

Outlook for 2005: *Re-investment and Rationalization*

The Leading IT Skills in Demand within
Canadian Organizations in 2005

Executive Presentation to SHRC

June 2005

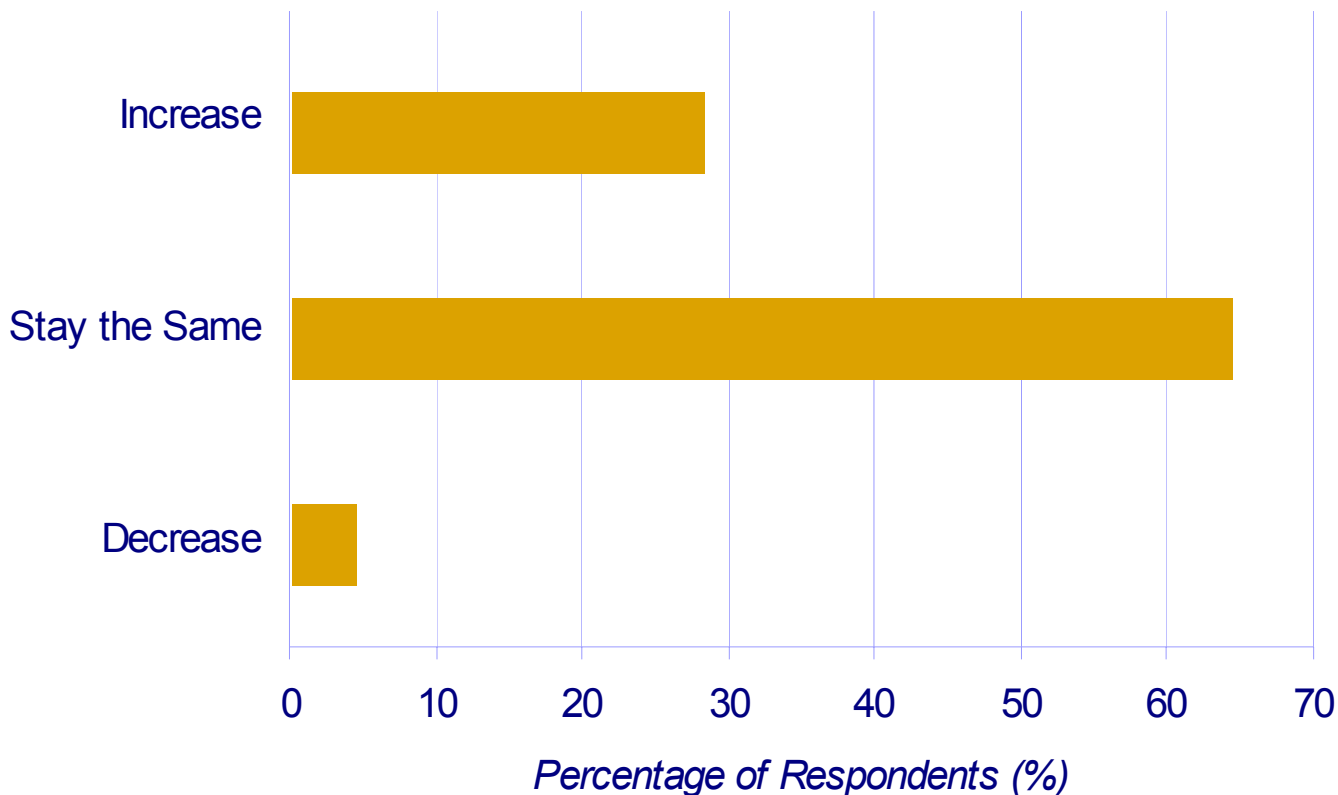
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Setting the Stage

Demand Returning for IT Skills Training

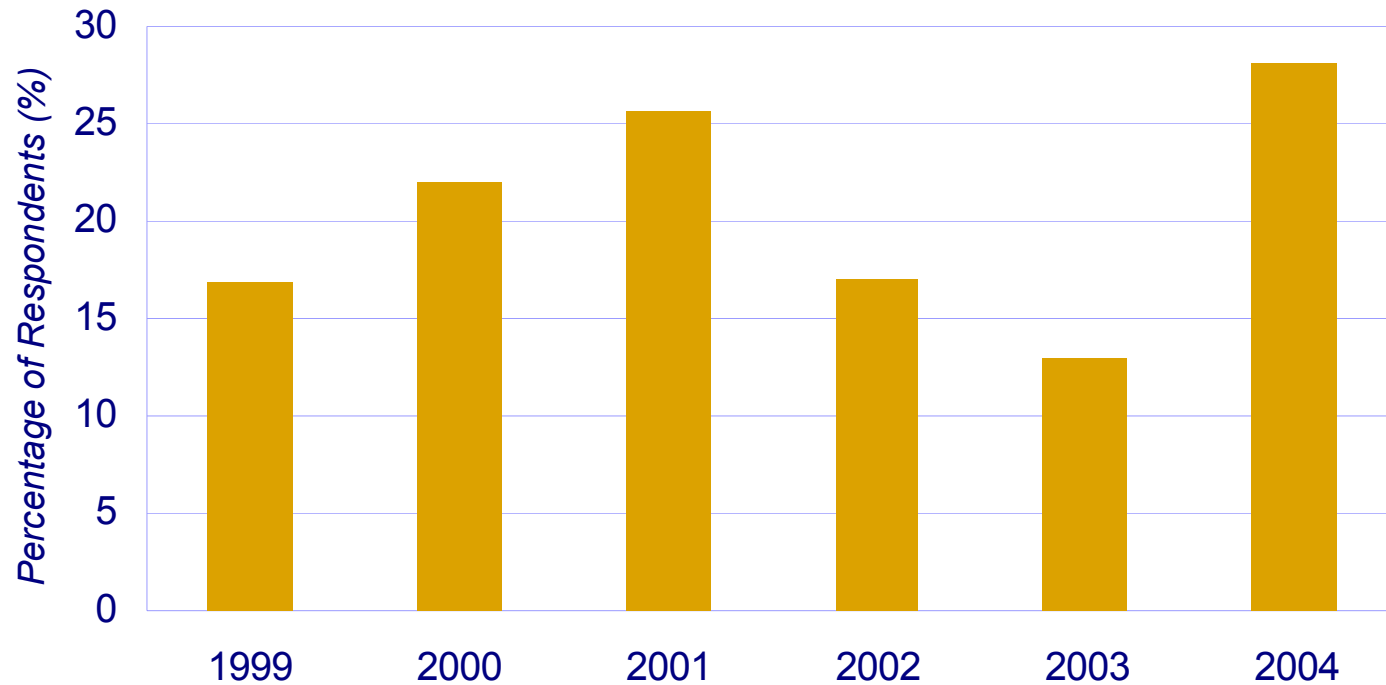
Q: Compared to 2004, how is your organization's 2005 spending on IT Professional Technology Training expected to change?



