

10GbE NIC Survey

2010

Content

- **Executive Summary**
- **Part 1: Participant Profiles**
- **Part 2: 1Gb NIC Preferences**
- **Part 3: 10Gb NIC Dynamics**

Executive Summary

Executive Summary

- **Goal:**
 - Get a pulse (100 participants) on end-user perceptions of topics surrounding the migration from 1Gb to 10Gb NICs
- **Survey**
 - 3-part survey
 - 113 respondents
 - From 30 LinkedIn groups
- **Perceptions**
 - The vast majority of server network ports are configured for *Ethernet* LAN, SAN or HPC
 - VLAN and Teaming are the most important features on 1Gb NICs
 - There is a strong preference for 1Gb NICs offered by their server vendor
 - Performance is the biggest issue with 1Gb NICs
 - Few believe they don't need 10GbE technology
 - Server virtualization is by far the biggest driver for 10GbE
 - The expectation is 2.5x the price of a 1Gb NIC for a 10Gb NIC

Key Findings

• 1Gb NIC Preferences

- Almost half the respondents (45.0%) configure only 2 NIC and LOM ports per server. Another quarter (25.9%) said they configure 5 ports per server.
- Almost half (44%) said that 100% of their servers use a standard NIC driver image. Another quarter (22%) said up to 75% of their server use a standard driver image.
- VLAN and Teaming were selected by more than by half (55%) as important because they effect the way their network functions. Jumbo Frames and iSCSI were selected by more than 45%.
- Over half (52.3%) said the primary issue with 1Gb NICs is performance.
- Almost half (45.9%) said the brand of 1Gb NIC they buy is the same as their server vendor.
- Over 80% (The) expect to pay \$200 or less for a 1Gb NIC

• 10Gb NIC Dynamics

- >80% of server network ports in data centers are configured for *Ethernet* LAN, SAN or HPC
- The expectation is \$500 or less for a 10Gb NIC
- Almost half (44.8%) are in the process of investigating 10Gb technology. Over 20% (21.9%) have deployed 10Gb technology.
- Over 90% (90.5%) expect to pay \$500 or less for a 10Gb NIC.
- Almost half (42.9%) knew about virtual NIC technology but stilled used multiple 1Gb NICs

Participant Profiles

Part 1

118 LinkedIn® Participants



Target LinkedIn Groups

Cisco Certified Engineers & Architects Network, Linux System Admins, Microsoft Certified Professional Network, High Performance & Super Computing, HPC Professionals, IT Focus Expert Group, PartnerPoint – An Online Community of Microsoft Partners, Storage Professionals, Storage: SAN, NAS, The Storage Networking Industry Association, VMware Virtualization & Cloud Computing



Invitation in a “Discussion”

Speak out about Ethernet NICs and get a \$5 Starbucks Card
Broadcom needs feedback from IT professionals with hands-on experience with Ethernet NICs, Fibre Channel HBAs or iSCSI HBAs. Respond to a brief survey at <http://www.surveymonkey.com/s/NPHVNYT> and get a \$5 Starbucks Card.

Posted 4 days ago | Delete discussion



On-line Survey



September 2009 Network Controller Survey

1. Participant Profile

The purpose of this page is to capture a basic profile of the survey participant.

1. Your \$10 Starbucks Gift Card will be mailed to this address.
** Sorry this offer applies only to participants in the U.S. **

Name:

Company:

Address:

City/Town:

State:

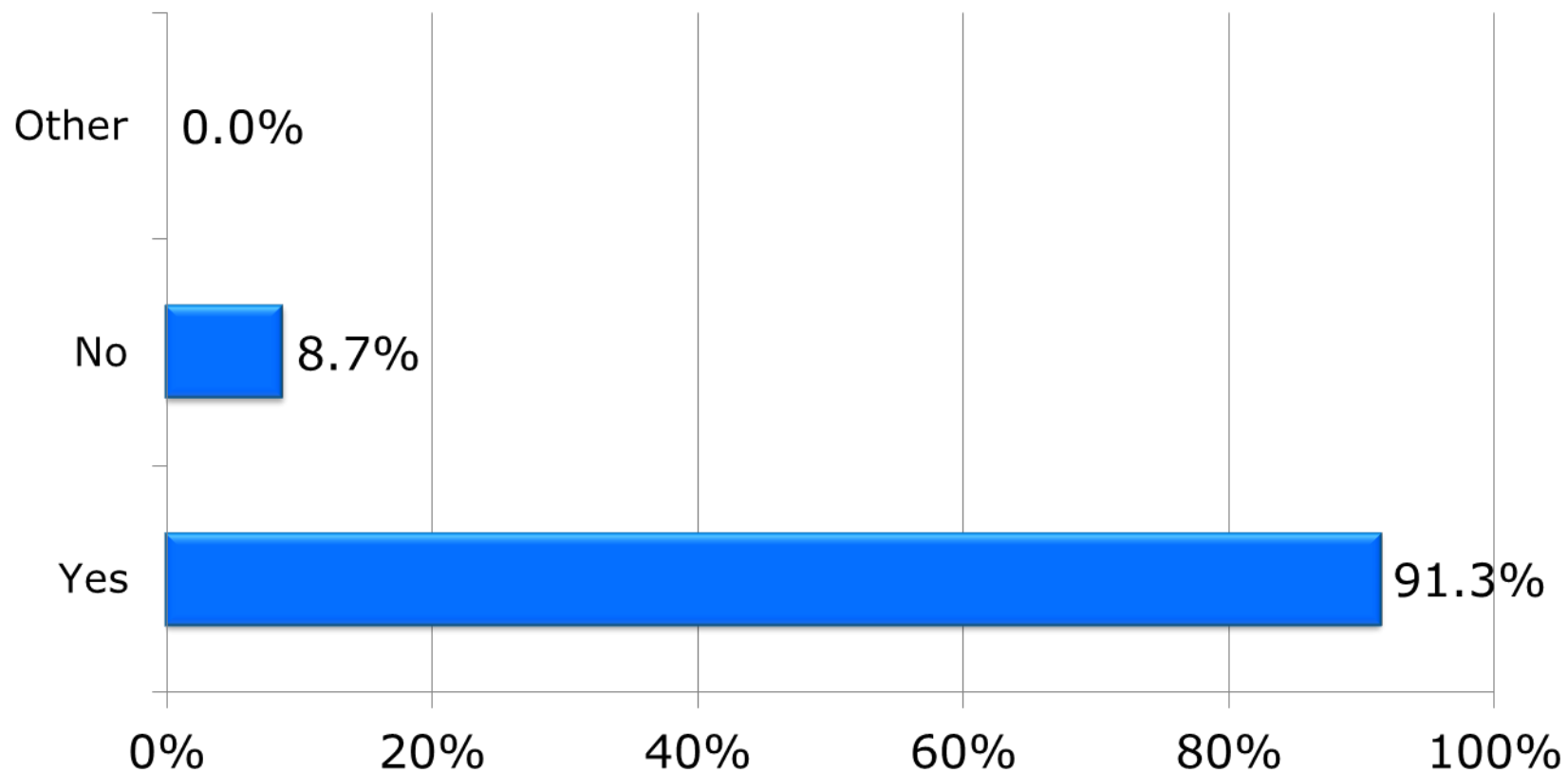
Select Participating Companies

Advanced Clustering Technologies
AEGON USA
Altalink
Ashen Grove
AT&T
BAM
BB&T
Bravo Health
CDW
Cerner
City & County of Denver
Cleversafe Inc.
Colliers Lanard & Axilbund
Columbia University
Comp-ALL Systems LLC
Conexient
Conning
Crabtree & Crabtree
Data Network Solutions
Duke University
EDS Inc
ET International
EURAC
First National Bank of Hutchinson
Fox Accounting, Inc
Grays-IT-Consultations
Green Oak Systems

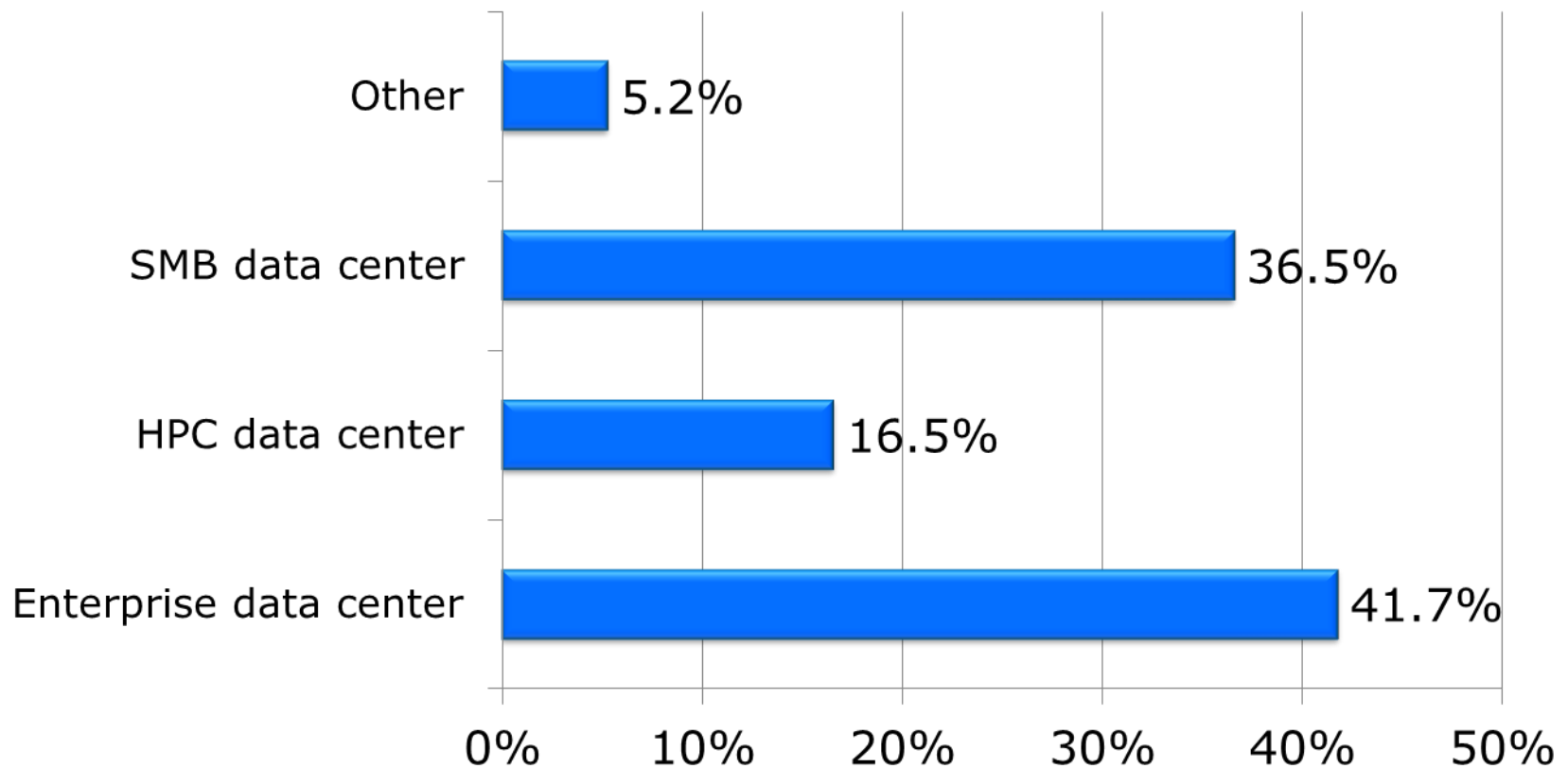
HCL Technologies
HPCC
Indiana University
InfoTechSystems
InterNexus Consulting LLC
Jabil
JP Morgan Chase
Kettering Health Network
Kettering Health Network
KLA
KLA-TENCOR
LSI
Marketstar
McGraw-Hill
N.O.C.C.C.D.
Nationwide
NetWerks
NVIDIA
Orlando Health
Pacific East
Passport Health Communications
Pate Engineers
Pilgrim's Pride
Pomeroy IT Solutions
Quest Software
RTS
SAC Capital Advisors

