Emerging Information Security Challenges

- *Strategies for Securing the Enterprise in the New Economic Era*

MENA Information Security Conference 2011

Amman, 19 Sep 2011

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Introduction to IDC

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- Over 100 analysts in MEA offices
- Research coverage of 25+ countries in MEA
- IDC Conferences reach out to 4000+ IT executives in MEA

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Agenda

IT Security Market Dynamics

- Key Technology Themes Shaping IT Security

- Emerging Security Technology Trends

IT Security Market in the Middle East

- IT Security Spending

- Forecasts

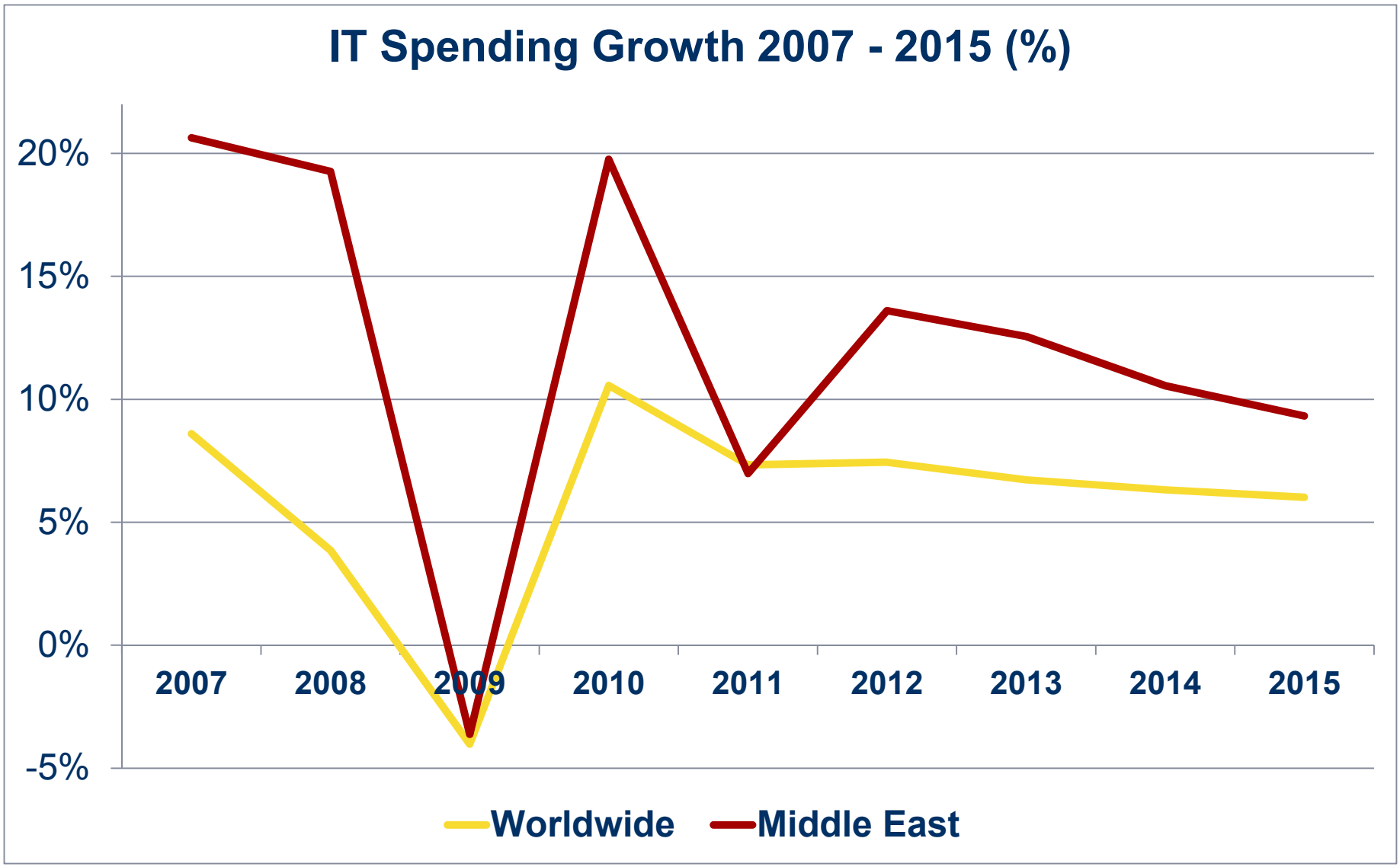
Security Viewpoints from CIOs

- Challenges & Priorities Ahead

Essential Guidance

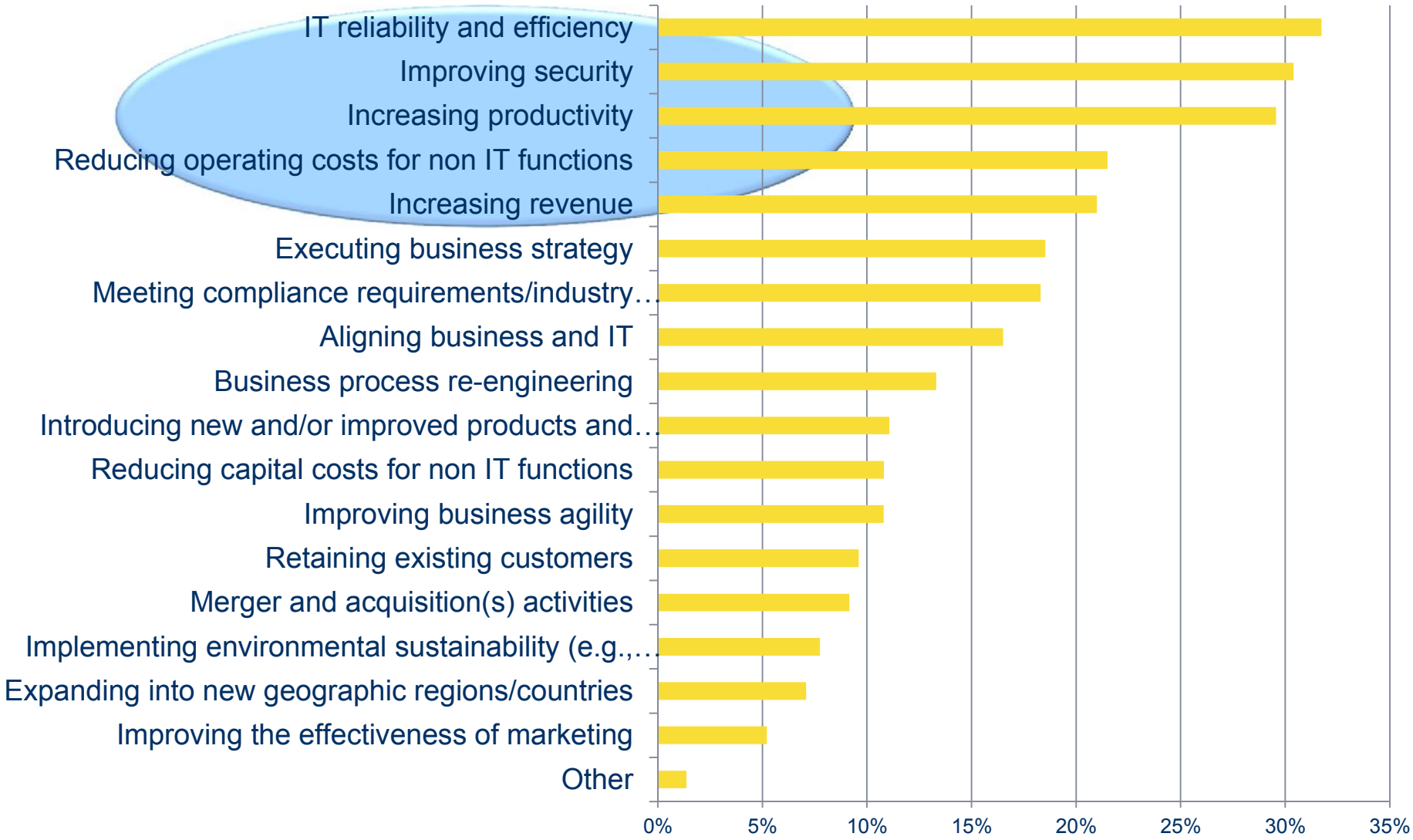
IT Security Market Dynamics

IT Markets in Context



Source : IDC Worldwide Black Book, Q1 2011; growth in constant currency