Setting the Stage

Productivity Driving Skills Demand

Q: Which one area could vendors of IT products and services improve to help your company increase its return on investment for IT?



■ Help employees better understand how to more efficiently use the technology

Understanding the Demand for IT Skills

Areas of Focus

- Research Objectives and Methodology
- The 2005 Demand for IT Skills in Canada
- The Changing Demand for IT Skills
- Summary and Observations
 - Notable Findings
 - Implications for Key Players
 - IT Training Providers
 - IT Product and Services Vendors
 - Corporate IT Departments
 - Individual IT Professionals

Understanding the Demand for IT Skills

Research Objectives

SHRC asked IDC Canada to address three questions:

- 1) What skills are currently in demand?
- 2) How has this demand changed over the past year?
- 3) What are the implications for industry stakeholders?

Why did SHRC want to know this information?

- SHRC is the source for IT Labour Market Information in Canada. This study is one piece of the work that SHRC is doing to provide Canadians with the most comprehensive information on the IT labour market.

Understanding the Demand for IT Skills

*Primary Research Methodology**

Current Year

IDC Canada's 4Q-2004 Survey

- Completed in December 2004
- Web-based survey
- 497 respondents
- Confidence Interval +/- 4.4%
- Canada-wide
- Organizations with 100+ employees
- Respondents are senior IT professionals
- Represents a cross section of industries

Previous Year

IDC Canada's 4Q-2003 Survey

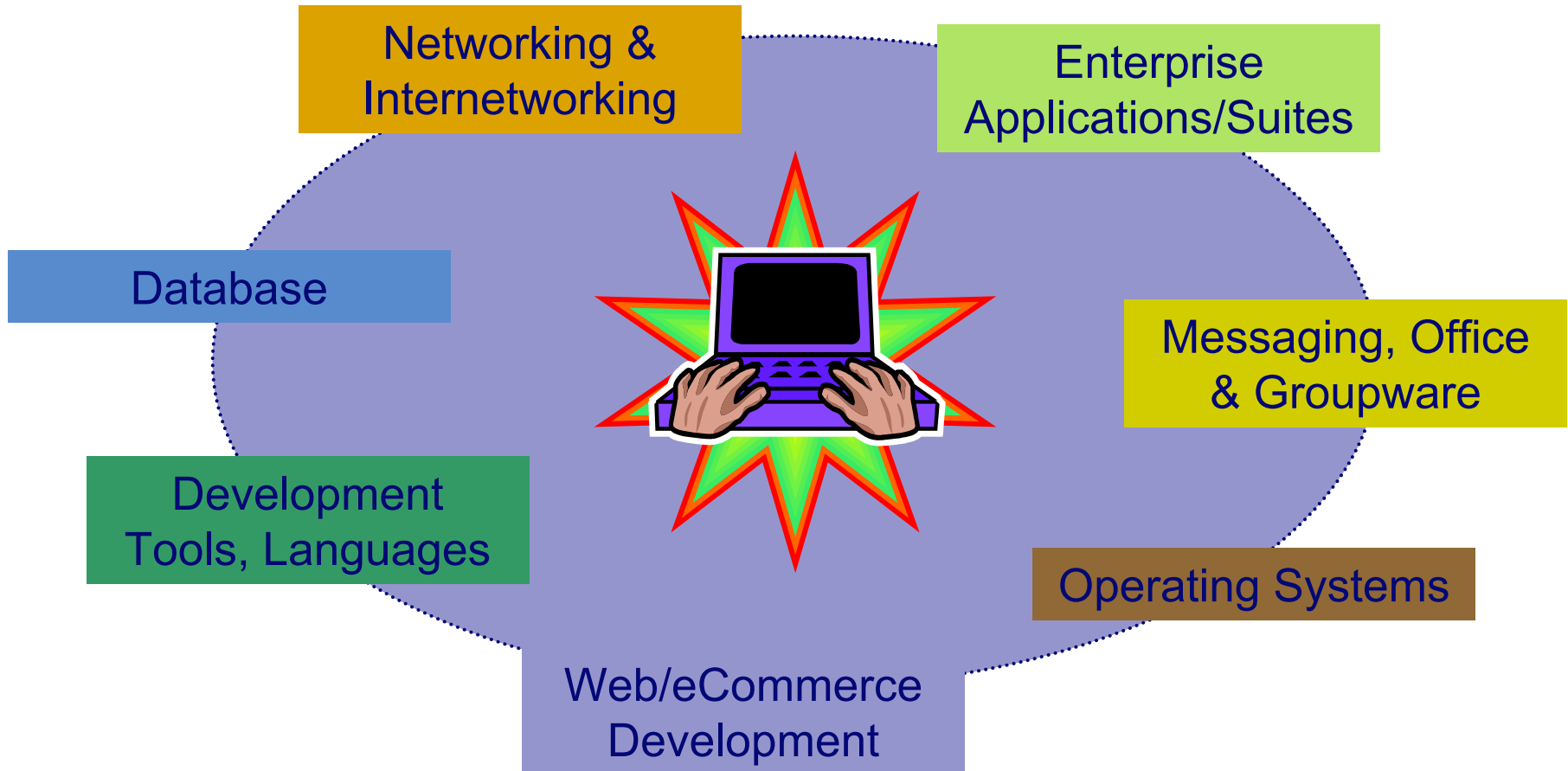
- Completed in December 2003
- Web-based survey
- 414 respondents
- Confidence Interval +/- 4.9%
- Canada-wide
- Organizations with 100+ employees
- Respondents are senior IT professionals
- Represents a cross section of industries

- Analyze the current demand for IT skills across Canada
- Evaluate differences to identify trends
- Observe patterns within different segments

*See appendix for detailed demographics

Understanding the Demand for IT Skills

Skill Groupings



Within the above groups, there are a total of 78 individual IT skills sets.