Sacramento Municipal Utility District
SBS
Seagate Technology, LLC
Shaw Industries Group
SJW
Solov
Sonic Healthcare USA
Southern Company Services
Spacelabs Healthcare
Sport fields USA
SSI
Symantec
Synergistic Solutions
System Connections Inc.
The Bridge Group
Thump Games
Tier-1 Solutions
UIC
Univ. of Utah HSC
University of Washington
US Tsubaki, Inc
Venyu
Ver Ploeg & Lumpkin, P.A.
Verizon
Virtual Site, S.A. de C.V.
Vishay Siliconix
X-Feds
YRCW

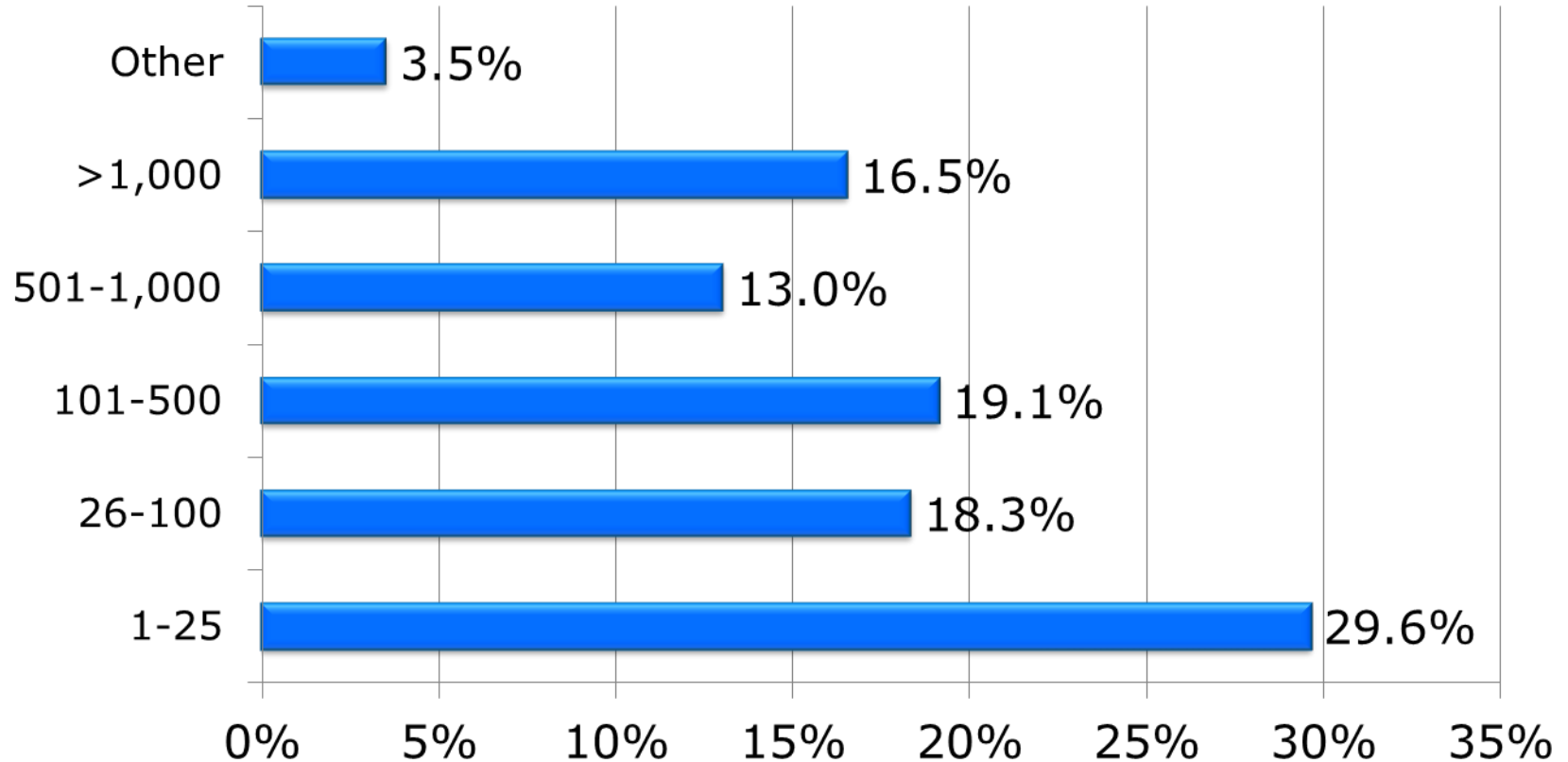
1.2 Do you have hands-on experience installing and managing Ethernet NIC, Fibre Channel HBA or iSCSI HBA drivers and software?



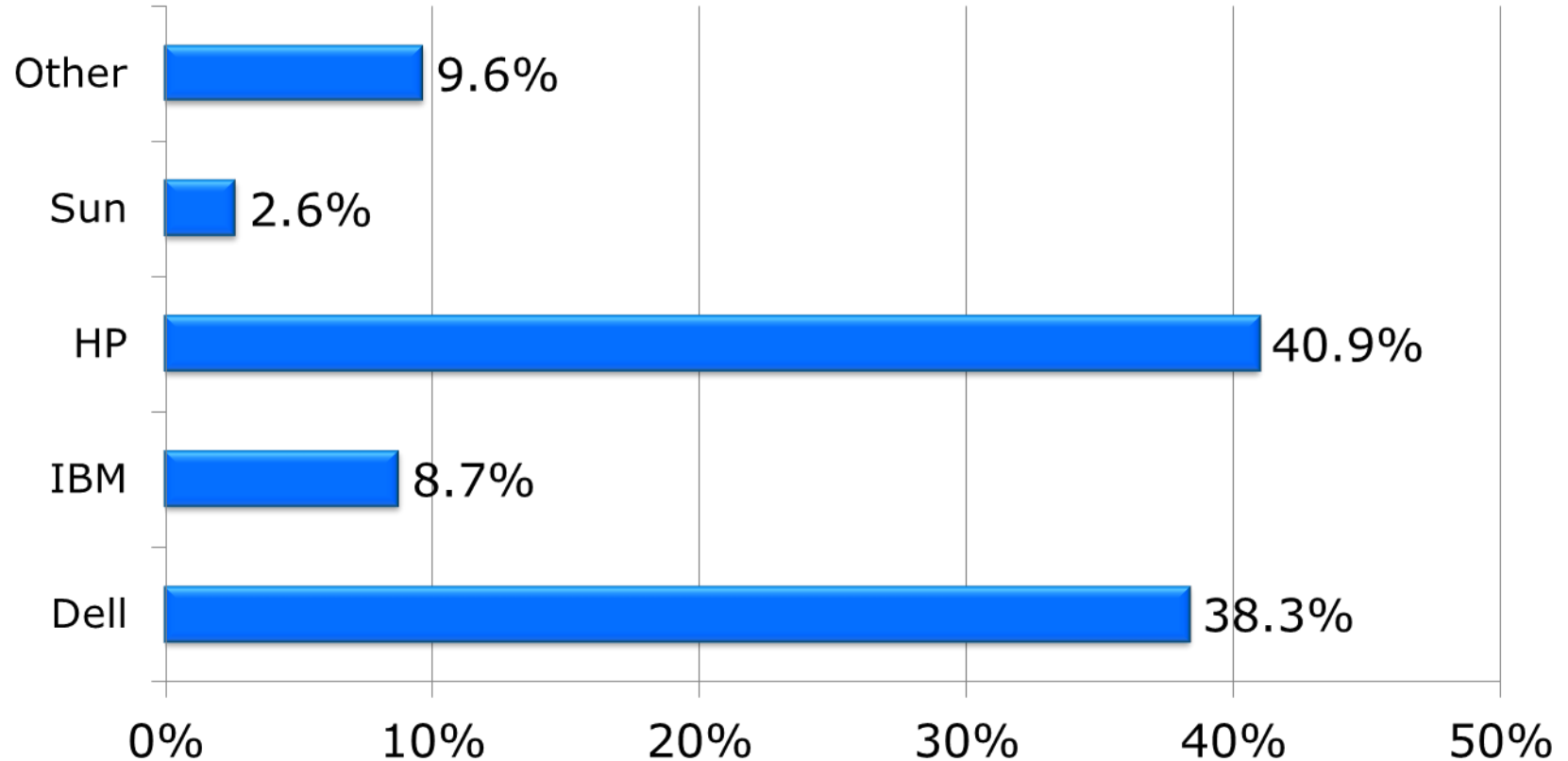
1.3 Your environment is best described as:



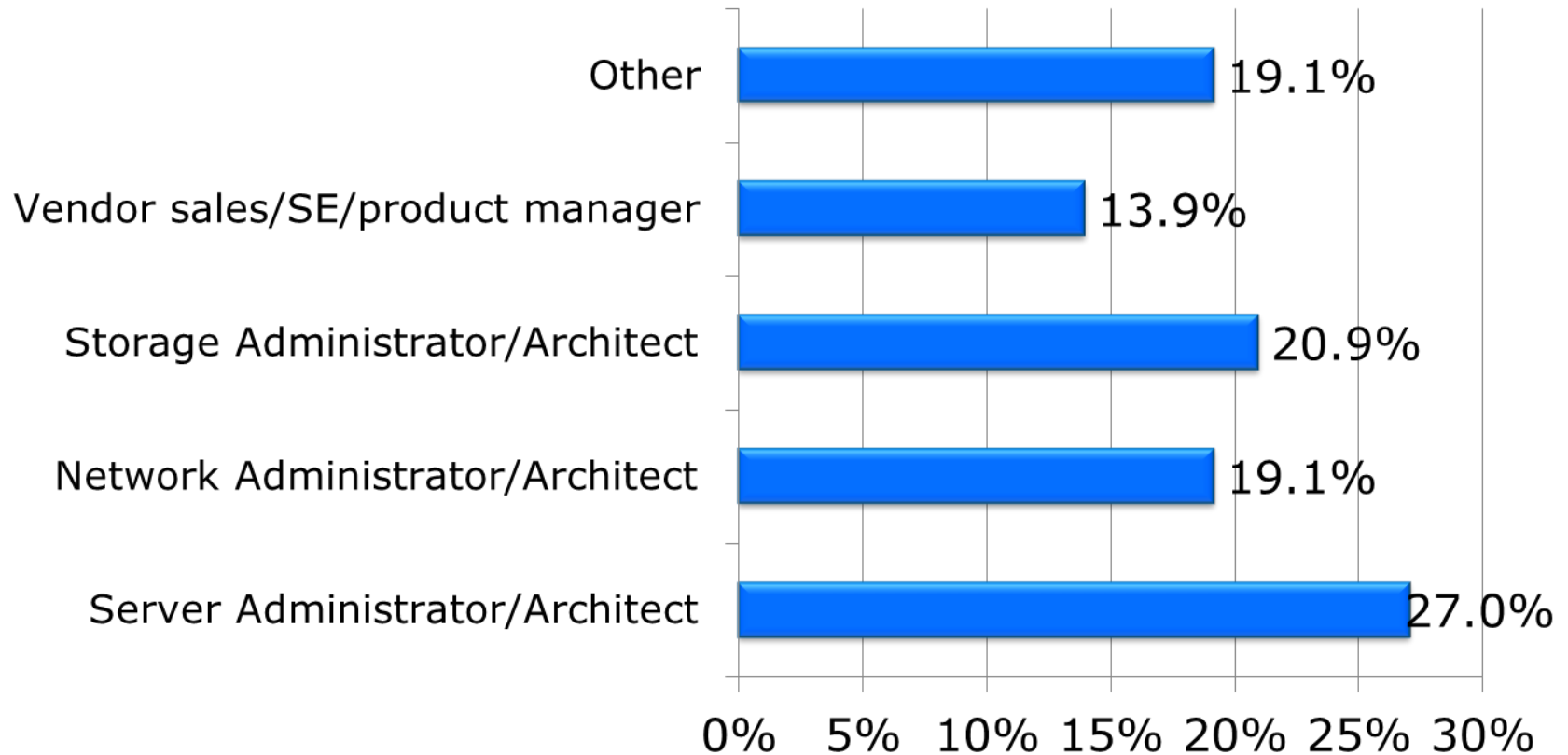
1.4 Number of servers in your environment:



