INDUSTRY COOPERATION TO TACKLE COUNTERFEITING IN MOBILE COMMUNICATIONS

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Mobile Manufacturers Forum

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- About the MMF and 'Spot-a-fake-phone'
- Key Facts
- What to Prepare for
- Challenges for Manufacturers and Operators
- 'Joint Device Identifier Task Force' (JDIT)

About MMF

International non-profit association with scientific purpose of telecommunications equipment manufacturers with an interest in the safety of mobile or wireless communications, focusing on:
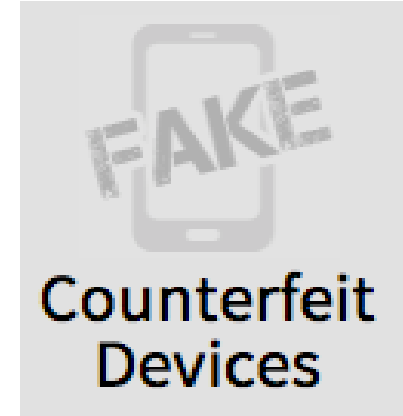
MMF Members: Alcatel Mobile Phones, Apple, Cisco, Ericsson, Huawei, Intel, LG, Microsoft, Motorola Mobility, Motorola Solutions, Samsung, Sony (+ companies participating in one or more of MMF's initiatives)

EN ES PT DE

www.spotafakephone.com

Spot a **Fake** Phone

Home   How To Tell   Why buy Genuine   Publications   Report a Fake   FAQ
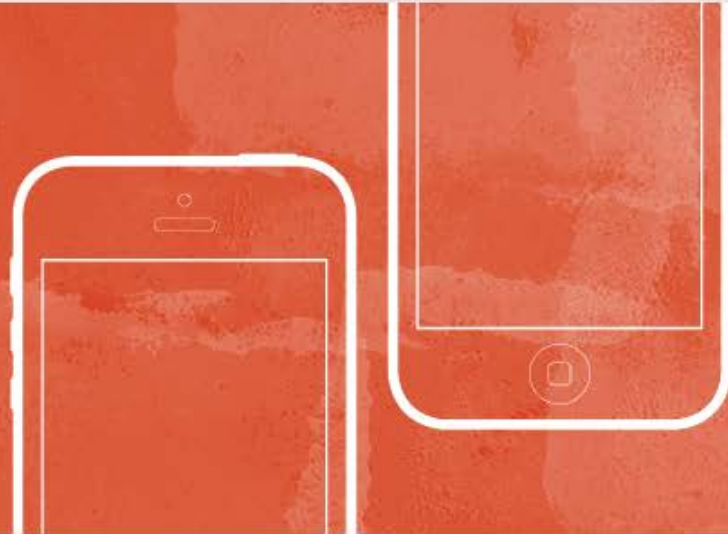
Is your mobile phone

COUNTERFEIT?

Counterfeit phones and accessories are a multi-billion dollar business controlled by organized crime. Don't buy into it!

How to Tell

What's so bad about fake phones?

CONSUMER IMPACT

Buying a fake phone can pose a health risk to you and loved ones who use the device. Other drawbacks, such as network disruption and poor product quality makes buying genuine the clear choice.

NATIONAL IMPACT

With counterfeiters evading taxation, many countries are losing a great deal of revenue, including sales and value added taxes as well as various duties and associated government charges.

INDUSTRY IMPACT

Black market phones cost the mobile phone industry billions of dollars in lost sales every year. According to some reports counterfeit black market phones made up around 10 per cent of worldwide sales in 2010.
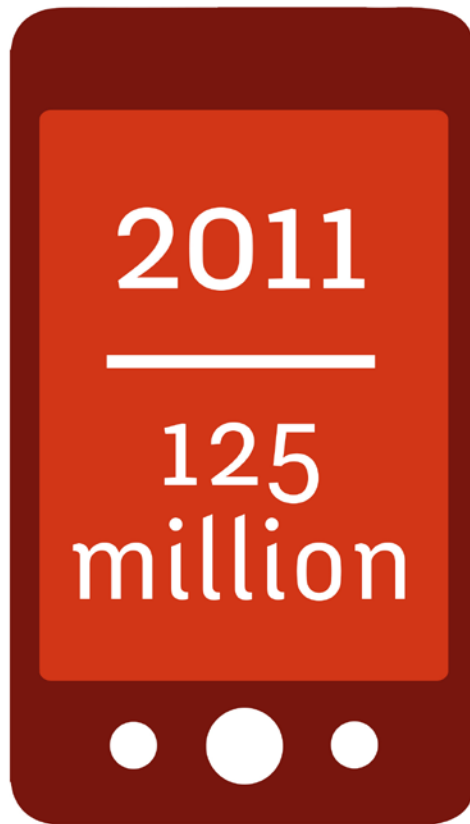
Learn more

