revenue definition and measurement for government entities, government is omitted from this list of vertical industries for IT spending as a percentage of revenue, but is shown on the list of industries for IT spending as a percentage of enterprise operational expenses or budget.

Source: Gartner ITKMD (January 2010)

Figure 7. IT Spending as a Percentage of Revenue, by Region, 2009 (Average)

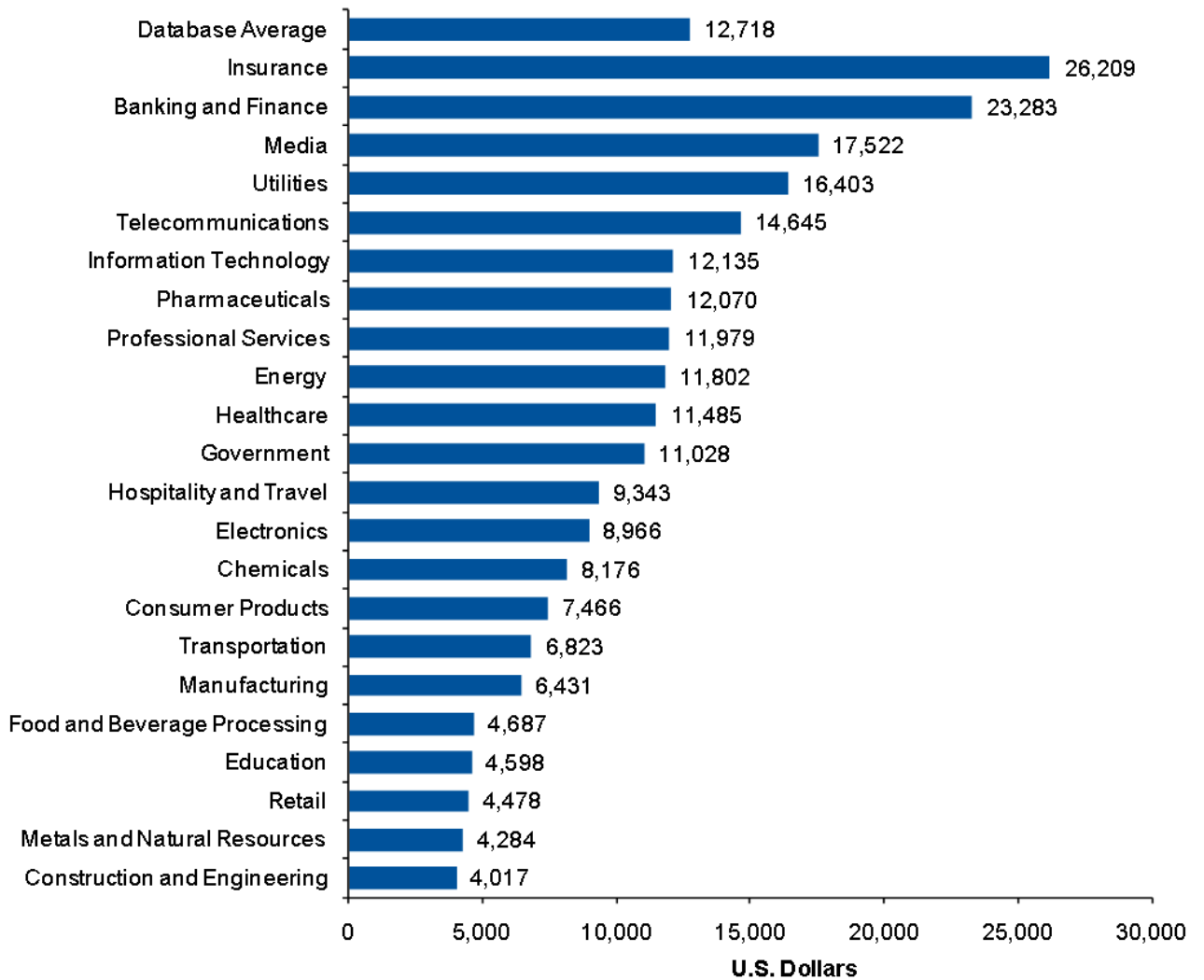


Source: Gartner ITKMD (January 2010)

5.2 IT Spending per Enterprise Employee

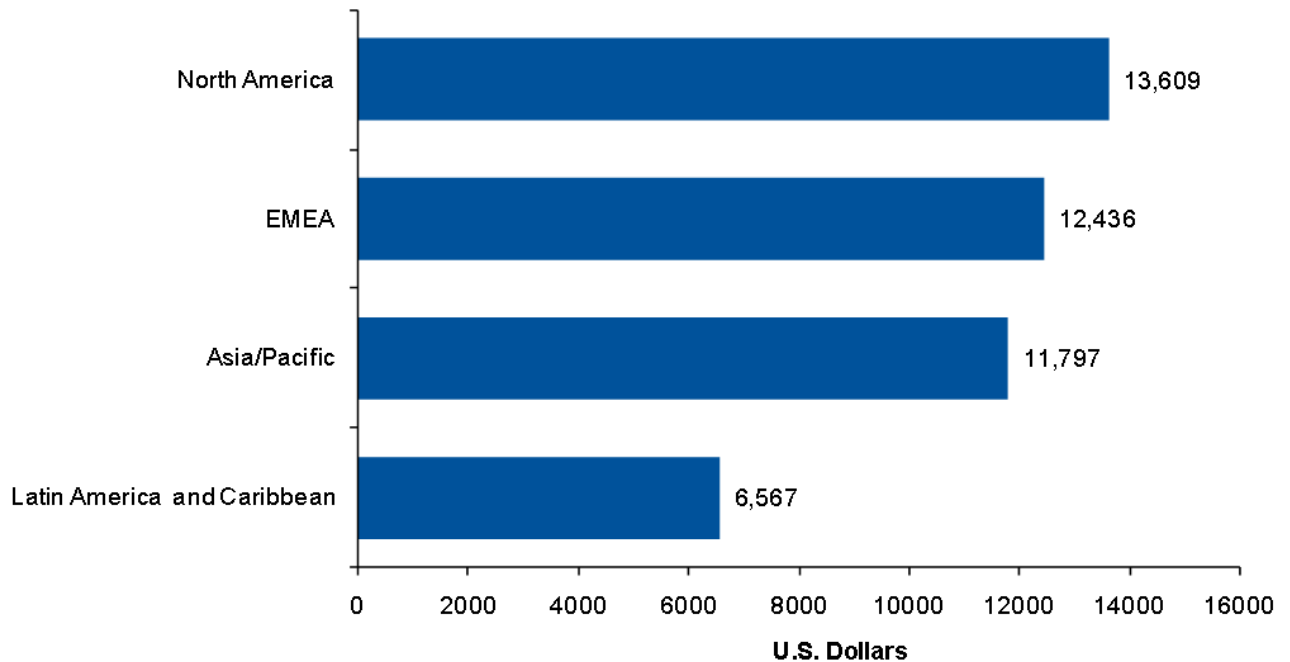
IT spending per enterprise employee helps provide insight into the amount of technology support an organization's workforce receives (see Figure 8 and Figure 9). It can also provide some insight into an organization's level of automation, especially when viewed in conjunction with revenue and income per employee. Insurance, and banking and finance, retain their positions as the top two for the IT spending per enterprise employee metric, respectively, and over the "IT Spending and Staffing Report, 2009," followed by media, utilities and telecommunications for the 2009 and 2010 research reports. By regions, mature regions typically show higher IT spending per employee figures, with North America and Europe, the Middle East and Africa (EMEA) showing higher levels than Asia/Pacific (although not too far off from the others), and Latin America and the Caribbean region showing a figure nearly half that of North America.

Figure 8. IT Spending per Enterprise Employee, by Industry, 2009 (Average)



Source: Gartner ITKMD (January 2010)

Figure 9. IT Spending per Enterprise Employee, by Region, 2009 (Average)

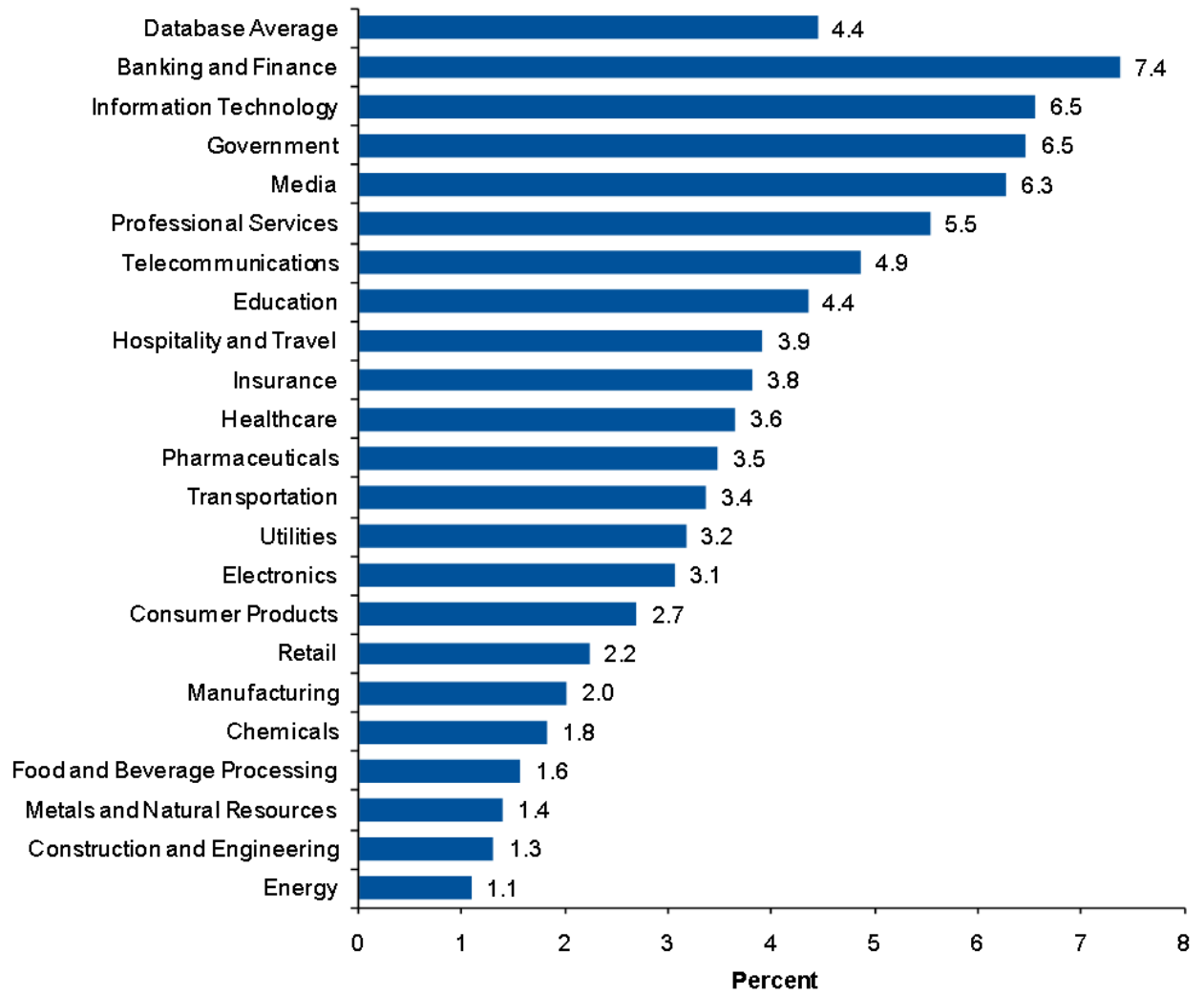


Source: Gartner ITKMD (January 2010)

5.3 IT Spending as a Percentage of Enterprise Operational Expenses, 2009

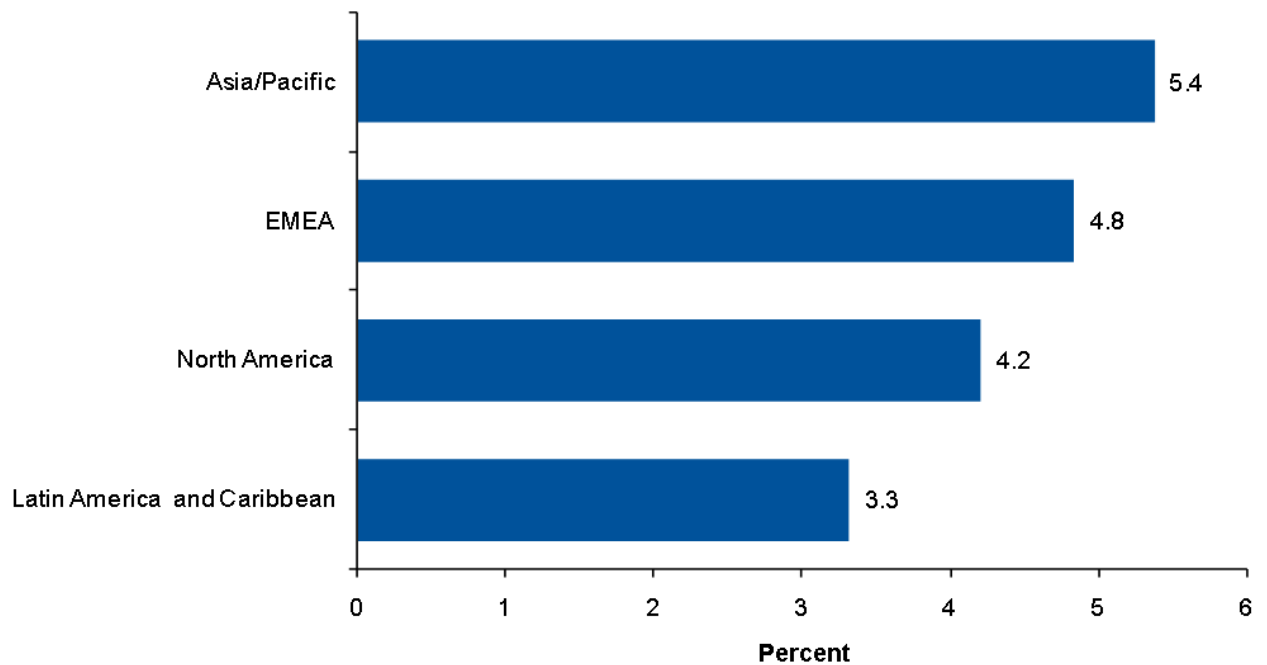
While revenue is highly variable or otherwise inconsistent, the use of IT spending as a percentage of enterprise operational expenses provides a view of the role that IT plays in the spending patterns of the business (see Figure 10 and Figure 11). The greater the amount of operating expenses dedicated to IT, typically the greater the need for visibility into the IT investments the business will require. The highest levels in this category again belonged to banking and financial services enterprises, where IT is often viewed as a strategic enabler, followed by the information technology vertical industry, which moved up an astounding eight places to the No. 2 spot for this metric since the "IT Spending and Staffing Report, 2009." While IT is often viewed mostly as a cost center, the investment in IT can often be substantially lower through the lens of this metric.

Figure 10. IT Spending as a Percentage of Operational Expenses, by Industry, 2009 (Average)



Source: Gartner ITKMD (January 2010)

Figure 11. IT Spending as a Percentage of Operational Expenses, by Region, 2009 (Average)

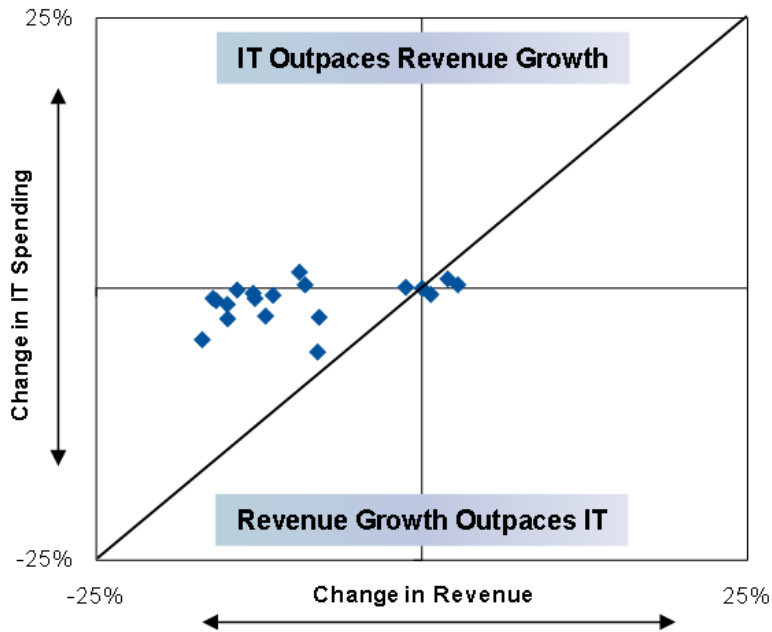


Source: Gartner ITKMD (January 2010)

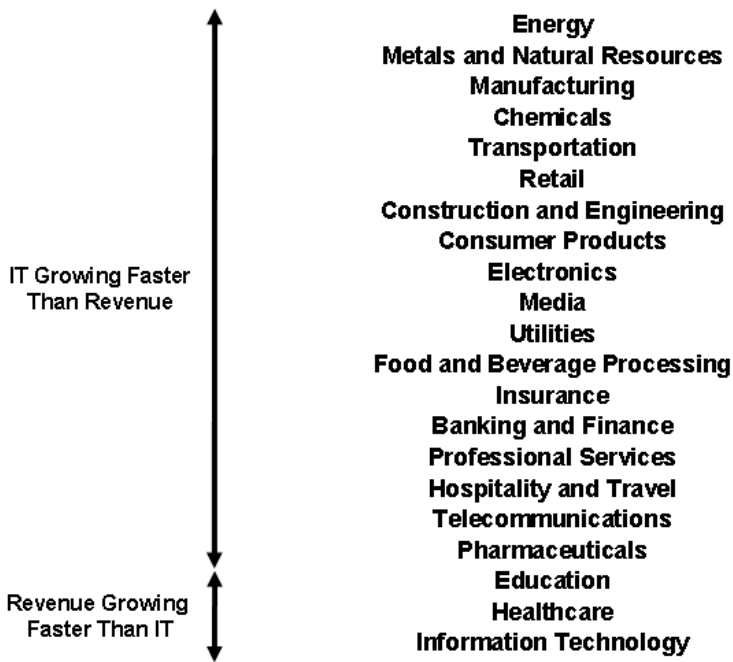
5.4 Comparing Growth in Revenue, Operational Expenses and Operating Profit to IT Spending Growth

Mapping year-over-year revenue growth to IT spending growth or change can be a powerful tool in understanding the role that IT plays in the evolution of the business. By plotting growth in revenue or business operating expenses alongside year-over-year IT investment growth, we can get a better sense of business and IT alignment, especially when viewed over multiple years. Figure 12 and Figure 13 show that, in most cases during 2009, IT spending outpaced growth in revenue and operating expenses. However, for 2009, this could mean that declines in revenue outpaced declines in IT spending. In many organizations, 2009 was an atypical year; revenue decline was steeper than declines in IT spending, which accounts for fewer vertical industries in the revenue category changing faster than the IT change category, or the opex growing faster than the IT category. Figure 14 shows IT spending as a percentage of revenue vs. the operating profit or margin for 2009, which is a useful view for positioning or evaluating the level of IT spending required for changes in business models.