1.5 Predominant brand of server in your environment:



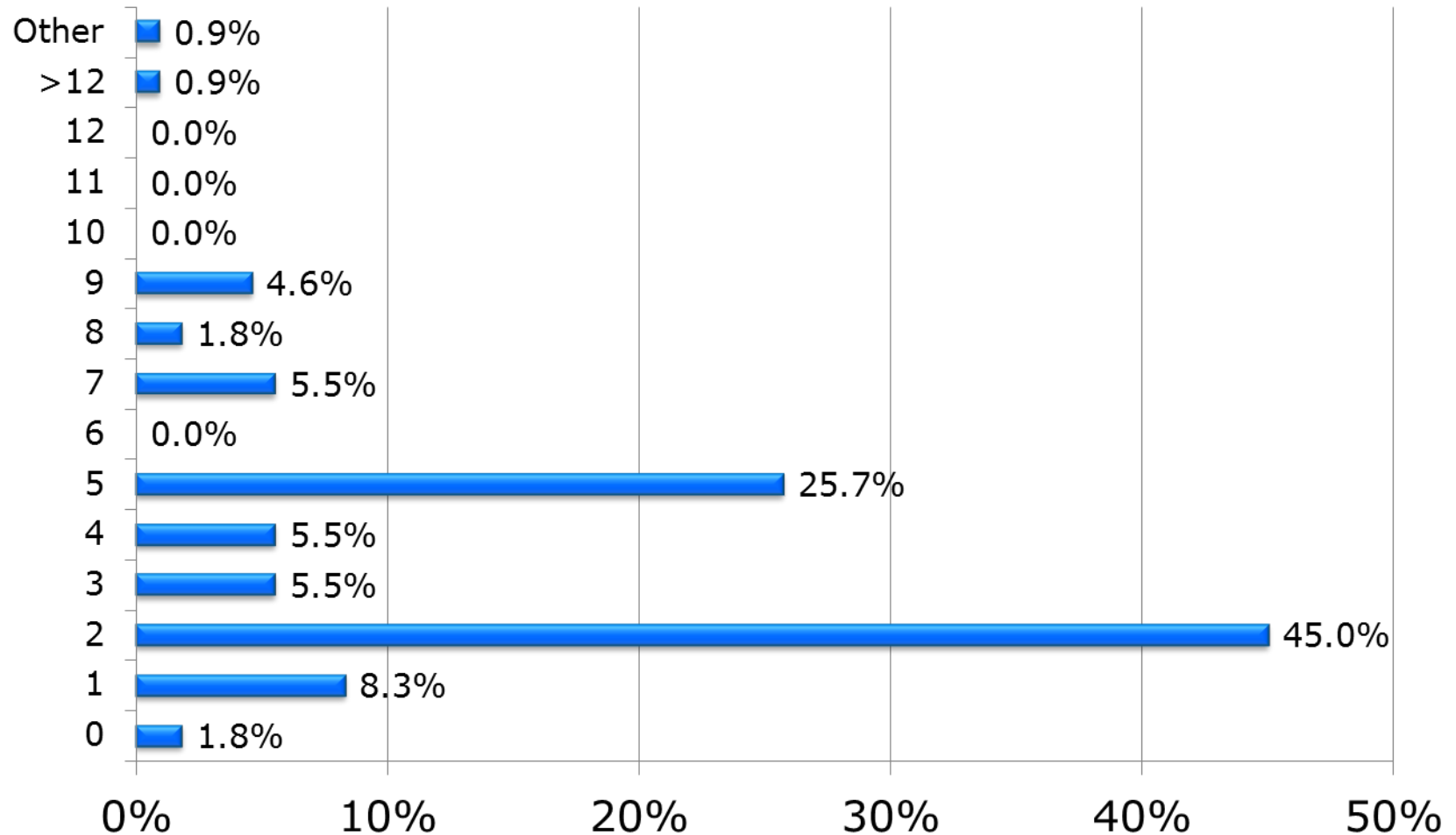
1.6 Your job title or job description is:



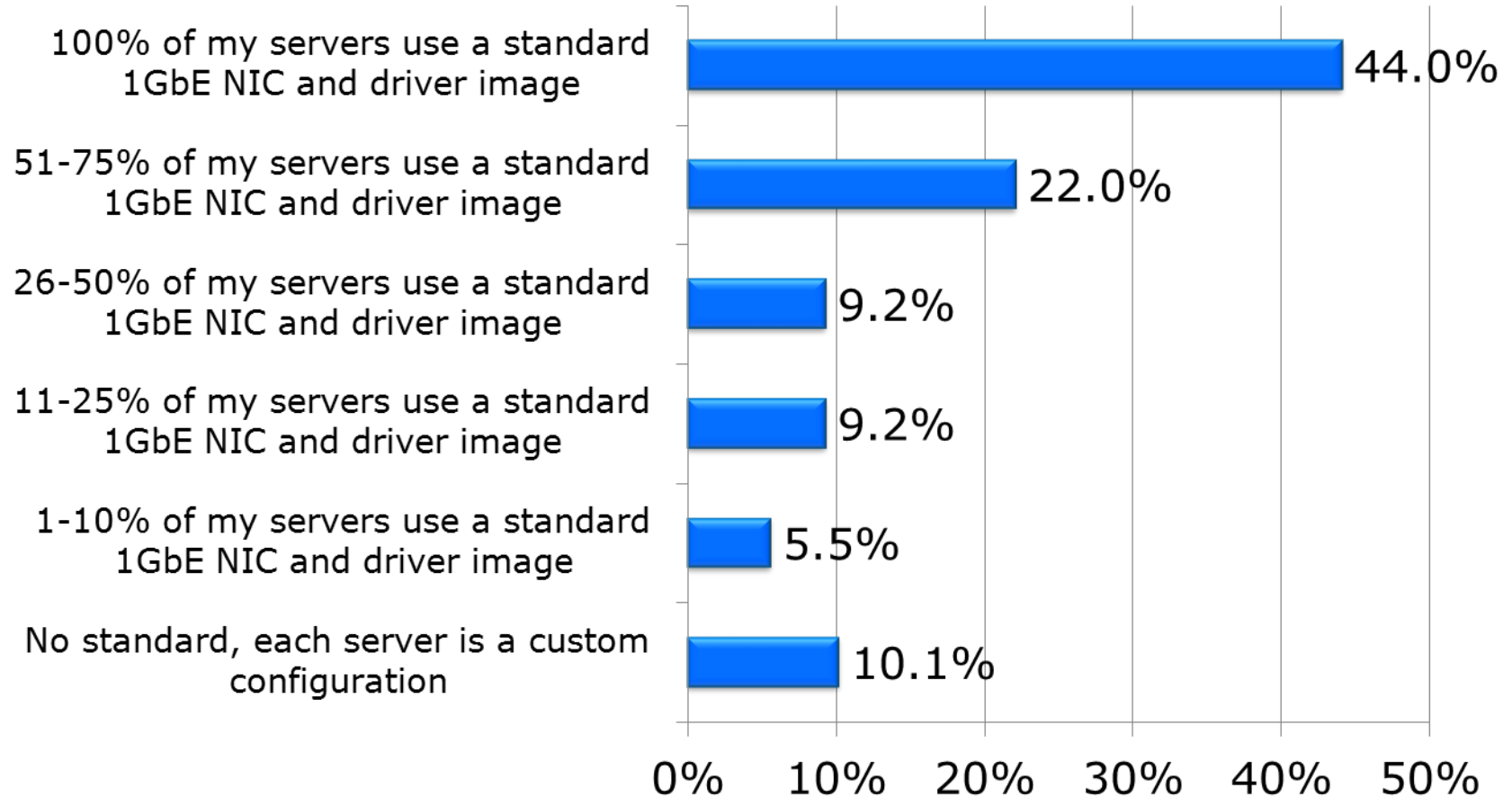
1Gb NIC Preferences

Part 2

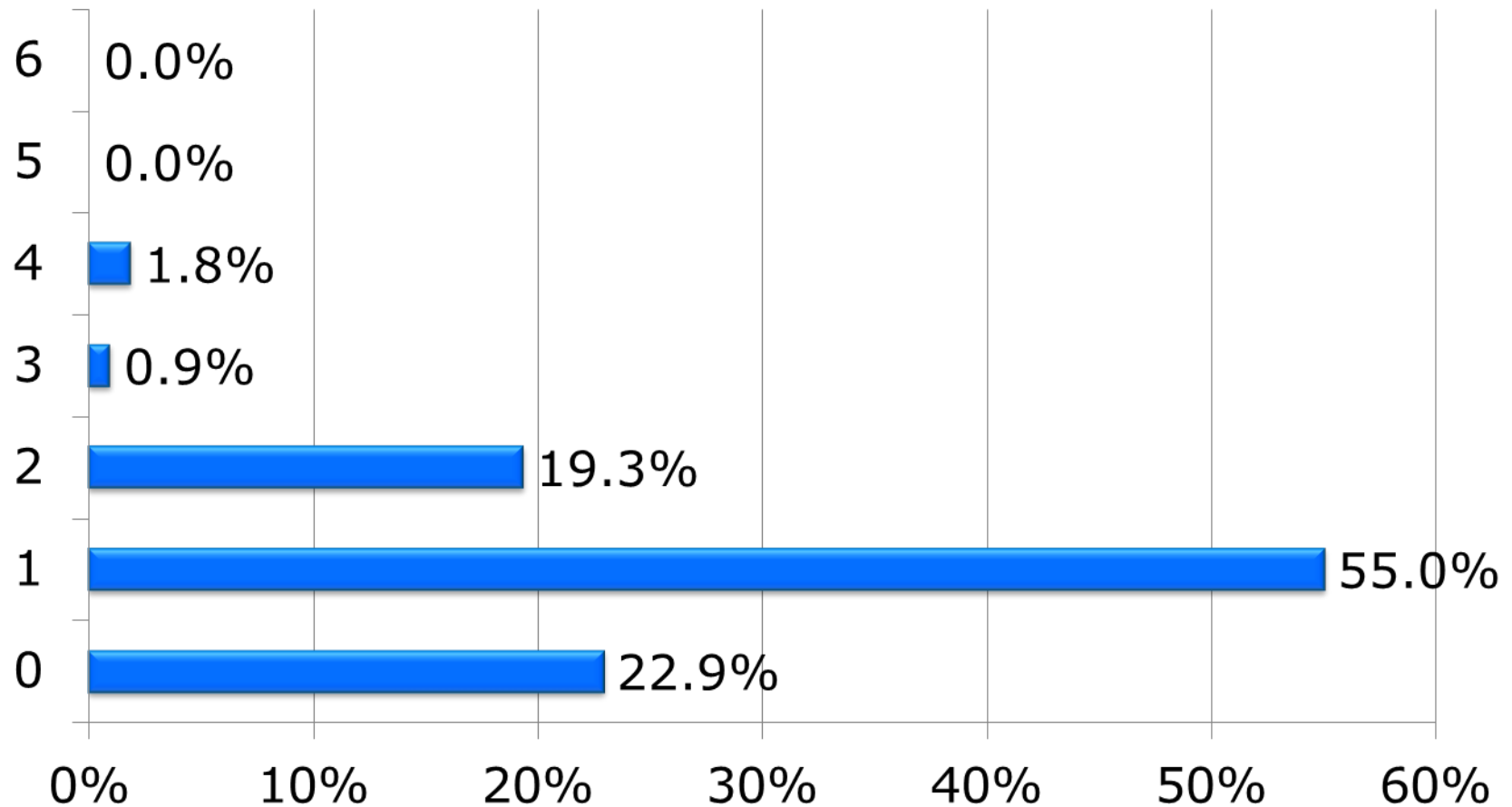
2.1 On average, how many 1GbE LAN-on-Motherboard (LOM) and NIC ports do you configure per server?



