

How much IT is enough?

Michael Harris

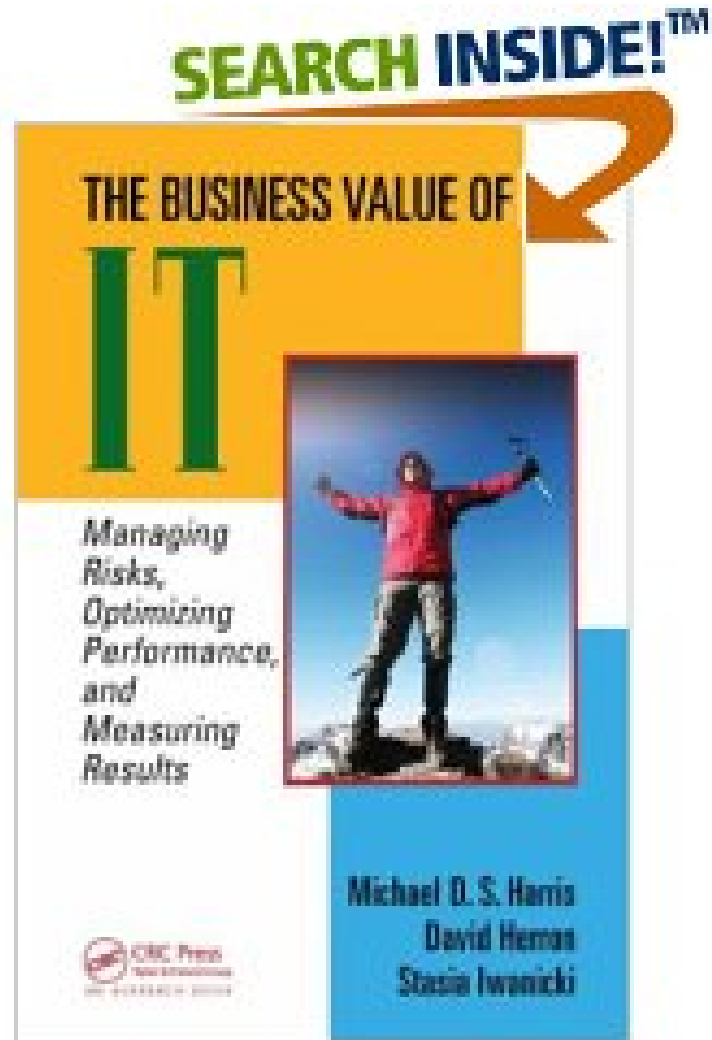
President

David Consulting Group

Presentation Objectives

- Decisions about IT spending are a series of trade-offs.
- The key to making the right decisions lies in first knowing the compelling needs to achieve the business strategy.
- Establishing the strategic enablers (most critical elements necessary to deliver on the strategy) generates the focus for planning activities to achieve this desired future state; efficient IT, nimble IT, high-quality IT, world-class IT, etc.
- To determine how much IT is enough, the scope of the IT budget must be defined.
- Typically, the IT budget is comprised of some mix of the people, processes, and technology (hardware and software) spending for an organization.
- The IT budget can be managed as a cost or profit center, functioning through a department, a business unit, an entire division, a company or a set of such entities that we call IT Providers.
- We have defined a number of ways to measure IT value in another DCG webinar. Here, we present four value metrics to explore how to examine when the level of IT spend may be enough.

For more information ...



Presentation Agenda

1. Return on Investment (ROI)
2. IT spend as a percentage of gross company revenue
3. IT distribution analysis
4. Organizational evaluation

And, finally, ...

- Cost containment and innovation

Return on Investment for IT spending

- Technology is an investment.
- The spending provides a return (at least it should!)
- This is also true for required changes like Sarbanes-Oxley compliance or other regulatory requirements.
- The return may be increased revenue or it may be simply the cost of remaining a going concern (cost of staying in business) or keeping your CEO on (or off!) the front page of the Wall Street Journal.