PUBLICATIONS   WHO WE ARE   Tweets

Key Facts
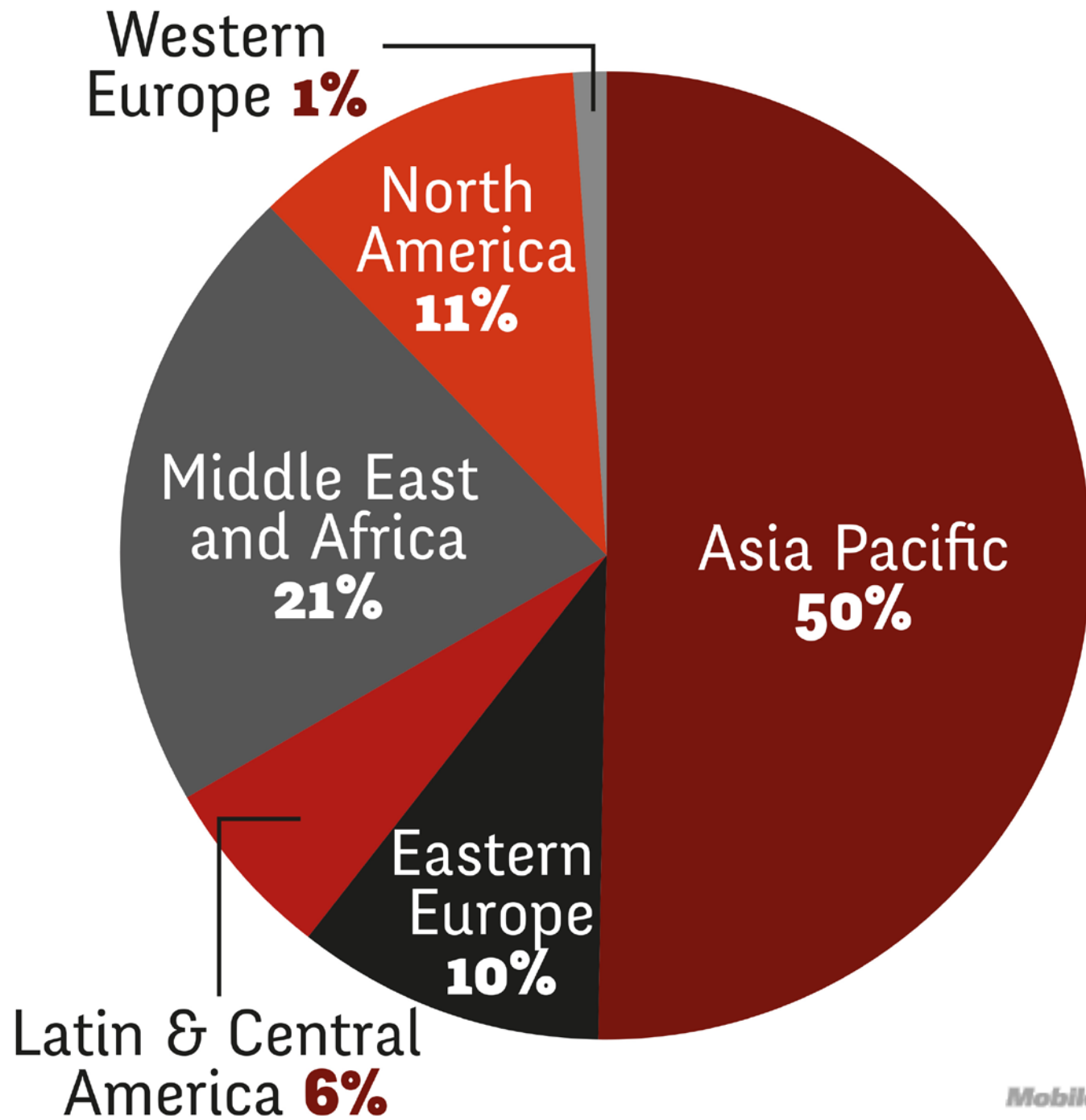
2011
—
125
million

counterfeit/substandard
handsets sold globally

WHAT IS THE IMPACT?

$6 billion
in lost sales
per year

Western Europe **1%**

North America **11%**

Middle East and Africa **21%**

Asia Pacific **50%**

Eastern Europe **10%**

Latin & Central America **6%**

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What to Prepare for

Personal Safety

- Protect personal and private information

  - mBanking
  - Health information
  - Contacts
  - Business and personal info/emails
  - Internet of Things