The 2005 Demand for IT Skills

Top 15 Skills in Demand, 2005

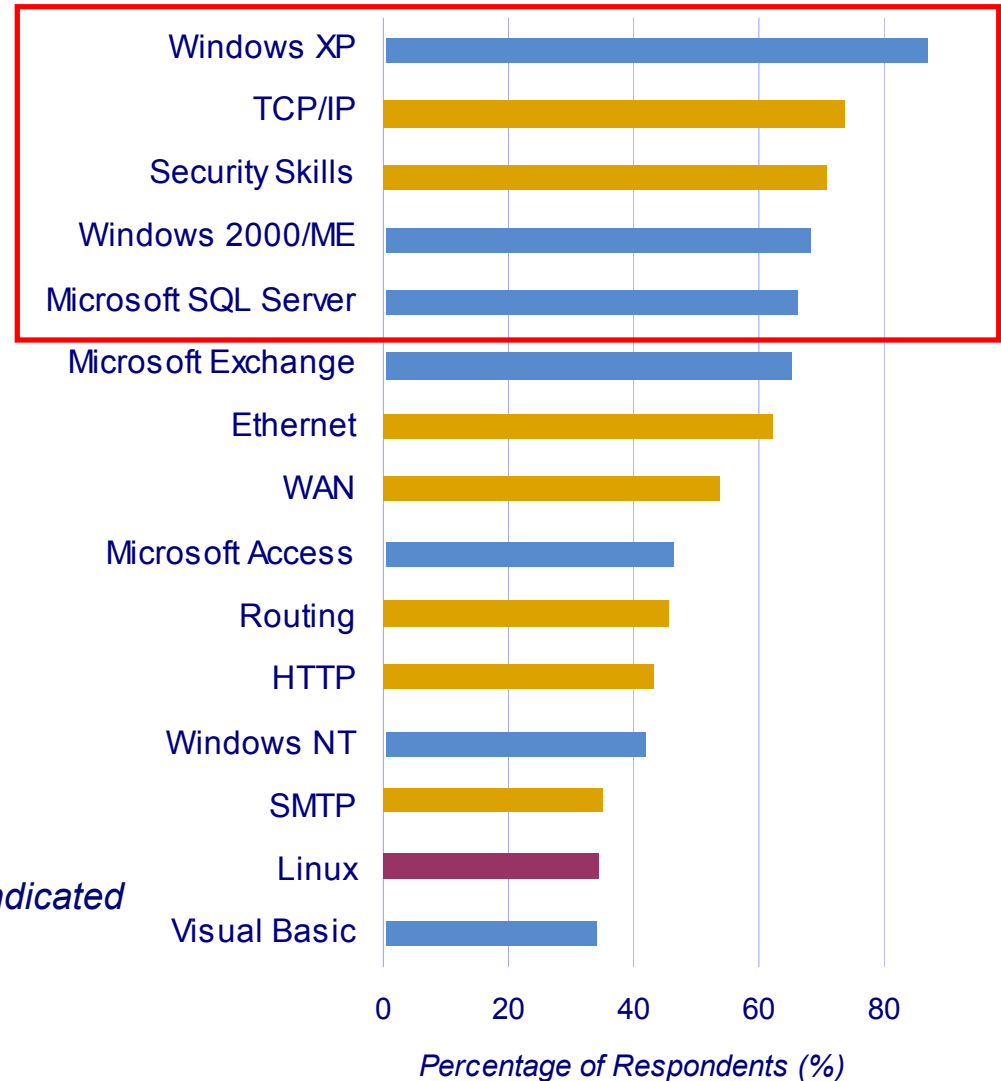
2005 IT Skill Priorities

- **Networking**
- **Microsoft**

Top individual skills for 2005:

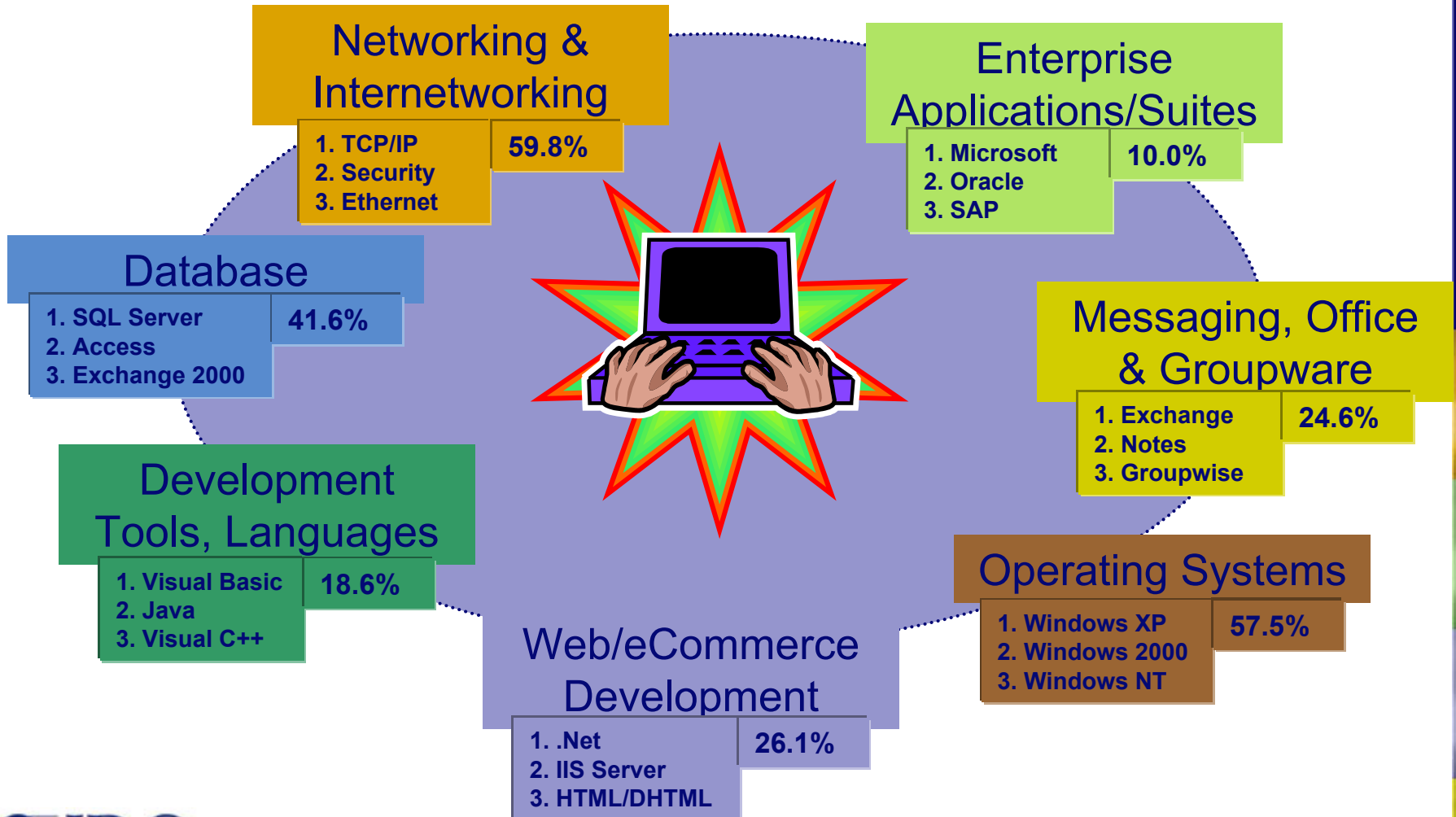
- 1) Windows XP
- 2) TCP/IP
- 3) Security Skills
- 4) Windows 2000/ME
- 5) Microsoft SQL Server