Top IT Investments Across Markets



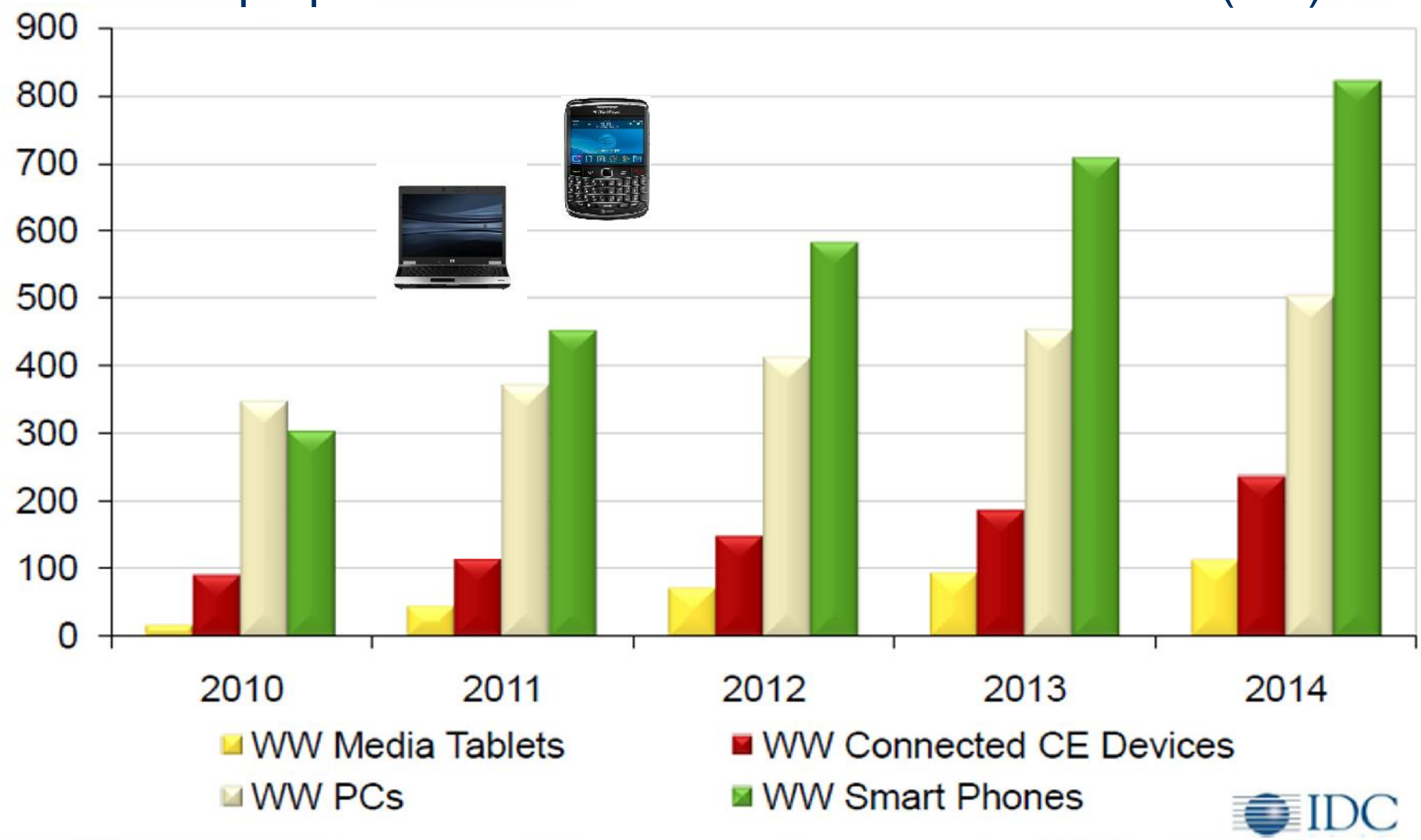
Key Themes that will shape Enterprise IT Security

1. Virtual
2. Social
3. Mobile

The enterprise network is evolving from a fixed, data-centric, client server topology to an application-driven, multi-media and mobile network, that is more closely aligned with business needs than ever before.

Mobilution

Laptops and Smart Phones in Use Worldwide (Mn)



Commercial/Consumer Lines Blur

Multiple devices per person is the new reality

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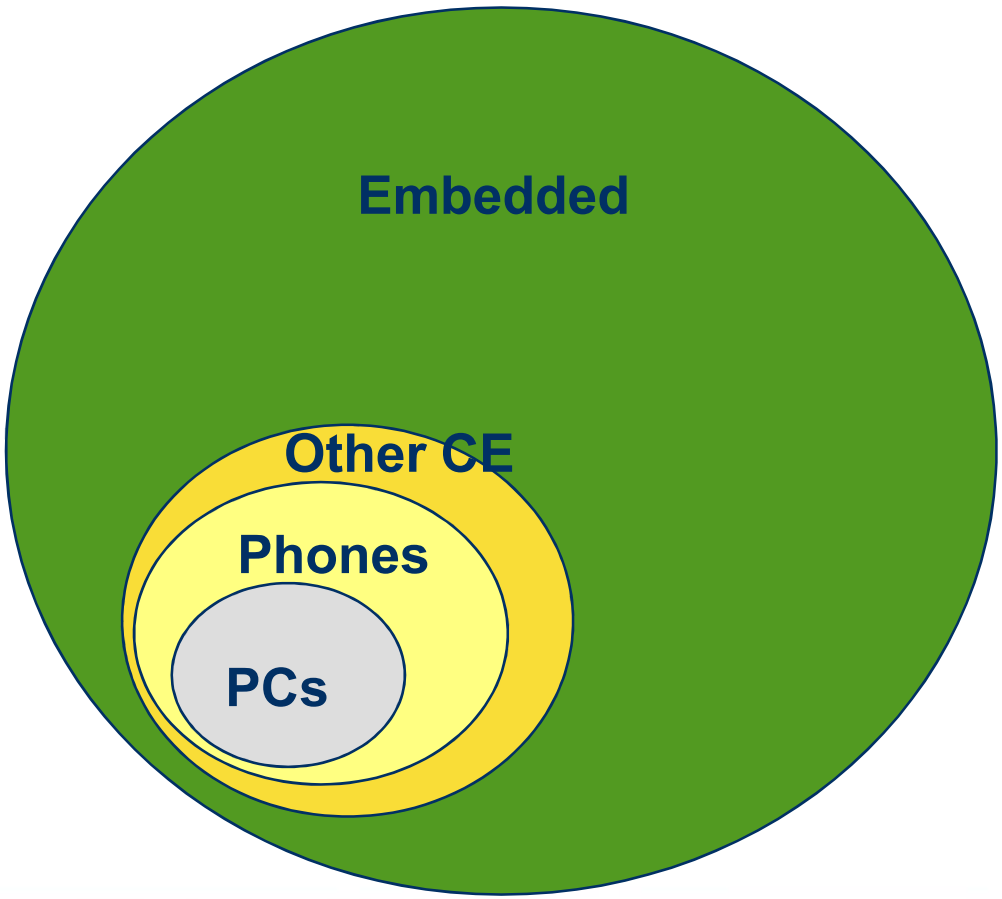
Connectivity of Tomorrow - *Intelligent Everything*

IDC Analyze the Future

Billions of Connected Devices, 2020



	Total Potential Market
23 billion	200B Big Things
3.3 billion	1-5 x People
2.6 billion	<1 x People
2.0 billion	<.5 x People

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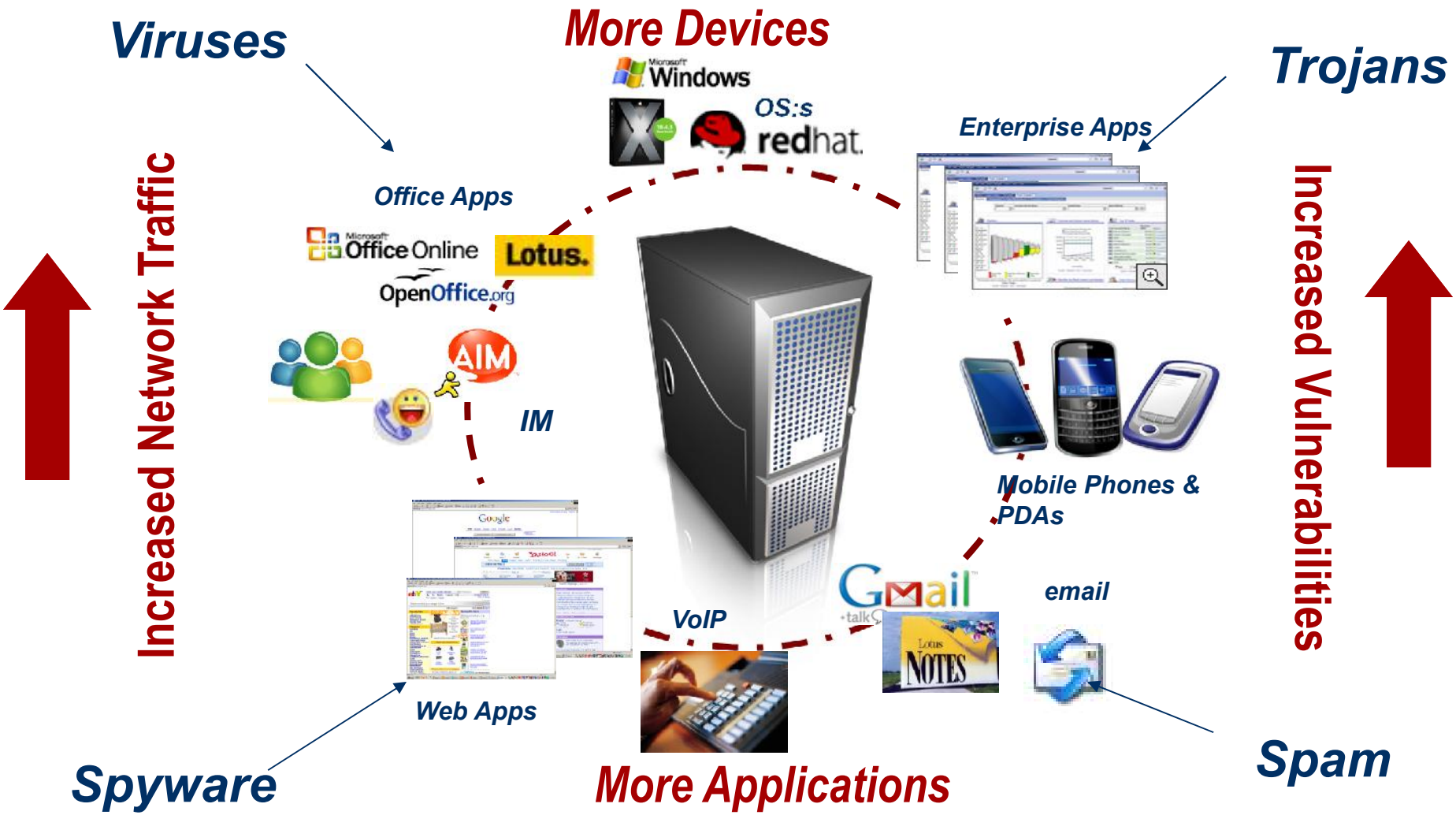
Network Perimeter becoming more difficult to control



