

## WHITE PAPER

---

### **Value of Certification: Team Certification and Organizational Performance**

Sponsored by: Microsoft

---

Cushing Anderson

Peter McStravick

November 2006

### **IDC OPINION**

After years of building IT infrastructure to alternately enable new business models, drive new revenue, accelerate growth, or reduce costs, IT organizations are now striving for increased service excellence as the driver of IT policy. To meet this goal, IT executives and their functional managers must examine the kinds of skills their teams require and, where relevant, seek to improve those skills. IDC believes:

- Team skill is directly responsible for organizational performance in several key IT functional areas.
- Increasing the concentration of Microsoft-certified team members on a team directly impacts team performance.
- The teams at the top tier of performance have between 40% and 55% of their teams certified on relevant Microsoft technologies and processes.

This research demonstrates that for each new team member certified, team performance increases. Every time.

## IN THIS WHITE PAPER

In this white paper, IDC describes the significant results of a recent survey on IT organizational performance of 1,200 teams managed by more than 400 IT managers. It describes the link between organizational performance and team skill and demonstrates the link between certification and performance in both general excellence and specific functional capability.

## SITUATION OVERVIEW

---

### **IT Priorities Focus on Service Improvement**

A recent survey of more than 400 IT managers found a predominant theme in corporate IT strategy objectives: IT strategy is intended to improve service delivery. With its role as a business enabler, IT service delivery has transcended "business transformation" through accelerated change and even "cost reduction" as the motivation for many IT-related projects.

This is an important shift that IT managers must respond to through staffing and other activities. While enterprises and their IT leaders were aggressively using technology to respond to and transform their business as recently as 2004, new findings show a consolidation or a regrouping of effort to focus on improving existing processes and the resulting services delivered.

To respond to this shift in emphasis, IT executives and their functional managers must examine the kinds of skills their teams require. More specifically, IT managers must seek to maximize the value of their teams to improve service delivery and performance.

### ***Certification Improves Service Performance***

As most managers would agree, important IT functions require a significant proportion of task- and technology-related skills to perform their assigned duties. Not surprisingly, 80% of IT managers believe their teams require a significant amount of task-specific skills to perform their assigned duties.

And while most managers believe that certifications are important to team and organizational performance, most IT managers don't realize the impact their teams' skill has on the teams' ability to perform at a high level.

Recent research examined the impact of Microsoft certification on IT performance. Asking detailed questions of IT managers who together managed more than 1,200 teams, IDC examined the relationship of the performance of those teams to the percentage of each team that was certified by Microsoft on a variety of technologies. The results were clear: Microsoft certification, as a measure of skill, was positively correlated to performance improvement.

The research examined both general service excellence and specific measures of task-level performance: In both types of performance, certification matters.

## ***Certification Improves Both General and Functional Performance***

### **General Service Excellence: Certifications Enable Agility and Security**

Other IDC research has uncovered six general service goals that IT organizations are increasingly striving for:

- Agility
- Enabling customer access to Internet-based apps
- Enabling employee access to Internet-based apps
- IT efficiency
- Response time for standard or routine tasks
- System/information security

IT organizations often change procedures, install technology, and even reorganize their staff to achieve these goals. However, IT managers have a more reliable and predictable tool at their disposal: Certification.

Certification, at its core, is simply an attestation to the capability of the test-taker, a measure of skill on particular tasks. To design a reliable and informative certification, the certification sponsor attempts to isolate those skills and behaviors that improve (or retard) performance, and develop a test that reliably predicts the test-taker's knowledge of those items. So, to the extent the test elements are relevant to a particular organization, the test-taker who passes a test has demonstrated a level of capability or proficiency that the certification sponsor says is sufficient to improve performance. This research certainly confirms that conclusion.