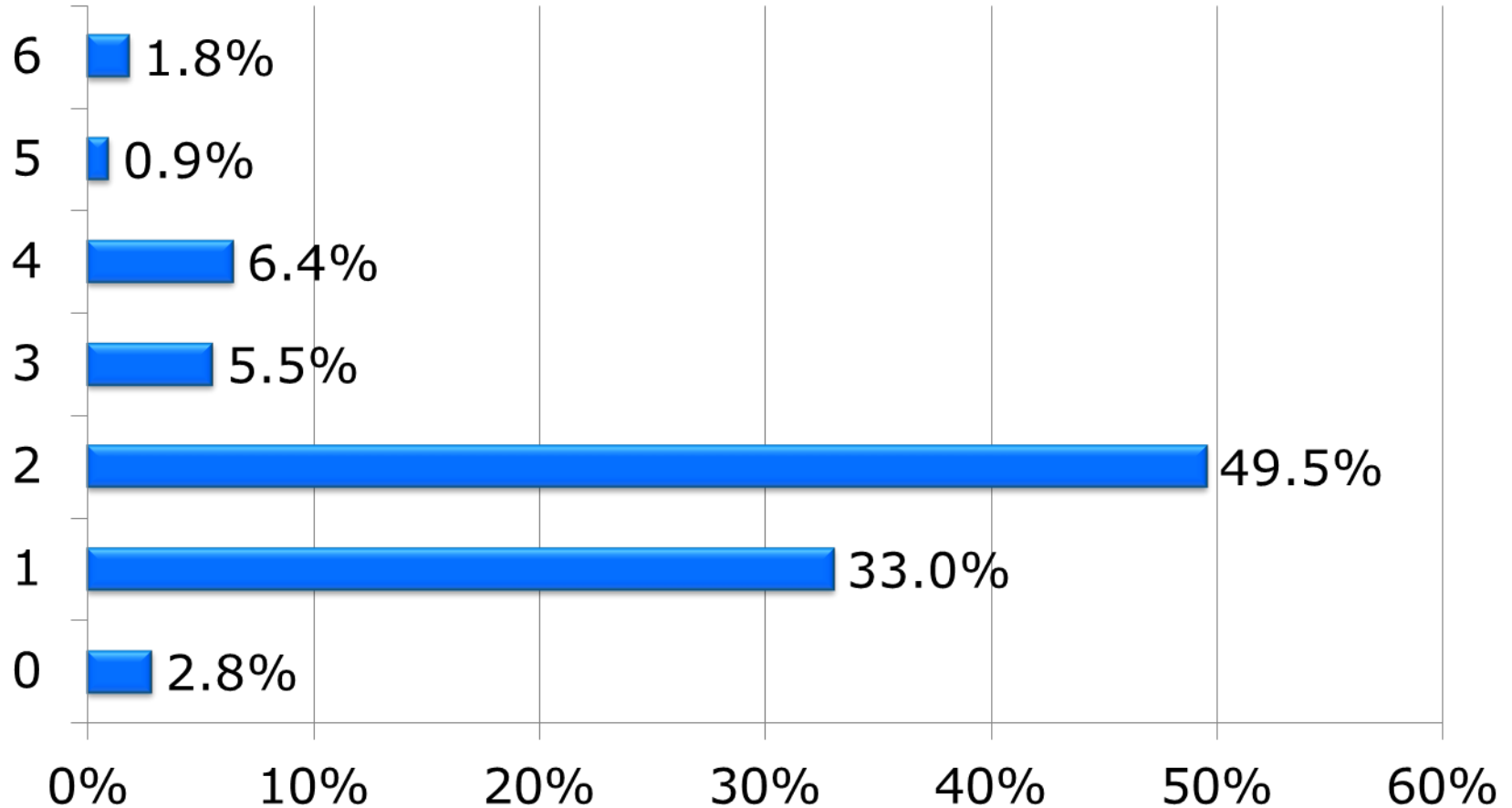
2.2 What percent of your servers are configured with a standard 1GbE NIC and driver image?



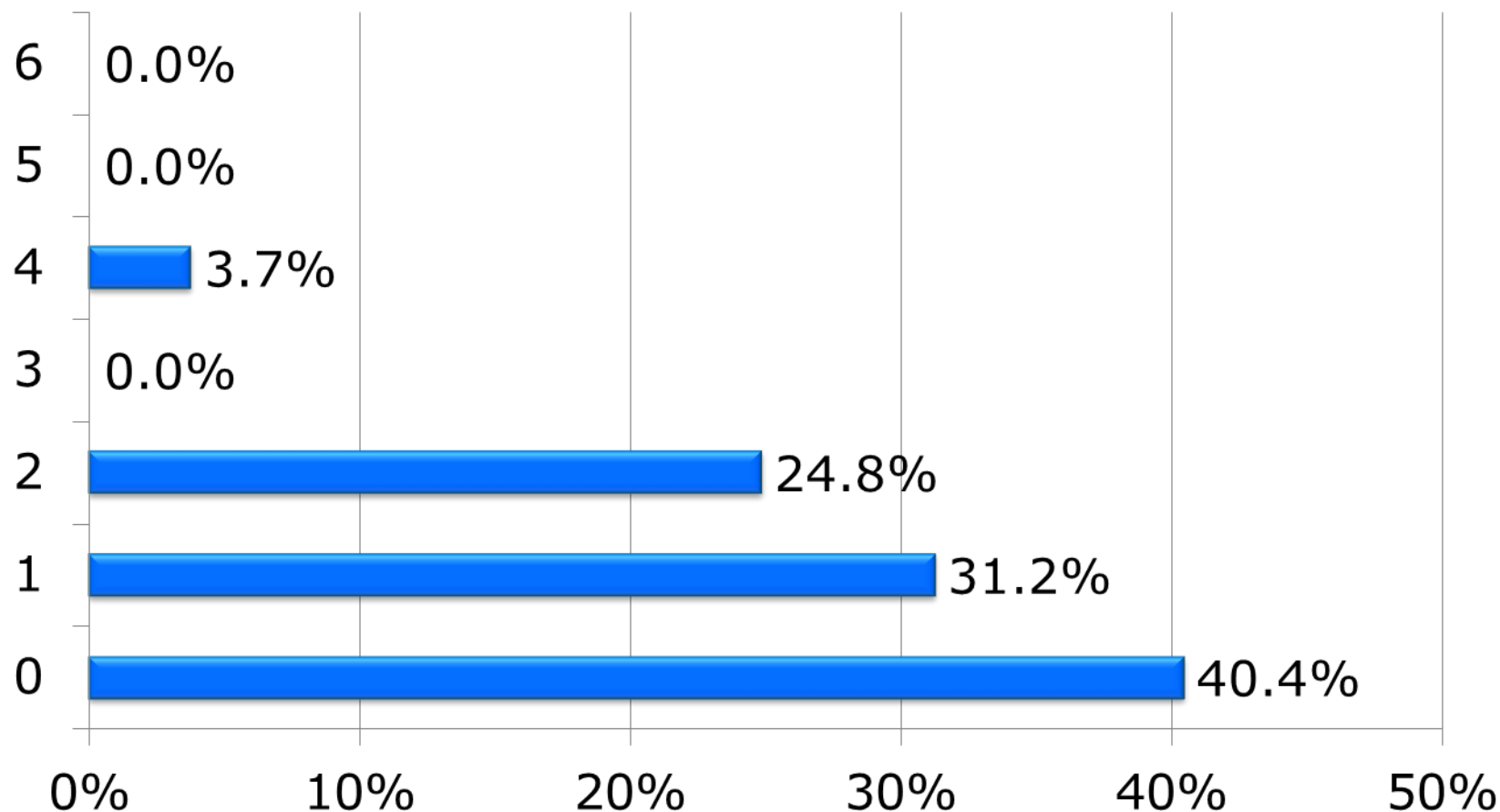
2.3 On average, how many 1GbE ports do you have configured per server for MANAGEMENT?



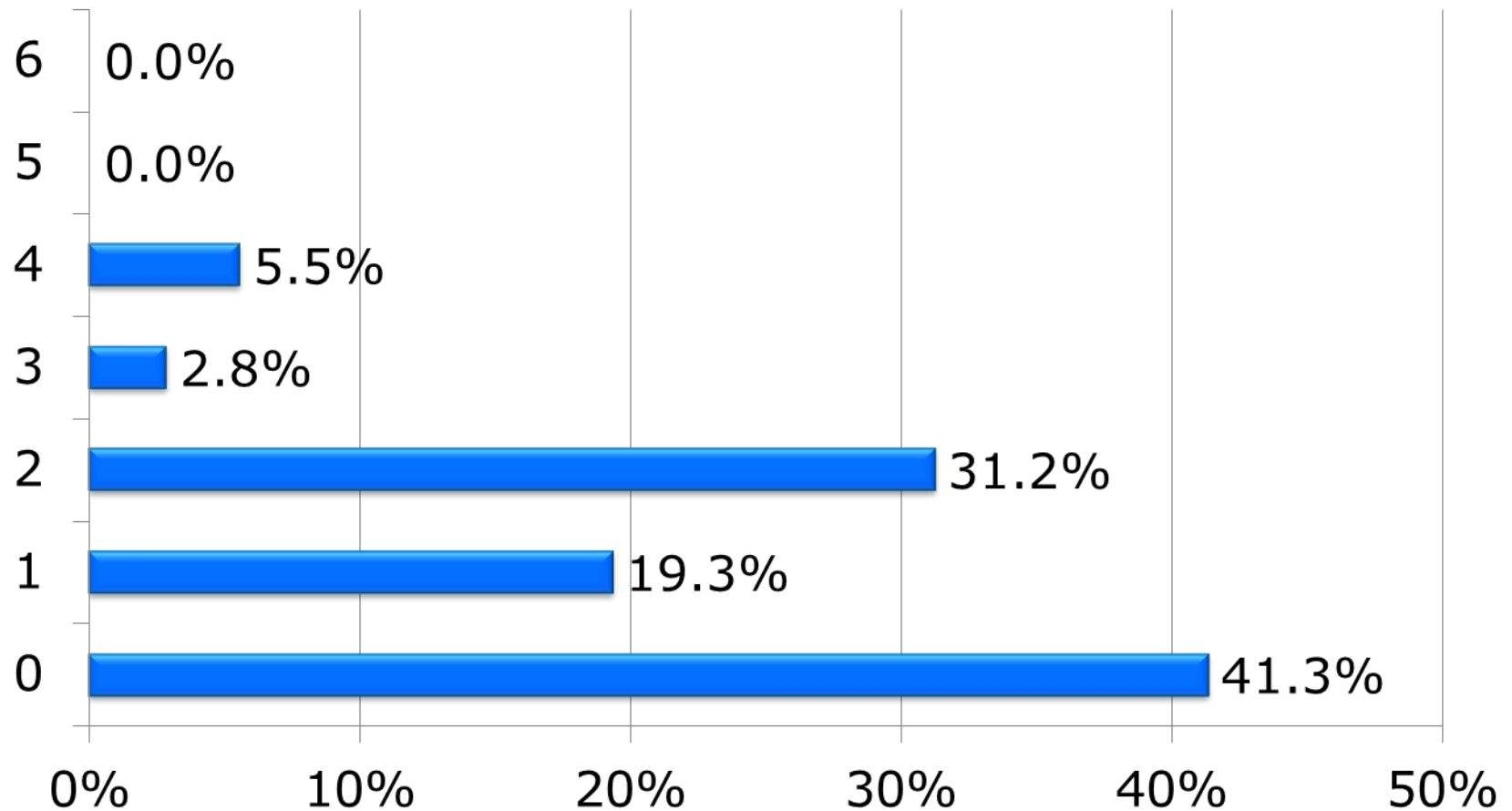
2.4 On average, how many 1GbE ports do you have configured per server for GENERAL LAN CONNECTIVITY?