Figure 12. Agility: Revenue vs. IT Spending Change, 2008 to 2009



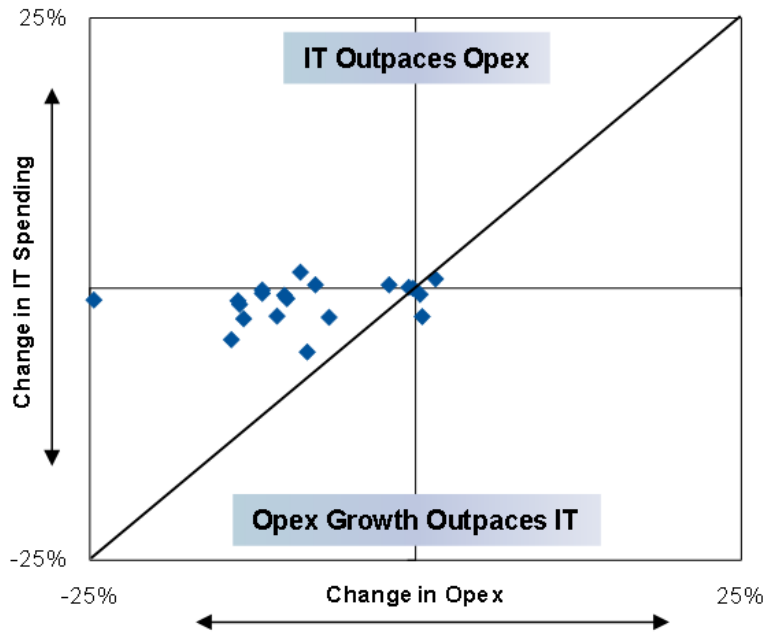
Highest IT Growth vs. Revenue



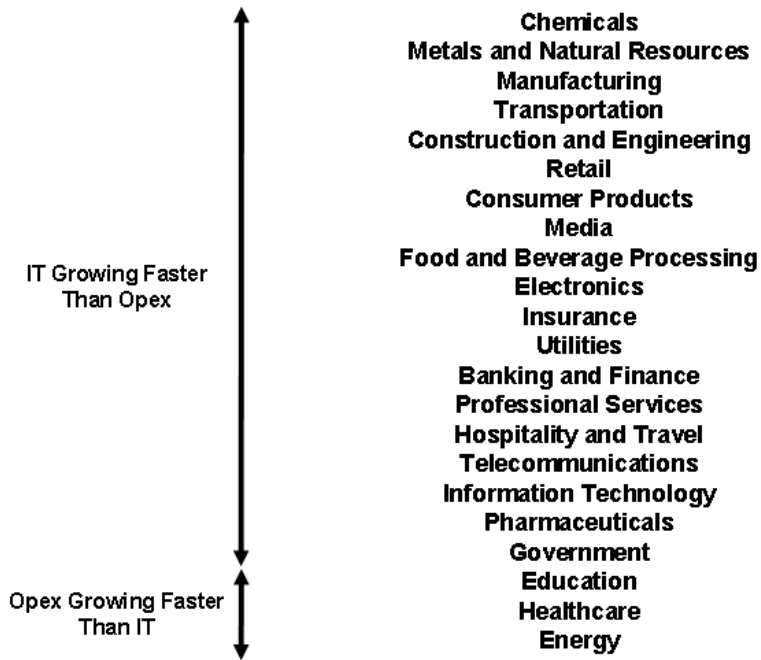
Lowest IT Growth vs. Revenue

Source: Gartner ITKMD (January 2010)

Figure 13. Agility: Operational Expenses vs. IT Spending Changes, 2008 to 2009



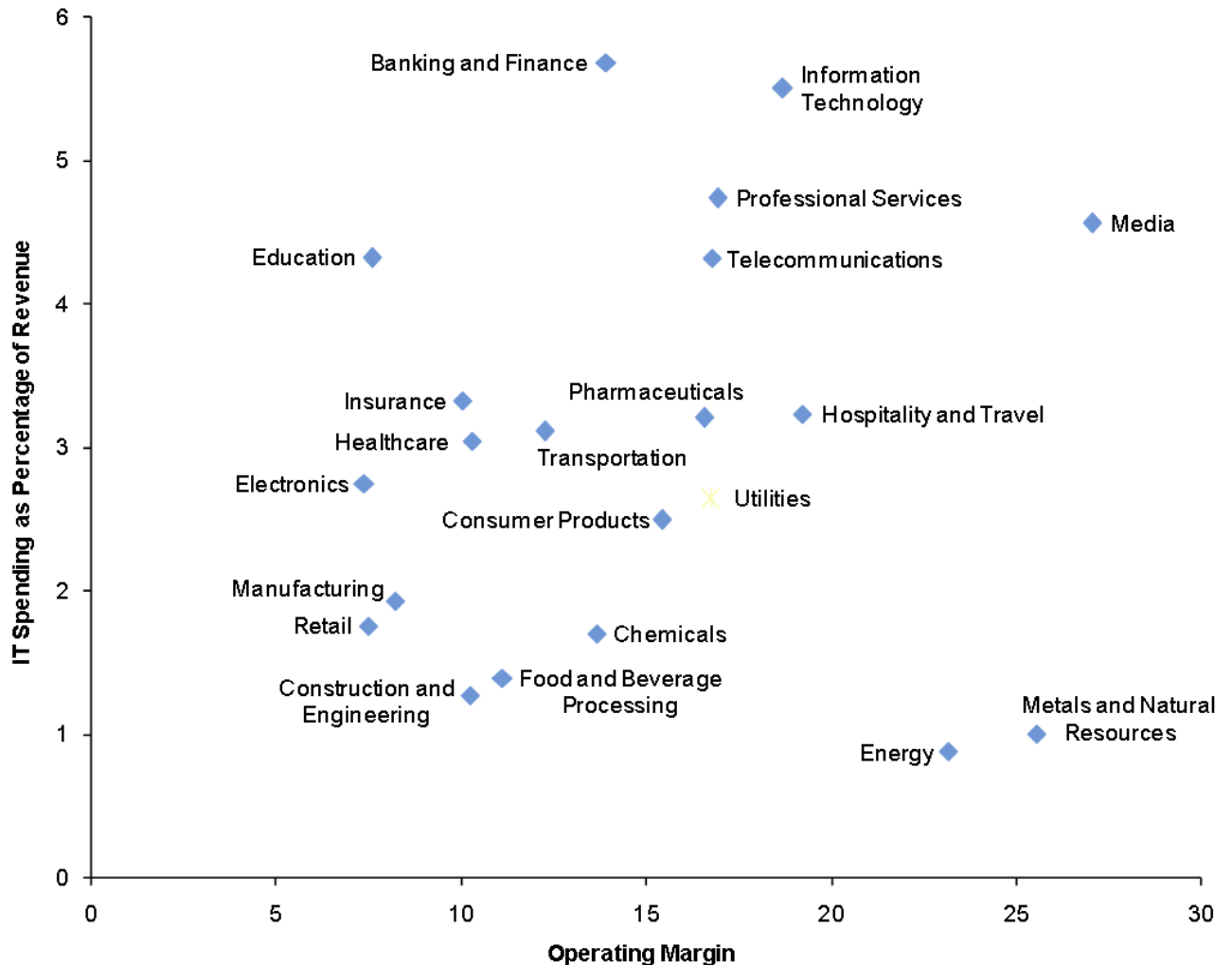
Highest IT Growth vs Opex



Lowest IT Growth vs Opex

Source: Gartner ITKMD (January 2010)

Figure 14. IT Spending as a Percentage of Revenue vs. Operating Profit, 2009

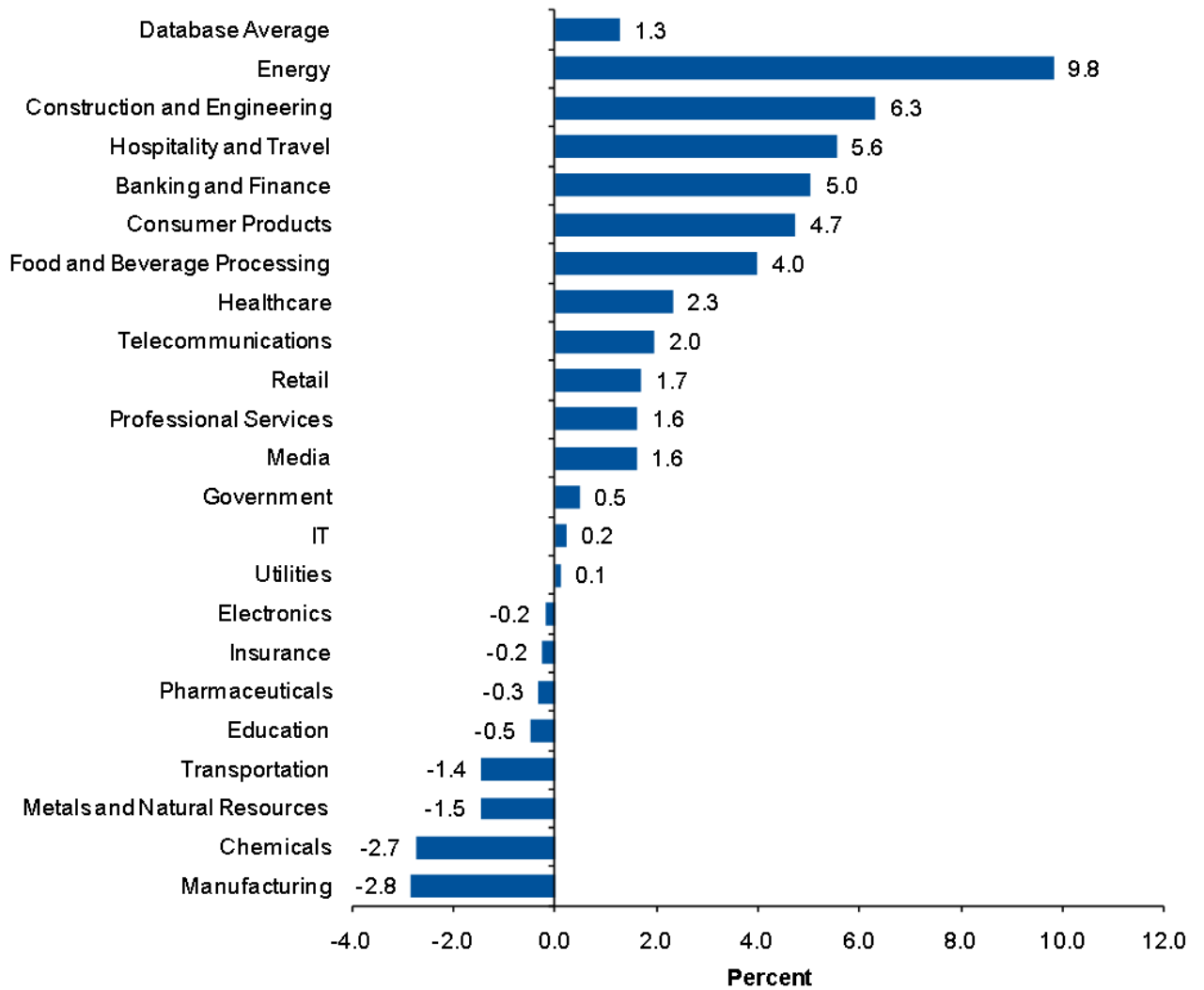


Source: Gartner ITKMD (January 2010)

5.5 IT Spending Outlook in 2010: Enterprises Are Still Cautious

The outlook for 2010, based on survey and benchmarking data collected throughout 2009, is for an average planned increase in IT spending of 1.3% (see Figure 15). This is much less optimistic than last year, when the planned or forecast increase was 2.7% (and 5% the year before that). Although the spending change for the education vertical industry was positive at 0.9% in 2009, in the middle of the economic recession, there is a delayed reaction in this vertical industry, with the 2010 IT spending change projected to be -0.5%, when many vertical industries are set for a return to growth and increases in IT spending. There is a similar delayed reaction for retail and insurance segments, wherein the database's negative change averages are projected to be more significant in 2010. As shown in Figure 16, regional 2010 forecasts for IT spending changes are all positive vs. the actual IT spending changes shown in Figure 5, with the Latin America and Caribbean region showing the most variable swing of -3.5% in 2009 to a growth of 6.4% in 2010. The Asia/Pacific region shows the highest forecast for IT spending growth in 2010 at 6.7%, while North America and EMEA show less than 1% growth.

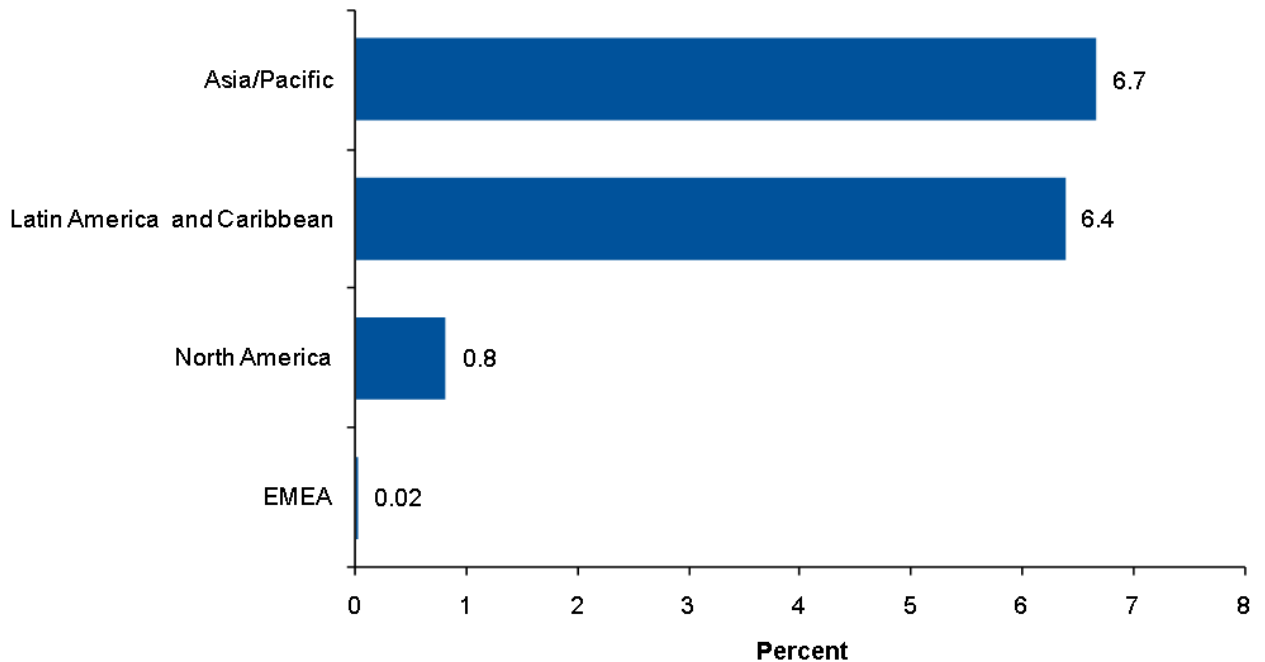
Figure 15. IT Spending Changes, by Industry, 2009 to 2010 (Average)



Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

Figure 16. IT Spending Changes, by Region, 2009 to 2010 (Average)



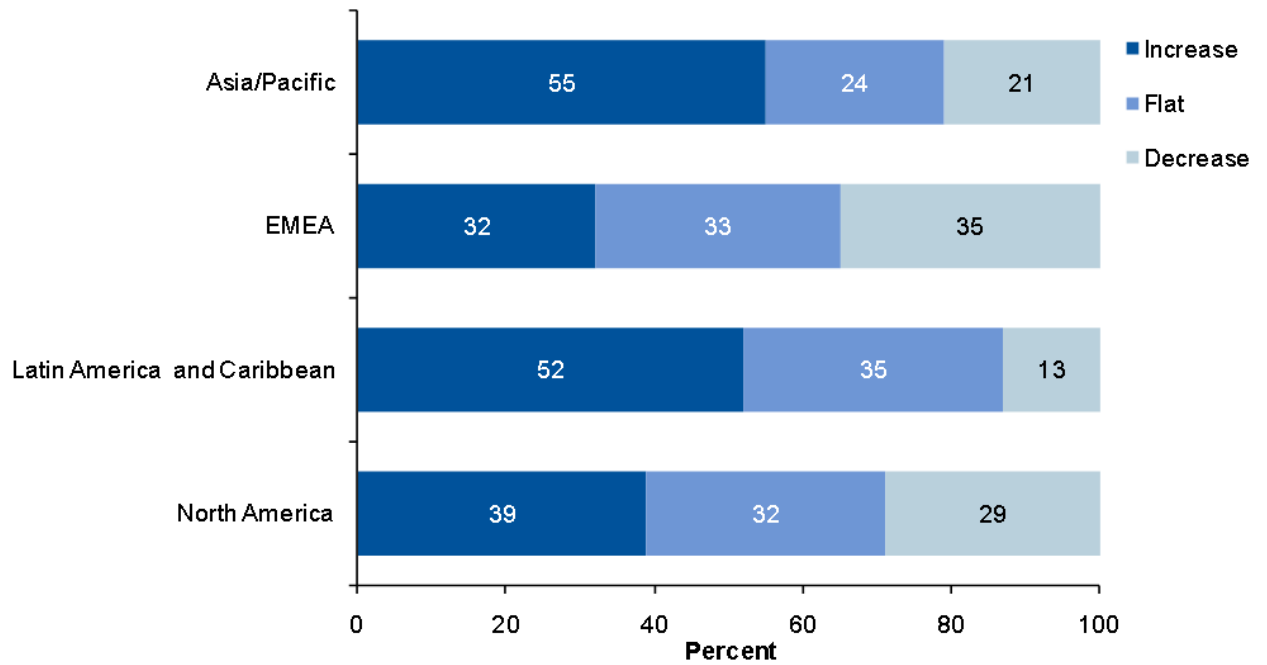
Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

5.6 IT Spending Change Behavior: Return to Growth for Some, but Not All

By looking at the distribution of enterprises increasing, decreasing and keeping spending flat, it is possible to get a better understanding of what's driving the averages shown in earlier figures (see Figure 17 through Figure 22). As shown in Figure 17 and Figure 18, the 2010 forecasts for IT spending change seem to temper the optimism of 2010 being the ultimate return-to-growth year for all enterprises. Viewing the percentages of enterprises with flat or decreasing IT spending, or the percentage averages for decreases in IT spending, shows that the full effects of this economic downturn may require a year or more for many IT and business leaders to overcome.