Return on Investment for IT spending

A Typical Scenario

- A business unit requests a business application that will create a competitive advantage in the marketplace. That “advantage” needs to be understood and communicated by the business to the IT Providers.
 - How is this application expected to improve revenues?
 - How is it expected to reduce expenses?
 - Are there secondary benefits to be realized by streamlining a process or improving the customer experience?
 - How should this initiative be prioritized versus all other opportunities in the queue?
 - What competitive advantage does this application provide? For how long?
- The business states that the CEO designated this as a top priority.
- It is expected to bring \$10MM in increased sales over the next 5 years.

Return on Investment for IT spending

A Typical Scenario – the IT response

- The business states that the CEO designated this as a top priority.
 - It is expected to bring \$10MM in increased sales over the next 5 years.
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- The IT Providers have to estimate the expense to develop the new application.
 - Technology costs will be \$2.5MM and take 6 months to be in full production. (Note that we are assuming an efficient and effective estimation process based on historic data – unfortunately this is not as common as we might expect and hope).
 - ROI = (Total Benefits – Total Expenses)
 - ROI = (\$10MM - \$2.5MM)
 - ROI = \$7.5MM over 5 years
 - The results can also be expressed as a ratio; in this case 1:4 representing \$4 of return for every dollar invested over the same 5 year period.
 - Often, the ROI is expressed in annual terms for easier comparison to commonly used interest rates.
 - Over the five years the ROI is 300%.
 - Making some simple assumptions, the annual ROI would be roughly 25%.
 - An excellent investment!



Return on Investment for IT spending

Limitations

- To understand some of the limitations of using only the ROI dimension, consider “Growth Bank,” and “Old Bank.”

- Growth Bank sought tremendous organic growth at almost any price.
- A persistent belief was that spending a \$1 to make \$2 was a good investment.
- Growth was explosive and organic.
- It took years for the analysis of Total Cost of Ownership to catch up but it eventually did.
- IT was very expensive in comparison to peer groups, their applications were built independently and there was tremendous redundancy in the services they provided.