IT Departments Need to Plan Ahead

- **Who Decides What Device Gets Access?**
  - *How much access? - Enforcement of acceptable use policies*
  - *How much support (if any)?*
- **How to Secure Multiple Devices?**
  - *Malware defence, protection of sensitive data, remote wipe, and remote kill*
  - *How to deal with Mobile Apps explosion?*
- **What About BYOPC?**
  - *Who owns the device if the employee leaves?*
  - *How do you keep data on a personal device secure?*
- **Users Don't Care About IT Boundaries**
  - *They just want to use what they want to use*

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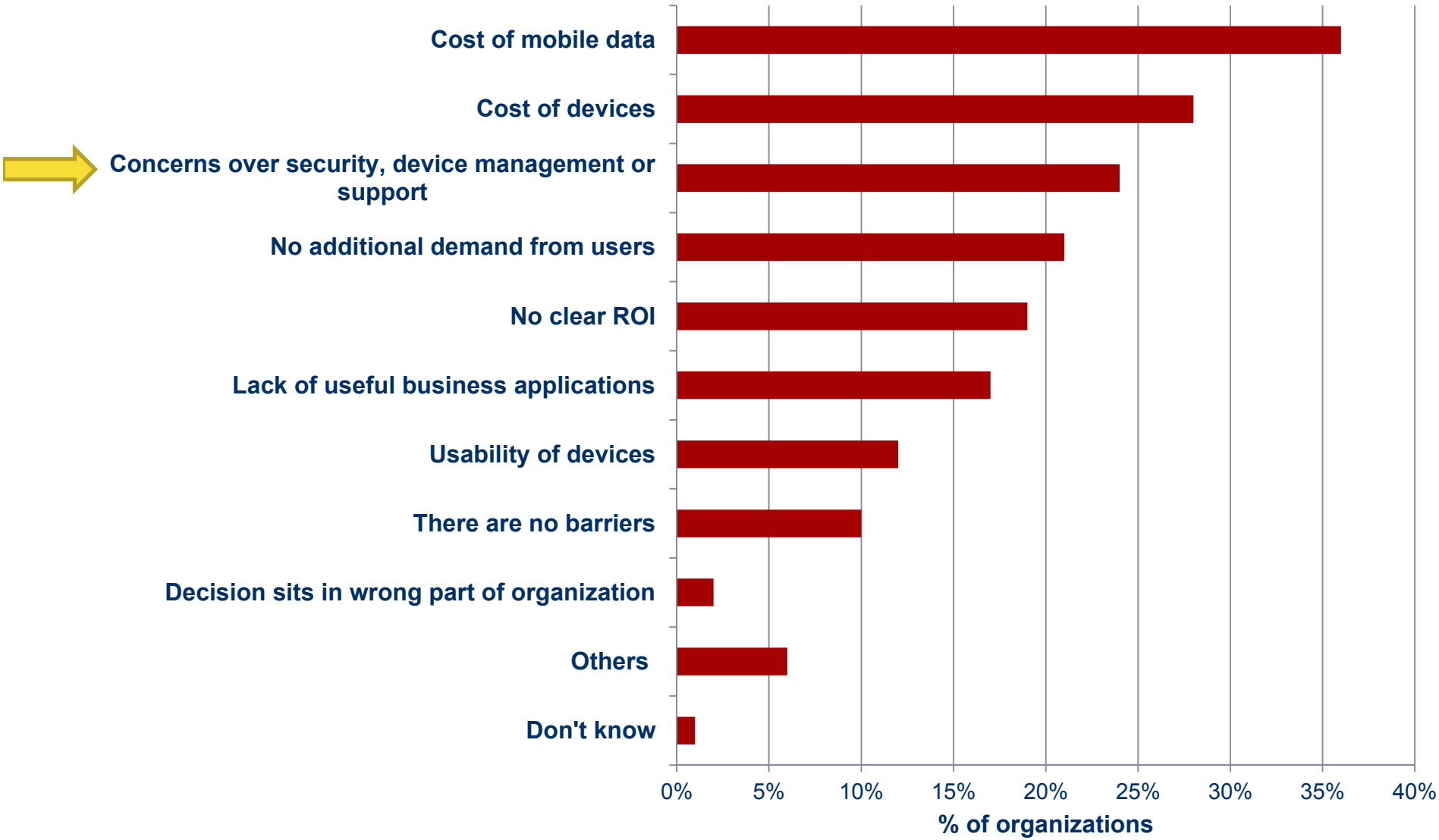
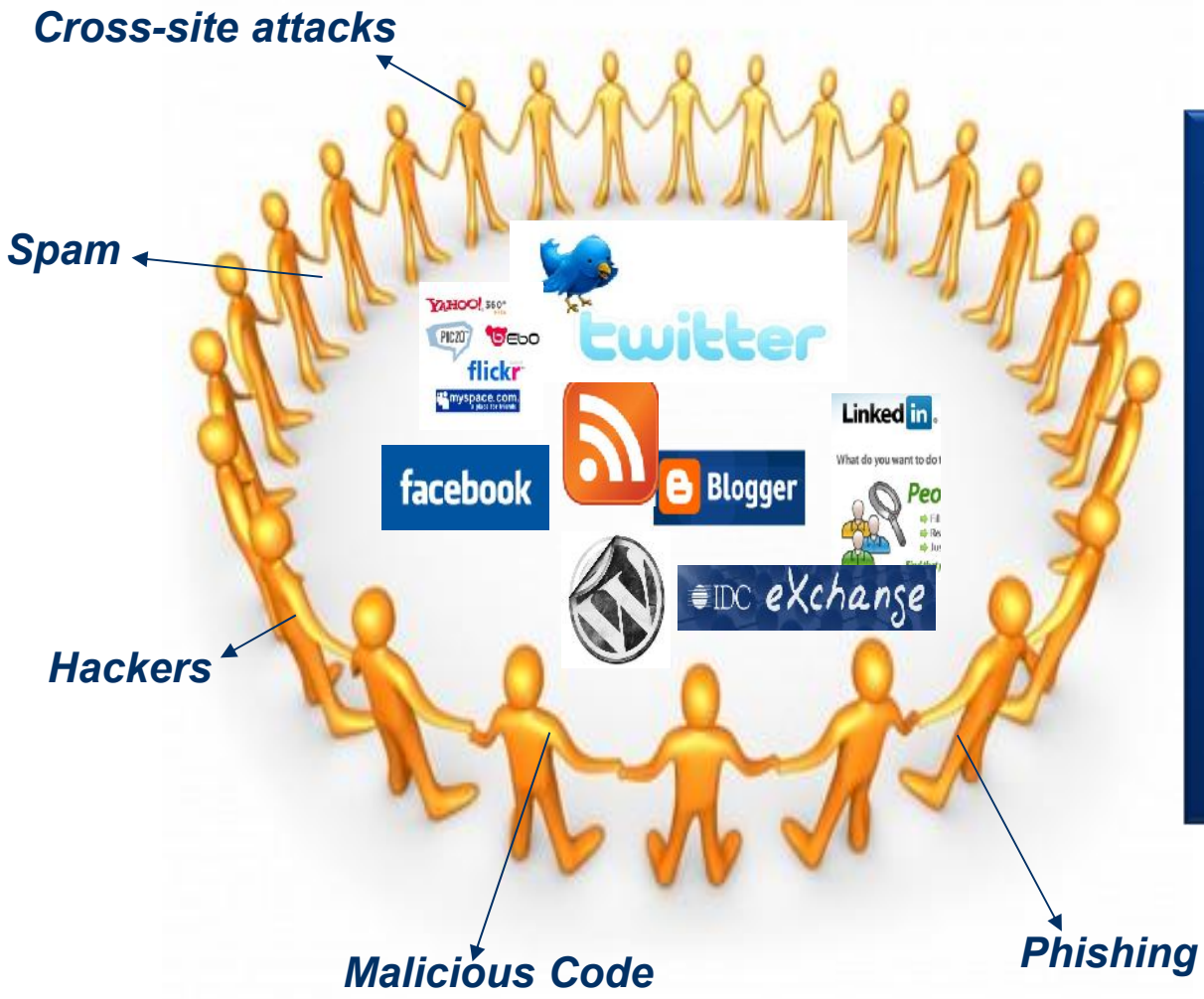
Barriers to Provisioning of Converged Mobile Devices



Social Media opening a New Vulnerability Gateway



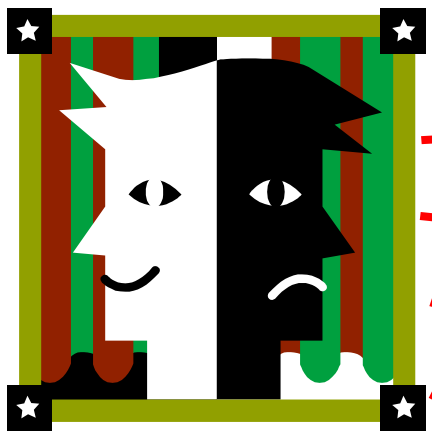
As a growing number of Social Media applications make their way into the enterprise, they bring with them even more security concerns and attack vectors.