Reflects the proportion of organizations that indicated they were seeking a particular skill (multiple responses accepted).



The 2005 Demand for IT Skills

Top 3 Skills by Technology Category

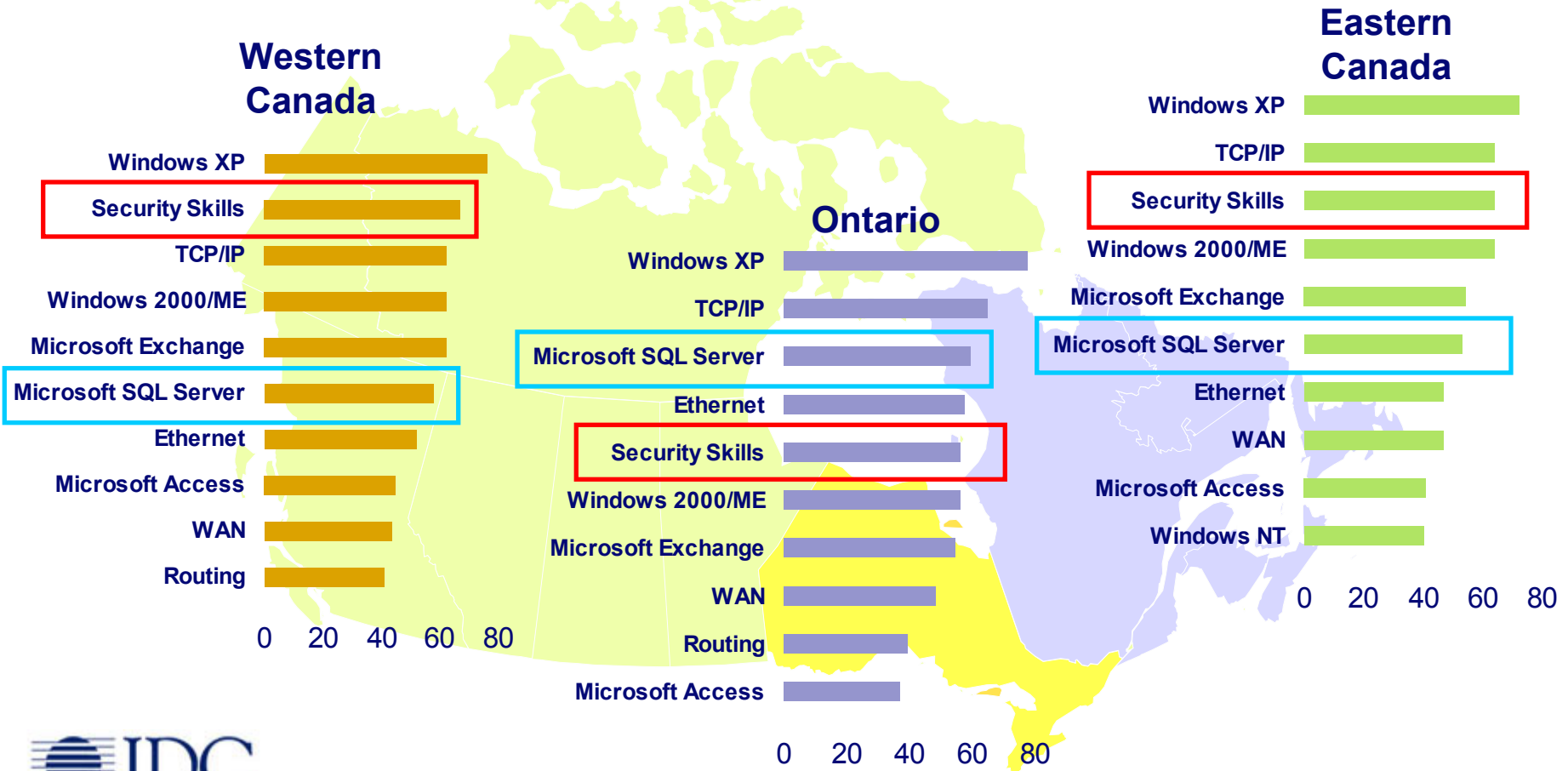


Percentage represents average of the top 3 mentions for each category

The 2005 Demand for IT Skills

Little Regional Difference in Demand

9 out of top 10 skills needed are the same, however some differences in priority by region



The 2005 Demand for IT Skills

Strong Demand in the Public Sector

- Public sector leading the way in security skills and Linux demand – 11 of 15 skills higher than average
- Financial services has the lowest demand for XP and TCP/IP – 11 of 15 skills lower than average
- Manufacturing has lowest demand for security skills
- Infrastructure has strongest overall demand for Microsoft OS (XP and 2000)