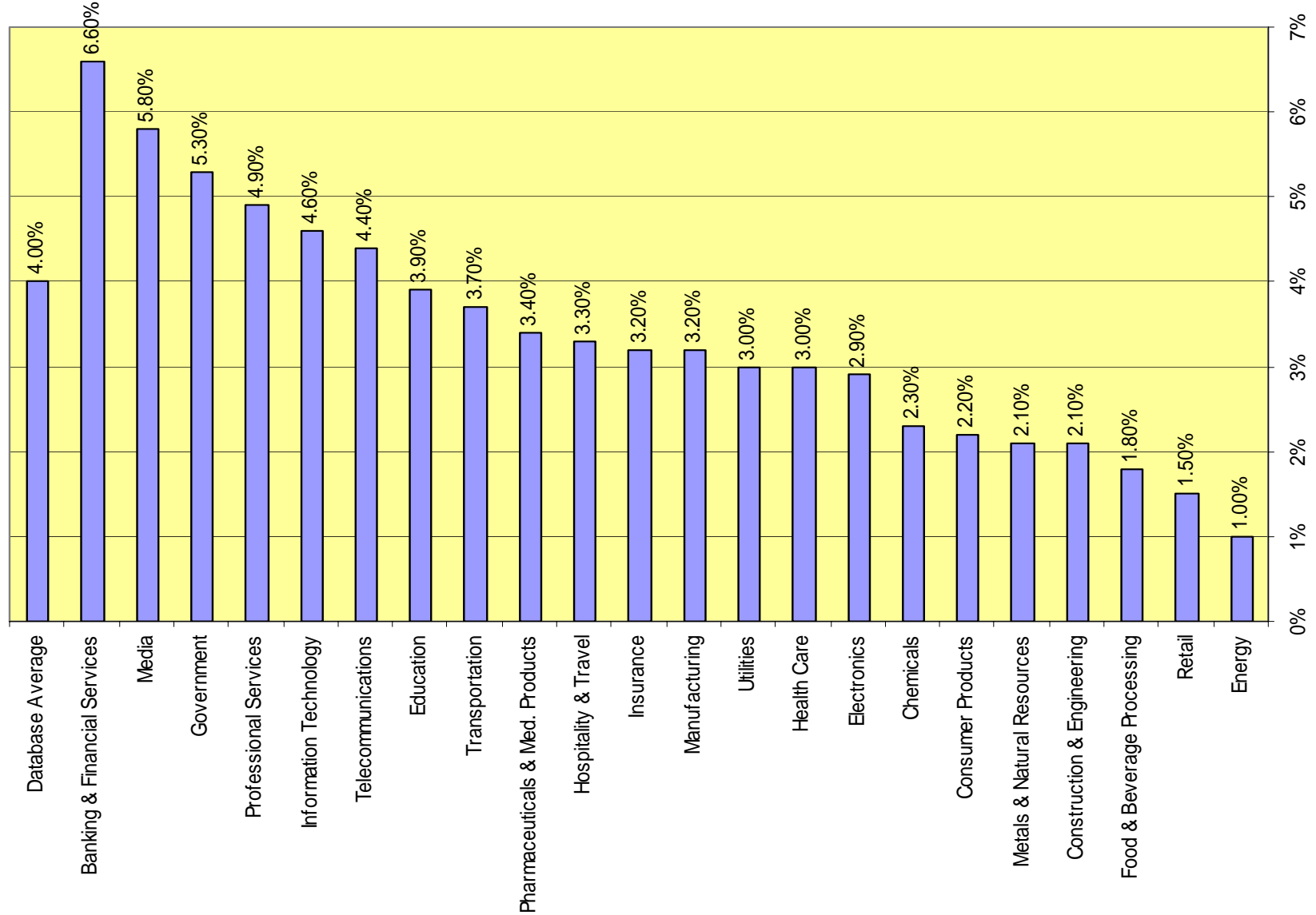
- Old Bank moved at a slow pace, carefully considering every investment.
- They targeted projects with a 2 year payback.
- ROI had to be at least 5:1.
- Innovation was rare.
- Expenses were always toward the lower end of peers.
- Time-to-market for new products was always behind industry peers.
- Growth was through acquisition.

- Both examples are approaches of very different real industry peers.
- Both banks are in the top 10, even today.
- ROI is not a single threaded answer.

IT Spend as % of Revenue (2007 Plans)