Virtualization
- The Good, the Bad....

86% of CIOs in Middle East are scoping **Virtualization** projects for the next 12 months

Security Enabler

- Test and Patch Environment
- Application Isolation
- Forensics
- Honeypots



Security Challenges

- Hypervisor Vulnerabilities
- Guest Machine Infection
- Denial of Service
- HyperJacking
- Audit & Compliance Issues

Source: IDC Middle East CIO Survey (Dec2010/Jan 2011) N=97

Cloud : the Brave New World

IDC
Analyze the Future

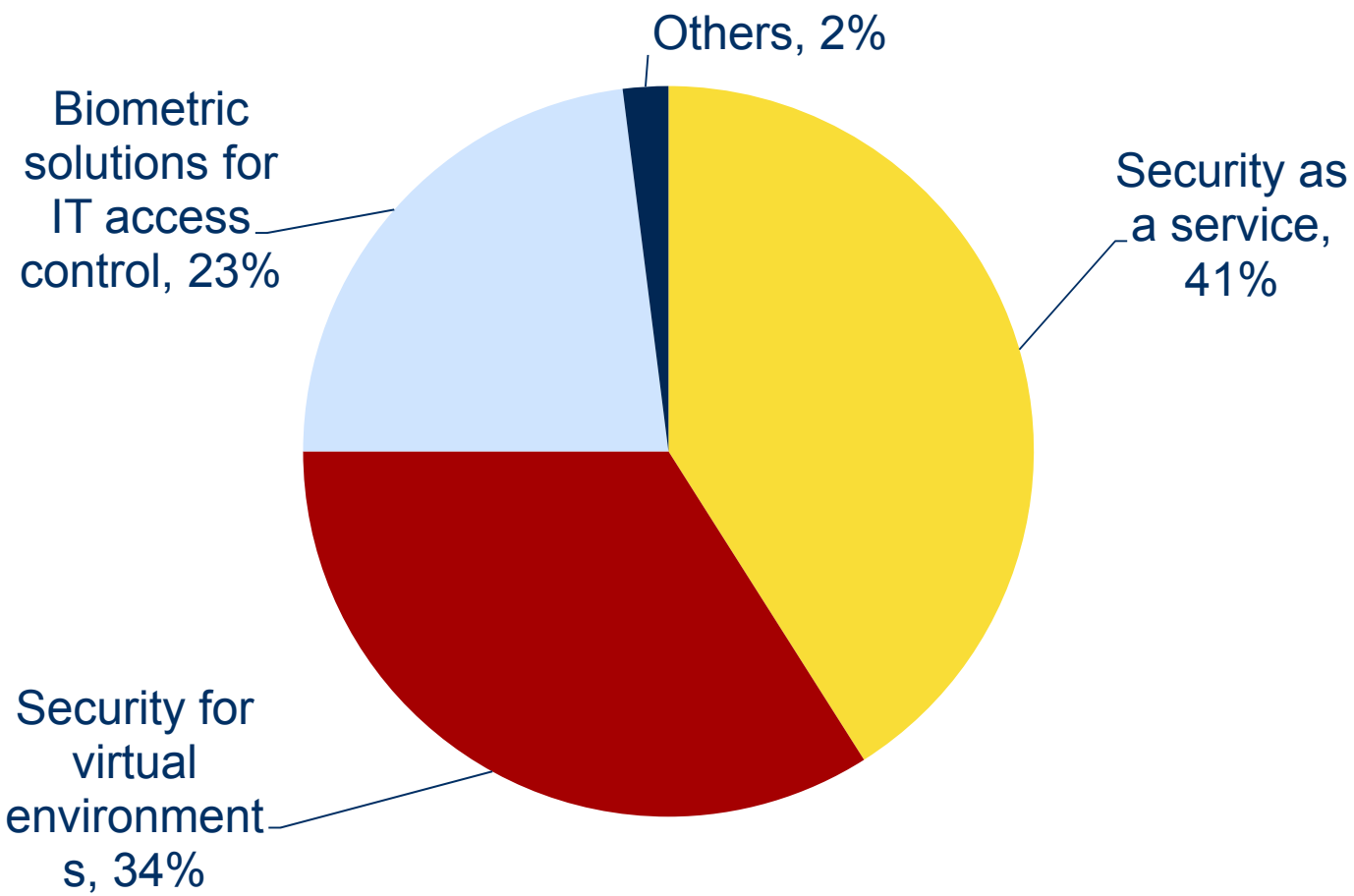
36% **of CIOs in the Middle East are scoping Cloud Computing projects in 2011**

- **Interest mostly around Private Cloud in the region**
- **Data privacy/security a major hurdle to Public Cloud adoption**
  - **Amazon EC2 disruption, PSN hack adding to concerns**
- **Security in the Cloud -** *Endpoint Security Will Move to the Cloud*
- **Security from the Cloud –** ***SaaS solutions***

Source: IDC Middle East CIO Survey (Dec2010/Jan 2011) N=97

Emerging IT Security Areas

Emerging IT Security categories an organization expects to spend in the next 2 – 3 years



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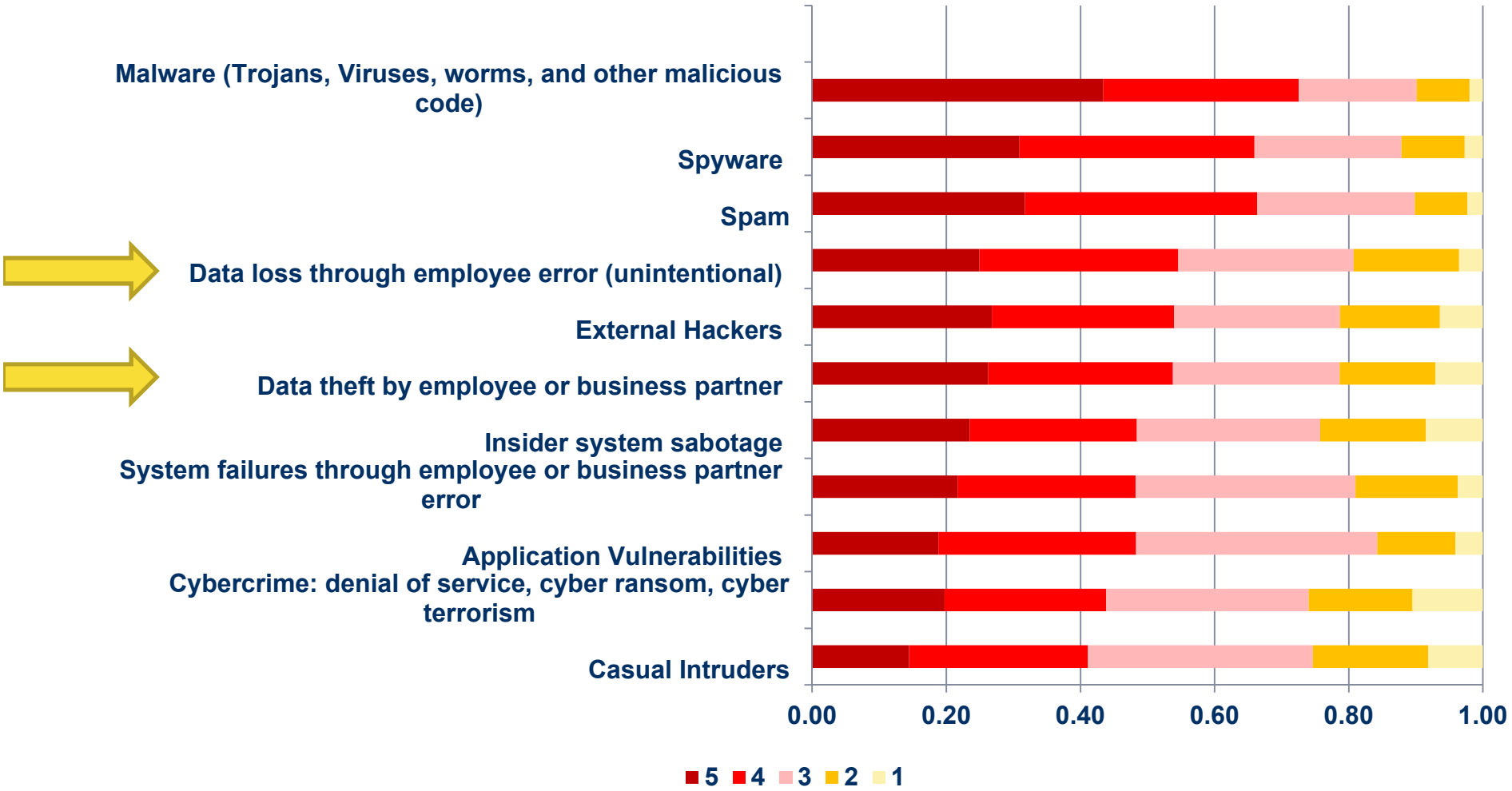
Source: IDC IT Security Road show Dubai 2010, N=143