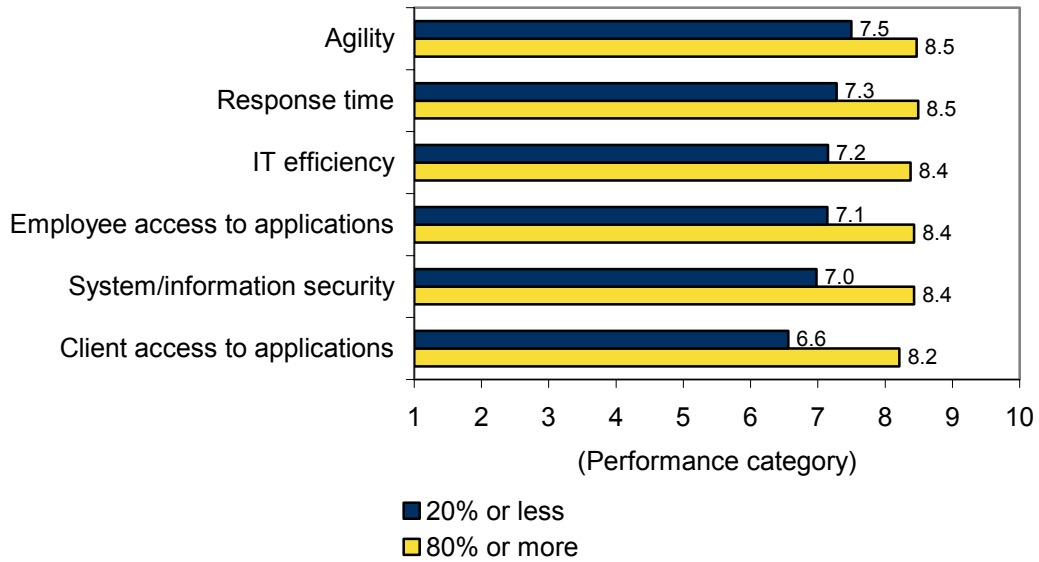
For instance, in a comparison of a "low density" of IT-certified staff with a "high density" of IT-certified staff, it was clear that an increase in the percentage of Microsoft certification increased the overall performance IT organizations strive for in agility, efficiency, and security (see Figure 1).

But general excellence in "agility" or even "IT efficiency" is not what most managers strive for. They want functional excellence in areas like "network security" or "application development" or even "IT help desk operations." Here the research was equally conclusive; each new certification increased team performance. Figure 2 illustrates the steady increase in average team performance as the percentage of team certified increases.

This research confirms what managers may intuitively understand: that for each additional member of a team certified, team performance increases. Whether the increase is from 37% to 38% of the team being certified or from 60% to 61% of the team, the team performance increases overall.

**FIGURE 1**

General IT Service Performance Comparison Between Low and High Density of Microsoft Certification



n = 400

Notes:

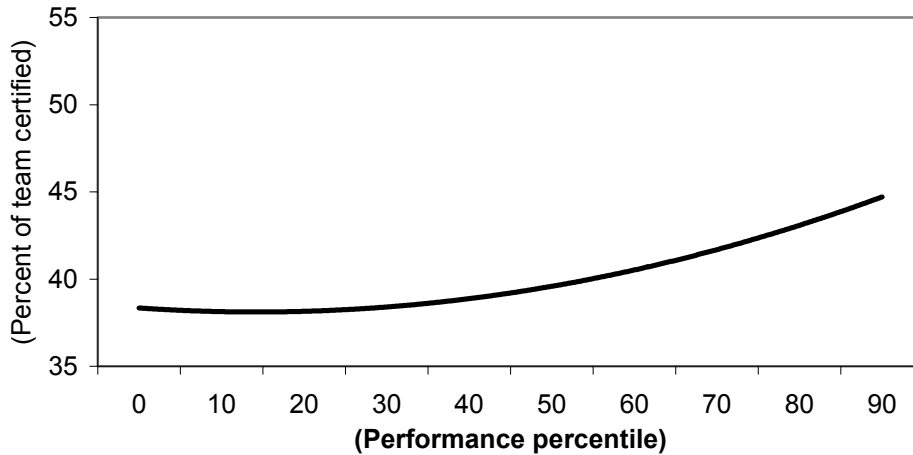
Scale is 1–10, with 1 = far worse than industry average, 5 = industry average, and 10 = far better than industry average.

Movement of 0.5 or more is significant at this sample size.