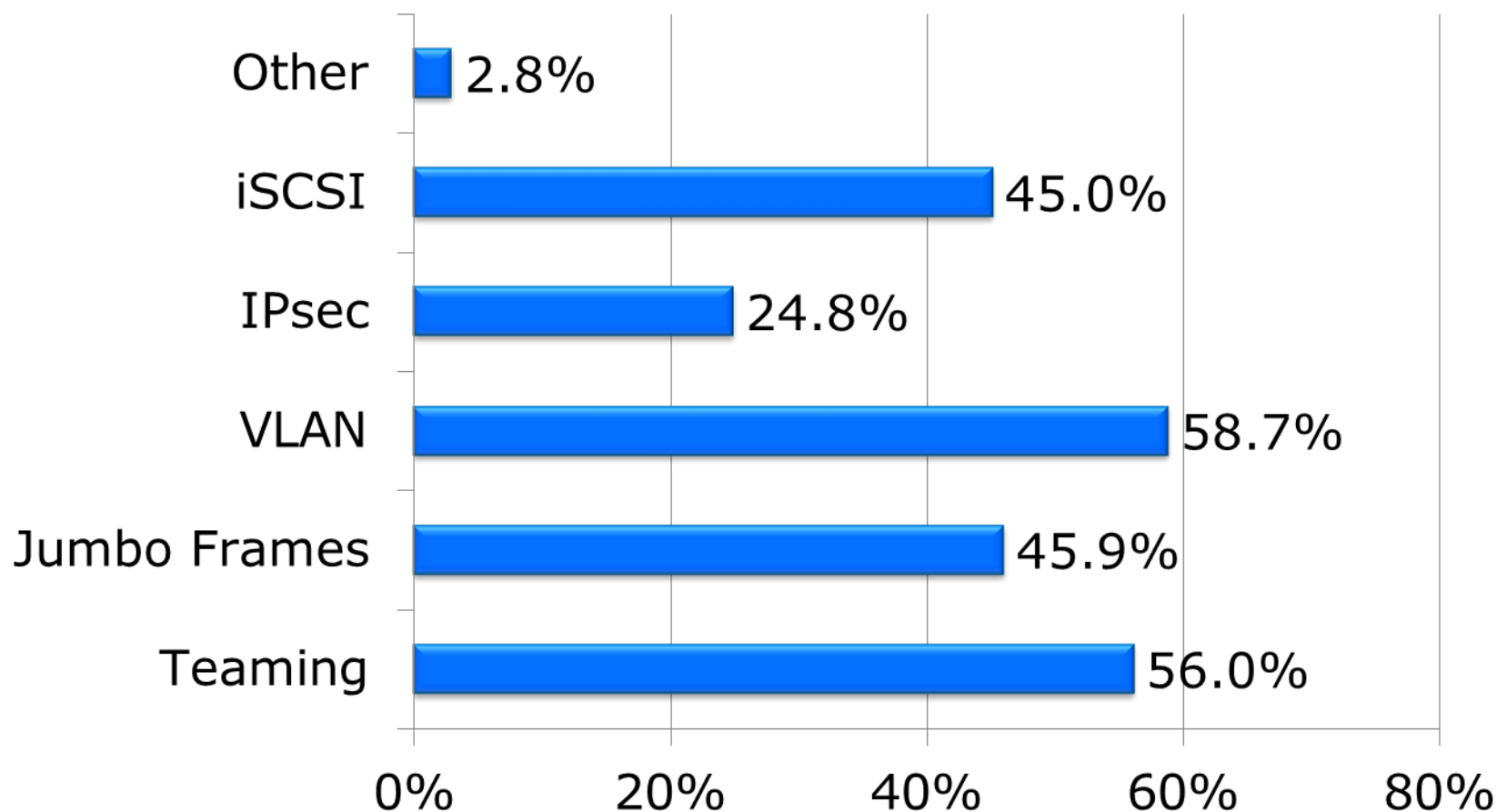
2.5 On average, how many 1GbE ports do you have configured per server for CLUSTER INTERPROCESSOR COMMUNICATIONS?



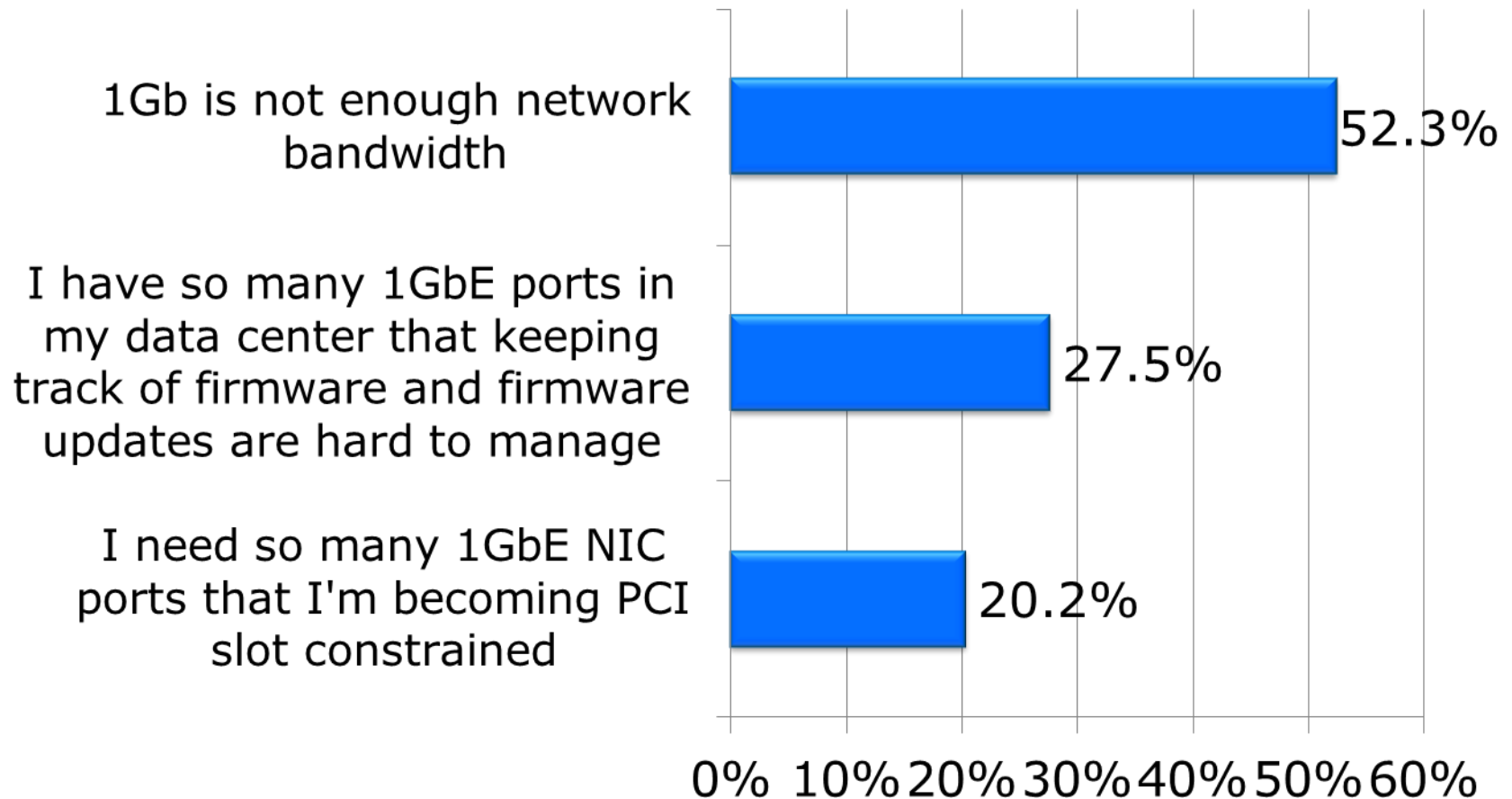
2.6 On average, how many 1GbE ports do you have configured per server for NAS or iSCSI STORAGE?



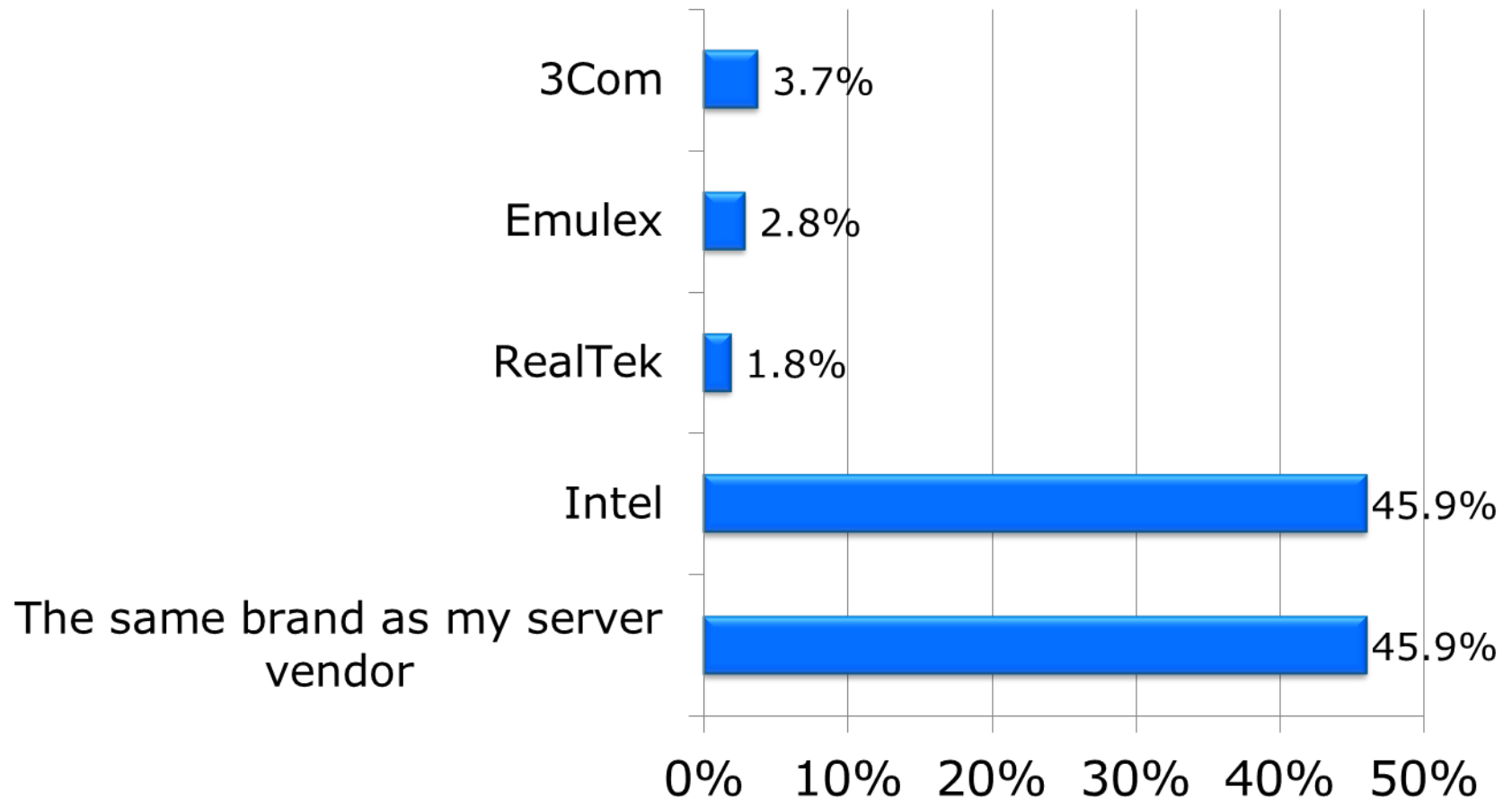
2.7 These 1GbE NIC features are important to me because they effect the way my network functions (SELECT ALL THAT APPLY):