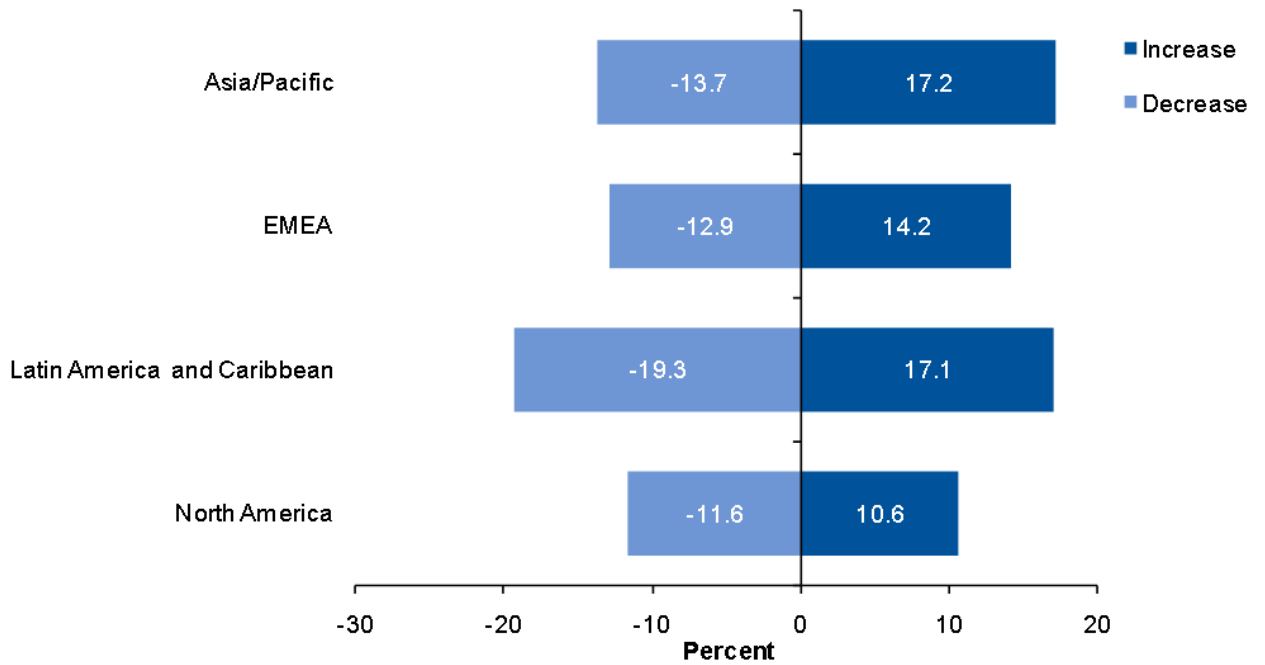
Figure 17. IT Spending Behavior: Regional Distribution of IT Spending by Change Type (Increase, Flat, Decrease), 2009 to 2010 (Average)



Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

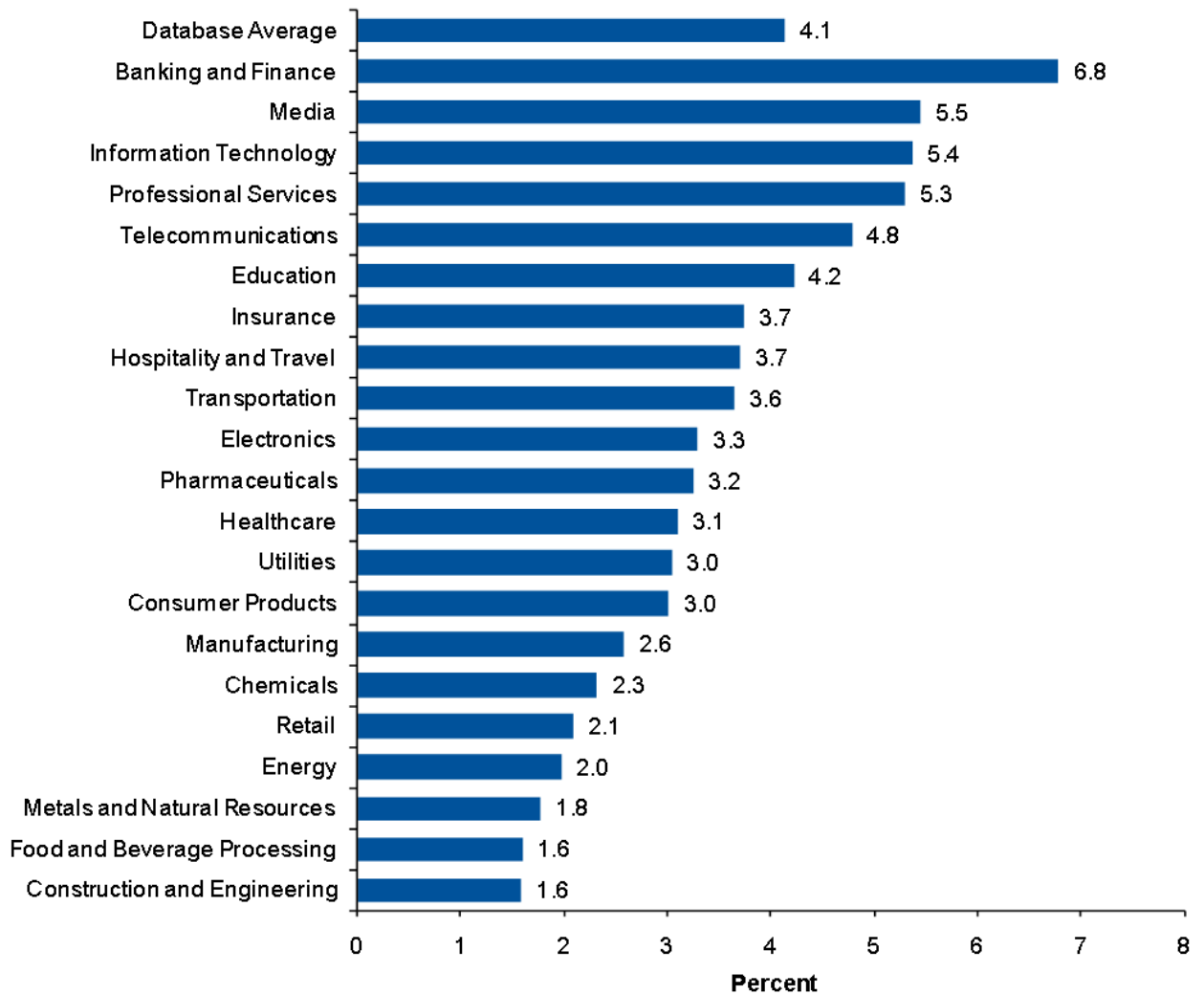
Figure 18. IT Spending Behavior: Regional IT Spending by Change Type (Increase or Decrease), 2009 to 2010 (Average)



Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

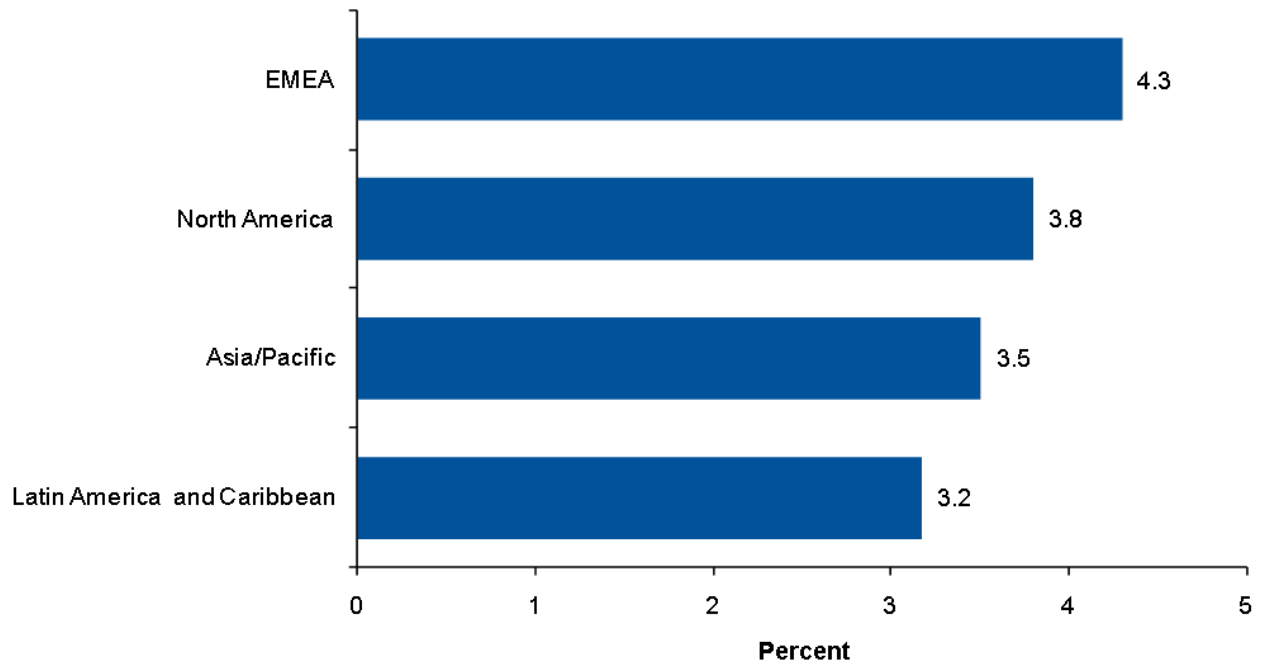
Figure 19. IT Spending as a Percentage of Revenue, by Industry, 2010 (Average)



Notes: (1) This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution. (2) Because of issues with revenue definition and measurement for government entities, government is omitted from this list of vertical industries for IT spending as a percentage of revenue, but is shown on the list of industries for IT spending as a percentage of enterprise operational expenses or budget.

Source: Gartner ITKMD (January 2010)

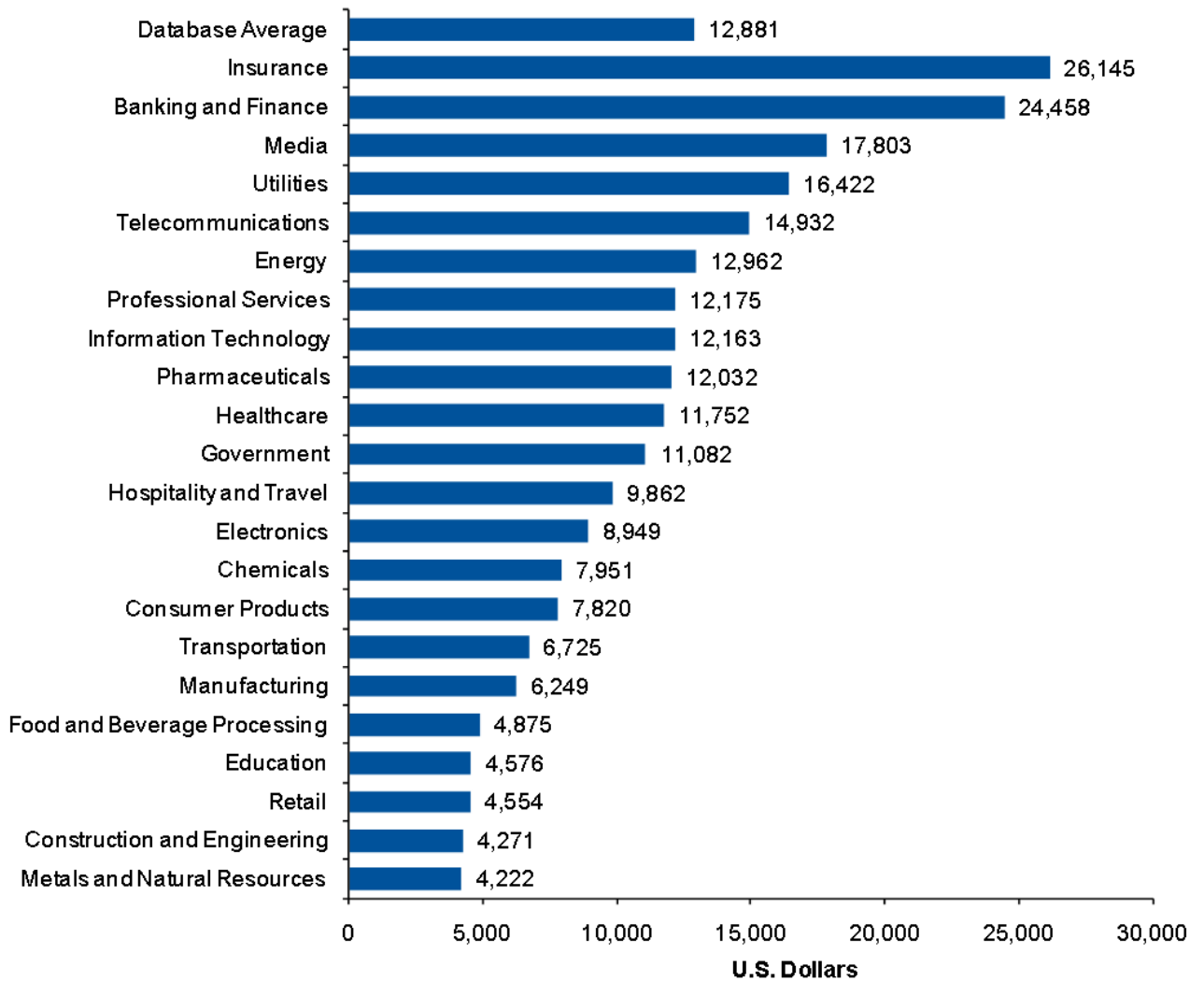
Figure 20. IT Spending as a Percentage of Revenue, by Region, 2010 (Average)



Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

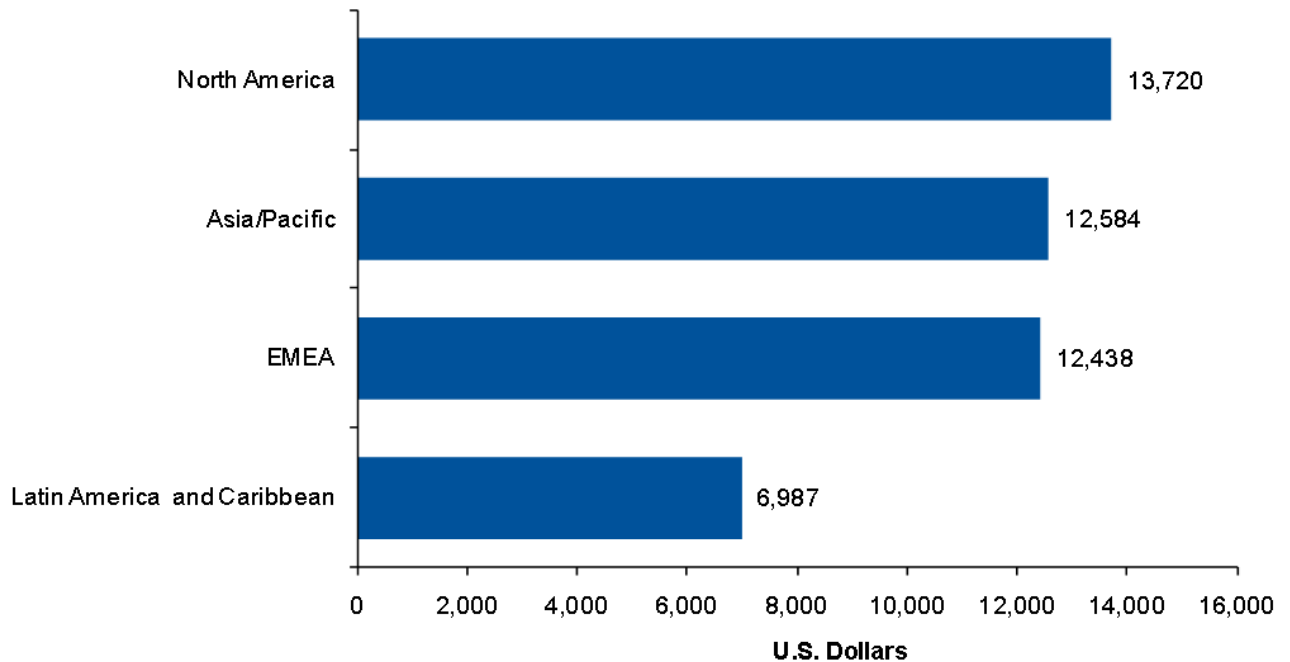
Figure 21. IT Spending per Enterprise Employee, by Industry, 2010 (Average)



Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

Figure 22. IT Spending per Enterprise Employee, by Region, 2010 (Average)