Source: Gartner Consulting Worldwide IT Benchmark Service, 2007

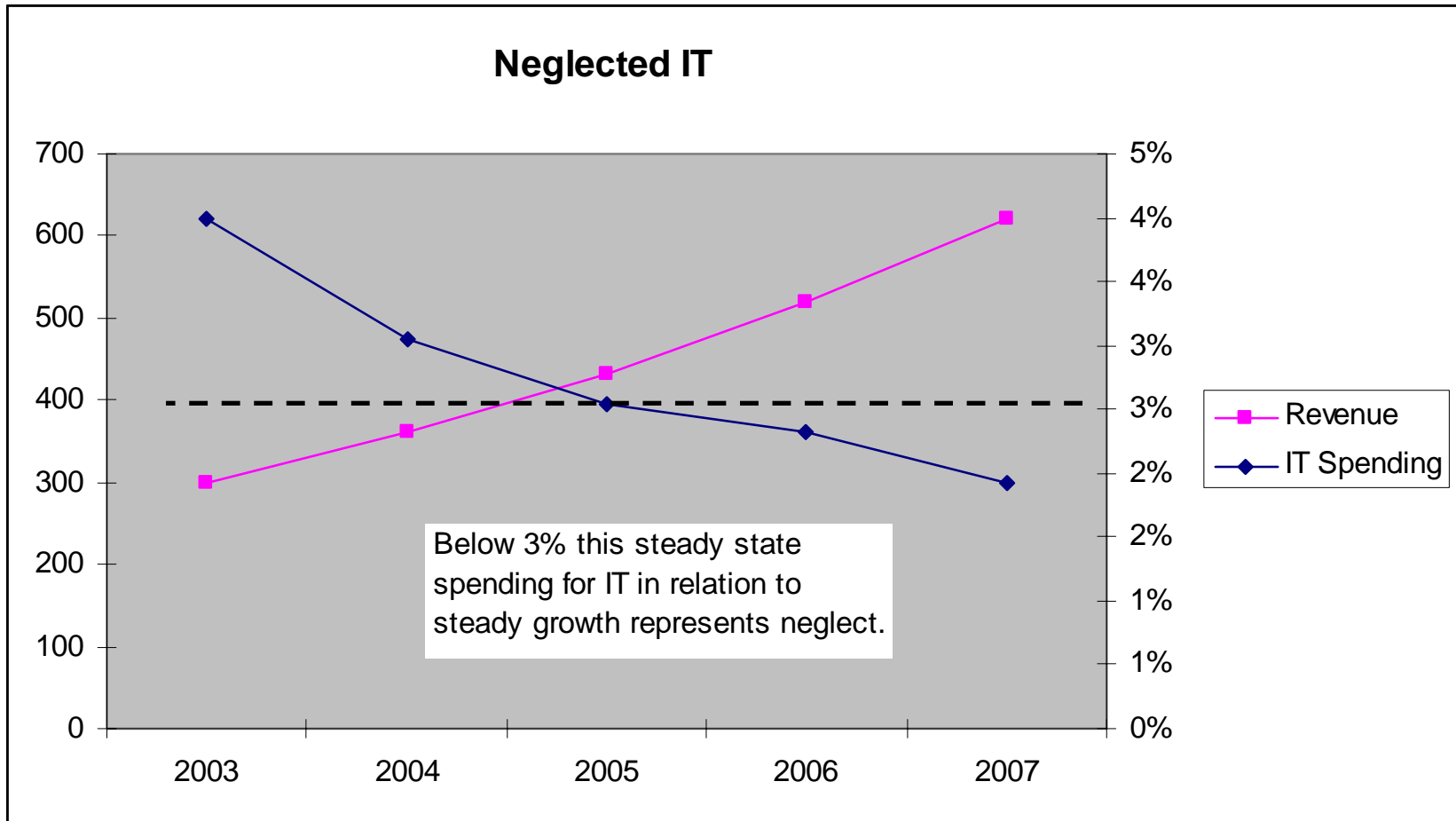
IT as a % of Revenue
2007 Plans



IT spend as a % of gross company revenue

- In an industry like Financial Services (in a growth year) we would see targets of 6% - 9% depending on factors such as:
 - The need for new development in technology
 - The organizations reliance on technology
 - Opportunities for consolidation
- IT spending as a percentage of gross company revenue is a measure that has been collected and reported for years, so there is a substantive amount of data available by industry and other factors (US, non-US, CMMI Level, company size).
- Unfortunately, the missing parameter in using this data is whether the industry is in a growth year or a year of restructuring (e.g. lower marketing spend resulting in lower revenues means a higher IT spend as a percent of revenue without changing the IT demand).
- It is still a telling number to calibrate for year over year spending.
- For example, this measure can help paint the picture of a truly neglected IT department which has flat IT spending in a steadily growing company. The percentage technology spend in relation to revenue will show a steady decline year over year, as illustrated in the next slide.