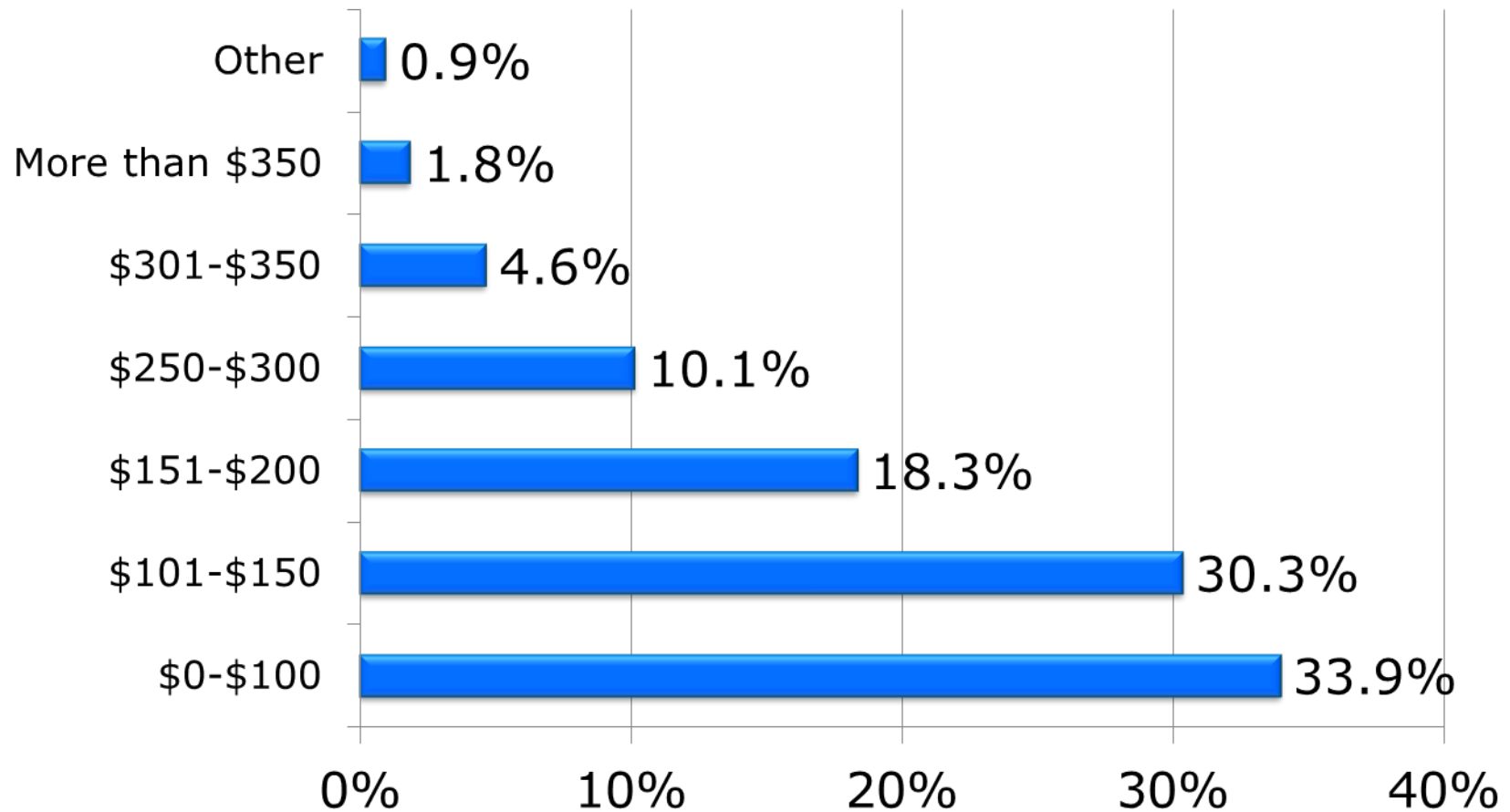
2.8 The primary issue I have with 1GbE NICs today is:



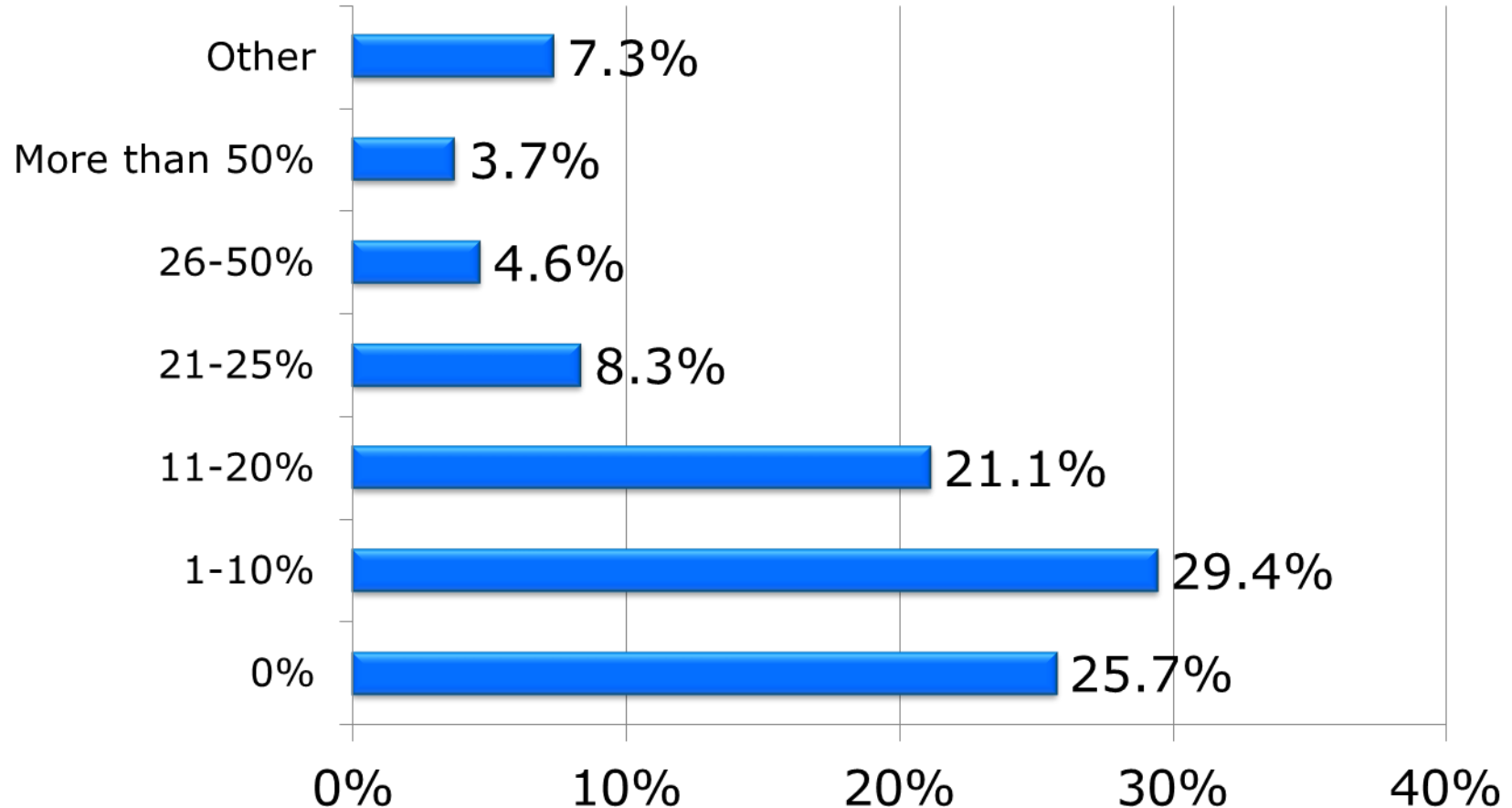
2.9 The brand of 1GbE NIC I buy is:



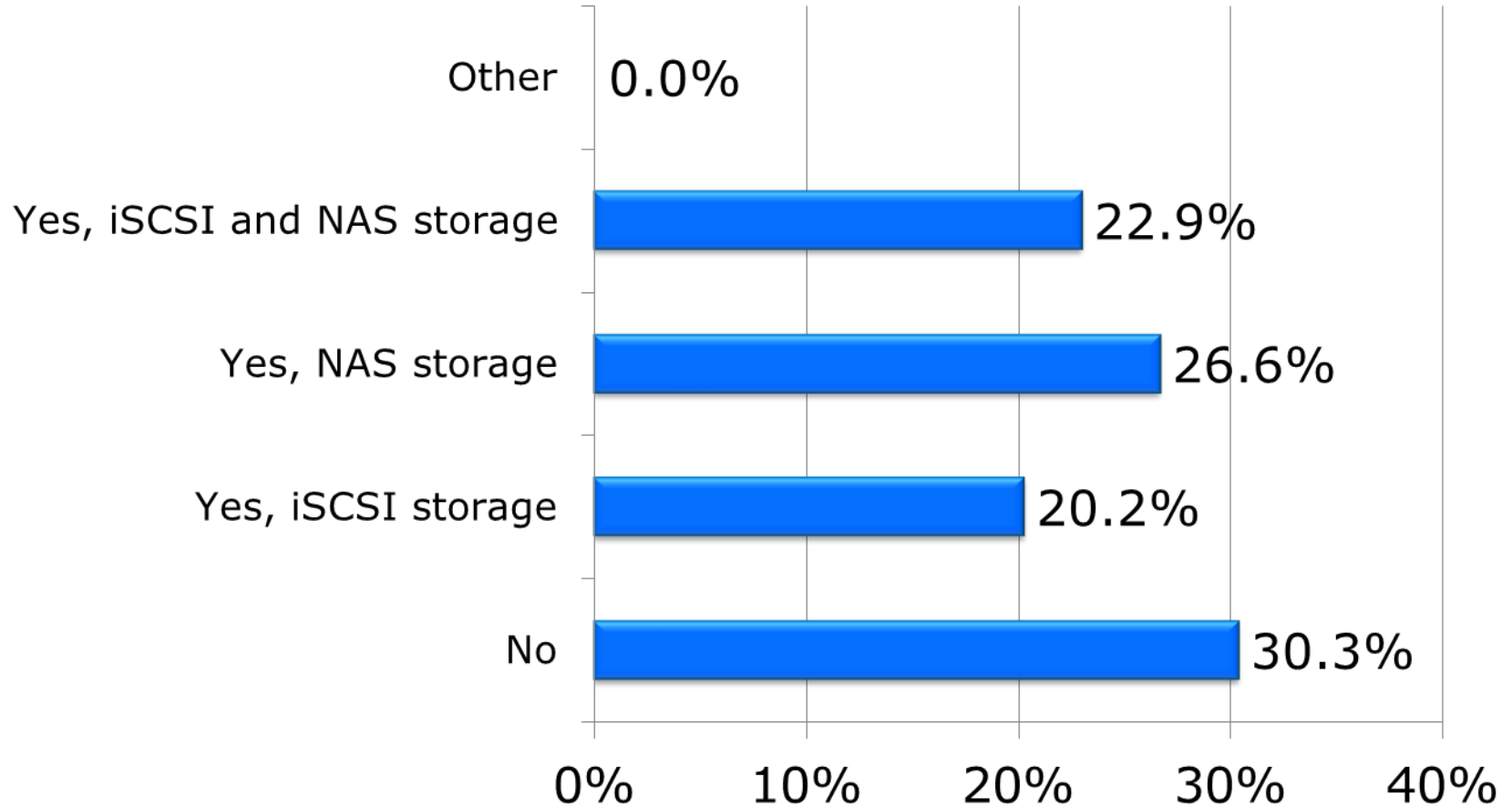
2.10 The average price you pay for a 1GbE NIC is:



2.11 For a single 1Gb NIC, what percent of your server CPU do you estimate is used to support iSCSI protocol processing when you configure a Windows iSCSI software initiator (no iSCSI offload)?