IT Security Threats Perception among IT Security Managers

Please rate the following threats in terms of their seriousness for your organization's network, data and Internet security. (1 – not a significant threat at all …… 5 – very significant



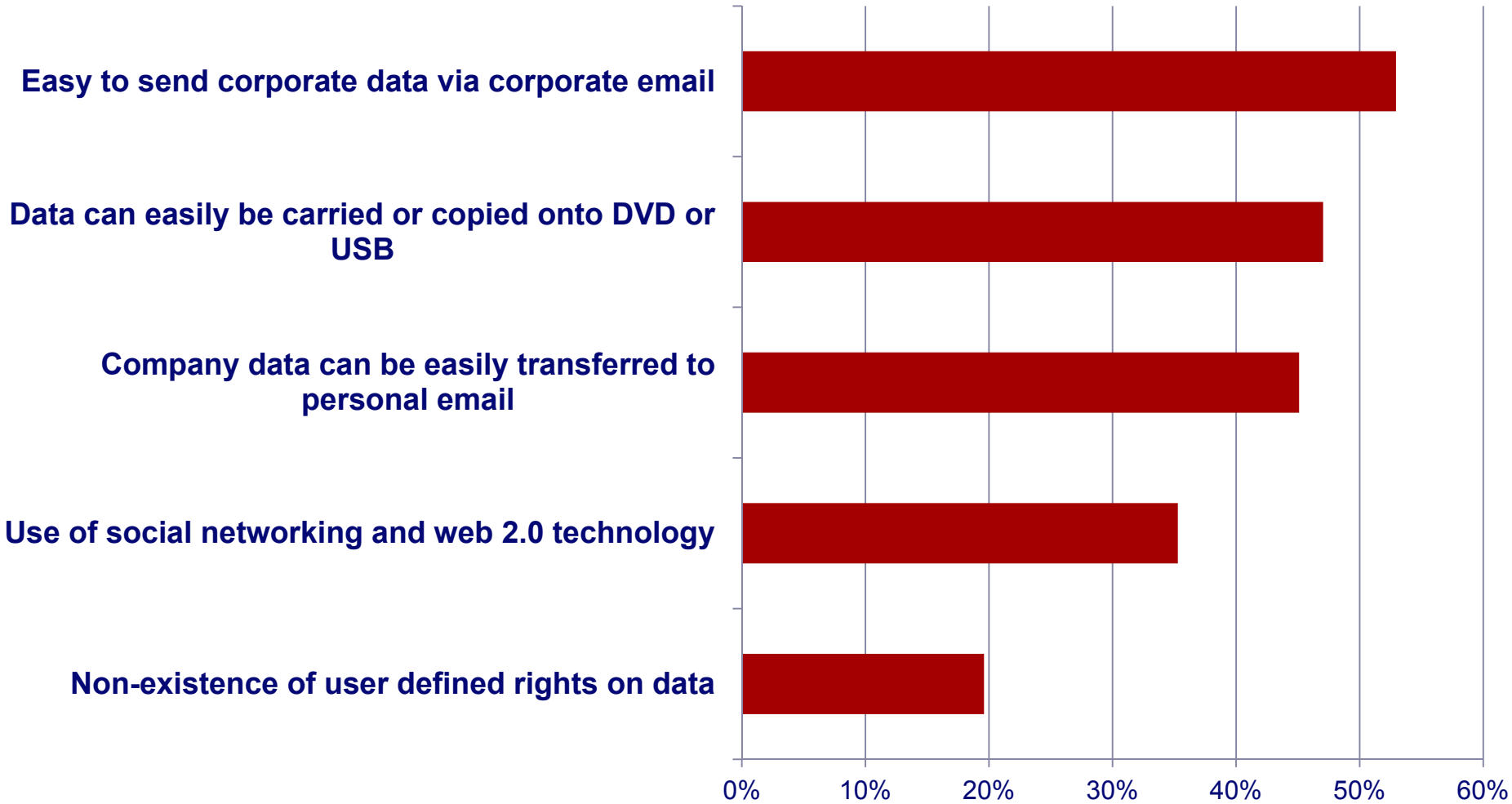
Growing Threat of Data Loss

Wikileaks incident shows it can happen to the best

- **Corporate Data Loss happens thru' employees - accidentally and deliberately**
- **Loss can cause severe**
  - **e** to reputation, intellectual
  - loss, legal penalties etc.
- **ral avenues of data**
  - *Corporate email*
  - *aptops*
  - *Mobile devices*
  - *Veb portals*
  - *ISBs*
  - *nstant Messaging*

Reasons for Data Loss

Q. What are the primary internal factors due to which your organization loses data?



Source: IDC IT Security Roadshow 2011 Dubai

Preventing Data Loss

"Dude...you have data leakage."

- **Data Classification will be needed**
  - *What data is sensitive?*
  - *Who can access the data?*
  - *What data can be shared?*

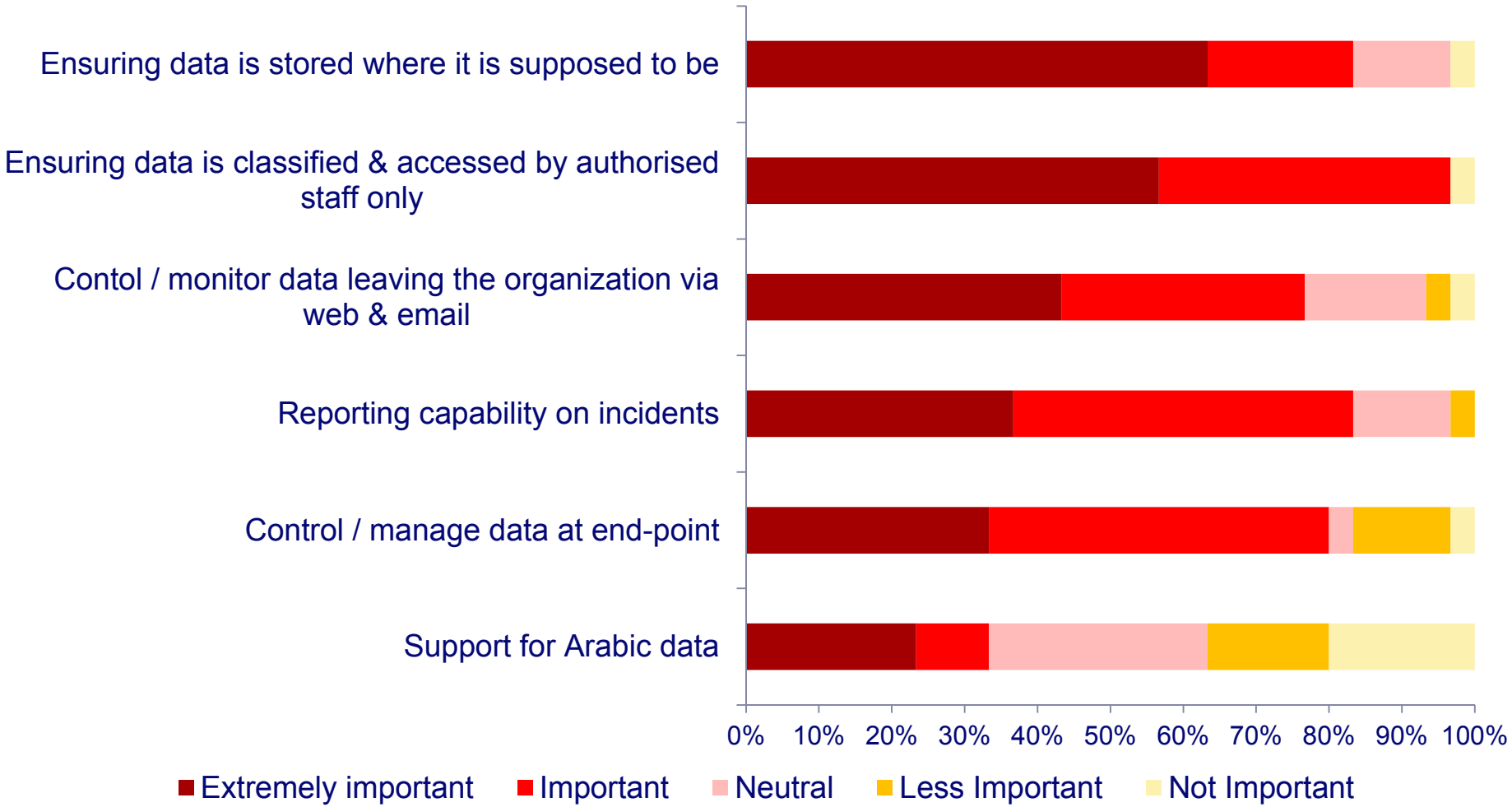
- **Data loss prevention (DLP) solutions at the endpoint.**
  - *File and Disk Encryption technology to prevent data access from stolen or misplaced hardware sources*

- **DLP emerging as a feature in messaging security platforms**
  - Deploying robust messaging solutions to track inbound & outbound communication.