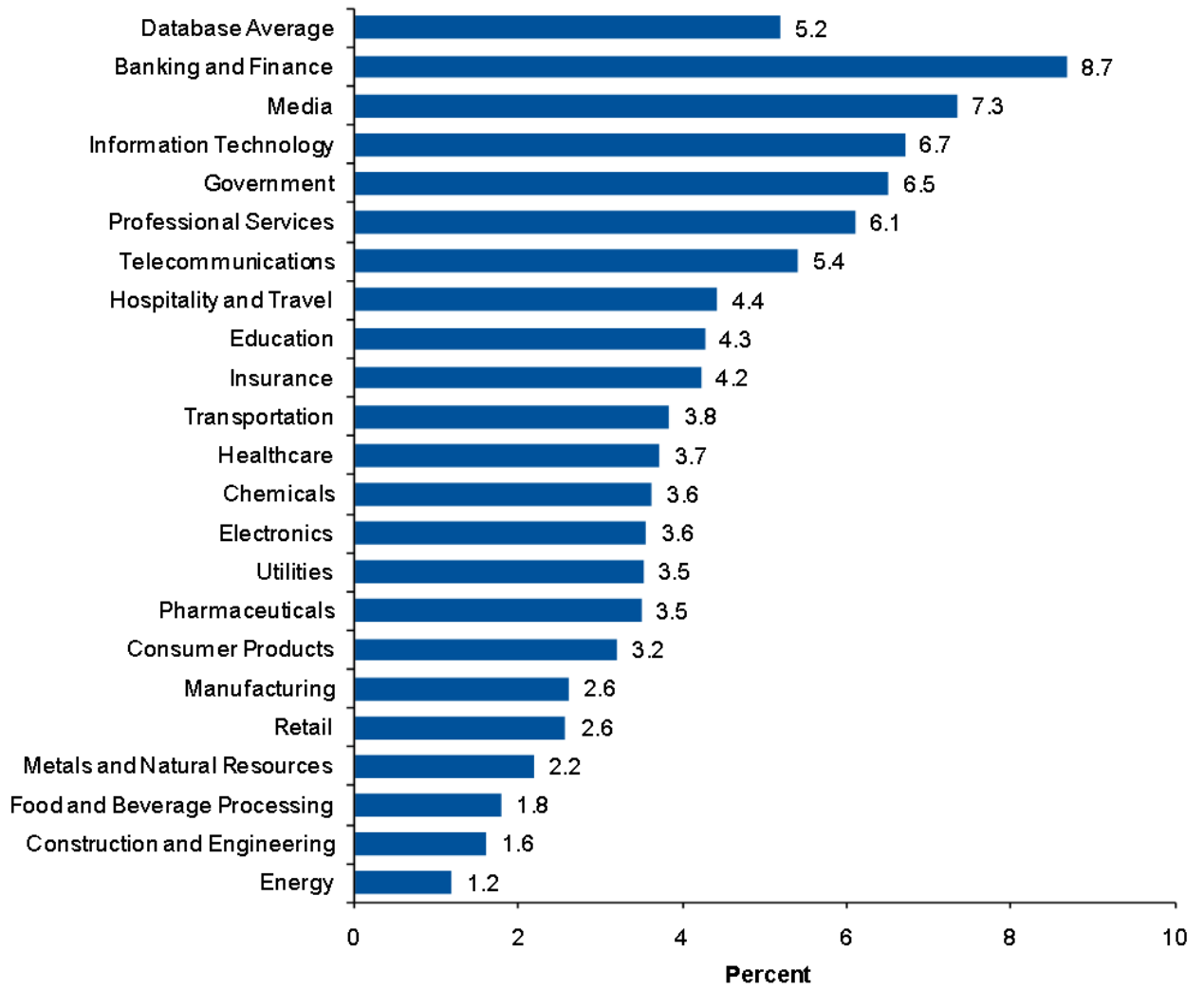
Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

5.7 IT Spending as a Percentage of Enterprise Operational Expenses, 2010

As was the case with IT spending as a percentage of revenue, IT spending as a percentage of enterprise operational expenses is forecast to increase or remain flat in 2010 in the vast majority of vertical industries. The education segment is the only vertical industry showing a decline here, although marginally, which changes from 4.4% in 2009 (see Figure 10) to 4.3% in 2010 (see Figure 23). As shown in Figure 24 (and Figure 11 earlier), IT spending as a percentage of operational expenses by world region is also set to increase in every region, and on average.

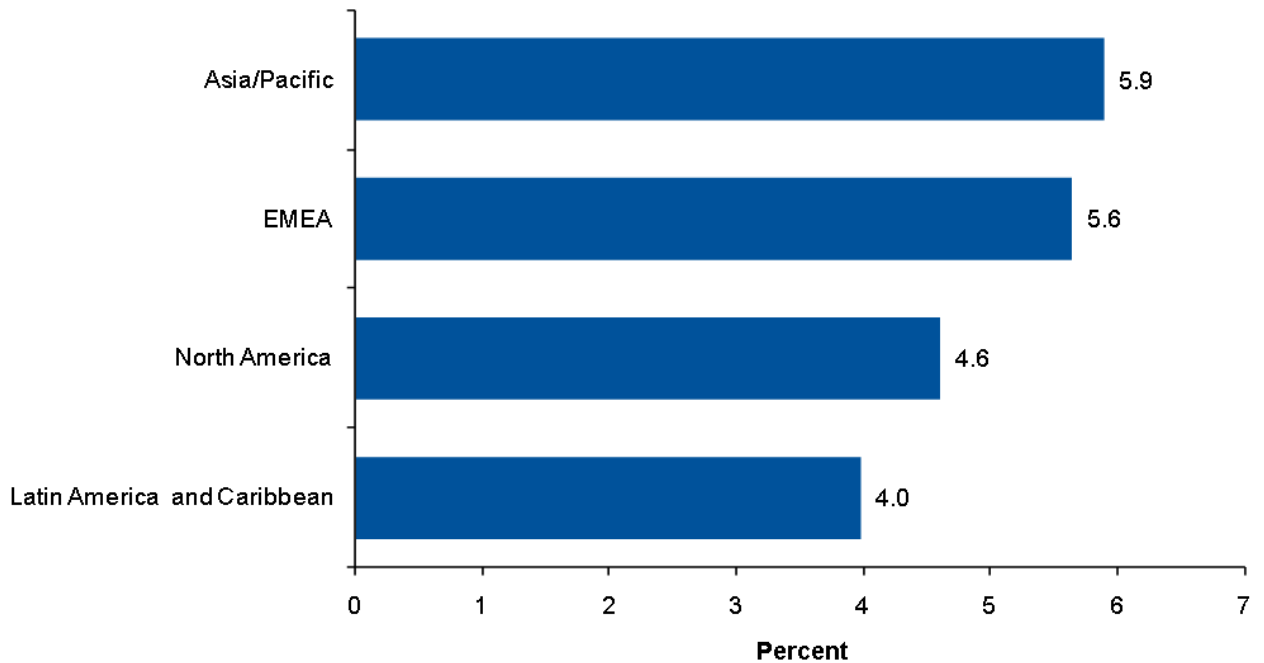
Figure 23. IT Spending as a Percentage of Enterprise Operational Expenses, by Industry, 2010 (Average)



Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

Figure 24. IT Spending as a Percentage of Operational Expenses, by Region, 2010 (Average)



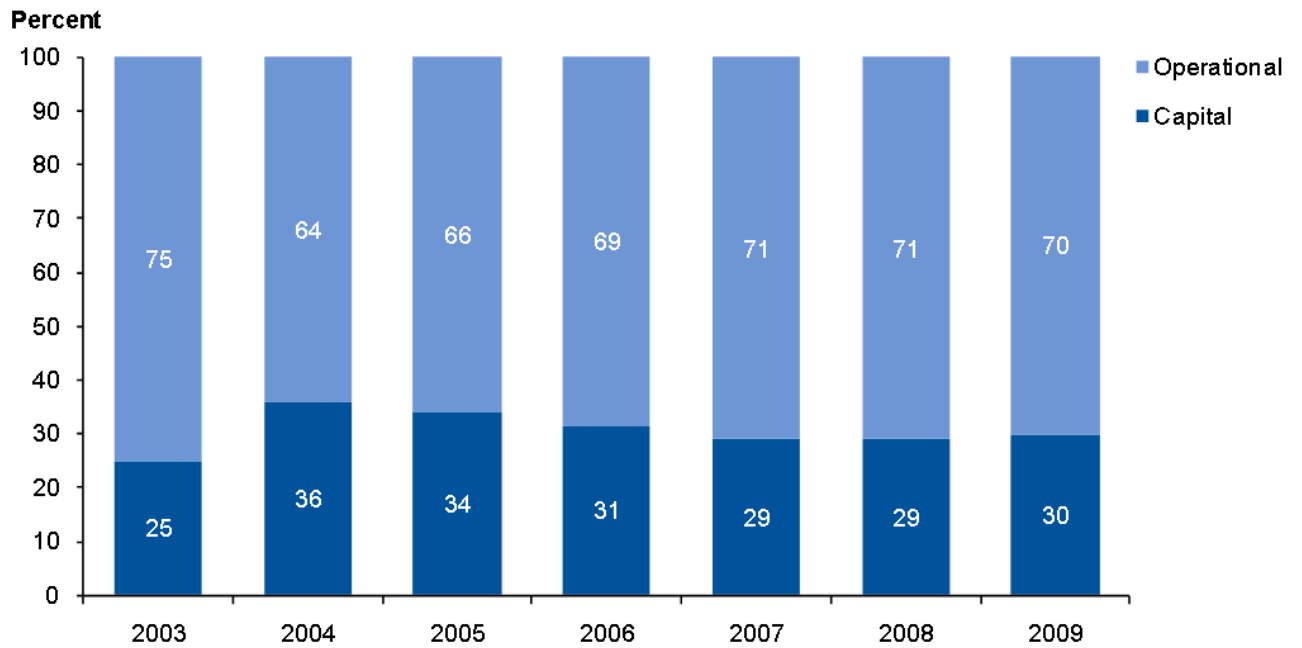
Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

5.8 IT Operational Expenses vs. IT Capital Expenses

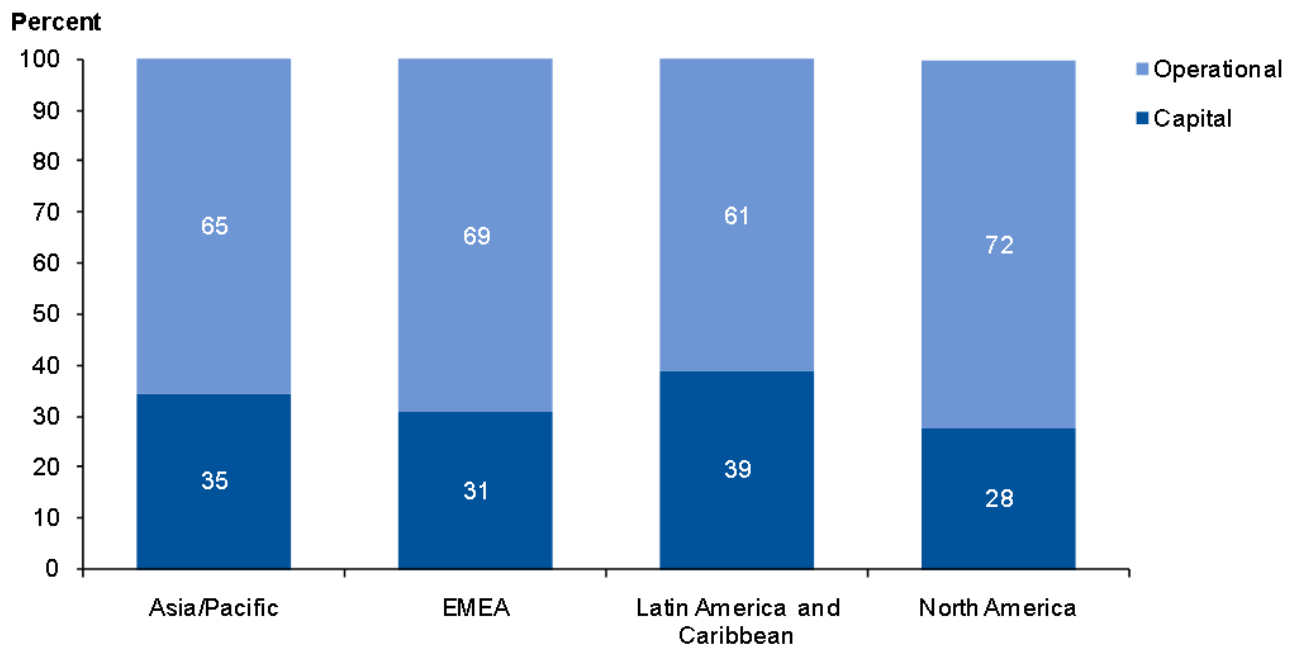
To understand the IT investment profile, it's important to look at IT operational expenses vs. IT capital expenses. The economic recession had a minimal effect on the IT spending split between operational expenses and capital expenses in 2009, with 30% of IT spending devoted to IT capital and 70% devoted to IT operational expenses (see Figure 25). Throughout 2009, there was an immaterial increase of one percentage point in the IT capital spending portion, up from 29% in 2008. Higher overall growth rates in IT spending in emerging regions, such as Asia/Pacific and the Latin America and Caribbean regions, often correlate to higher percentages of IT spending devoted to IT capital, with the split devoted to IT capital at 35% and 39%, respectively. These levels are higher than those in the more mature regions of EMEA and North America, with an IT capital split percentage of 31% and 28%, respectively (see Figure 26).

Figure 25. IT Capital vs. IT Operational Spending, Historical Trending, 2003 to 2009 (Average)



Source: Gartner ITKMD (January 2010)

Figure 26. IT Capital vs. IT Operational Spending, by Region, 2009 (Average)



Source: Gartner ITKMD (January 2010)

5.9 Strategic IT Spending Categories: Run-the-Business, Grow-the-Business and Transform-the-Business IT Spending

Classifying IT spending into categories that show impact on business outcomes or success can aid alignment and quantify underinvestment in IT. Gartner uses the following portfolio spending categories:

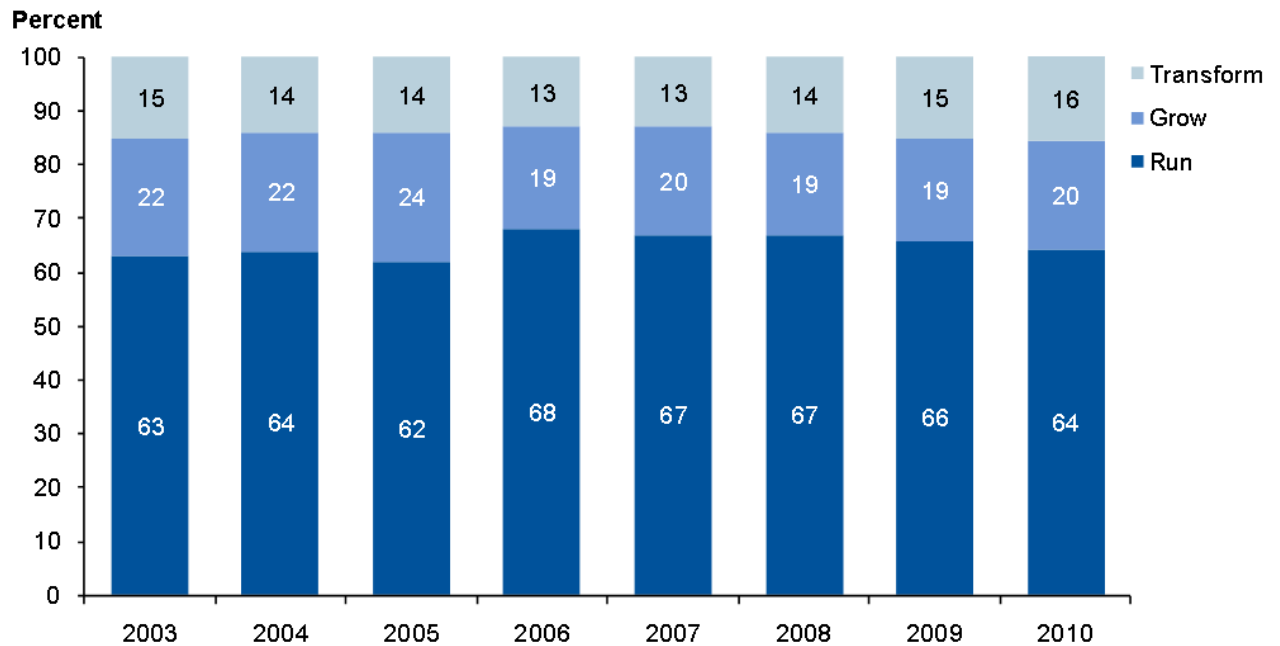
- **Run the business:** This is an indicator of how much of the IT resource is consumed and focused on the continuing operation of the business. Nondiscretionary expenses are included in the run-the-business cost.
- **Grow the business:** This is an indicator of how much of the IT resource is consumed and focused on developing and enhancing IT systems in support of business growth (typically organic growth). Discretionary investments are included in the grow-the-business cost.
- **Transform the business:** This is an indicator of how much of the IT resource is consumed and focused on implementing technology systems that enable the enterprise to enact new business models. This is very much a "venture" category, and would be represented by activities such as a brick-and-mortar retailer moving to online shopping; a traditional bank offering online banking (or moving into offering insurance services); or a commercial airline offering new freight services.

Gaps in business alignment can be found by examining IT spending as it relates to the day-to-day operations of a business (run), the organic growth of the business (grow), and its support of major business transformation, new products, services or business models (transform).

Growth or transformation that is expected, but not reflected, in the IT budget can indicate that the business has not planned adequately, or is looking to get IT support from somewhere else (such as outsourcing) that will not be managed by the IT organization. Situations like these are symptomatic of IT organizations that are viewed as cost centers rather than strategic enablers, and can also highlight competitive disadvantages.

In 2009, the distribution of IT spending between run, grow and transform activities showed only a slight change over the percentages in 2008, and the forecast for 2010 shows a slight increase in the growth and transform categories, which reduces the run category from 66% to 64% (see Figure 27).

Figure 27. Run-, Grow- and Transform-the-Business IT Spending, Historical Trending, 2003 to 2010 (Average)



Note: This data was collected throughout 2009 and may be influenced by underoptimism, based on the recession, and overoptimism for a return to growth. Because of this, 2010 forecasts and projections should be used with caution.

Source: Gartner ITKMD (January 2010)

Subtle hints of an industry's IT investment profile can be seen in a higher percentage of IT spending devoted to the grow and transform categories, which comes at the expense of the run category from a percentage perspective. In Table 3, insurance shows the highest grow/transform percentage at 42%, followed by the retail and information technology vertical industries at 40%. The aim of levels this high is to drive revenue growth or achieve significant productivity improvements. Here, again, is more evidence that many enterprises will be climbing out of austerity into a return-to-growth footing. Looking only at transform the business, insurance and pharmaceuticals devote 18% of IT spending to this category, and they are the highest of all vertical industries analyzed; this indicates that they endeavor to drive new revenue, enter new marketplaces or create new business models with the aid of IT.