Source: IDC's *IT Manager Survey*, 2006

**FIGURE 2**

Relationship Between Performance and Microsoft Certification



n = 5,534 responses across 31 KPIs

Source: IDC's *IT Manager Survey*, 2006

In fact, this research shows that there is even a strong correlation between "top tier" performance and the percentage of a team that is certified. Organizations that had between 40% and 55% of their team members certified performed in the top 20%, or the "top tier," of all organizations. Though the percentage varied depending on the specific functional area, managers can use that benchmark as a rough target to achieve high performance. For instance:

- ☒ Teams responsible for network security or network systems and software that had between 40% and 45% of the team certified by Microsoft performed in the top tier of all 400 organizations that responded.
- ☒ For traditional application development, database development, or Web application development teams, when between 40% and 50% of the team is certified, the organization is more likely to perform in the top tier.

Managers who strive for high performance must look to team skill as a specific, appropriate opportunity for improvement. It is important to reinforce, however, that every increase in team certification increases team performance.

Two-thirds of managers believe that certifications improve the level of service and support offered to IT end users/customers, and three-quarters believe that certifications are important to team performance. This research demonstrates that having sufficient percentage of team members certified can increase IT organizational performance by up to an average of 11 percentage points (see Table 1).

**TABLE 1****General Team Capability at Two Concentrations of Certification (Mean Score)**

Q. *Please compare your team's performance to what you think is industry average performance.*

Performance Category	20% or Less	80% or More
Agility	7.50	8.47
Response time for standard or routine tasks	7.28	8.49
Overall IT efficiency	7.15	8.38
Enabling employee access to Internet-based apps	7.14	8.43
System/information security	6.98	8.43
Enabling customer access to Internet-based apps	6.56	8.21

n = 400

Note: Scale is 1 to 10, with 1 = far worse than industry average, 5 = industry average, and 10 = far better than industry average.

Source: IDC's *IT Manager Survey*, 2006

## CONCLUSION

With an increased emphasis on IT service delivery excellence, organizations are attempting to improve key metrics. One clear and straightforward way of improving performance is to increase the overall capability, or skill, of the key teams. It is clear that every increase in team skill improves organizational performance. So, this research demonstrates that for each new team member certified, team performance increases. This research concludes that:

- Team skill is directly responsible for organizational performance.
- Concentration of certifications in a team is clearly linked to team capability and performance.
- To achieve "top tier" performance, organizations should strive for between 40% and 55% of the team certified in relevant technologies and processes.

IDC recommends that IT managers consider their overall performance goals and determine if team performance would increase with additional skills. If team performance is important, IDC recommends IT managers leverage training and certifying team members as an effective way to increase organizational performance.

## APPENDIX

### Specific Performance Improvement by Functional Area

IDC also looked at specific functional areas common in IT organizations to isolate specific performance metrics that were influenced by increased concentrations of IT certifications.

For six areas, while the results show a positive and dramatic performance improvement with very high concentrations of Microsoft-certified professionals on a team performance, having 80% of a team certified is not a realistic goal. To be realistic, organizations should strive to invest sufficiently to achieve a high degree of performance. This research suggests that to reach the top 20% or "top tier" of organizational performance, teams can have between 40% and 55% of the team certified. The sections that follow present key findings for several functional areas.

### ***Network Security***

Network security activities include efforts to plan, design, build, and manage secure network infrastructures and comprehensive security programs.

IDC looked at several performance metrics related to network security and found that PC and server compliance with standards is 4–5% higher at organizations with 80% of the team Microsoft certified. With every percentage increase in compliance, organizations reduce the risk of malicious attack, increase system reliability, and reduce service and support costs.

At the same time, to enter the top tier of performance, or performance in the top 20% of all companies, network security teams should strive for 40% of their teams certified in relevant Microsoft products and processes.

### ***Network Systems and Software***

Network systems and software activities include network management, application management, systems management, and business dashboards. Network management also includes managing network availability and monitoring alarms and response times.

IDC looked at several performance metrics related to network system and software management and found that both server and client applications were more frequently deployed on time and on budget by teams with high concentrations of Microsoft certifications. Additionally, unscheduled downtime was lower on those teams that had more than 80% Microsoft certification.

To reach the top tier of performance, network system and software management teams should strive for 46% of their teams certified in Microsoft-related products and processes.

### ***Messaging and Collaboration***

Messaging and collaboration include activities to maintain and manage standalone email applications, instant messaging applications, and team collaborative applications, and the identity databases those services use.