- **Most data loss incidents are accidental**
  - Tools focus on end-users education to and to stop obvious violations of e-mail/instant messaging use policies

Factors driving DLP Spending

If planning to invest in DLP, what do you consider to be the top factors driving your data loss prevention investment plans?



n=30

Source: IDC-Symantec CIO Study 2010 N=40

Regulatory Compliance Requirements Continue to Grow

GOVERNMENT REGULATIONS

Data protection laws

INTERNATIONAL REGULATIONS

Sarbanes Oxley, Basel II & III

INDUSTRY STANDARDS

PCI DSS, ITIL, ISO 27002

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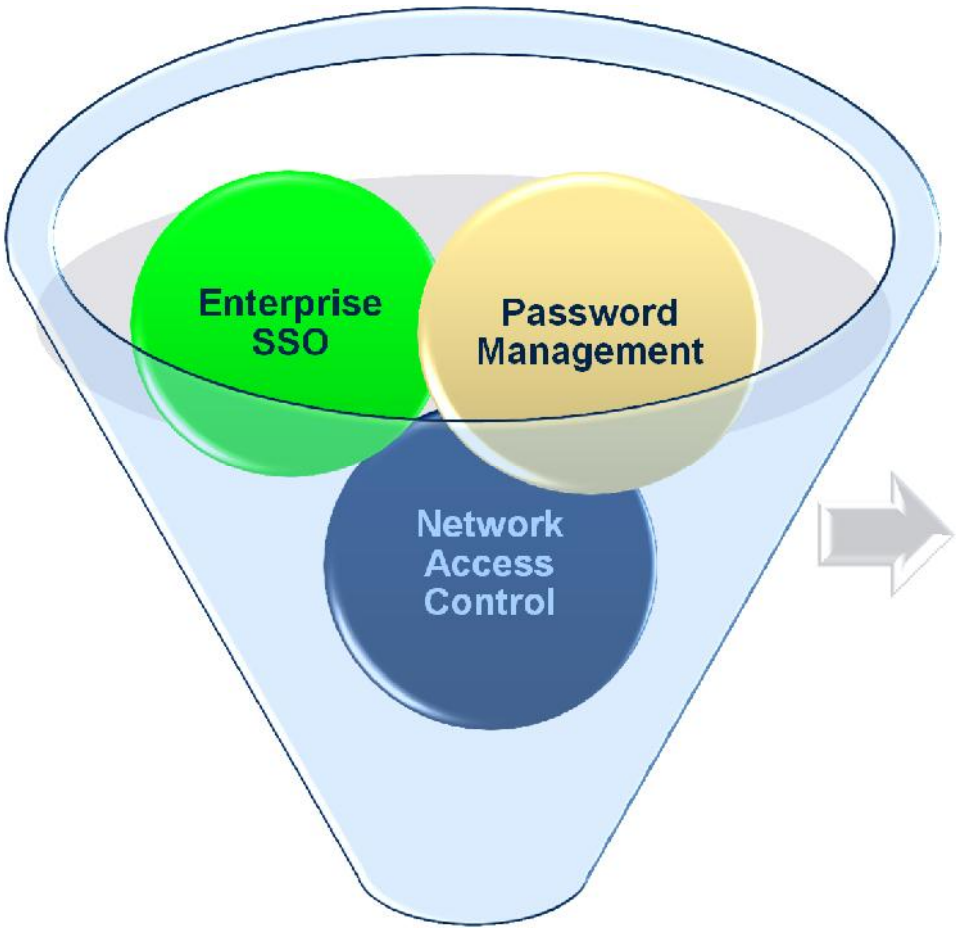
Over 90% of large enterprises in the GCC are currently investing or planning to invest in Compliance solutions

Source: IDC-Symantec GCC CIO Study 2010, N=40

Identity Management becoming essential….

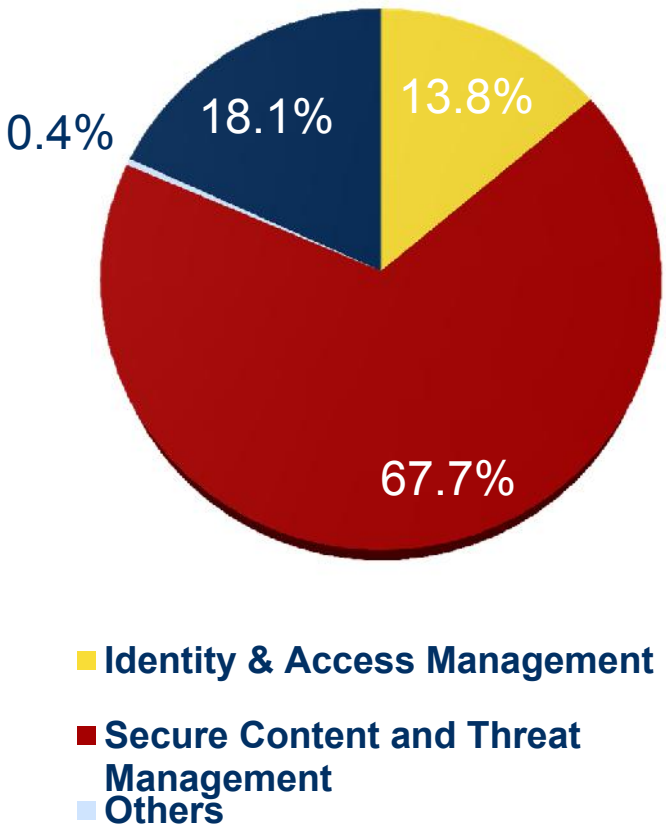


- **To meet regulatory compliance demands, Identity & Access Management (IAM) architecture becoming essential.**
- **IAM integral component of governance, risk, and compliance (GRC)**
- **Collision of cloud platforms and traditional systems pressures enterprises to better handle IAM**
  - Mixtures of SaaS with internal applications, such as ERP and CRM

IT Security Market in the Middle East

IT Security Market in the Middle East

IT Security (SW & Appliance) Spending in the Middle East (2010) = US$ 210Mn



✓Secure Content & Threat Management Software forms the largest segment of the market

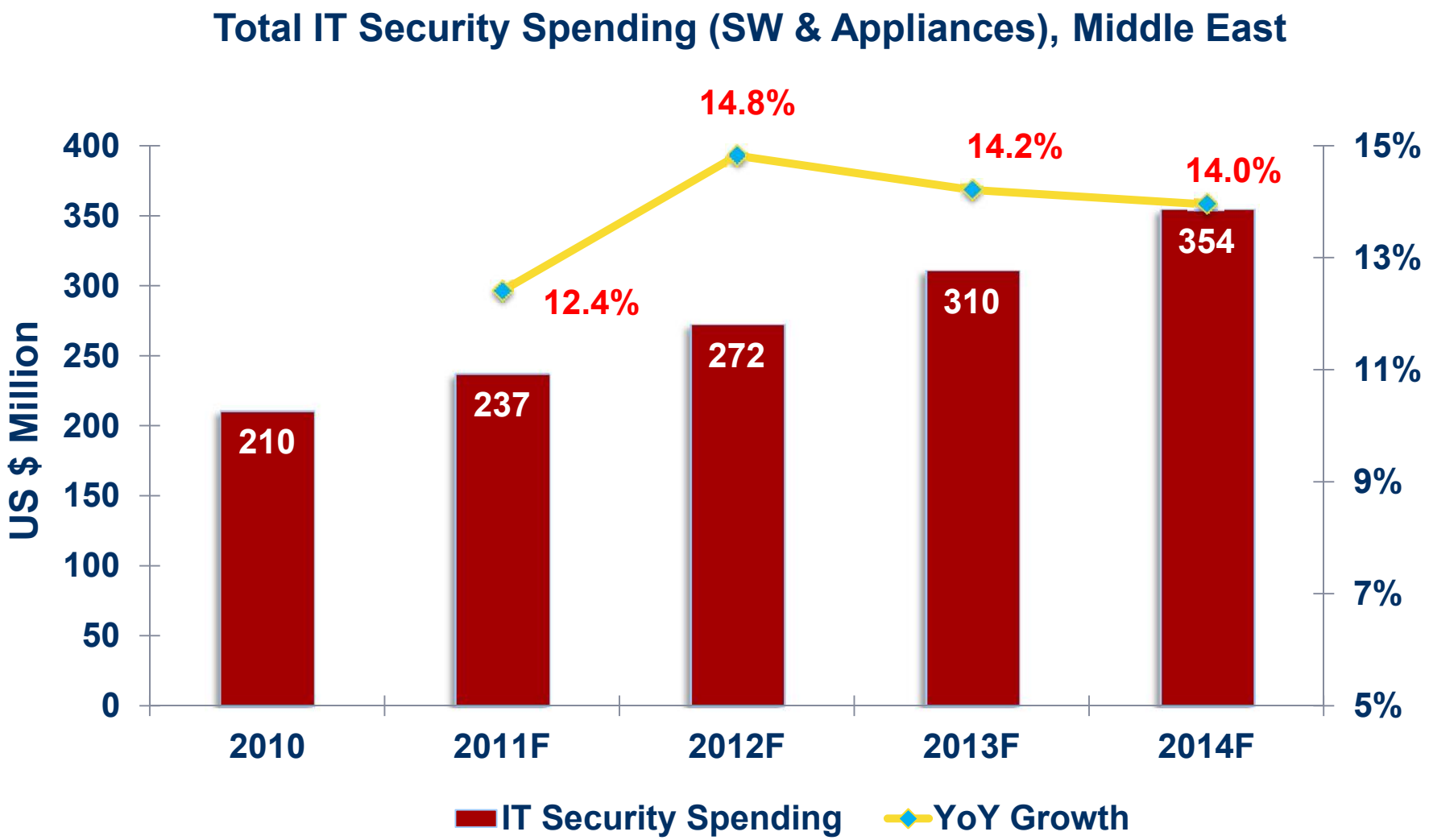
- ✓Network security – firewalls, VPNs
- ✓End point security – client anti-virus & anti-spyware, end point DLP
- ✓Messaging security – anti-malware, content filtering
- ✓Web security - Web filtering, Web antimalware, Web 2.0 security

✓Fastest growing categories

- ✓**Identity & Access Management Software** – password mgmt, single sign-on (SSO) etc
- ✓**Security & Vulnerability Management Software**– compliance, risk mgmt, patch mgmt etc.