Table 3. Run-, Grow- and Transform-the-Business IT Spending, by Industry, 2009

Industry	Run	Grow	Transform
Database Average	66%	19%	15%
Banking and Finance	62%	21%	17%
Chemicals	71%	13%	16%
Construction and Engineering	67%	19%	14%
Consumer Products	61%	22%	17%
Education	69%	16%	15%
Electronics	69%	20%	11%
Energy	73%	17%	10%

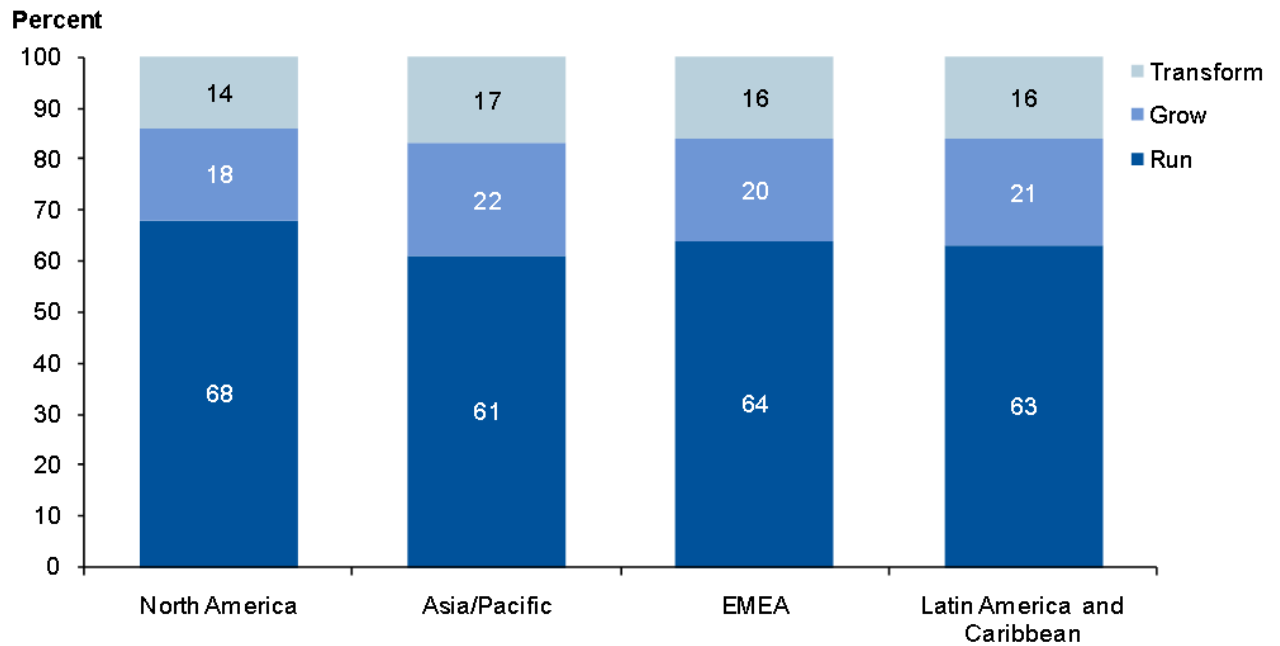
Industry	Run	Grow	Transform
Food and Beverage Processing	67%	19%	14%
Government	73%	12%	15%
Healthcare	67%	19%	14%
Hospitality and Travel	65%	20%	15%
Information Technology	60%	23%	17%
Insurance	58%	24%	18%
Manufacturing	70%	18%	12%
Media	62%	24%	14%
Metals and Natural Resources	75%	16%	9%
Pharmaceuticals	62%	20%	18%
Professional Services	62%	22%	16%
Retail	60%	24%	16%
Telecommunications	57%	27%	16%
Transportation	66%	19%	15%
Utilities	67%	17%	16%

Source: Gartner ITKMD (January 2010)

Somewhat amazing in 2009 is that there was an immaterial decline in the grow and transform categories (and an increase in the run category), even during the largest worldwide recession in history. Although not all survey or benchmark respondents provided strategic spending category information (and may have only provided other IT spending information), we find that enterprises that are able to organize and articulate their IT spending by strategic spending categories are more likely to be advanced in investment practices, which means they tended to continue with multiyear programs, or even increased grow and transform category spending, while other enterprises were retrenching in desperation during the recession. This also indicates that, as each year passes, in the run category, more enterprises are experimenting with and getting better at converting more of their IT spending to variable cost sources, which would allow for quicker reduction during a recession.

Higher overall growth rates in IT spending in emerging regions, such as Asia/Pacific and the Latin America and Caribbean regions, often correlate to higher percentages of IT spending devoted to the grow and transform categories, with the percentage of IT spending devoted to grow/transform at 39% and 37%, respectively. EMEA and North America show levels of 36% and 32%, respectively (see Figure 28).

Figure 28. Run-, Grow- and Transform-the-Business IT Spending, by Region, 2009 (Average)

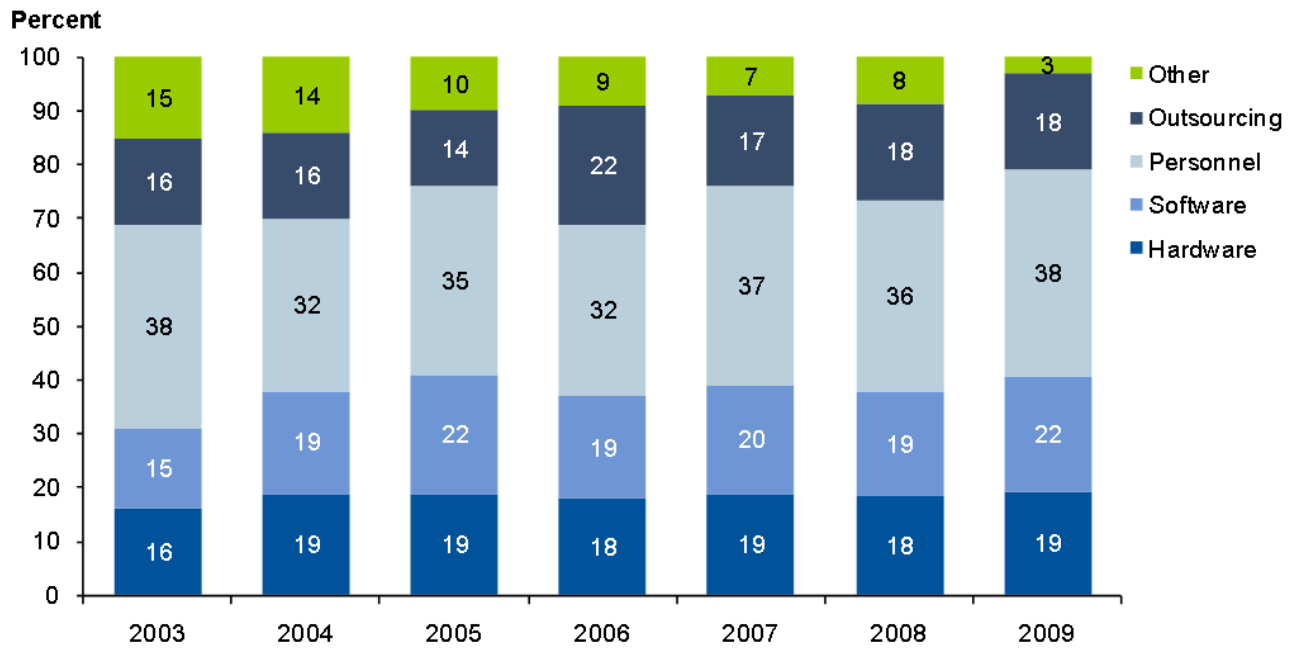


Source: Gartner ITKMD (January 2010)

5.10 Hardware, Software, Personnel and Outsourcing Spending Distribution

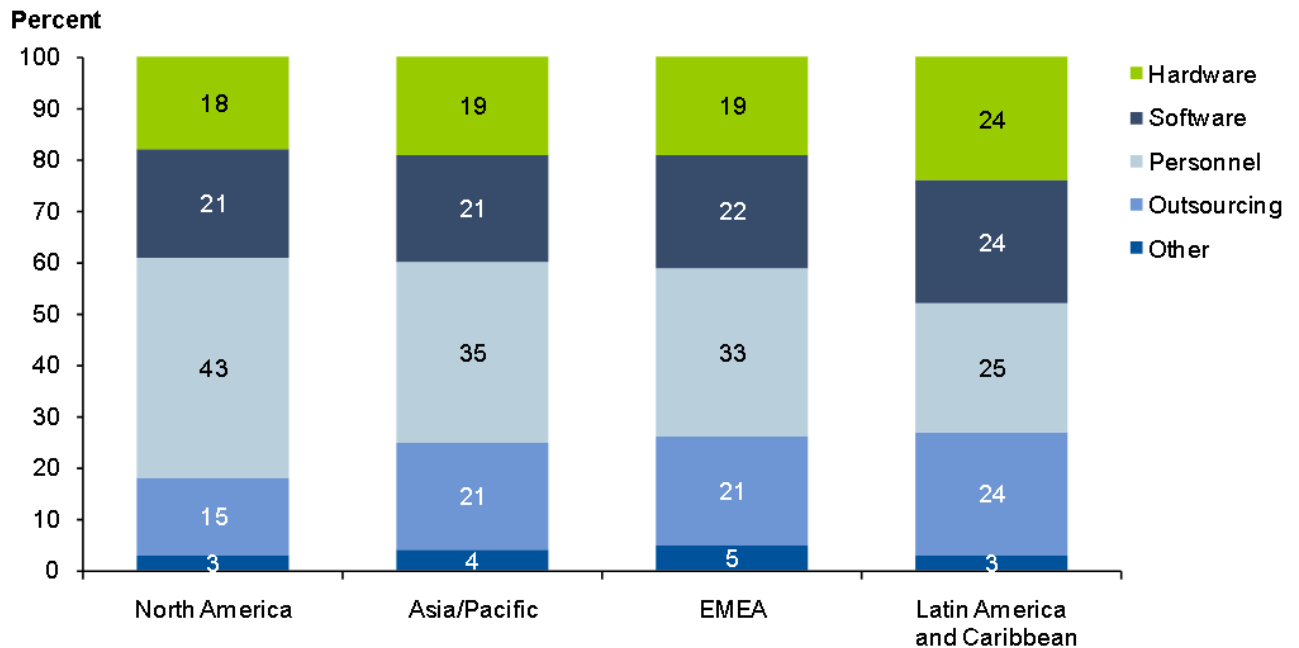
Distribution of spending among hardware, software, personnel and outsourcing can provide some insight into an organization's level of dependence on external IT services (outsourcing), or the relative investment in infrastructure vs. services (see Figure 29 and Figure 30). In 2009, many IT leaders used this distribution of IT spending to help identify IT cost optimization opportunities by viewing which percentages within their organizations were higher or lower than the industry standards (shown below).

Figure 29. IT Spending on Hardware, Software, Personnel and Outsourcing, Historical Trending, 2003 to 2009 (Average)



Source: Gartner ITKMD (January 2010)

Figure 30. IT Spending on Hardware, Software, Personnel and Outsourcing, by Region, 2009 (Average)

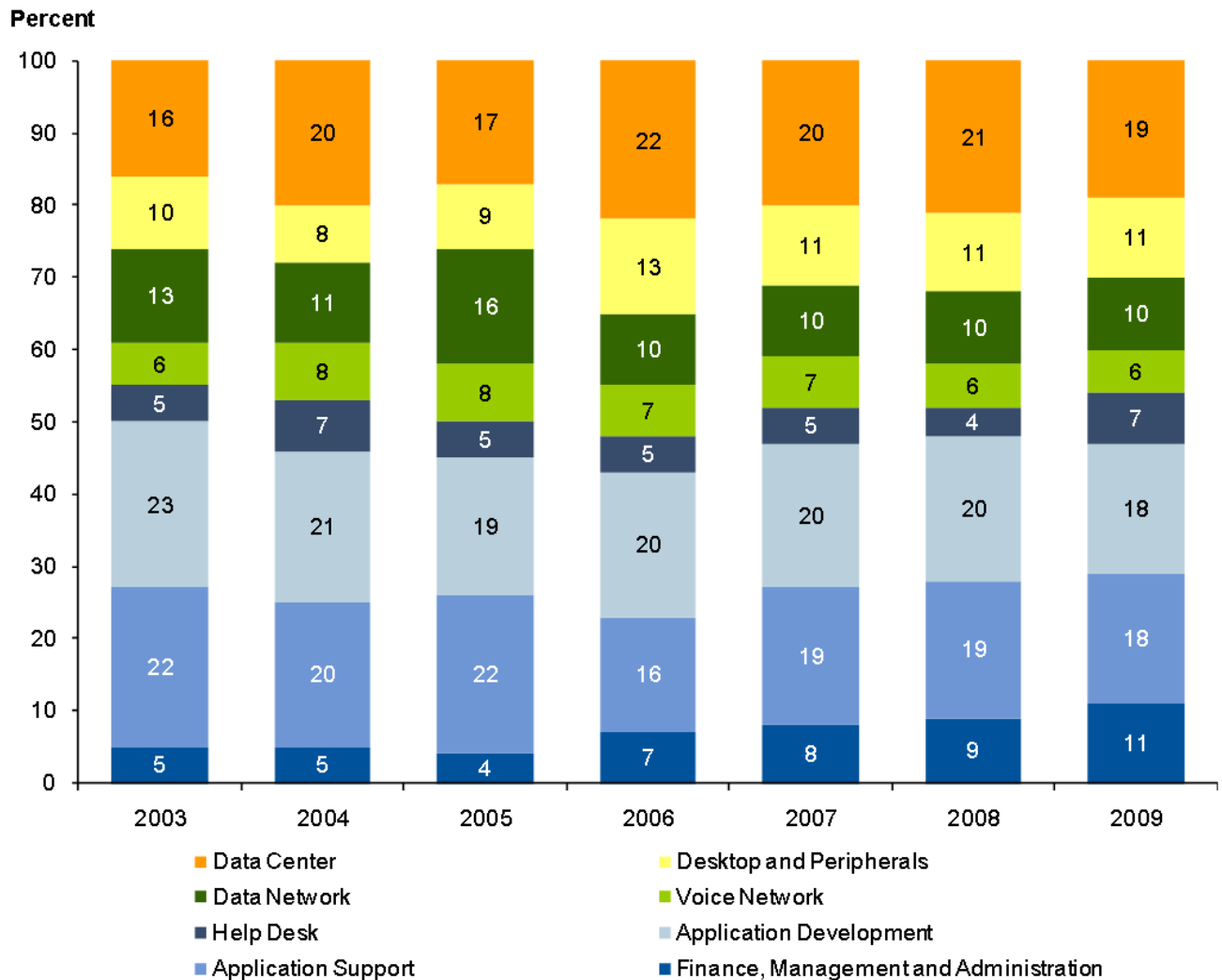


Source: Gartner ITKMD (January 2010)

5.11 IT Spending by Technology Tower or IT Domain

Viewing total IT spending by domain or tower provides insight into the basic functions or activities performed by IT (see Figure 31 and Figure 32). To understand the type of workload present in an organization, one can combine application development and support, and then compare this with the sum of the distribution of the remaining towers (except for finance, management and administration). In that way, IT leaders can determine whether the organization is spending more on applications or infrastructure. Comparing application development with application support can help determine how much the organization spends on building or acquiring new applications, as opposed to maintaining existing ones. For definitions, see Note 1 "Technology Domain or Tower Distribution of IT Spending and Staffing."

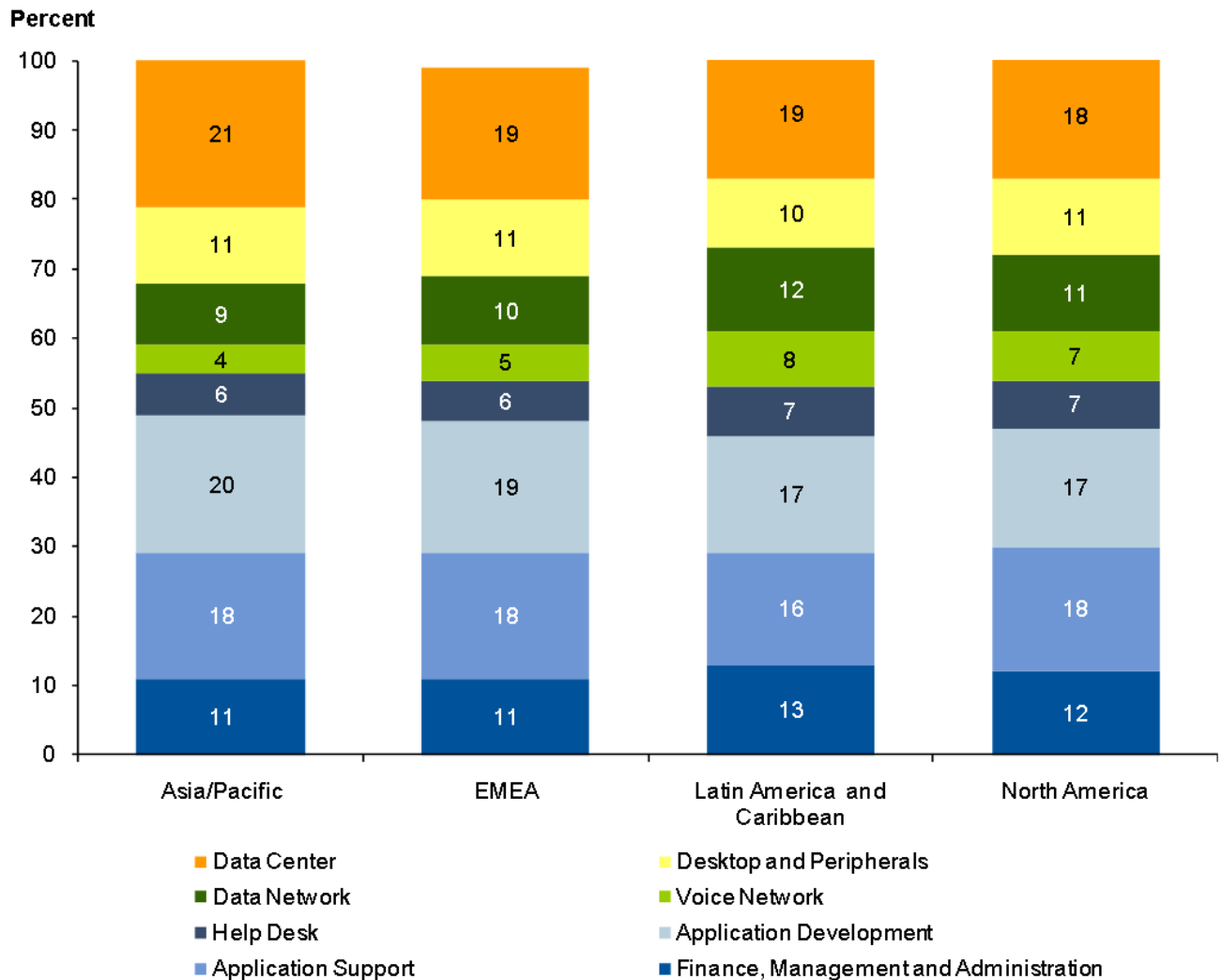
Figure 31. IT Spending by Technology Tower or IT Domain, Historical Trending, 2003 to 2009 (Average)



Note: IT spending by tower or domain combines IT operating expense with depreciation and amortization. IT capital expense is omitted from this analysis.