Top 15 Skills in Demand By Industry

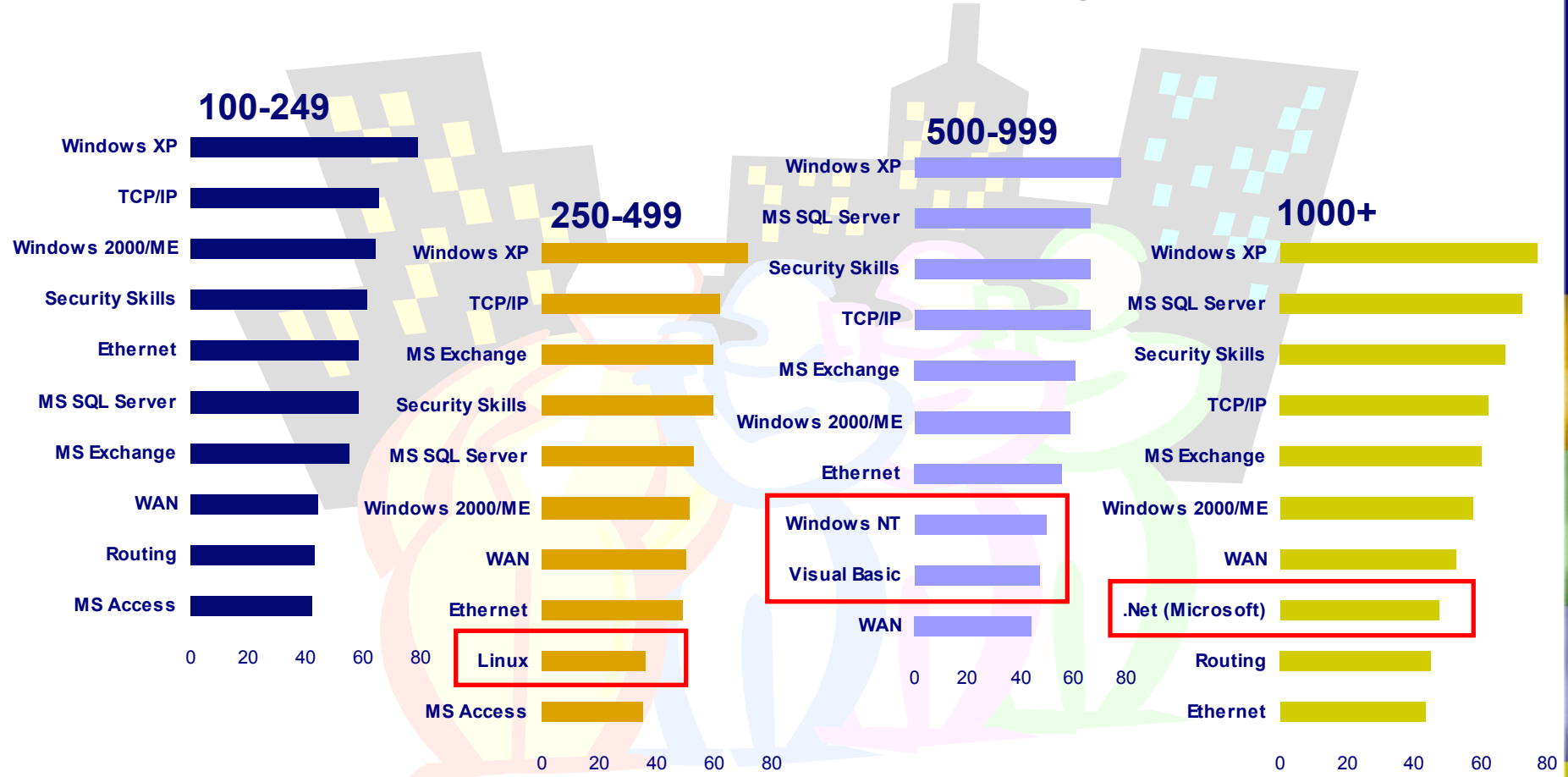
	Financial	Manufacturing	Infrastructure	Distribution	Public	Total
Windows XP	63.2	78.4	79.5	75.2	75.8	76.2
TCP/IP	57.9	66.7	69.2	61.2	65.2	64.1
Security Skills	68.4	56.5	59.0	60.8	69.2	61.1
Windows 2000/ME	57.9	61.2	61.5	61.4	52.7	59.7
Microsoft SQL Server	73.7	56.8	47.4	58.6	59.3	57.9
Microsoft Exchange	63.2	54.0	53.8	56.2	63.7	57.0
Ethernet	42.1	59.0	46.2	52.6	56.0	54.1
WAN	42.1	51.8	50.0	45.0	42.4	46.6
Microsoft Access	36.8	47.8	39.5	34.8	42.9	40.3
Routing	36.8	35.3	42.1	40.2	44.6	39.6
HTTP	36.8	35.3	35.9	38.8	39.6	37.4
Windows NT	31.6	40.6	33.3	37.3	31.9	36.6
SMTP	35.0	34.5	34.2	26.3	31.9	30.5
Linux	26.3	24.5	33.3	31.0	37.4	30.1
Visual Basic	26.3	33.1	23.7	26.7	34.1	29.7

Data represents results as a percentage of respondents

The 2005 Demand for IT Skills

Similar Skills in Demand by Company Size...