Source: IDC Gulf States Software and Security Market Report 2009

IT Security Spending Outlook - Middle East



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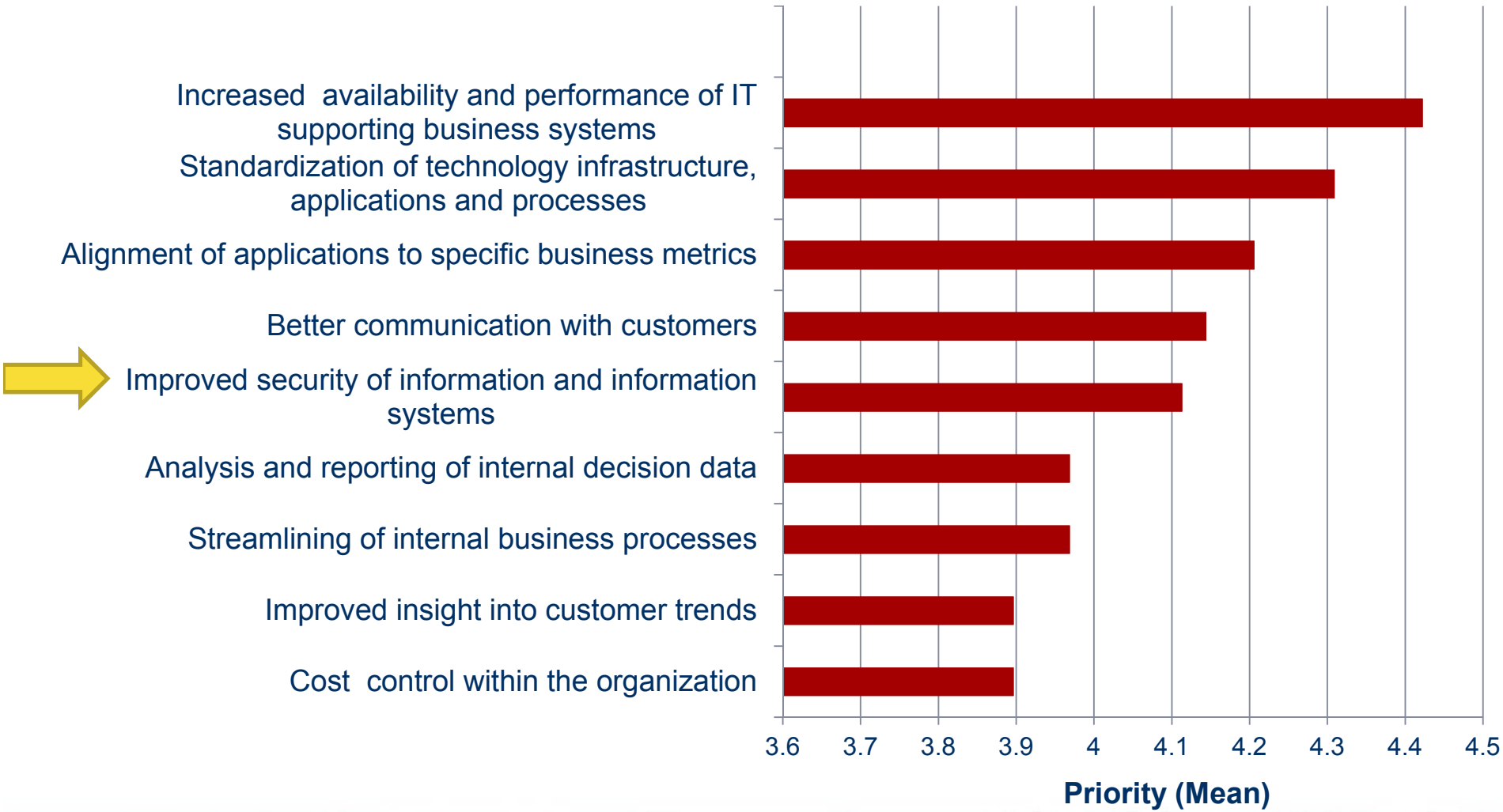
Source: IDC Gulf States Software and Security Market Report 2009

CIO Viewpoints on Security

CIO/IT Head's Strategic Priorities 2011

Q. What are your ICT expenditure priorities over the next 12 months?

1 means lowest priority and 5 means highest priority.



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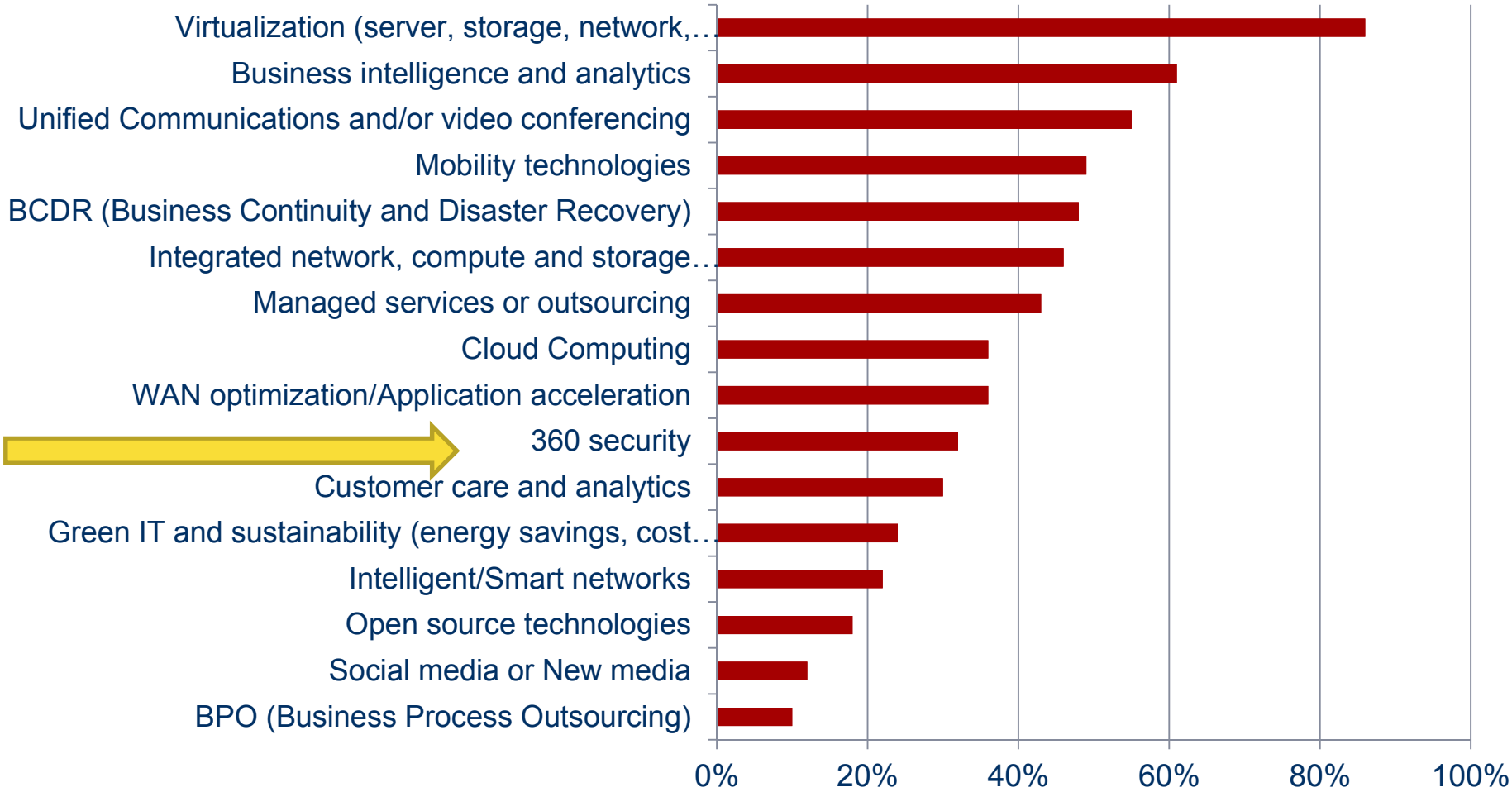
Source: IDC Middle East CIO Survey (Dec2010/Jan 2011) N=97