Source: Gartner ITKMD (January 2010)

Figure 32. IT Spending by Technology Tower or IT Domain, by Region, 2009 (Average)



Note: IT spending by tower or domain combines IT operating expense with depreciation and amortization. IT capital expense is omitted from this analysis.

Source: Gartner ITKMD (January 2010)

6.0 IT Staffing: Key Metrics and Trends

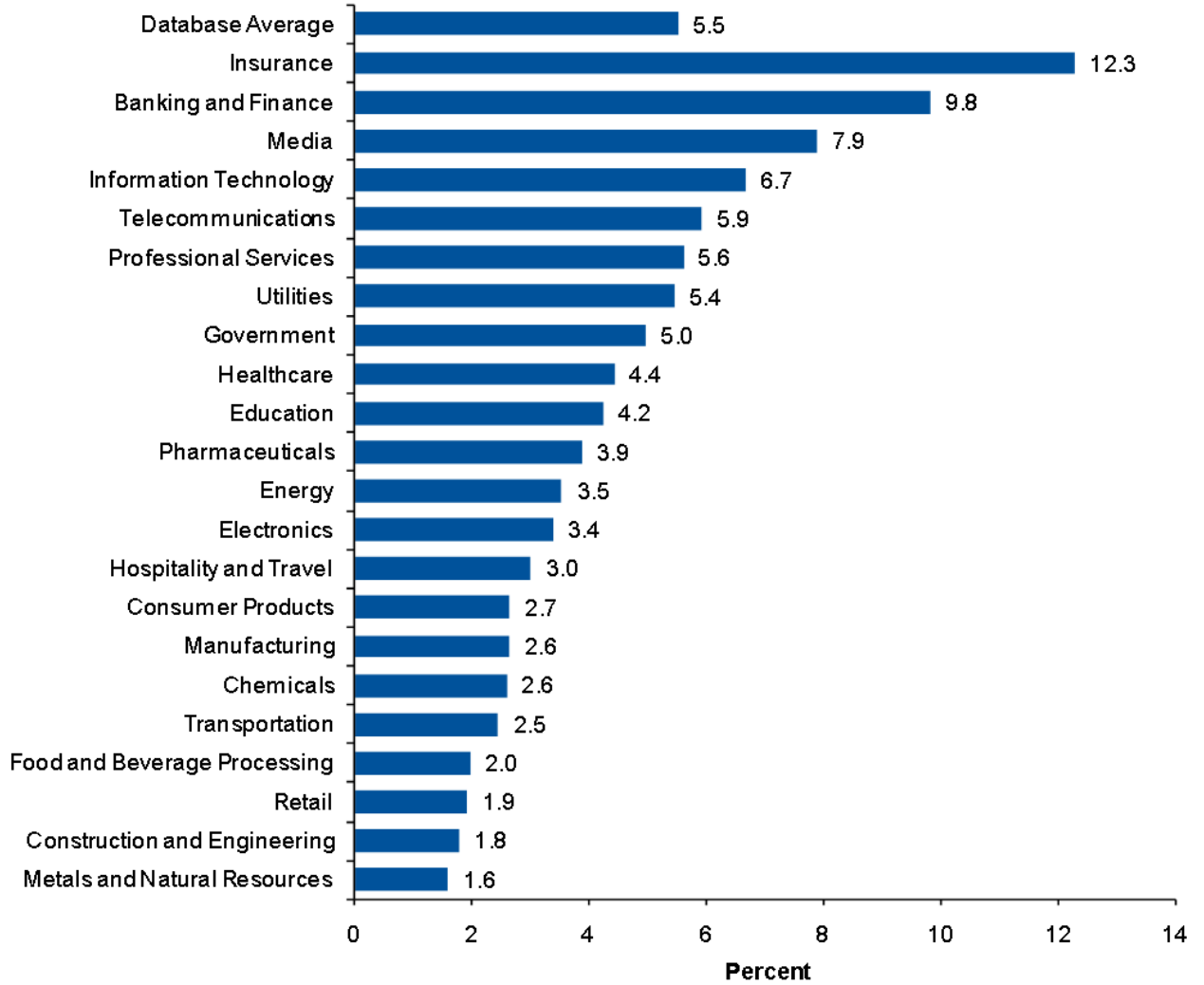
As we have seen in previous figures, the IT staff (i.e., internal IT FTEs and IT contract labor) typically represents more than one-third of the overall IT investment, which demonstrates the considerable human component of the IT portfolio. As such, it is critical for organizations to understand whether they are staffed adequately, whether their human resources are effective, and whether they are sufficiently trained and motivated to meet changing business needs. The following metrics provide a broad view of IT staffing levels among the organizations studied.

6.1 Internal Support

A key measure of IT support to a business is the percentage of IT employees (i.e., internal IT FTEs and IT contract labor) in the enterprise compared with the total number of employees (excludes contract labor — see Figure 33 and Figure 34). Traditionally, banks and financial

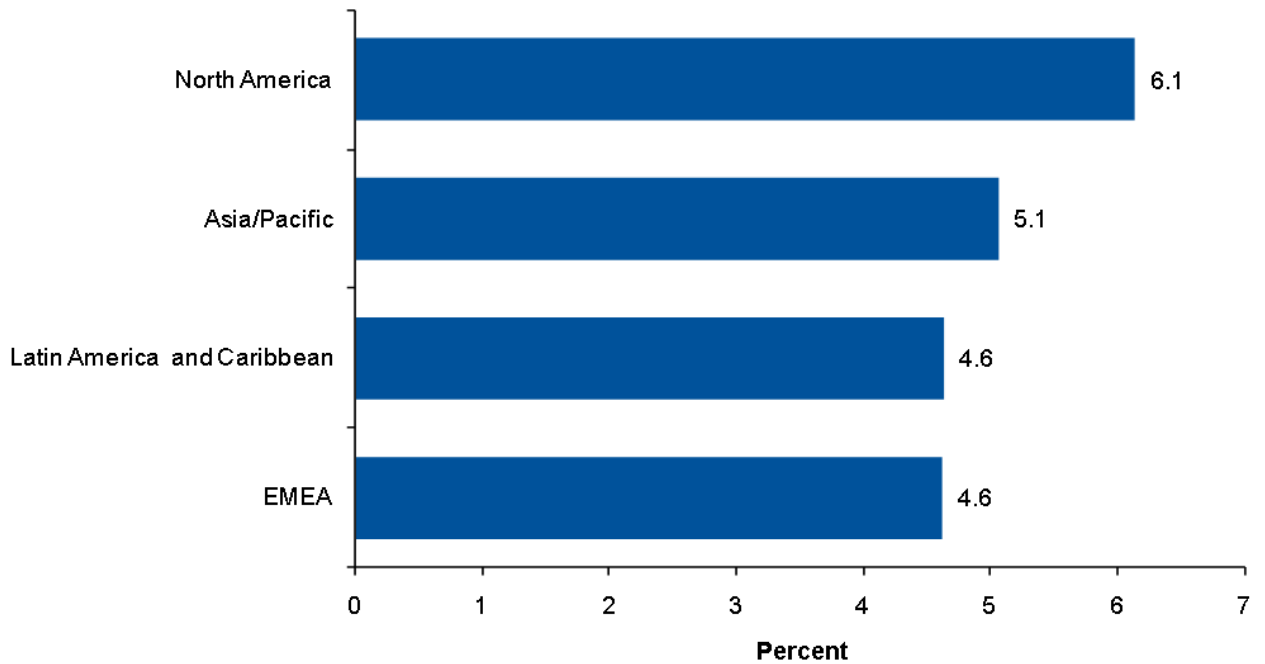
services companies have been among the most IT-intensive employers, but in the past year, we have seen a considerable increase for insurance and media firms, which have taken the top positions. Regionally, enterprises in North America show a higher percentage of enterprise employees devoted to the IT staff, while EMEA is the last of the four regions.

Figure 33. IT Employees as a Percentage of Total Enterprise Employees, by Industry, 2009 (Average)



Source: Gartner ITKMD (January 2010)

Figure 34. IT Employees as a Percentage of Total Enterprise Employees, by Region, 2009

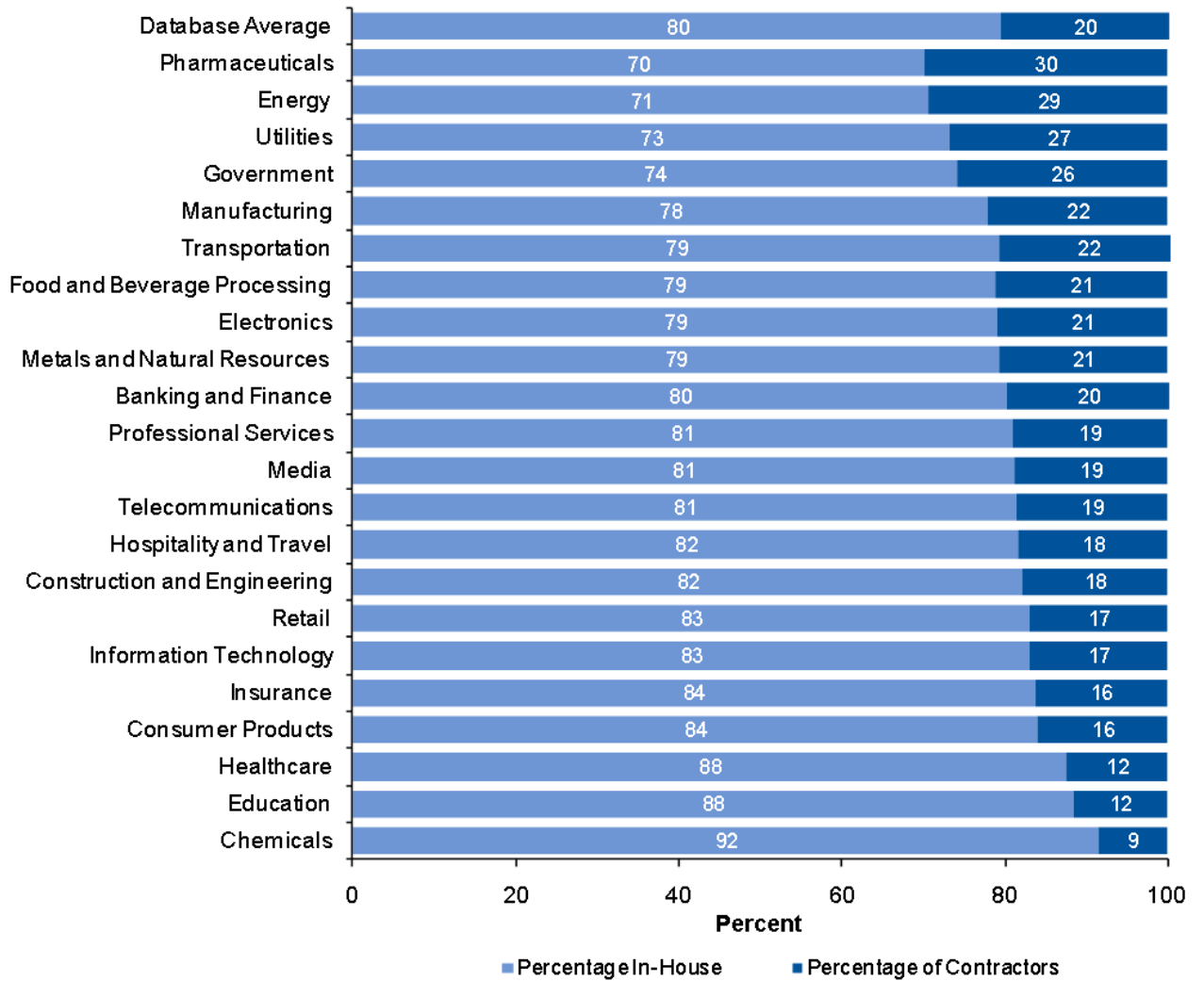


Source: Gartner ITKMD (January 2010)

6.2 Hiring Outside

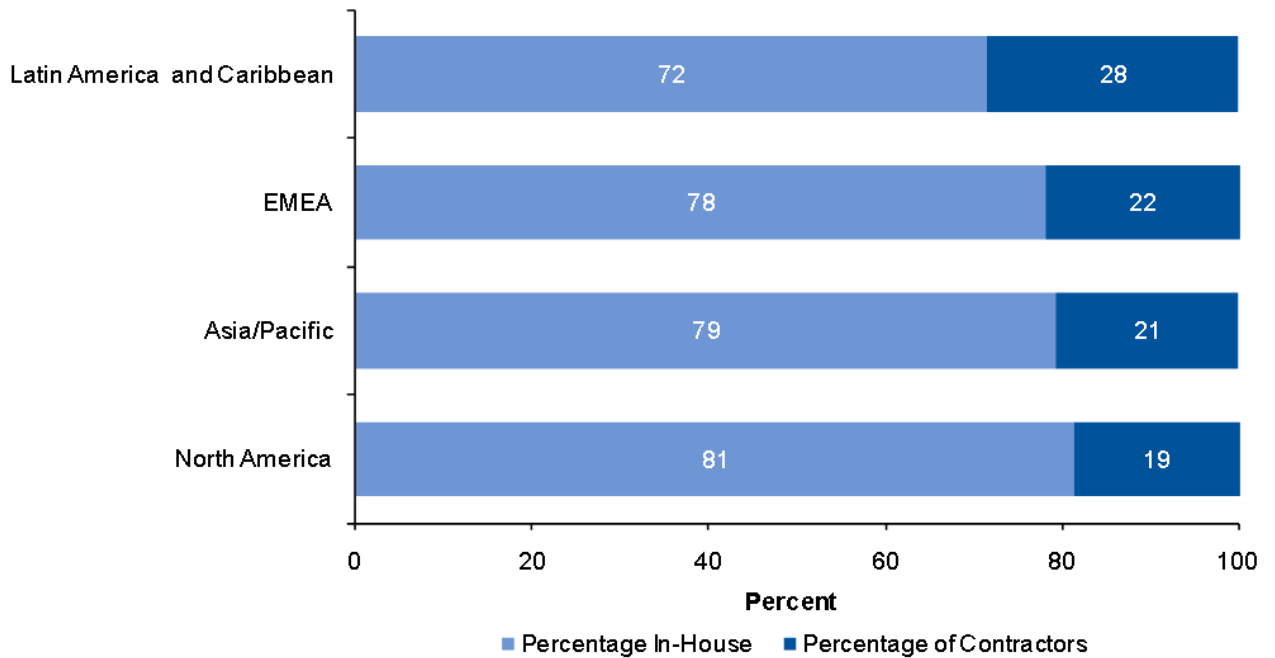
IT contract labor or contractor usage can be an effective approach to maintaining flexibility when business conditions are changing. In 2009, we saw many enterprises significantly reduce their contract labor workforce and maintain their internal IT staffs. However, keeping contractors for extended periods can be costly, and can limit process standardization. Industry sectors that are most dependent on IT contractors include pharmaceuticals, energy, utilities and government entities (see Figure 35). On a regional basis, Latin American companies are the heaviest users of external contractors (see Figure 36).