Flat IT Spending in a growing company

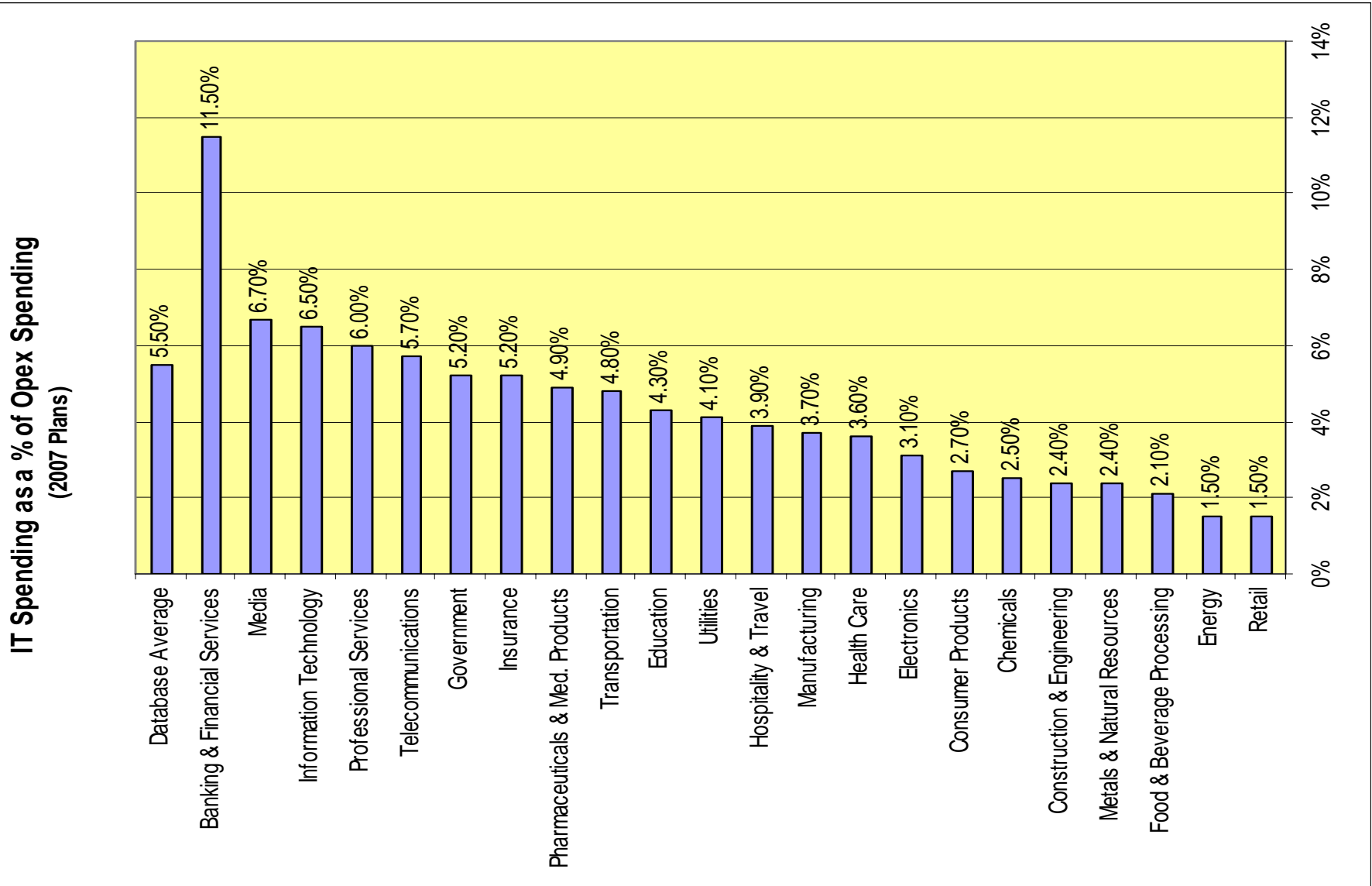


IT distribution analysis

- IT Distribution Analysis is a technique used to understand the relative amounts of people, spending, applications, customers, etc. in relation to the amount of technology maintained and developed in an organization.
- This data reveals the current level of resource utilization which achieves the current output or level of support.
- You can think of this as the miles per gallon (or kilometers per liter) rating for your technology investment.
- The results are points for understanding and discussion within the current organization.
- There is also industry data available if a comparison to peer groups is desired

IT Spend as % of Operating Expenses (2007 Plans)