...but differences are telling

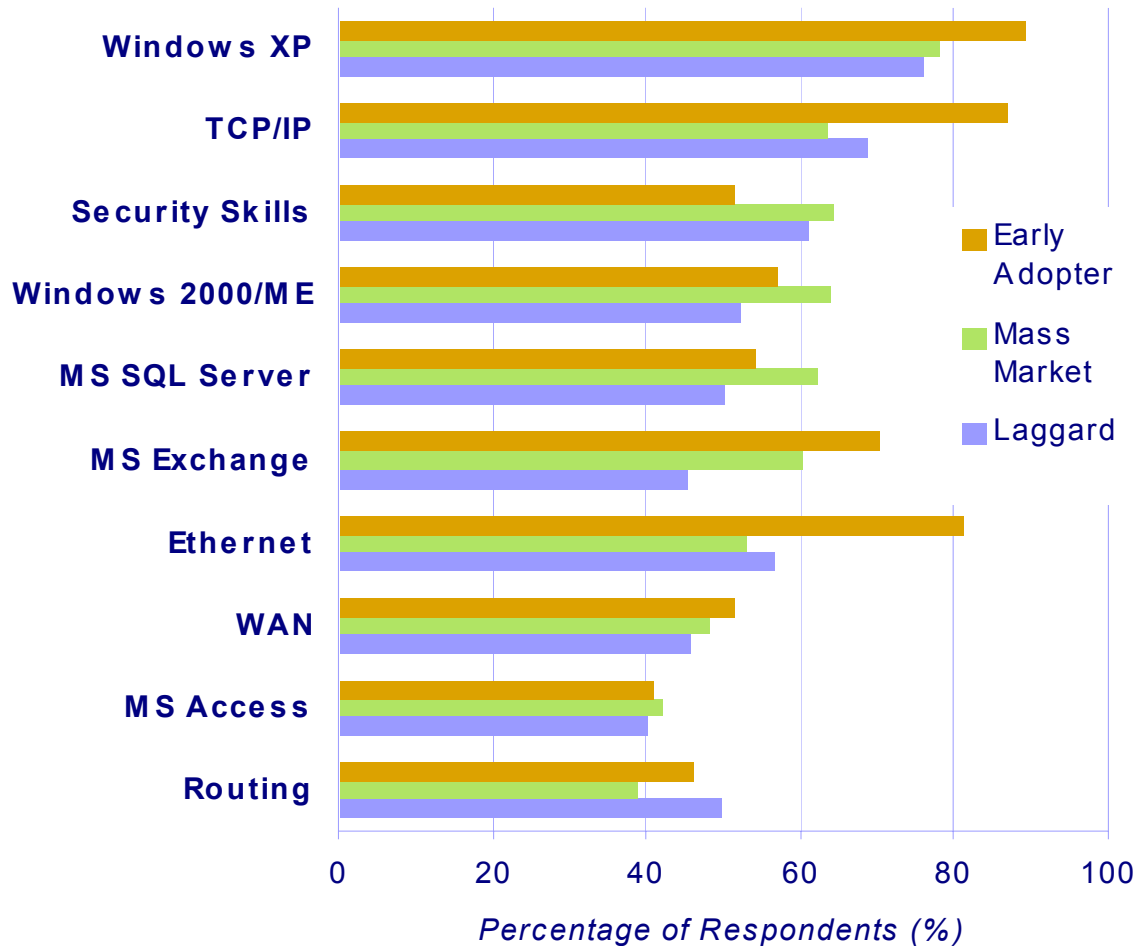


* Data represents results as a percentage of respondents

The 2005 Demand for IT Skills

Skill Demand by IT Adoption Disposition

- *Early Adopters* demonstrate highest demand for skills – 3 skills over 80 percent
- *Early Adopters* much less focused on security skills for 2005 – ahead of the curve or reckless?
- *Laggards* indicate significantly less skill demand in general



Early Adopter – Focus on leading edge technologies (N=37)

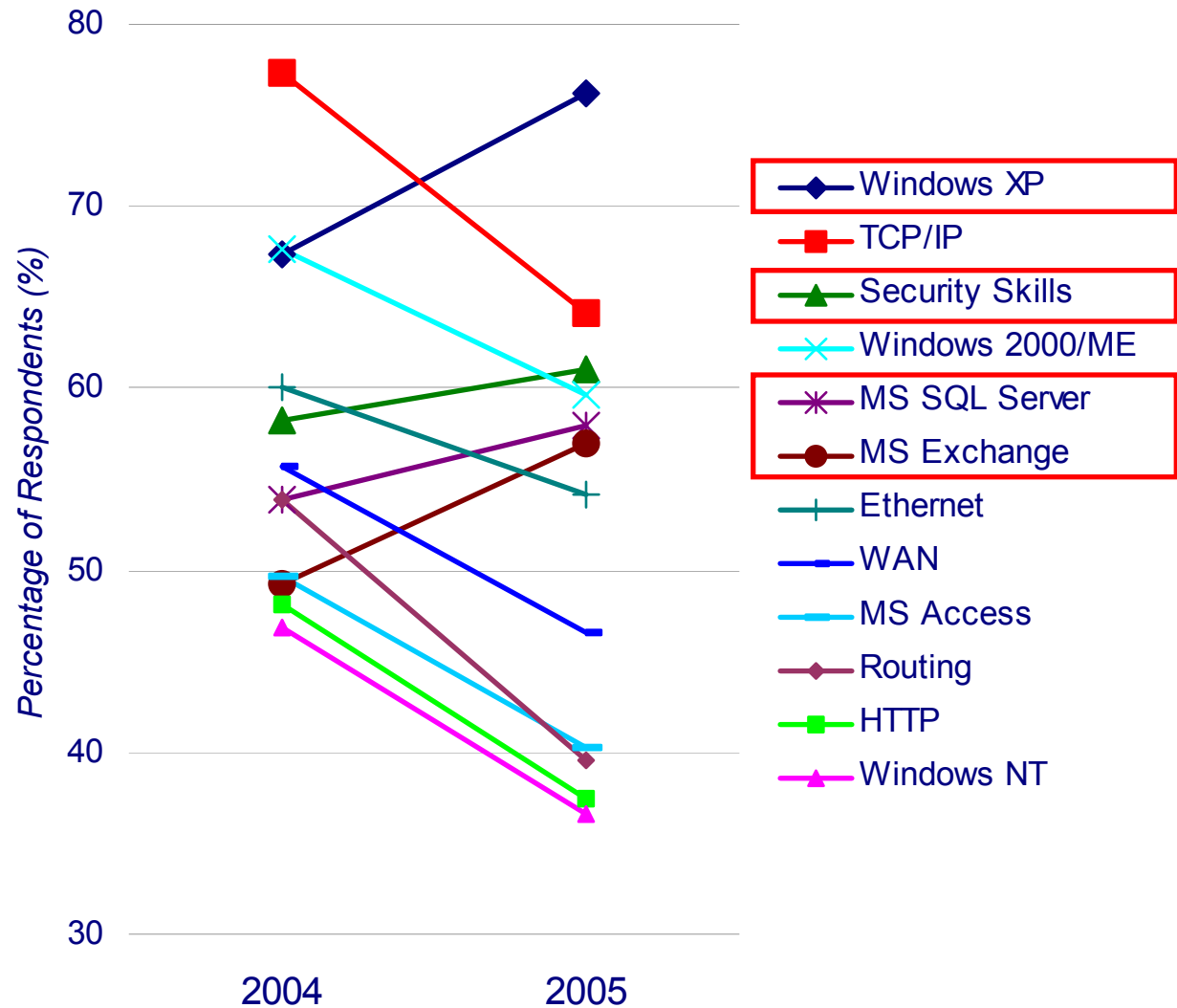
Mass Market – Focus on stable, proven or common technologies (N=389)

Laggard – Focus on commodity/necessary technologies (N=71)

The Changing Demand for Skills

8 of Top 12 Skills Down in Demand from 2004

- Overall demand for IT skills is down - top 12 skills averaged a 5% decline compared to 2004.
- Increased demand for security skills, plus 3 Microsoft skills.