Figure 35. Split of Contractors vs. Internal IT Staff, by Industry, 2009 (Average)



Source: Gartner ITKMD (January 2010)

Figure 36. Split of Contractors vs. Internal IT Staff, by Region, 2009 (Average)

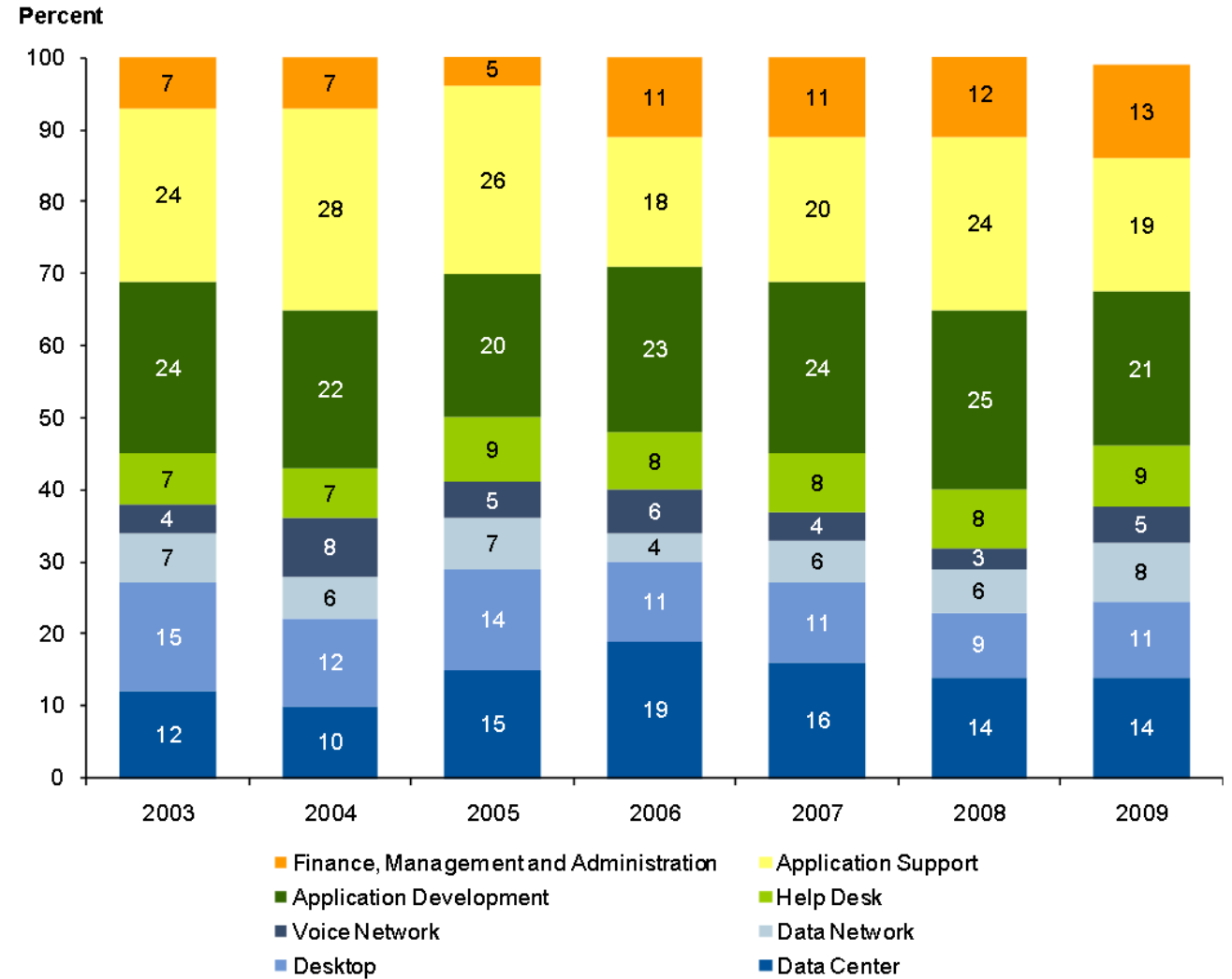


Source: Gartner ITKMD (January 2010)

6.3 Labor Intensity

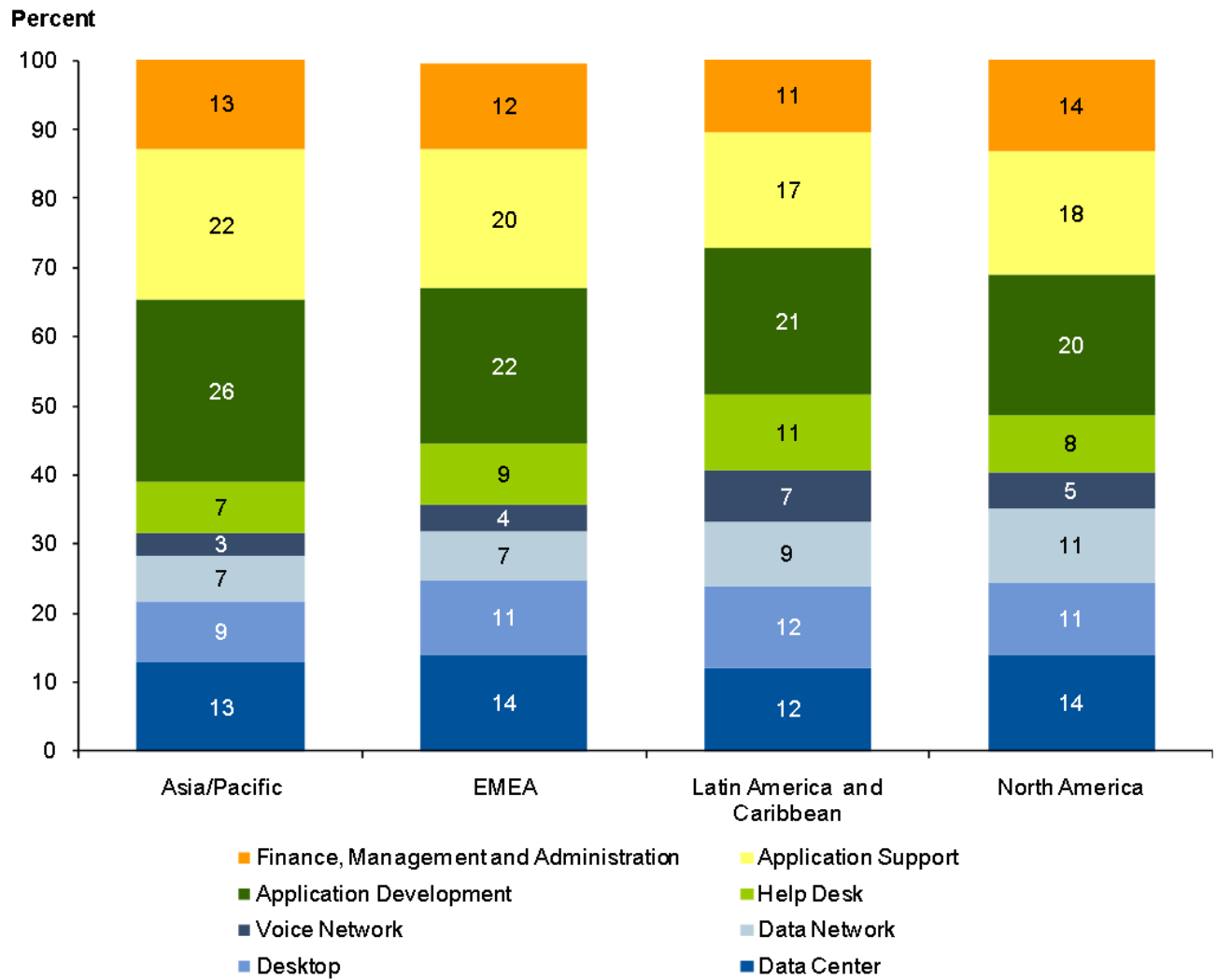
Like the IT spending distribution by technology tower or IT domain, the IT staff can also be distributed into these categories to discover efficiency and help with planning. The way human resources are distributed across technology domains or towers shows which activities are most labor-intensive. Typically, application activities (development and support) demand the most staffing, and in 2009, there was a percentage decrease in the number of staff members dedicated to application development and support (see Figure 37). Regionally, we see the highest concentration of application resources in Asia/Pacific and EMEA (see Figure 38). For definitions, see Note 1 under "Technology Domain or Tower Distribution of IT Spending and Staffing."

Figure 37. Distribution of IT Staff by Technology Tower or IT Domain, Historical Trending, 2003 to 2009 (Average)



Source: Gartner ITKMD (January 2010)

Figure 38. Distribution of IT Staff by Technology Tower or IT Domain, by Region, 2009 (Average)



Source: Gartner ITKMD (January 2010)

7.0 Conclusions

The metrics and benchmarks we have identified provide a high-level view of current trends in IT by region, industry and overall. They also reveal trends in business alignment, staffing, technology and outsourcing. In addition, they can be used to assist in communicating alignment with the business and setting targets in key technology areas. Finally, they provide context for key business decisions and internal performance measures.

However, it is important to understand that the averages are not targets, and decisions of "good" or "bad" performance should not be based on these benchmarks. They are reference points from which to view current performance and investment levels, and to help identify differences that could merit further analysis. Articulating why your organization is higher or lower than these metrics is the first step toward better business alignment.

For more-detailed metrics focused on industries, technologies and regions, consult Gartner Consulting's ITKMD documents (see Section 2 of this report), which will help you monitor alignment, competitive position and relative performance.

Additionally, for ongoing and more-targeted analysis, more-customized benchmarking services are available. They provide clients with more in-depth, personalized benchmarking support to assist in communicating IT's role in creating business value, to measure IT alignment, to help identify technology performance strengths, and to prioritize areas and opportunities for optimization.

Gartner Consulting's ITKMD provides a macrolevel look at Gartner's benchmark analytics global database of comprehensive cost and performance measures. For more information on these solutions, contact us at benchmarkinginfo@gartner.com.

RECOMMENDED READING

"IT Spending and Staffing Report, 2009"

"IT Metrics: IT Staffing Levels for 2010: How Benchmarks Can Help in a Changed World"

"Case Study: ETS Tackles Business Alignment With Its Advanced Electronic IT Scorecard"

"Midsize Enterprise CEO and CIO IT Spending and Staffing Expectations Must Align for Return to Growth"

"It Is Time to Rethink the IT Budget Process"

"Metrics, Dashboards and Scorecards; CIO Desk Reference Chapter 22"

"IT Financial Management; CIO Desk Reference Chapter 23"

"Fixed vs. Variable: Preserving New Application Projects in Tight IT Budgets"

Note 1

Glossary

Enterprise Employees

The count of employees (i.e., head count, excluding contractors or consultants) regardless of whether they are frequent users of the technology supported by the IT organization. For many of the calculations in this report, this excludes enterprise contract labor.

IT Budget/Spending

The best estimate of total spending, at the end of the 12-month budget period, for information technology to support the enterprise. IT budget/spending can come from anywhere in the enterprise that incurs IT costs, and it is not limited to the IT organization. It is calculated on an annualized "cash out" basis, and, therefore, contains capital spending and operational expenses, but not depreciation and amortization.

IT budget/spending information collected from clients includes the following from a resource or accounting perspective:

- Hardware, software, personnel (including travel, benefits and training), contractors and consultants, outsourcing, disaster recovery, occupancy, data and voice communications/transmissions — all associated with supporting information technology within the enterprise.

- Occupancy costs include fully burdened costs for the facilities being used by the staff supporting the enterprise. Some examples include office space, furniture, electricity, maintenance, property taxes, security and office supplies. Occupancy costs for space that's dedicated to IT functions, such as the data center and the help desk, are also included.
- All taxes (except the value-added tax when it is recovered or refunded to the organization).

It also includes the following from an IT domain or activity perspective:

- The data center (e.g., servers and storage), client devices (desktops, laptops, PDAs, smartphones), voice and data networks (including, but not limited to, voice and data transmissions, fixed and mobile telephony, remote access services and Internet access services), help desk, application development and maintenance.
- IT support functions, such as the office of the CIO, which includes supervisory management; and finance and administrative costs, such as purchasing, asset management, process management and marketing of IT services.
- Dedicated data-processing equipment used in operations, production and engineering environments — examples include computer-aided design (CAD)/computer-aided manufacturing (CAM), standard computing equipment used in devices for factory automation, and tablet PCs used by healthcare professionals.

IT budget/spending information collected from clients typically *does not* include:

- Costs for technology or services that are resold — for example, salaries for developers involved in building commercially packaged software.
- Operational technology that is equipment built or purchased for non-data-processing purposes, but has computerized components — for example, robotic manufacturing machines, automated teller machines (ATMs), specialized point-of-sale devices, scanners, blood pressure monitors, etc.
- Depreciation or amortization expenses that could lead to double counting from an accounting perspective.
- Internal "cross charges" and corporate allocations related to expenses such as early retirement, incentive bonuses, human resources and a chairperson's salary.
- Business data subscriptions and services (such as Bloomberg), even if they are managed by the IT organization.

IT Budget/Spending on Capital

Total capitalized IT spending for this fiscal year (i.e., full value of assets acquired in this fiscal year). This includes investments in new application development and infrastructure.

IT Budget/Spending on Operational Expenses

Total day-to-day operations and maintenance expenses for this fiscal year that have not been capitalized. This does not include any amortization and depreciation.

FTE Head Count

An FTE represents the logical staff to support functions performed by the physical staff, as measured in calendar time. This includes all staffing levels within the organization, from managers and project leaders to daily operations personnel.

Insourced IT FTEs

The total number of insourced (in-house) FTEs who are employed by the IT organization (excluding contract and consultants). This includes all insourced full-time, part-time and temporary FTEs covered by the IT Budget/Spending definition above.

Contract IT FTEs

Total number of contract FTEs, who are supplemental to your staff and "operationally" managed by in-house staff. This includes all full-time, part-time and temporary FTEs covered by the IT Budget/Spending definition above.

Hardware Expenses

Includes all the hardware expenses described in the IT Budget/Spending definition above.

Software Expenses

Includes all the software expenses described in the IT Budget/Spending definition above.

Outsourcing

Specific to staff and services, this includes the fees for outsource contracts, in which "outsource" is defined as any situation in which the full operational responsibility for IT services is completely handed over to an external service provider (e.g., subcontracting microfiche, print, maintenance, procurement, system management, equipment). By IT spending resource category in this report, this includes external telecommunication services as well.

Personnel Salaries and Benefits Expenses

This includes expenses corresponding to all support resources, including the in-house staff as well as contractors and consultants who are operationally managed by the in-house staff. For in-house staff, this includes salary (including overtime pay), benefits and "other" employee costs, such as travel and training. For contractors and consultants, costs include all compensation that was paid directly to the individual or agency.

Other Expenses

Any items that survey respondents could not allocate specifically to hardware, software, outsourcing or personnel. By IT spending resource category in this report, this can include facilities and utilities expenses.

Technology Domain or Tower Distribution of IT Spending and Staffing

Viewing total IT spending by domain or tower provides insight into the basic functions or activities performed by IT to better understand workloads and interdependencies between these activities. In other parts of this report, IT spending is basically defined as IT operational expenses and IT capital expenses, and excludes IT depreciation and amortization. However, the IT spending categories used for technology domain or tower distribution include IT operational expenses and IT depreciation and amortization, and *exclude* IT capital expenses. Like the IT spending distribution by technology tower or IT domain, IT staff (internal and contract labor) also can be distributed into these categories to discover efficiency and help with planning. The way human resources are distributed across technology domains or towers shows which activities are the most labor-intensive.

From an IT spending perspective, each IT domain or technology domain includes IT operational expenses, depreciation and amortization (IT capital is excluded for this analysis). Standard resource categories include hardware, software, personnel (internal and contract labor), outsourcing, a dedicated network, facilities and occupancy. Personnel activities indirectly related to the technology domains (and not included in the finance, management and administration domain) include direct or immediate IT management, planning and process management, finance and administration, facilities management, operations and maintenance, and engineering and technical services.

- **Data Center:** This includes IT resources and services related to Intel, Unix and the mainframe, as well as other midrange platforms; in addition, storage, disaster recovery, and intra-data-center and inter-data-center connectivity that is segregated or isolated from general-purpose or shared networks.
- **Desktop and Peripherals:** These include IT resources and services related to desktop, mobile and tablet PCs; peripheral hardware, personal and shared printers; and handheld devices such as PDAs, smartphones and messaging devices. However, these exclude the transmission costs for these devices.
- **Data Network:** This includes IT resources and services related to WAN, MAN, LAN, remote-access services and Internet-access services. This also includes hardware, software and personnel costs, as well as transmission charges.
- **Voice Network:** This includes IT resources and services related to voice premise and wide-area voice services. This also includes hardware, software and personnel costs, as well as transmission charges for fixed and mobile telephony.
- **Help Desk:** This includes contact-center-based IT resources and services related to information and support in handling an enterprise's internal queries and operational problems about IT-related processes, policies, systems and usage. Services can include product support capabilities, including elements of hardware and software support, logging of problems, and results analysis (which means analyzing the results of calls taken to resolution for entry into a self-help database, problem trends to suggest permanent fixes and so forth); dispatch of service technicians or parts; training coordination; and other IT-related issues. Client-facing call centers or CRM activities are excluded here. Agents who handle customer service requests, issues or concerns can be classified as first line (Tier 1) and second line (Tier 2). This category also includes the time spent by team leaders or supervisors in performing this function.
- **Application Development:** This includes IT resources and services related to new code for a new application. Functional enhancements to current code take more than two person-weeks, or typically add greater than eight function points. A functional enhancement is defined as a change made for a user that allows additional capabilities (from a business point of view) that were not there before. In some environments, major enhancements actually can be added in less than two person-weeks. If this is the case, and more than eight function points are added (about 800 lines of COBOL or 300 lines of a database language), then this enhancement is recorded as a project and marked as an enhancement. This includes the generic roles of programmer analyst, database technology, QA/testing, project tracking, infrastructure development, and IT and end-user training.
- **Application Support:** This includes IT resources and services related to bug fixes of any size or duration, maintenance of hard-coded data or tables (including field-size changes) embedded within the programs (any size or duration), and functional

enhancements to current code that take less than two person-weeks and typically add fewer than eight function points, or any project that produces no new business functionality for the user. This includes the generic roles of programmer analyst, database technology, QA/testing, project tracking, infrastructure development, and IT and end-user training.

- **Finance, Management and Administration:** These include functions at a level within the IT organization that, after best efforts, cannot be allocated to one of the other technology domains or towers. Typically included are roles that cover all functions within IT, or provide enterprise support, and include IT resources related to the office of the CIO, such as enterprise architecture, disaster recovery that covers all IT functions, governance, strategic planning, procurement and vendor management, relationship management, financial management, project and portfolio management (not included in the application domains), marketing and communications, technology planning, business process management, change management, enterprise architecture, security and risk management (which are not included elsewhere), and advanced or emerging technology groups.

Revenue

The revenue associated with the business units supported by the IT organization. (*Banks:* revenue equals net fee and interest income; *insurance:* revenue equals gross premium and other income; *government and nonprofit:* revenue equals enterprise operating budget).

Business Operational Expense

This is the total expense associated with the business units supported by the IT organization, and includes items such as selling, general and administrative; cost of goods sold/revenue; research and development; depreciation; depletion; and amortization expenses. For insurance, this includes loss and loss adjustment expenses. For banking, this includes interest expense and noninterest expense.

Operating Income

This equals revenue minus business operational expenses.

Profitability

This equals operating income divided by revenue.

Strategic Spending Categories

- **Run the business:** This is an indicator of how much of the IT resource is consumed and focused on the continuing operation of the business. Nondiscretionary expenses are included in the run-the-business cost.
- **Grow the business:** This is an indicator of how much of the IT resource is consumed and focused on developing and enhancing IT systems in support of business growth (typically organic growth). Discretionary investments are included in the grow-the-business cost.
- **Transform the business:** This is an indicator of how much of the IT resource is consumed and focused on implementing technology systems that enable the enterprise to enact new business models. This is very much a "venture" category, and would be represented by activities such as a brick-and-mortar retailer moving to online shopping;

a traditional bank offering online banking (or moving into offering insurance services); or
a commercial airline offering new freight services.

Industry Definitions

Banking and Financial Services: Organizations from which the primary revenue stream is derived from one or more of the following: Accounting, Agricultural Lending, Asset Administration Services, Asset Management, Auto Lending, ATM Operators, Banking — Asia & Australia, Banking — Canada, Banking — Europe, Banking — Latin America, Banking — Middle East & Africa, Cash Lending, Check Cashing & Coin Conversion, Check Guarantee, Claims Filing, Administration & Processing, Collections, Commercial Lending, Commercial Real Estate & Construction Lending, Credit Cards, Credit Reporting, Currency, Commodity & Futures Trading, Custodial & Trust Services, Electronic Communications Networks, Electronic Payment Systems, Equity Trading, Financial Services Regulatory Agencies, Fixed-Income Trading, Hedge Fund Management, Infrastructure Financing, Institutional Asset Management, Institutional Brokerages, Investment Banking, Investment Firms, Investment Funds, Large-Market Investment Banking, Lending, Market Makers, Specialists, Trade Clearing & Trade Settlement, Middle-Market Investment Banking, Money Center Banks, Mortgage Banking & Related Services, Mutual Fund Management, Online Banking, Online Retail Brokerages, Outsourced Financial Products & Services Marketing, Personal Lending, Private Banking, Receivables Lending, Forfeiting & Factoring, Regional Banks & Thrifts, Retail Asset Management, Retail Brokerages, Retirement & Pension Management, Securities Brokers & Traders, Shareholder Services, Small-Business Lending, Small-Market Investment Banking, Stock Exchanges, Super Regional Banks, Trade Facilitation, Transaction Processing & Settlement, Transaction, Credit & Collections, Turnaround Specialists & Liquidators, Venture Capital, Warranties.