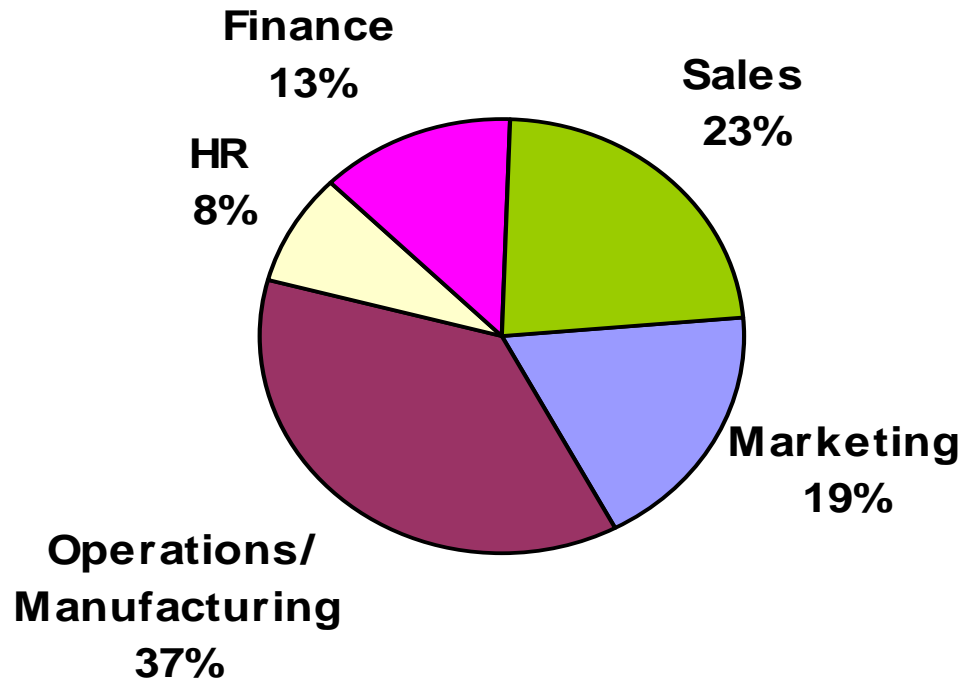
Source: Gartner Consulting Worldwide IT Benchmark Service, 2007



IT distribution analysis

- It can be very productive to analyze the cost of maintenance as a percentage of the overall IT budget.
- If maintenance expenses are 80% or more of the IT budget then there should be room to make savings to devote more funds to new capabilities.
- Follow-up questions include: Which applications require the most support? What solutions are more effective?
- The same approach can be applied to each technology category.
- The analysis should be performed according to categories that already represent the way your IT Providers support the client base, usually by departments of:
 - Sales
 - marketing,
 - Operations
 - human resources
 - Finance
 - manufacturing, etc.