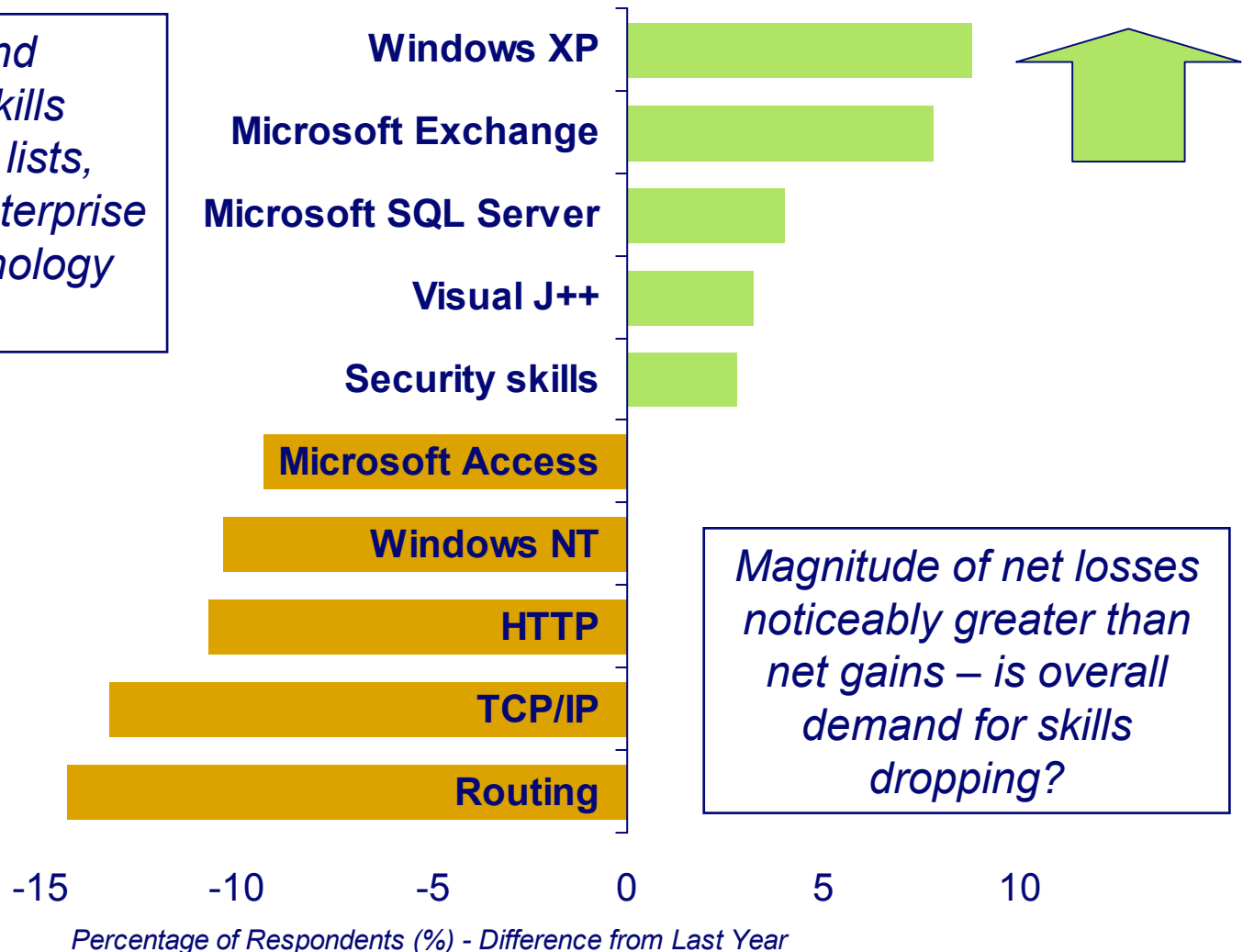


* Data represents results as a percentage of respondents

The Changing Demand for Skills

Top 5 Gainers and Losers

Microsoft and networking skills dominate both lists, reflecting both enterprise focus and technology evolution.



Magnitude of net losses noticeably greater than net gains – is overall demand for skills dropping?

The Changing Demand for Skills

Changes in Demand by Category

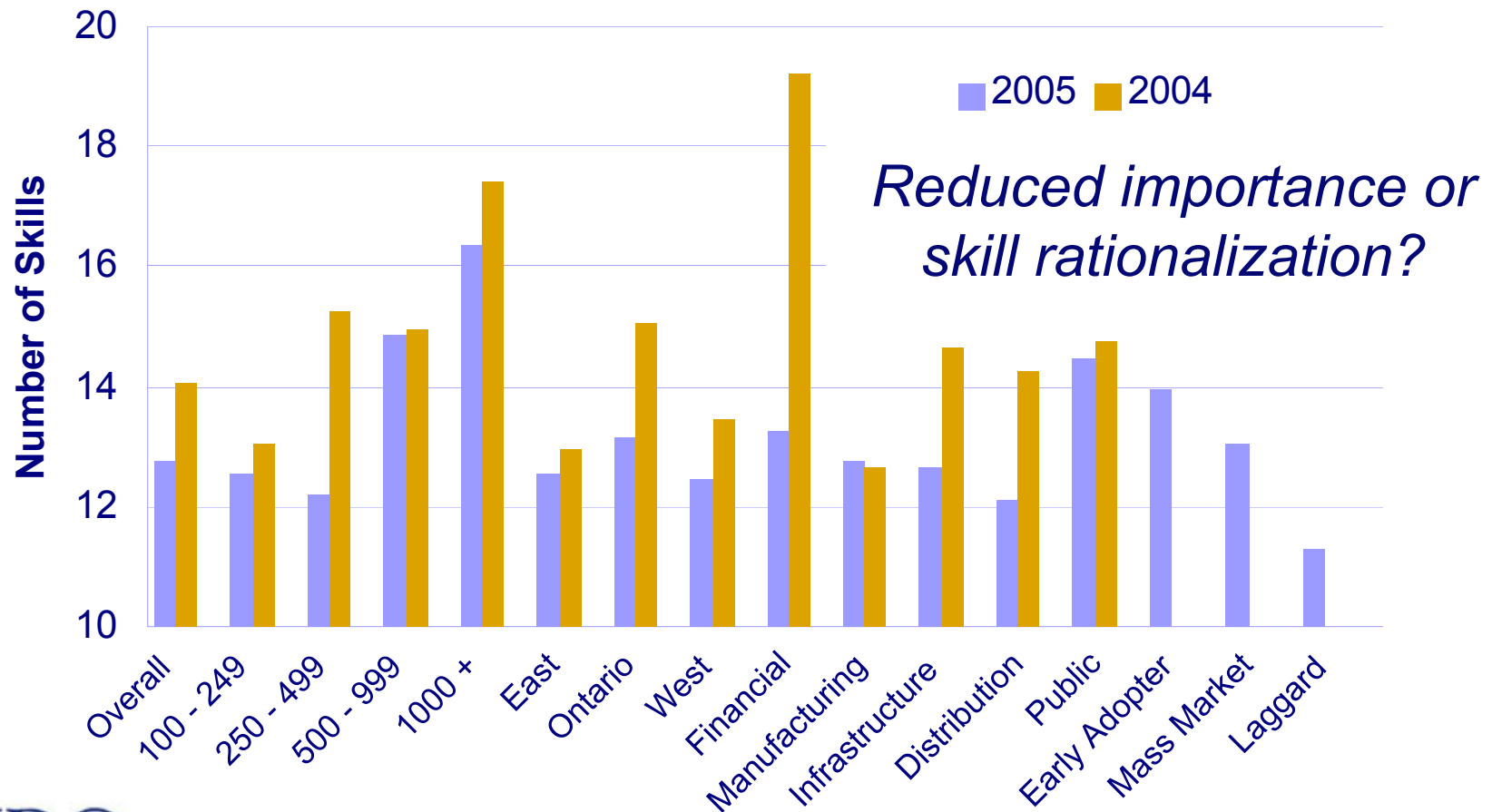
When looking at the IT skill needs within categories, overall demand is down, but organizations appear to be narrowing their focus on a few leading priorities.