Chemicals: Organizations from which the primary revenue stream is derived from one or more of the following: Agricultural Chemicals, Basic and Intermediate Chemical & Petrochemical Manufacturing, Chemical Distribution, Paints, Coatings & Other Finishing Product Manufacturing, Plastic & Fiber Manufacturing, Specialty Chemical Manufacturing.

Construction and Engineering: Organizations from which the primary revenue stream is derived from one or more of the following: Aggregates, Concrete & Cement, Architectural & Engineering Services, Commercial & Heavy Construction, Construction & Design Services, Construction Materials, Lumber, Wood Production & Timber Operations, Manufactured Buildings, Plumbing & HVAC Equipment, Residential Construction, Specialty Contracting.

Consumer Products: Organizations from which the primary revenue stream is derived from one or more of the following: Accessories, Apparel, Appliances, Athletic/Outdoor Gear & Apparel, Audio Equipment, Automotive Service & Collision Repair, Baby Supplies & Accessories, Bicycles & Accessories, Car & Truck Rental, Children's Clothing, Cigarettes, Cigars & Smokeless Tobacco Products, Cleaning Products, Collectibles, Giftware & Commemorative Products, Consumer Electronics, Consumer Products Manufacturers, Cosmetics & Skin Care, Death Care Products & Services, Dinnerware, Cookware, Flatware, Knives & Cutlery, Electronic Gaming Products, Eyewear Manufacturers, Firearms & Accessories, Fitness Equipment, Footwear, Fragrance, Golf Equipment, Hair Salons, Hand Tools, Power Tools, Lawn & Garden Equipment, Home Furniture, Home Storage & Organizational Products, Housewares, Intimate Apparel, Jewelry & Watch Manufacturing, Laundry Facilities & Dry Cleaning Services, Linens, Mattress & Bed Manufacturers, Men's Clothing, Musical Equipment, Musical Instruments, Office & Business Furniture, Fixtures & Equipment, Office, School & Art Supplies, Optical Services, Personal Care Products, Pet Products, Photographic & Optical Equipment/Supplies Manufacturers, Portrait Photography, Ready-to-Assemble Furniture, Rent-to-Own, Sound & Lighting Equipment, Sporting Goods & Equipment, Tobacco, Tobacco Accessories, Tobacco Brokers & Distributors, Toys &

Games, Travel Agencies & Services, Veterinary Care, Video Equipment, Weight & Health Management, Window Coverings & Wall Coverings, Women's Clothing.

Education: Organizations from which the primary revenue stream is derived from one or more of the following: Child Care Services & Elementary & Secondary Schools, Colleges & Universities, Education & Training Services, Internet Educational Services.

Electronics: Organizations from which the primary revenue stream is derived from one or more of the following: Analog Chips, Application Service Providers, ATMs & Other Self-Service Terminal Manufacturing, Audio Chips & Boards, Communications Chips, Communications Testing Equipment, Computer Displays & Projectors, Computer Input Devices & Speakers, Computer Networking Equipment, Computer Peripherals, Computer Products Distribution & Support, Contract Electronics Manufacturing, Design, Foundry & Packaging Services, Discrete & Passive Components, Display Components, Electrical Products, Electrical Products Distribution, Electronic Component Distribution & Support, Electronic Components, Electronic Connectors, Electronic Inspection & Monitoring Instruments, Electronic Test & Measurement Instruments, Graphics & Video Chips & Boards, Handheld Computers & Accessories, Industrial & Military Computer Systems, Information Technology Services, Integrated Security Systems, Logic Devices, Magnetic Disk Storage, Mass Storage Systems, Memory Chips & Modules, Microprocessors, Microcontrollers & Digital Signal Processors, Motors, Motor Drives & Related Products, Network Access & Communication Devices, Network Security Devices, Networking Chips, Optical Disk & Magnetic Tape Storage, Optical Switching & Transmission Components, Personal Computers, Personal Storage Drives & Media, Point-of-Sale & Electronic Retail Systems, Power Generation & Storage, Printing & Imaging Equipment, Protective Equipment, Routing & Switching Equipment, Scientific & Technical Instruments, Security & Monitoring Equipment, Security Products, Semiconductor Equipment & Materials, Semiconductors, Sensor Chips, Servers & Mainframes, Specialized Computer Systems, Storage Networking Equipment, Supercomputers, Switches, Connectors & Keypads, Technology Leasing, Transformers & Power Conversion, Wireless Communications Components, Wireless Networking Equipment, Workstations & Thin Clients.

Energy: Organizations from which the primary revenue stream is derived from one or more of the following: Alternative Energy Sources, Crude Petroleum Pipelines, Energy Exchanges, Energy Trading & Marketing, Fossil Fuel Power Generation, Fuel Oil Dealers, Hydroelectric Power Generation, Liquefied Petroleum Gas Dealers, Natural Gas Gathering & Processing Systems, Natural Gas Pipelines, Nuclear Power Generation, Oil & Gas Exploration & Production, Oil & Gas Exploration Services, Oil & Gas Field Equipment, Oil & Gas Field Services, Oil & Gas Refining, Marketing & Distribution, Oil & Gas Transportation & Storage, Oil & Gas Well Drilling, Petroleum & Petroleum Products Wholesalers, Petroleum Bulk Stations & Terminals, Petroleum Refining, Refined Petroleum Pipelines, Royalty Trusts, Wholesale Energy Trading & Marketing.

Food and Beverage Processing: Organizations from which the primary revenue stream is derived from one or more of the following: Alcoholic Beverages, Bakery Products, Bottling & Distribution, Brewers, Candy & Confections, Canned & Frozen Foods, Canned & Frozen Fruits & Vegetables, Carbonated Beverages, Coffee & Tea, Dairy Products, Distillers, Edible Oils, Energy, Sports, Health & Nutritional Drinks, Fish & Seafood, Flavorings, Spices & Other Ingredients, Food Service, Food Service Suppliers, Food Wholesale Distributors, Freshly Prepared Foods, Fresh Produce Distributors, Grains, Juice, Meat Products, Milled Grains, Flours & Baking Mixes, Nonalcoholic Beverages, Packaged Cookies & Crackers, Pastas & Cereals, Prepared Meals & Concessions Suppliers, Sauces & Condiments, Snack Foods, Specialty Foods Distributors, Sugar & Sweeteners, Water & Ice, Winemakers.

Government: Organizations from the state, local and federal government, as well as government-affiliated organizations.

Healthcare: Organizations from which the primary revenue stream is derived from one or more of the following: Healthcare Plans, Healthcare Products, Healthcare Services, Home Healthcare, Hospitals, Long-Term Care Facilities, Medical Devices, Medical Equipment & Supplies, Medical Laboratories & Research, Medical Practice Management & Services, Medical Products Distribution, Prescription Benefits Management, Specialized Healthcare Services.

Hospitality and Travel: Organizations from which the primary revenue stream is derived from one or more of the following: Adult Entertainment, Amusement Parks, Arcades & Attractions, Budget & Economy Motels, Casual Dining Restaurants, Entertainment, Extended Stay & Business Suite Hotels, Fast Food & Quick Service Restaurants, Fitness & Dance Facilities, Gambling, Gambling Resorts & Casinos, Gaming Activities, Gaming Equipment & Services, Internet Gambling, Lodging, Midprice Hotels & Motels, Movie Theaters, Professional Sports Teams & Organizations, Resorts, Restaurants & Cafes, Specialty Eateries, Sports & Recreation, Ticket Sales, Upscale & Luxury Hotels, Upscale Dining.

Information Technology: Organizations from which the primary revenue stream is derived from one or more of the following: Accounting & Finance Software, Asset Management Software, Billing & Service Provisioning Software, Business Intelligence Software, Collaborative Software, Content & Document Management Software, CRM, Marketing & Sales Software, Database & File Management Software, Development Tools, Operating Systems & Utilities Software, E-Commerce Software, Education & Training Software, Engineering, Scientific & CAD/CAM Software, Enterprise Application Integration Software, ERP Software, Entertainment & Games Software, Financial Services, Legal & Government Software, Healthcare Management Software, Human Resources & Workforce Management Software, Manufacturing, Warehousing & Industrial Software, Messaging, Conferencing & Communications Software, Multimedia, Graphics & Publishing Software, Networking & Connectivity Software, Retail, Point-of-Sale & Inventory Management Software, Security Software, Storage & System Management Software, Supply Chain Management & Logistics Software, Wireless Software.

Insurance: Organizations from which the primary revenue stream is derived from one or more of the following: Accident & Health Insurance, Auto & Other Vehicle Insurance, Commercial Insurance, Credit Insurance, Homeowners' Insurance, Insurance Brokers, Liability Insurance, Life Insurance, Mortgage Guaranty Insurance, Property & Casualty Insurance, Reinsurance, Risk Management, Surety Insurance, Title Insurance, Workers' Compensation.

Manufacturing: Organizations from which the primary revenue stream is derived from one or more of the following: Aerospace & Defense Maintenance & Service, Aerospace & Defense Parts Distribution, Aerospace & Defense Parts Manufacturing, Agricultural Machinery Manufacturing, Aircraft Leasing, Aircraft Manufacturing, Auto Manufacturing, Auto Parts Manufacturing, Commercial Aircraft Manufacturing, Commercial Shipbuilding & Related Services, Construction, Mining & Other Heavy Equipment Manufacturing, Container Leasing, Fluid Control Equipment, Pump, Seal & Valve Manufacturing, Food Service & Food Retail Equipment Manufacturing, Glass & Clay Product Manufacturing, Hardware & Fastener Manufacturing, Industrial Automation & Industrial Control Products Manufacturing, Industrial Contract Manufacturing, Industrial Equipment Leasing, Industrial Machinery & Equipment Distribution, Industrial Machinery & Equipment Manufacturing, Lighting & Other Fixture Manufacturing, Material Handling Equipment Manufacturing, Metal Fabrication, Military Aircraft Manufacturing, Military Ship & Submarine Manufacturing, Motorcycle & Other Small Engine Vehicle Manufacturing, Packaging & Container Manufacturing, Paper & Paper Product Manufacturing, Pleasure Boat Manufacturing, Rail & Trucking Equipment Manufacturing, Recreational Vehicle Manufacturing, Rubber & Plastic Product Manufacturing, Textile Manufacturing, Tire Manufacturing, Truck Leasing, Truck, Bus & Other Vehicle Manufacturing, Weaponry & Related Product Manufacturing, Wire & Cable Manufacturing.

Media: Organizations from which the primary revenue stream is derived from one or more of the following: Audiovisual Equipment Rentals, Sales & Services, Book Publishing, CD, CD-ROM & DVD Manufacturing & Distribution, Directories & Yellow Pages Publishers, Film & Video, Greeting Cards, Information Collection & Delivery, Internet Content Providers, Internet Music Distribution & Downloads, Internet Searching Services & Portals, Motion Picture Equipment, Motion Picture Production & Distribution, Music, Newspaper Publishing, Periodicals Publishing, Publishing, Radio Broadcasting & Programming, Television, Television Cable, Pay & Broadcast Networks, Television Production & Distribution, Television Station Groups, Trading Cards & Comic Books.

Metal and Natural Resources: Organizations from which the primary revenue stream is derived from one or more of the following: Aluminum Production, Coal Mining & Processing, Copper Mining & Processing, Diamond & Other Precious Stones Mining, Industrial Metals & Minerals, Metals Brokers, Metals Distribution, Precious Metals Mining & Processing, Specialty & Exotic Materials, Steel Production, Steel Service Centers.

Pharmaceuticals and Medical Products: Organizations from which the primary revenue stream is derived from one or more of the following: Biotechnology, Biopharmaceuticals & Biotherapeutics, Biotechnology Research Equipment, Biotechnology Research Services, Pharmaceuticals Distribution & Wholesale, Pharmaceuticals Manufacturers, Diagnostic Substances, Drug Delivery Systems, Generic Drugs, Over-the-Counter Medications, Vitamins, Nutritionals & Other Health-Related Products.

Professional Services: Organizations from which the primary revenue stream is derived from one or more of the following: Accounting & Finance Staffing, Advertising & Marketing, Advertising Agencies, Armored Vehicle Services, Auctions, Coffee & Water Beverage Services, Commercial Cleaning & Facilities Management Services, Commercial Printing, Commercial Property Investment, Commercial Property Management, Commercial Real Estate Brokerage, Commercial Real Estate Development, Consulting, Copy Centers & Online Printing Services, Correctional Institutions, Direct Marketing Services, Executive Search, Healthcare Real Estate Investment Trusts (REITs), Healthcare Staffing, Hotel & Motel REITs, Human Resources & Staffing Consulting, Industrial REITs, Information & Records Management Services, Information Technology & Other Technology Staffing, Internet Auctions, Label & Packaging Printers, Land REITs, Legal Services, Leisure & Entertainment REITs, Market Research Services, Mortgage & Investment REITs, Office REITs, Online Staffing & Recruitment Services, Outsourced Human Resource Services, Parking Facility Management, Public Relations, REITs, Residential Property Investment, Residential Property Management, Residential Real Estate Brokerage, Residential Real Estate Development, Residential REITs, Retail REITs, Sales Promotion & Specialized Marketing Services, Security Guard Services, Security Services, Staffing, Surveillance, Investigation & Security Consulting, Talent & Modeling Agencies, Technical & Scientific Research Services, Trade Show Exhibitions, Event Planning & Related Support, Uniform Rental & Laundry Services, Web Consulting.

Retail: Organizations from which the primary revenue stream is derived from one or more of the following: Apparel & Accessories Retail, Auto Parts Retail, Automobile Dealers, Building Materials Retail & Distribution, Camera & Optical Goods Retail, Catalog, Mail Order & Television Sales, Computer & Software Retail, Consumer Electronics & Appliances Retail, Convenience Stores & Truck Stops, Cosmetics, Beauty Supply & Perfume Retail, Department Stores, Direct Selling, Discount & Variety Retail, Drug Stores & Pharmacies, Floor & Window Coverings Retail, Floral & Gifts Retail, Footwear & Related Products Retail, Gasoline Retailers, Golf Equipment Retail, Grocery Retail, Hobby & Craft Retail, Home Furnishings & Housewares Retail, Home Improvement & Hardware Retail, Internet Retail, Jewelry & Watch Retail, Military & Government Exchange Retail, Music, Video, Book & Entertainment Retail, Musical Equipment Retail, Natural & Specialty Foods Retail, Nonstore Retail, Office Products Retail & Distribution, Party & Holiday

Accessories Retail, Recreational Vehicle, Motorcycle & Boat Retail, Sporting & Recreational Equipment Retail, Tobacco Retail, Toys & Games Retail, Warehouse Clubs & Superstores.

Telecommunications: Organizations from which the primary revenue stream is derived from one or more of the following: Cable & Satellite Services, Cable TV System Operators, Copper Wire Switching & Transmission Equipment, Data Network Operators, Data Services, Direct Broadcast Service Providers, Enterprise Telecommunications Equipment, Fixed-Line Voice Service Providers, Internet & Online Service Providers, Local-Exchange Carriers, Long-Distance Carriers, Managed Network Services, Messaging Service Providers, Optical Switching & Transmission Equipment, Satellite & Broadcast Network Equipment, Satellite System Operators, Telecommunications Equipment, Telecommunications Equipment Distribution & Support, Telecommunications Infrastructure Development, Telecommunications Resellers, Telecommunications Services, Teleconferencing Service Providers, Telemetry & Telematics Service Providers, Videoconferencing Equipment, Wireless Broadband Service Equipment, Wireless Communication Services, Wireless Network Operators, Wireless Switching & Transmission Equipment, Wireless Telecommunications Equipment, Wireless Telecommunications Resellers, Wireless Telephone Handsets, Wireline Telecommunications Equipment.

Transportation: Organizations from which the primary revenue stream is derived from one or more of the following: Air Cargo Services, Air Traffic Control Services, Airlines, Airport Management Services, Bus Services, Charter & Other Nonscheduled Airplane Passenger Services, Express Delivery Services, Freight Forwarding Services, Helicopter Services, Logistics Services, Supply Chain Management Services, Warehousing & Distribution Services, Marine Shipping, Deep Sea Shipping, Inland Shipping, Port, Harbor & Marine Terminal Management, Postal Services, Rail Infrastructure Management Services, Railroads, Commuter Railroads, Freight Railroads, Intercity Passenger Railroads, Taxi & Limousine Services, Toll Road Management Services, Trucking, Less-Than-Truckload Carriers, Moving & Storage Services, Specialty Trucking, Truckload Carriers.

Utilities: Organizations from which the primary revenue stream is derived from one or more of the following: Electric Utilities, Electric Power Distribution, Electric Power Transmission, Retail Energy Marketing, Independent/Merchant Power Production, Natural Gas Utilities, Utility Services, Water Utilities, Wastewater Treatment, Water Distribution.

This research is part of a set of related research pieces. See "Research Roundup: 2010 Service Desk Best Practices Guide" for an overview.

REGIONAL HEADQUARTERS

Corporate Headquarters

56 Top Gallant Road
Stamford, CT 06902-7700
U.S.A.
+1 203 964 0096

European Headquarters

Tamesis
The Glanty
Egham
Surrey, TW20 9AW
UNITED KINGDOM
+44 1784 431611

Asia/Pacific Headquarters

Gartner Australasia Pty. Ltd.
Level 9, 141 Walker Street
North Sydney
New South Wales 2060
AUSTRALIA
+61 2 9459 4600

Japan Headquarters

Gartner Japan Ltd.
Aobadai Hills, 6F
7-7, Aobadai, 4-chome
Meguro-ku, Tokyo 153-0042
JAPAN
+81 3 3481 3670

Latin America Headquarters

Gartner do Brazil
Av. das Nações Unidas, 12551
9º andar—World Trade Center
04578-903—São Paulo SP
BRAZIL
+55 11 3443 1509