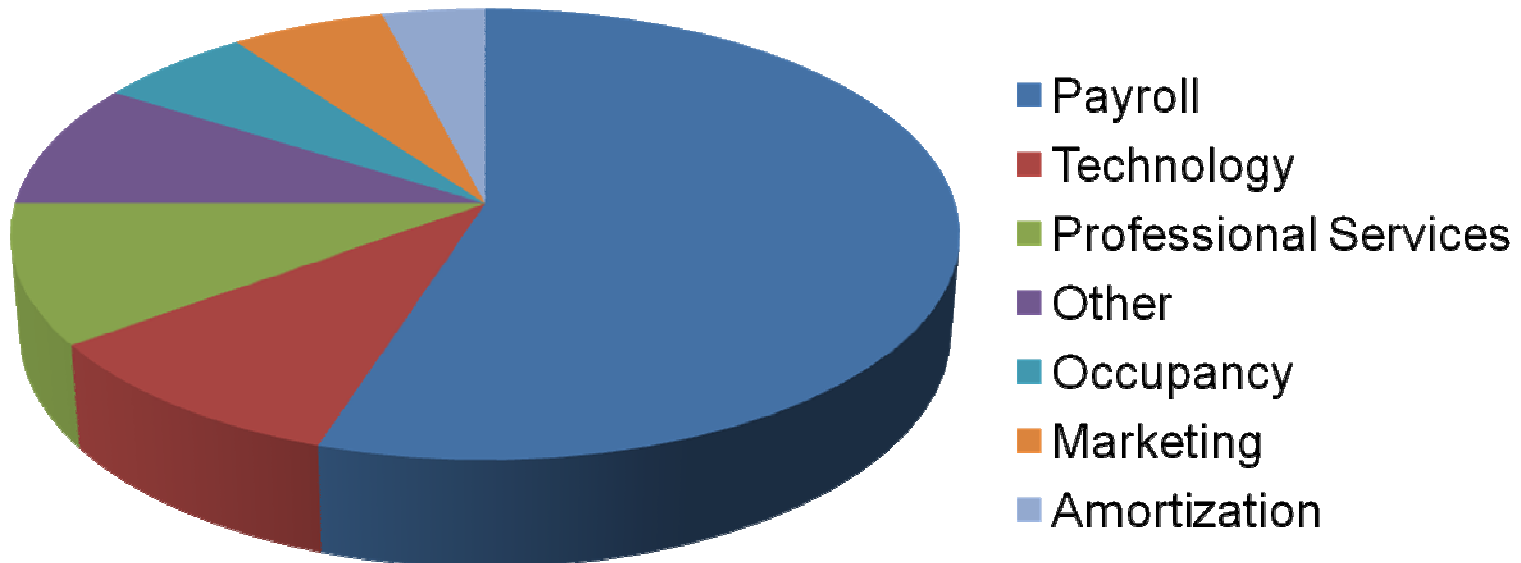
IT Spending by supported-client base



IT distribution analysis

- Another approach is analysis by what the IT budget is spent on.
- This approach has the benefit of easier data collection (usually) but the challenges of meaningful categorization and the seeming inflexibility of budgets in those categories
- It is tackling these challenges head on to align the IT budget with the organization's strategic goals that gives this technique its power.
- For example, if 30% of the company's non-IT budget is spent on marketing this year, then should 30% of the IT budget (or the "discretionary" IT budget) also be allocated to marketing?

IT Spend by IT Function



IT distribution analysis – Discretionary Budget

- The “discretionary” IT budget is one name for that part of the IT budget that is available to be spent each year “at the company’s discretion.” That is, IT budget that is not already committed to maintenance. This is usually a minority of the budget.
- The results of this internal analysis can be illuminating. The discussions often generate champions within the client base for increased funding for IT.
- Other observations of organizational need and pain points surface which can form grounds for conversations about change.
- An important point for discussion, though not obvious, is: “How did we get here?” What elements are present in the culture or structure of the organization that led to the current state?
- What organizational factors, cultural norms or customer demands contributed to the current state of spending or distribution of IT resources? This determines the influencing factors such as; operations receiving the greatest share of IT resources
- What is the prioritization process for approving new IT applications or enhancements? Failing to prioritize often leads to spending on the wrong things or the squeaky wheel project (or people).

Organizational Evaluation

- An Organizational Evaluation is an evaluation of the skills needed to run the IT organization. The human assets of the organization are always a delicate topic; it is important to take every step in this process or none at all.
- There are seven steps:
 1. Establish Guiding Principles
 2. Engage the Clients
 3. Engage IT Providers
 4. Establish goals for the outcome of this exercise.
 5. Skills evaluation
 6. Assess the organizational design according to the goals from step 4.

Organizational Evaluation

Establish Guiding Principles

- These principles become the **guardrails** for the evaluation.
- The guiding principles should answer the question: Why are we doing this? Some examples are:
 - Align IT outlets to deliver business strategy
 - Enable our target architecture
 - Evaluate IT spending
 - Support the need to consolidate
 - Support the need for rapid growth
 - To fund a new function
 - We're taking a disciplined approach to realigning the organization
- The principles you establish are used to confirm the resulting actions, ensuring alignment with the original intent of the organizational evaluation.