- *Networking skills*: most skills declined in demand, though security (infrastructure and public) and VoIP (public) posted gains
- *Messaging skills*: MS Exchange up – driven by public sector
- *Operating system skills*: Windows XP, Linux and Mac skills show increases; Windows 2000 and NT biggest declines
- *Enterprise applications skills*: Microsoft and SAP demand grows; Oracle and JDE skill demand declines
- *Web development skills*: .Net only skill to grow in demand (infrastructure and manufacturing); XML-related skills down across the board
- *Development tool skills*: all top skills decline in demand; Visual J++ (MS) grows across all verticals
- *Database skills*: SQL server grows (East and West); other top skills decline in demand

The Changing Demand for Skills

Lower Overall Demand for Number of Skills

Average number of skills in demand down for every category, except manufacturing. Biggest drop in financial services.



* No data for IT adoption disposition in 2004

Essential Guidance

Re-investment and Rationalization

Indicators:

- Decline in the overall number of skills in demand, although certain skill sets are gaining in importance.
- Corporate budgets for IT professional skills training are increasing.
- Organizations are placing greater emphasis on driving productivity from their IT investments and are looking to their IT partners for assistance through employee skill development.

IDC believes:

A process of skill rationalization is occurring. Organizations are narrowing their focus to a select group of technologies and their corresponding skill sets.

Process is being driven by the evolution of standards-based solutions, technological maturity, and an increasing organizational focus on productivity.

Essential Guidance

Implications for IT Training Providers

Demand for IT technical training returning.

- Budgetary restrictions over the past few years created pent-up demand for skill upgrades for corporate IT professionals.

The focus on Microsoft.

- Given the high level of demand for Microsoft skills, it is critical that training providers develop and promote their Microsoft portfolio in order to remain competitive.

The public sector opportunity.

- The public sector reported the greatest demand for IT skills in 2005, responding to an aging demographic, legacy systems and aggressive technology initiatives.

Essential Guidance

Implications for IT Product and Service Vendors

Attach skill training to solutions.

- Organizations are looking for quick and seamless integration and increased productivity from their IT investments and IT vendors should ensure that the necessary skills and training are available.

Be prepared to help.

- Customers may turn to outsourcing and professional service firms to reduce their burden on internal skill demands and to access specialized skill sets.

Partner with training firms.

- Alliances with IT training companies will help users access the most recent and relevant skill training.

Essential Guidance

Implications for Corporate IT Departments

Recognize the skill sets that are in demand.

- Understand the skill demand both regionally and nationally, and identify best practices for acquiring and retaining those most important to your organization.

Enterprise skill management.

- Focus on the complementary nature of particular skills to maximize the skill “tool boxes” of your IT professional staff.

Consider outsourcing/outtasking.

- Look to your IT solution providers for assistance in addressing immediate/short-term skill demands.

Essential Guidance

Implications for Individual IT Professionals

Distinguish yourself.

- The skills in highest demand are generally attached to pervasive products – look to add emerging technologies (VoIP, Linux, GigE) to your portfolio to enhance professional marketability.
- Focus on developing and marketing business, communication and interpersonal skills. Understanding how IT fits in with the larger business picture and being able to function within a team environment has become critical for success and advancement.

Multi-tasking, multi-skilled.

- IT professionals within departments are being forced to do more with less, and require broader skill sets.

Life-long learning.

- The rapid evolution of IT technologies and products entails that IT professionals continually re-skill in order to preserve their relevance.

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Tony Olvet, Senior Consultant

Thank You

This project was sponsored by the
Software Human Resource Council

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Appendix

Survey Demographics - Response Rates

Segment	2004	2003	Margin of Error 2004*	Margin of Error 2003*
100-249 employees	170	139	7.5	8.3
249-499 employees	97	70	10.0	11.8
500-999 employees	74	65	11.5	12.3
1000+ employees	156	136	7.9	8.4
East	85	73	10.7	11.5
Ontario	263	222	6.1	6.6
West	149	115	8.1	9.2
Financial Services	43	35	15.1	16.8
Manufacturing & Resources	129	117	8.7	9.1
Infrastructure Services	61	58	12.7	13.0
Distribution and Services	131	119	8.6	9.0
Public Sector	133	81	8.5	11
Early Adopter	37	-	16.3	-
Mass Market	389	-	4.97	-
Laggard	71	-	11.7	-
Total	497	410	4.4	4.9

*At the 95% Confidence Interval

Note that survey data for both years has been weighted to reflect the distribution of organizations in Canada by industry and size.

Appendix

Survey Demographics - Industry Clusters

- Financial
 - Banking
 - Insurance
 - Financial Markets
- Manufacturing & Resources
 - Manufacturing
 - Primary Resources
 - Construction
- Infrastructure Services
 - Communications
 - Utilities
 - Transportation
 - Media
- Distribution and Services
 - Wholesale
 - Retail
 - Business & Personal Services
- Public Sector
 - Federal Government
 - Provincial Government
 - Municipal Government
 - Health
 - Education