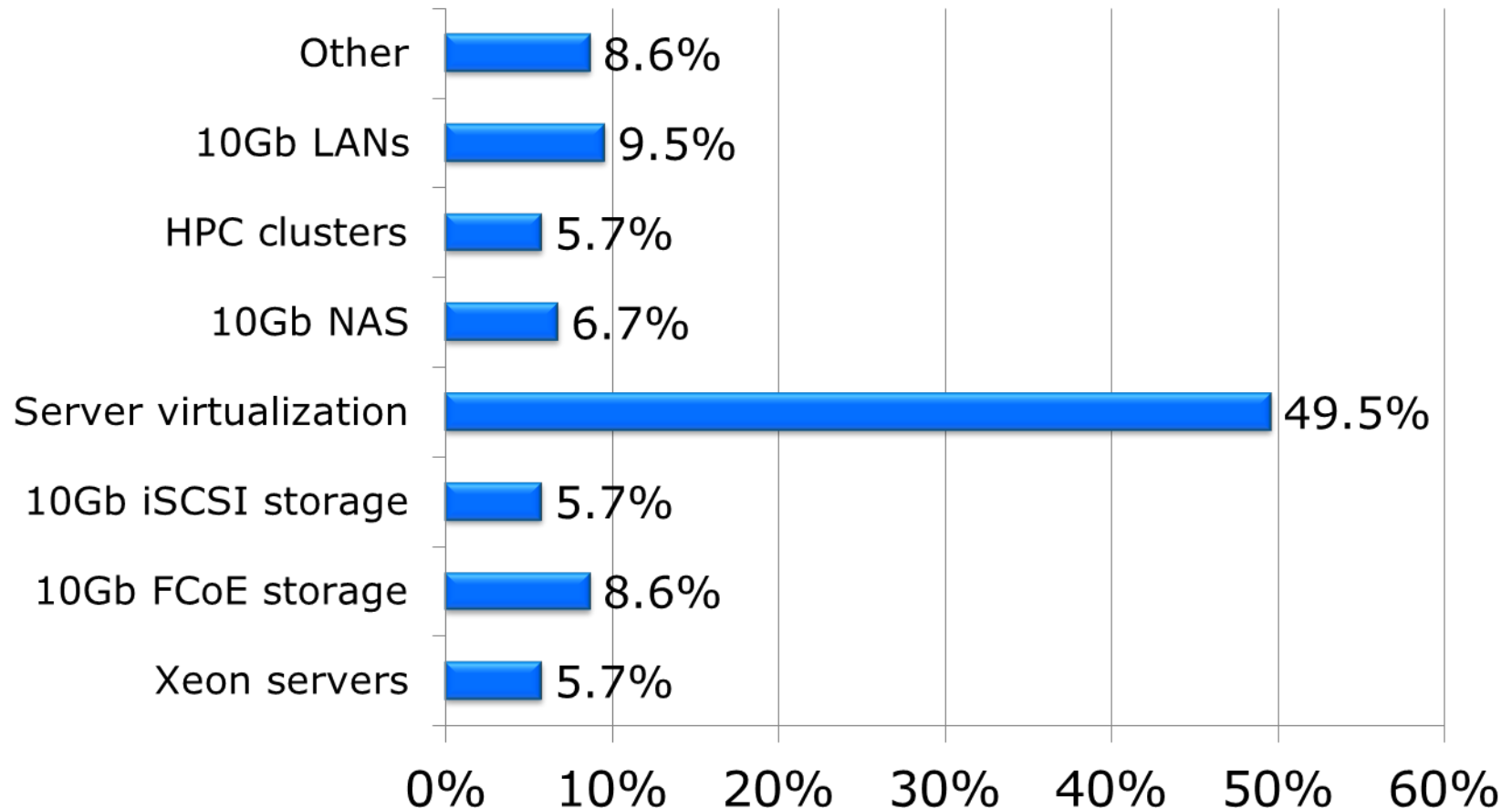
2.12 Do you have 1Gb Ethernet-based storage installed in your data center?



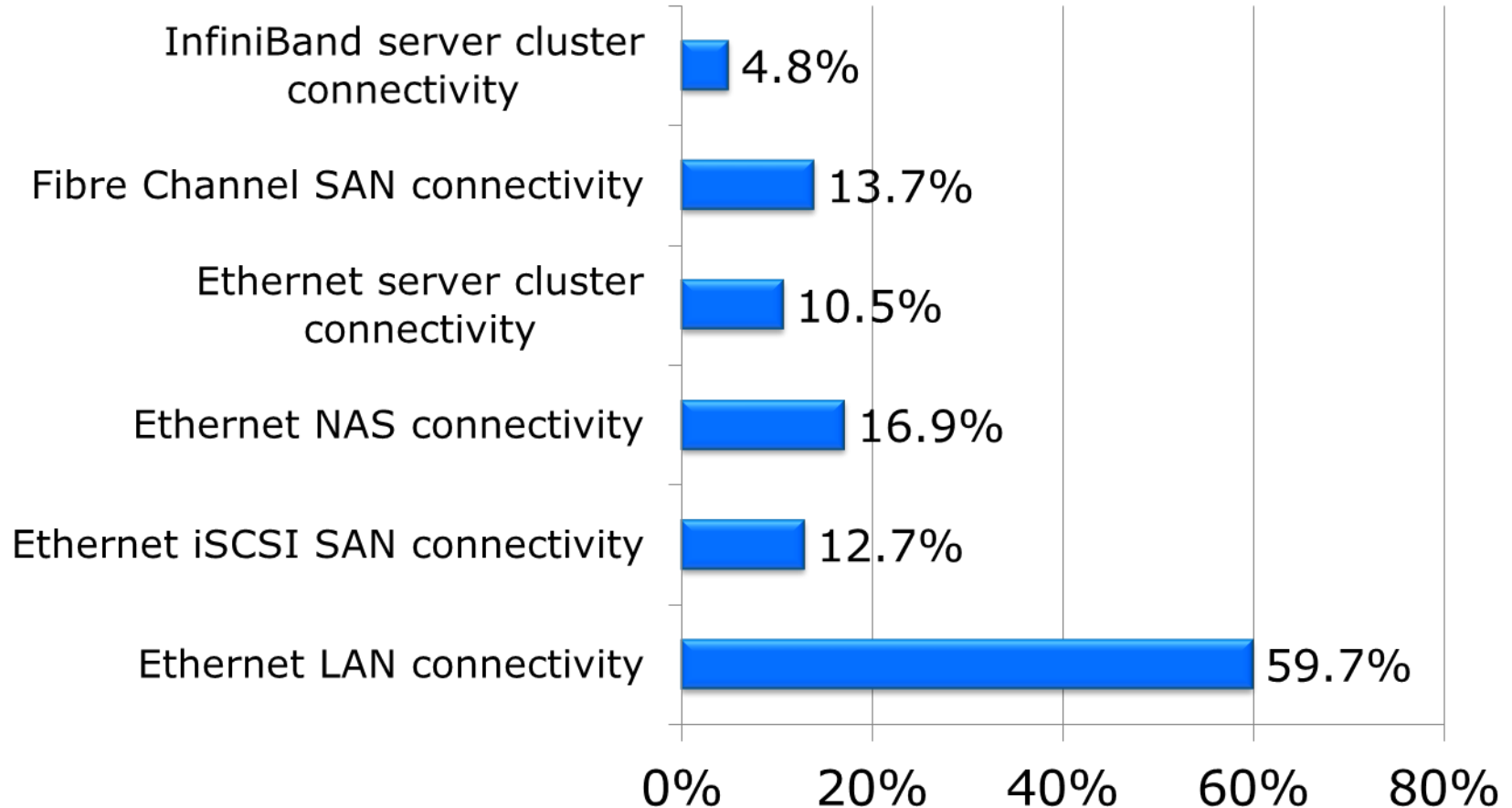
10Gb NIC Dynamics

Part 3

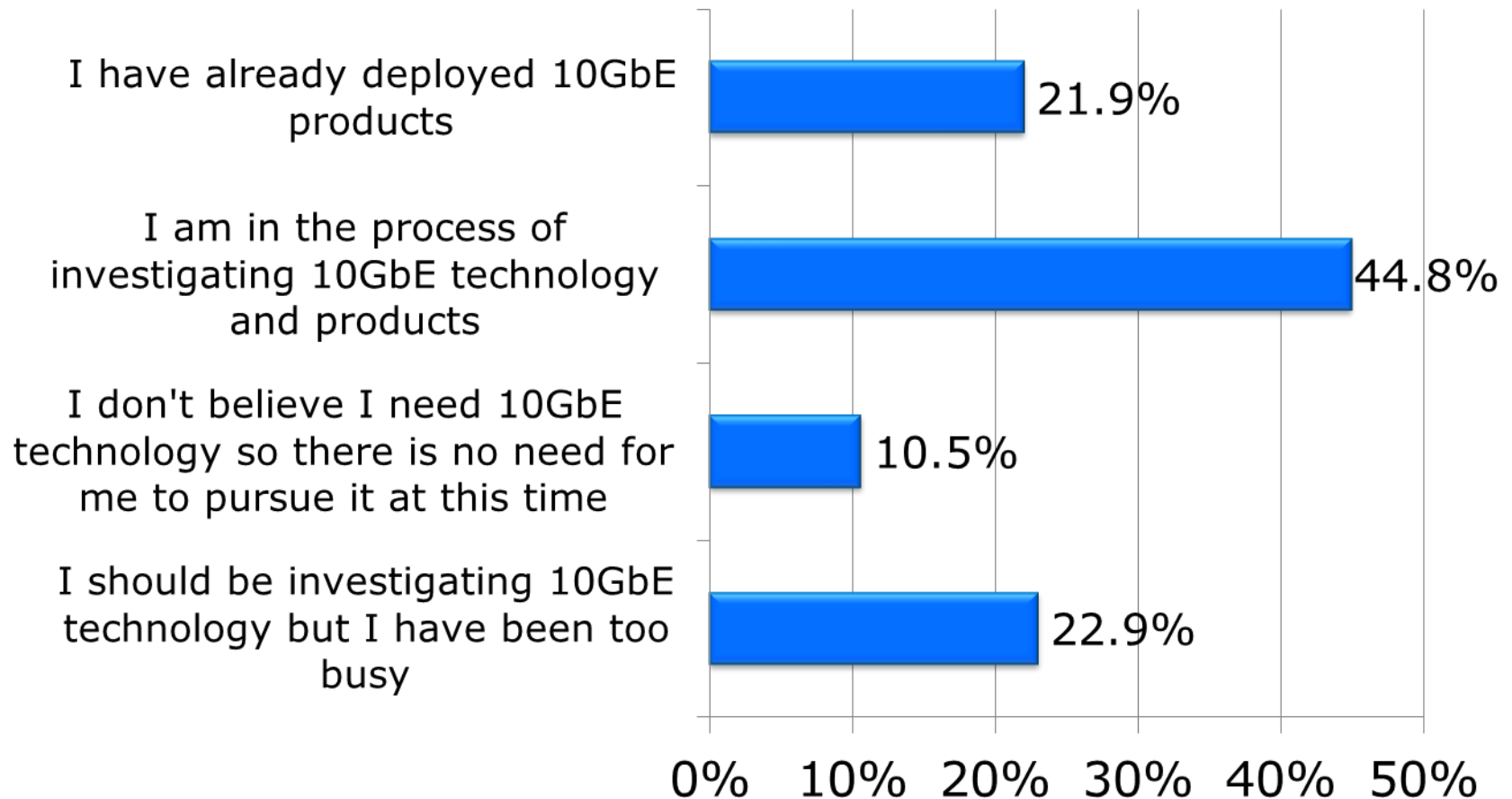
3.1 The application in my data center that is driving the adoption of 10Gb Ethernet is:



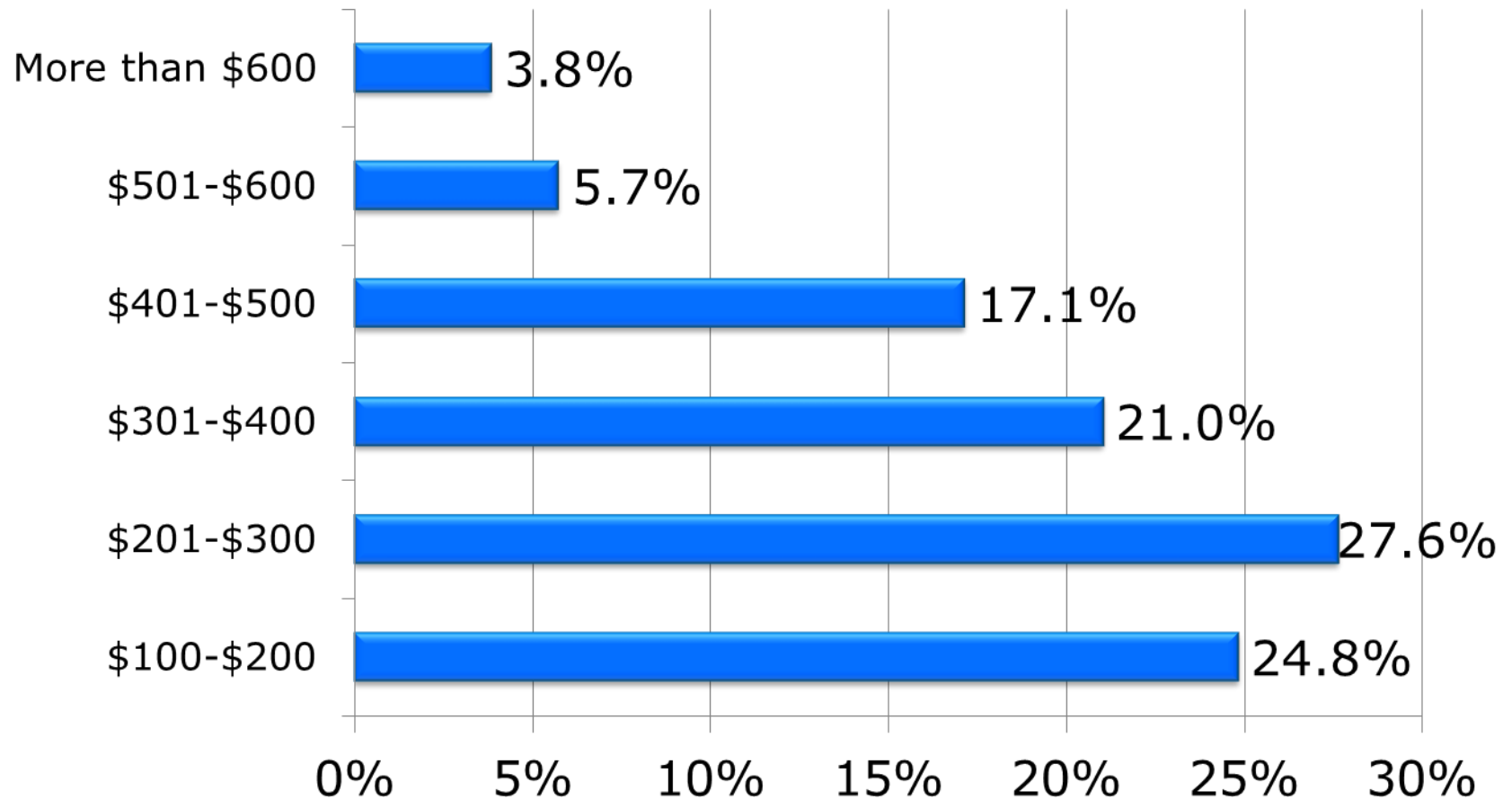
3.2 In your data center, what percent of your all your server network ports are configured for:



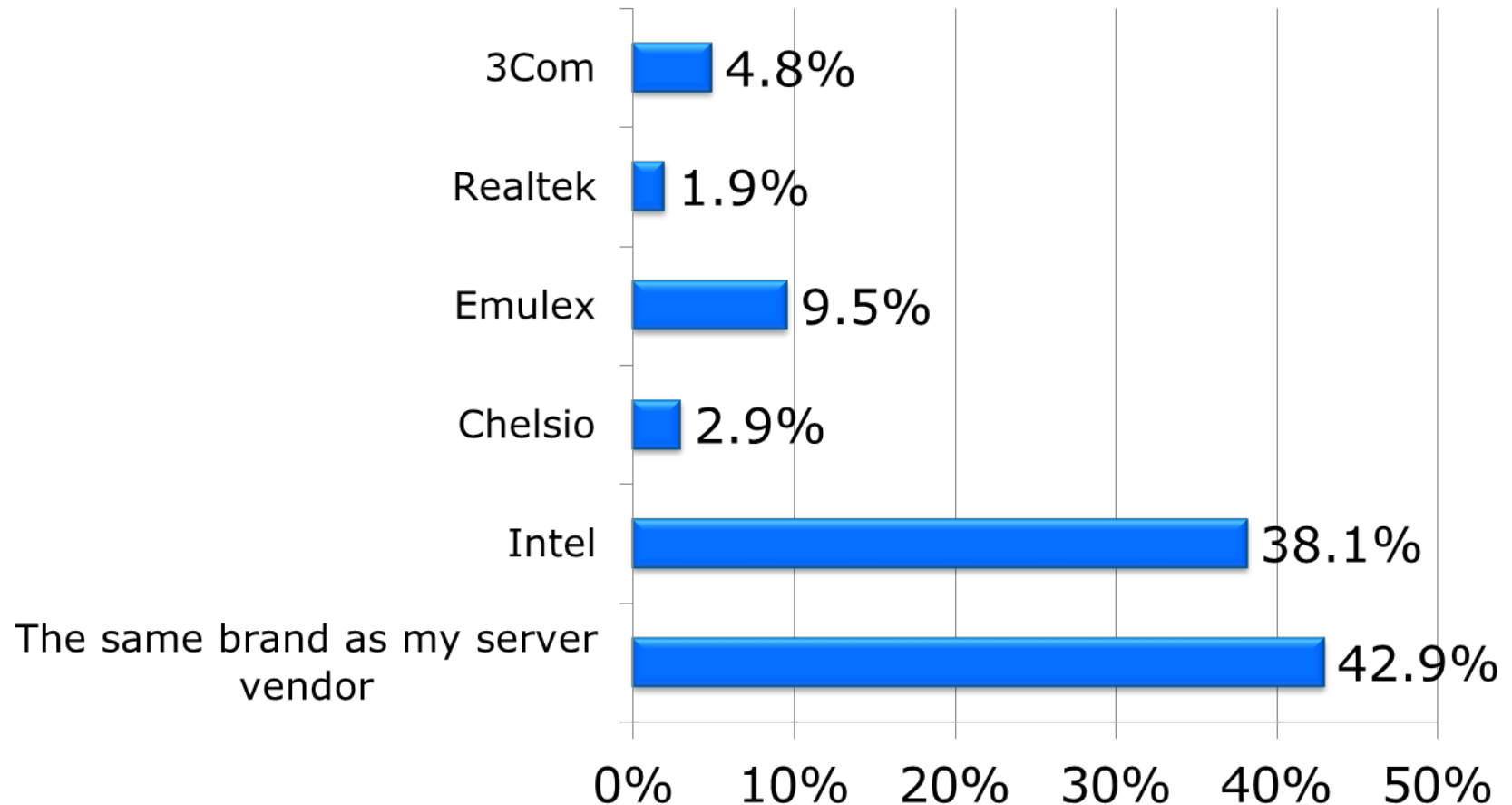
3.3 The status of my migration from 1GbE to 10GbE is best described as:



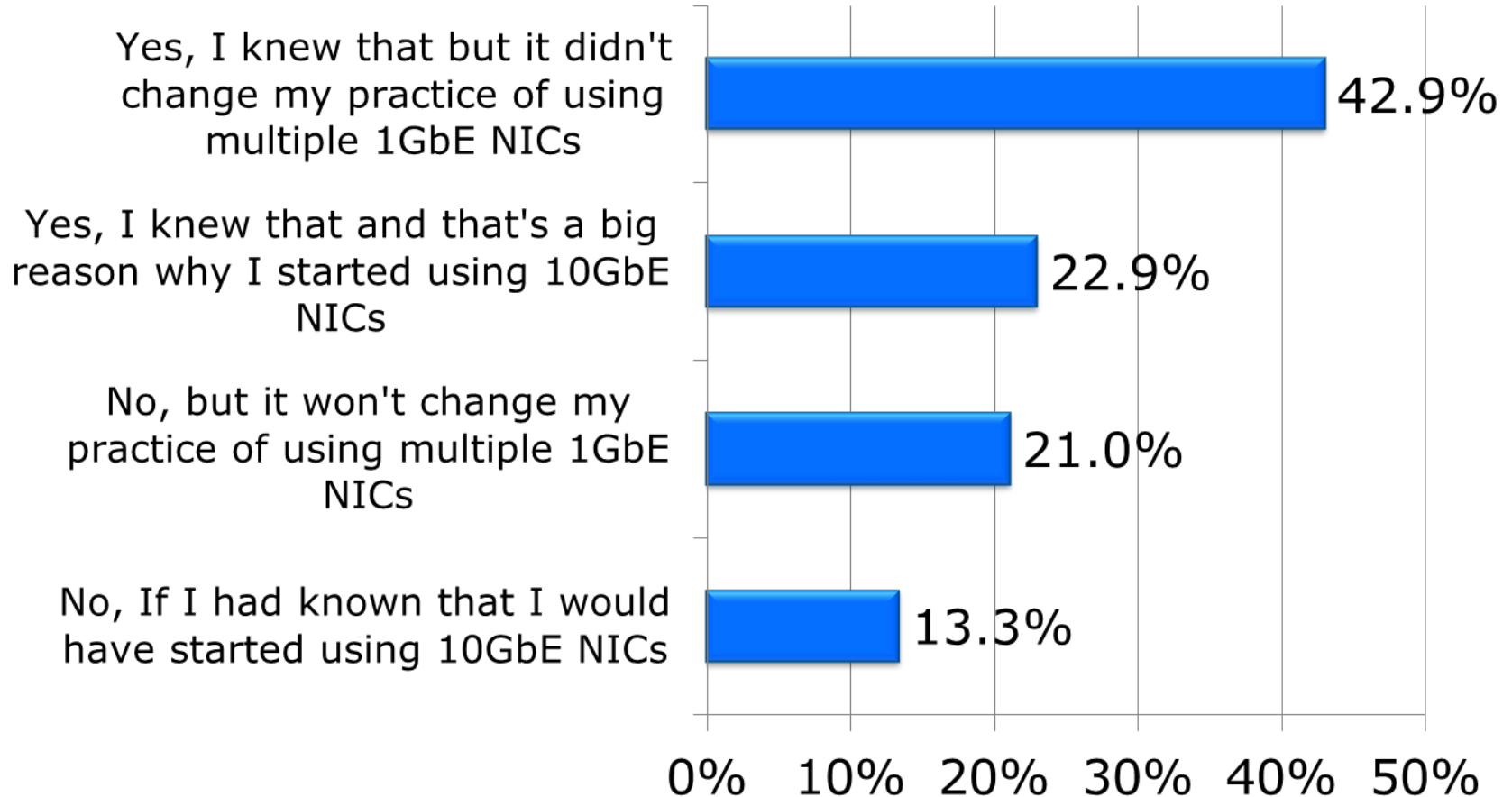
3.4 How much do you expect to pay for a 10GbE NIC?



3.5 If I was to buy a 10GbE NIC today, I would buy from:



3.6 Did you know today you could replace ten 1GbE NICs with a single 10GbE NIC configured with ten virtual NICs?





**IT BRAND
PULSE™**

The logo features the text "IT BRAND" in a large, bold, white sans-serif font, with "IT" in a lighter blue color. Below it, "PULSE™" is written in a smaller, white sans-serif font. A decorative graphic of grey, semi-transparent spheres is arranged in a pattern that resembles a pulse or a cluster of data points, positioned between the two lines of text. The background is a solid blue color with a subtle, lighter blue abstract shape in the lower half.