Organizational Evaluation

Engage the Clients

- The clients (internal and/or external) of the IT Providers have plenty of valuable input to determine the skills lacking in IT.
- This engagement can be captured through survey data, designed workshops, and focus groups.
- Prioritize the results. Remove outliers, observations that might be compelling but very rare.
- Seek to solve for the top 3 to 5 items.
- Client engagement is necessary to understand what issues really need to be solved.
- A lack of role clarity or no clear support might influence moving to a client-focused allocation of IT resources.
- This structure would align whole teams to focus on a specific business area. This structure is excellent for team focus, aligned goals and client satisfaction.
- The trade-off is a poor structure for functional support (all developers are not in the same group). It often costs more and can be difficult for central roles like architecture to support so many groups. As such, it is an important decision point in IT budget allocations.

Organizational Evaluation

Engage the IT Providers

- Many people within the IT organization and the outsourced IT Providers from bottom to top possess knowledge about what needs to be corrected.
- They will also have valuable information about the existence of barriers to change and the associated risks.
- Again, prioritize the results.
- You should see overlap with the theme of the input from the clients.

Organizational Evaluation

Establish Goals for the outcome of the exercise

- These goals will be reviewed with the leadership in the organization, at a minimum.
- Include the timeframe in which the results will be announced - the sooner the better.
- These goals could include onshore to offshore ratios of staff - like a 60/40 or 70/30 split, improving the client perception of IT or faster throughput.
- Regardless of the goals of the exercise, formal documentation is required.

Organizational Evaluation

Skills Evaluation

- Start with the future state of the organization. Use documents like the three-year business strategy, technology target architecture or other forward looking information to define high-level position types.
- Next slide illustrates a template for analyzing the results.
- Select the organization design.
 - In IT, there are two clear choices or a hybrid approach:
 - A **functional alignment** groups and reports of like functions, (e.g. analysts, project managers, developers, testers, etc). This design may be the most efficient because like functions are in a single team. Its limitations can be the lack of alignment with client goals, and IT roles and teams that are siloed.
 - A **client focused** design aligns entire delivery units according to client groups. This often entails diverse roles reporting to one manager, (e.g. project managers, analysts, developers and testers). Benefits include high client satisfaction and faster delivery through greater focus. Limitations of this design include less efficiency through teams developing their own processes, duplicating functions, and/or not providing clear priorities for shared resources like design or architecture.



Skills Evaluation Template

	Future Role	Future Technical Skills	Number Required	Can this position be outsourced? (why or why not)
Business Analyst	-Facilitation Skills -Requirements Elicitation	-Use Case Development -Risk analysis	18	
Project Manager	-Communication -Collaboration -Organization -Discipline -Leadership	-Earned Value Management -Business Case Development	10	
Development Manager			4	
Process Engineer		CMMI ITIL	3	
Architect		-Business and Technology knowledge	2	
Developer	-Documentation	-List technologies needed	30	
Tester		-List Testing Tools	15	

Organizational Evaluation

Assess the Organizational Design against the Goals

- Assess the organizational design according to the goals from step 4.
- Ensure the new design will fill the gaps identified.
- Communicate the results to leadership,
- Plan for the communication and rollout of the changes in the organization.

Cost Containment –vs- Innovation

- Striking the right balance between innovation and controlling IT cost is a continual challenge.
- Being innovative means some initiatives will fail.
- To breed a culture where risks are taken, failure must be an acceptable, even celebrated, result.
- Building for innovation and developing a culture for taking risk does not need to clash with cost consciousness. However, an appropriate structure or system of support to foster innovation is necessary.
- The following steps establish innovation as an important element of the IT culture and budget:
 - Establish a budget for innovation
 - Assign responsibility for innovation to a senior member of the IT organization
 - Set annual goals for innovation
 - Provide the time necessary for staff to work on innovative ideas
 - Celebrate failure as “lessons learned”

Summary – How much IT is enough?

1. Return on Investment (ROI)
2. IT spend as a percentage of gross company revenue
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4. Organizational evaluation

And, finally, ...

- Cost containment and innovation

Questions?

- For more information:
 - “The Business Value of IT: Managing Risks, Organizing Performance and Measuring Results” by Michael D. S. Harris, David Herron and Stasia Iwanicki (Auerbach, 2008)
 - www.davidconsultinggroup.com