CIO/IT Head's Technology Priorities 2011

Q. *Which of the following technologies are you scoping for projects in 2011? (Multiple responses)*



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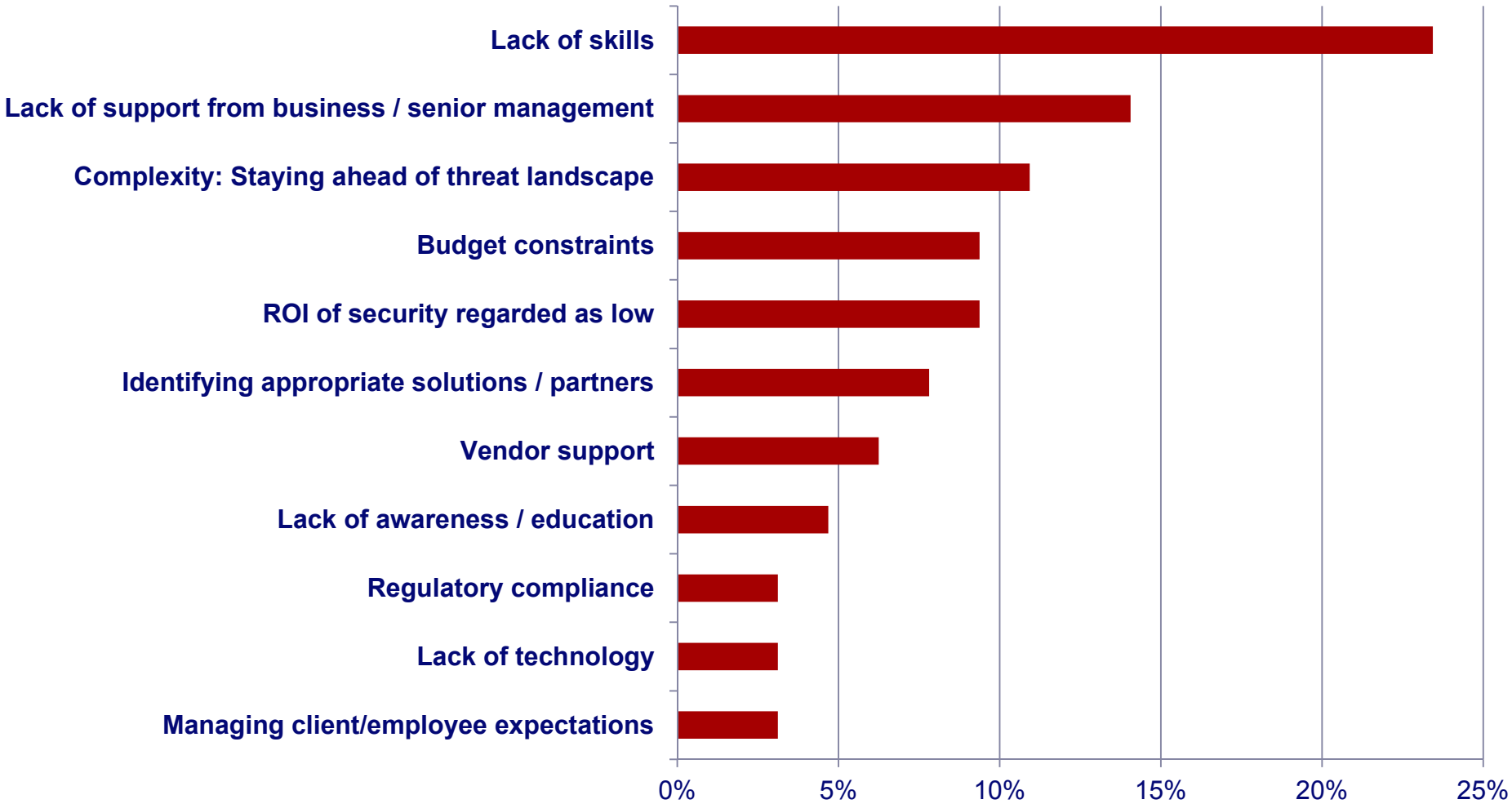
Source: IDC Middle East CIO Survey (Dec2010/Jan 2011) N=97

CIO/IT Head's Challenges with Security

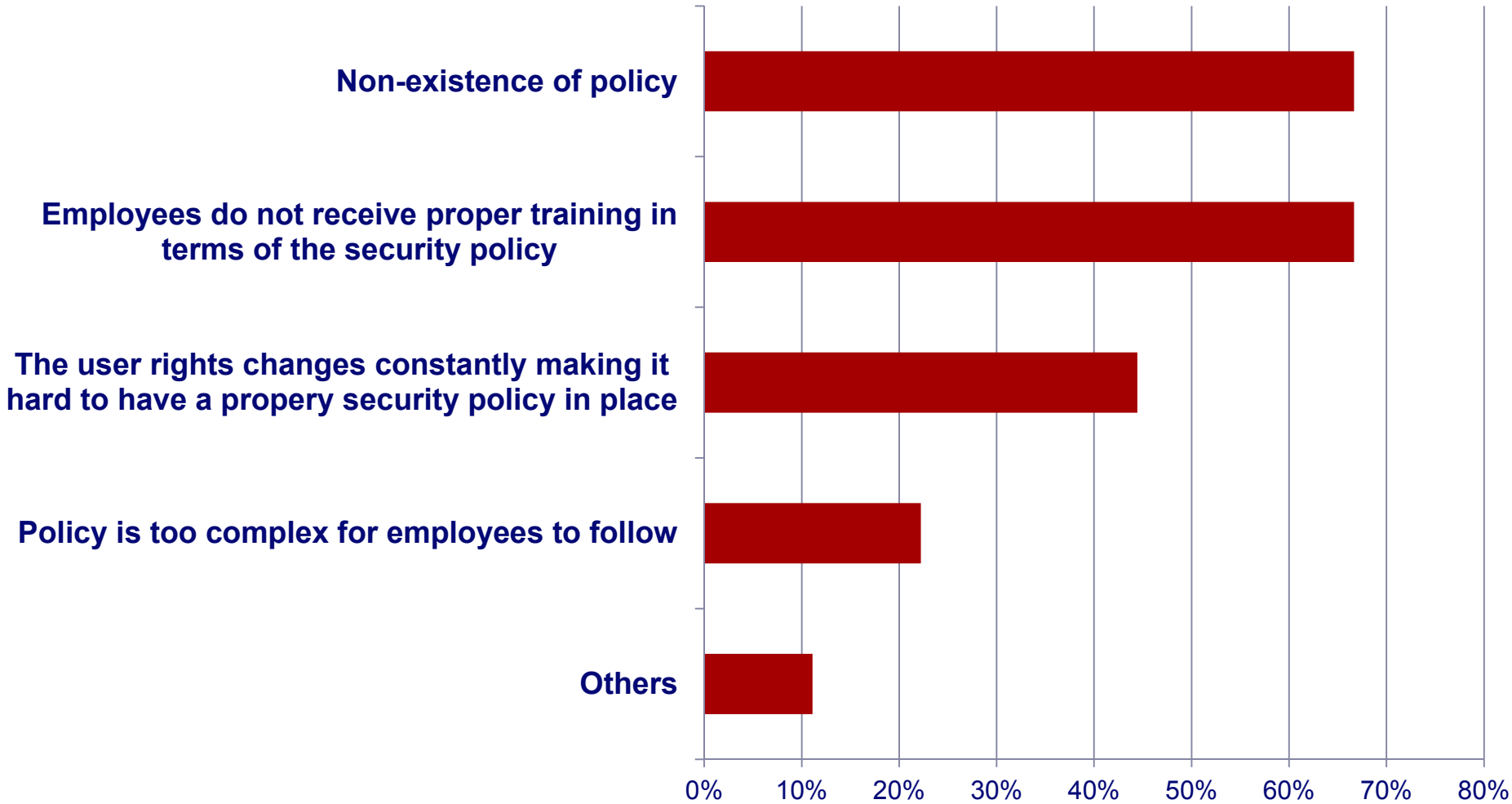
Q. What are your key challenges with regards to investment in security solutions?



Source: IDC-Symantec CIO Study 2010 N=37

Challenges with Security Policy Implementation

Q. What are the primary reason that hinders the proper implementation of an IT Security Policy?



Source: IDC IT Security Roadshow 2011 Dubai

Essential Guidance

Essential Guidance

- ✓**The dynamics around —Virtual, Mobile, Social require a new way of thinking of security**
  - ✓Security in a virtualized environment
  - ✓Device Management, Mobile Security
- ✓**Raise awareness of security implications of Virtualization & Cloud**
  - ✓Traditional approach to network security, identity & access etc. may not be sufficient
  - ✓If your orgn is planning for Cloud, get involved.
- ✓**Take the lead on Data Loss Prevention seriously**
  - ✓ Don't wait for incidents
  - ✓Start small – *Endpoint solns*
  - ✓IT should take lead on data classification – look for easy wins to begin

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Essential Guidance

- **Align security strategies & policies with fast-evolving business needs**
- **Benchmark & incorporate best practices; Enforce policies**
- **Educate, Educate, Educate!! – *Not just the average user but also senior management***

Image Source: Scott Adams

Thank you!

Questions?

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