IDC looked at several performance metrics related to messaging and collaboration management activities and found that messaging server and collaboration services availability was higher at organizations with a high concentration of Microsoft-certified professionals on the team. Additionally, client satisfaction was higher for those teams with high concentrations of Microsoft-certified team members.

To reach the top tier of performance, teams that manage messaging and collaboration should strive to have about 39% of their teams certified by Microsoft.

### ***Web Applications Management and Development***

Web management includes implementation, operations of Web servers, and applications. Web development includes activities of developers, business analysts, and other professionals to create Web-based applications.

IDC looked at several performance metrics related to Web application development and management and found that client satisfaction with Web applications is higher at organizations with high concentrations of Microsoft-certified professionals on the team.

To reach the top tier of performance, teams responsible for Web application development and management should strive for 41% of their teams certified by Microsoft.

### ***Application Development***

Application development includes activities of developers, business analysts, and other professionals to create traditional applications.

IDC looked at several performance metrics related to application development and found that more application development projects were completed on time and more projects were completed on budget by teams with high concentrations of Microsoft-certified professionals. At the same time, client satisfaction was higher for application development projects managed by teams with high concentrations of Microsoft certified professionals.

To reach the top tier of performance, teams responsible for application development should strive to have 50% of their teams certified by Microsoft.

### ***IT Help Desk***

Help desk activities include efforts to track, record, resolve, and manage problems related to the IT infrastructure and operations.

IDC looked at several performance metrics related to IT help desk management and found that client satisfaction with the help desk function was higher for teams with high concentrations of Microsoft-certified professionals. Those teams could resolve issues at a lower level more quickly and saw a reduced rate of escalation of issues from Level 1 to Level 2.

To reach the top tier of performance, IT help desk teams should strive for 55% of their teams certified by Microsoft.

### ***DB Development and Administration***

Even at low concentrations of Microsoft certification, database development teams completed on time and on budget more frequently than teams without Microsoft certification.

To reach the top tier of performance, database development teams should strive to have 48% of their teams certified by Microsoft. To reach the top tier in database administration, teams should strive for 41% of their teams certified by Microsoft.

## Key Performance Metrics

Table 2 illustrates 15 of the metrics most dramatically impacted by an increase in concentration of Microsoft certification.

**TABLE 2**

Impact of Certification on Performance: Results by Key Performance Indicator and Percentage of Team Holding Microsoft Certifications

	20% or Less	80% or More
<b>Network security projects</b>		
Client PCs compliant with company standards	69.7	71.4
Servers fully compliant with company standards	71.2	75.9
<b>Network systems and software</b>		
Production servers meeting compliance standards	64.8	67.6
Server applications deployed on time	59.7	66.7
Client applications deployed on time	55.4	65.9
Server applications deployed within budget	68.2	69.9
Unscheduled downtime	4.3	4.3
<b>Messaging and collaboration projects</b>		
Availability of messaging servers	71.3	72.7
<b>Web applications projects</b>		
Clients satisfied with Web apps	83.5	84.8
<b>Application development projects</b>		
Applications development projects completed on time	66.3	71.3
Applications development projects completed within budget	67.3	72.4
Clients satisfied with applications developed	78.0	84.9
<b>IT help desk</b>		
Clients satisfied with IT service desk	76.2	84.7
Issues escalating from Level 1 to Level 2	29.4	20.7
Issues resolved within 60 minutes	61.2	65.9
<b>DB development projects</b>		
DB development projects completed on time	71.5	*
DB development projects completed within budget	73.7	*
Clients satisfied with DBs developed	81.8	*

\* Insufficient data

n = 400

Source: IDC's *IT Manager Survey*, 2006

## Manager Perception of Certification Value

Figure 3 illustrates perception of certification for 400 IT managers.

**FIGURE 3**

**Perceived Value of Certification**

Q. How much do you agree with the following statement? Certifications ...



n = 400

Notes:

Response options were a scale from 1 to 5, with 1 = strongly disagree and 5 = strongly agree.

Values represent those respondents who chose 4 or 5 on a scale from 1 to 5.

Source: IDC's *IT Manager Survey*, 2006

**Copyright Notice**

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2006 IDC. Reproduction without written permission is completely forbidden.