EXECUTIVE SUMMARY

The importance of information technology (IT) security continues to grow. About 8 in 10 managers responsible for security at their firms across the 12 countries covered in CompTIA’s International Trends in Cybersecurity expect security to become an even higher priority over the next two years (79% net of moderately higher + significantly higher). Anticipated priority two years from now is significantly higher among firms in Maturing Economies (86% net higher) vs. those in Mature Economies (68% net higher). Nearly three-quarters of businesses in Germany expect IT security to grow in importance (73% net higher).

Due to the evolving nature of IT, the great majority of organizations have had to respond by changing the way their company approaches security. In Germany, similar to many of the other countries, the greatest factor has been the change in IT operations, especially as firms move to the cloud or implement new mobility strategies.

Another significant driver of change in security approach is reports of security breaches at other firms as well as internal incidents. Furthermore, across all the companies surveyed, nearly three-quarters report having at least one security breach/incident* in the past 12 months (73%).

IMPORTANCE OF CYBERSECURITY

Expected priority in 2 years from today

<table>
<thead>
<tr>
<th>International Summary</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET Lower</td>
<td>3%</td>
</tr>
<tr>
<td>No Change</td>
<td>18%</td>
</tr>
<tr>
<td>Moderately Higher</td>
<td>43%</td>
</tr>
<tr>
<td>Significantly Higher</td>
<td>40%</td>
</tr>
</tbody>
</table>

73% NET of Germany businesses expecting security to become a higher priority over the next two years

TOP DRIVERS FOR CHANGING APPROACHES TO CYBERSECURITY

Among Germany businesses

1. Change in IT operations (e.g. cloud, mobility)
2. Knowledge gained from training/certification
3. Reports of security breaches at other firms
4. Internal security breach or incident
5. Change in management

Note: see the last page for which countries are categorized in Maturing Economies vs. Mature Economies.

*Stemming from internal or external causes.
While 8 in 10 organizations in Germany experienced at least one security incident, nearly two-thirds had one or more serious breaches. Human error is becoming more of a factor in security breaches for most companies, especially for those in Maturing Economies (64% net overall significantly more + moderately more). In Germany, it is more of a factor now vs. two years ago for more than half (63% net human error more of a factor).

On the brighter side, roughly 9 in 10 firms use some type of security training to assess or improve security knowledge among employees such as new employee orientation, ongoing security training programs, random security audits, online courses, etc. (92% overall and 90% in Germany). And most managers believe it is important to test after IT security training to confirm knowledge gains (91% net very important + somewhat important in Germany). Moreover, employers in Maturing Economies especially find IT security certifications to be very valuable (49%) compared to those in Mature Economies (25%). Two-thirds of managers in Germany indicate that IT security certifications are very valuable (23%) or valuable (44%) in terms of validating security-related knowledge/skills or evaluating job candidates.

**HUMAN ERROR A MAJOR CONTRIBUTOR TO SECURITY RISK**

**International Summary**

- Human error: 58%
- Technology error: 42%

**Germany**

- Human error: 59%
- Technology error: 41%

**TOP SOURCES OF HUMAN CYBERSECURITY ERROR**

Among Germany businesses

1. General carelessness
2. Failure to get up to speed on new threats
3. IT staff failure to follow policies and procedures
4. End user failure to follow policies and procedures
5. Lack of expertise with networks, servers and other infrastructure
6. Inadequate resources/lack of time to manage threats

76% businesses reporting a mobile related security incident. Top issues: lost device, mobile malware, and data policy violation.
RESEARCH METHODOLOGY

CompTIA's *International Trends in Cybersecurity* was conducted to collect and share quantitative information on behaviors, techniques, and opportunities associated with IT security across 12 countries. More information and all country snapshots are available at [CompTIA.org/internationalsecurity](http://CompTIA.org/internationalsecurity).

A total of 1,509 IT and business executives participated in the online survey during January – February 2016, yielding an overall margin of sampling error at 95% confidence of +/- 2.5 percentage points. Sampling error is larger for subgroups of the data.

As with any survey, sampling error is only one source of possible error. While non-sampling error cannot be accurately calculated, precautionary steps were taken in all phases of the survey design, collection and processing of the data to minimize its influence.

CompTIA is a member of the Marketing Research Association and abides by its guidelines for survey best practices and research ethics.

CompTIA is responsible for all content contained in this report. Any questions regarding the study should be directed to CompTIA Research and Market Intelligence staff at [research@comptia.org](mailto:research@comptia.org).

SURVEY DEMOGRAPHICS

### Firm Size
- 5% Micro firm (5 to 9 employees)
- 34% Small firm (10 to 99 employees)
- 30% Medium firm (100 to 499 employees)
- 30% Large firm (500 or more employees)

### Primary Industry
- 20% Information Technology (IT)
- 14% Manufacturing (other than IT related)
- 11% Professional services (other than IT related)
- 10% Retail/Wholesale (other than IT related)
- 6% Healthcare/Medical
- 8% Financial/Banking/Insurance
- 2% Media/Publishing/Entertainment
- 3% Government (federal, state, local)
- 7% AMTUC (Agriculture, Mining, Transportation, Utilities, Construction)
- 6% Education
- 3% Hospitality
- 9% Other industry

### Countries

<table>
<thead>
<tr>
<th>Maturing Economies</th>
<th>Mature Economies</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=126 Brazil</td>
<td>n=125 Australia</td>
</tr>
<tr>
<td>n=131 India</td>
<td>n=125 Canada</td>
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<tr>
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<tr>
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<td>n=125 Japan</td>
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<td>n=125 Thailand</td>
<td></td>
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<tr>
<td>n=126 UAE</td>
<td></td>
</tr>
<tr>
<td>Total Maturing</td>
<td>Total Mature</td>
</tr>
<tr>
<td>884</td>
<td>625</td>
</tr>
</tbody>
</table>

1,509 Total number of respondents in the study

ABOUT COMPTIA

CompTIA is the voice of the world’s information technology (IT) industry and workforce.

Its members are the companies at the forefront of innovation; and the professionals responsible for maximizing the benefits organizations receive from their investments in technology.

CompTIA is dedicated to advancing industry growth through educational programs, market research, networking events, professional certifications, and public policy advocacy.

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