- Smartphone malware increases dramatically

  - In 2011: 472% up
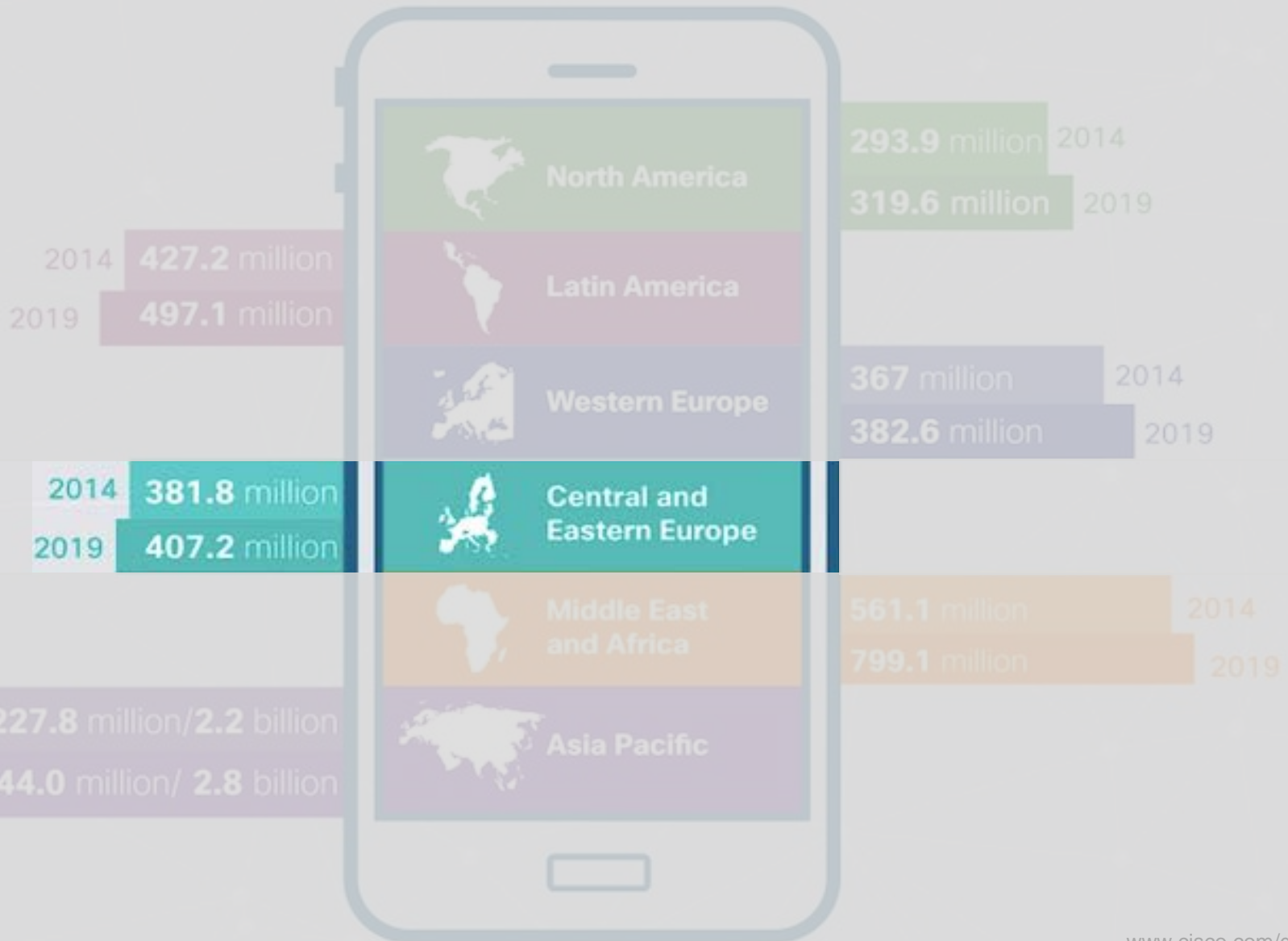   - 55% of this spyware
    - 44% of this SMS trojans

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CISCO

Visual Networking Index

In February 2015, Cisco released the Cisco® VNI Global Mobile Data Traffic Forecast, 2014–2019. This infographic provides some of the global and regional highlights from the updated study.

Cisco VNI, 2014-2019: More Mobile Users

North America
293.9 million 2014
319.6 million 2019

Latin America
2014 427.2 million
2019 497.1 million

Western Europe
367 million 2014
382.6 million 2019

Central and Eastern Europe
2014 381.8 million
2019 407.2 million

Middle East and Africa
561.1 million 2014
799.1 million 2019

Asia Pacific
2014 2,227.8 million/2.2 billion
2019 2,844.0 million/ 2.8 billion

Cisco VNI, 2014-2019:
Mobile Connected Devices per capita

2019 Per Capita

| North America | Latin America | Western Europe |
| 3.1 per capita | 1.5 per capita | 2.8 per capita |

Central and Eastern Europe — 2.1 per capita

Middle East and Africa

Asia Pacific

Update Cisco VNI, 2015 - 2020:
1.8   -   2.4

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Cisco VNI, 2014-2019:
Mobile Traffic Per End-User Connection

● 2014 ● 2019

North America
39% CAGR
1.5 GB/7.6 GB

Latin America
55% CAGR
276 MB/2.5 GB

Western Europe
43% CAGR
645 MB/3.9 GB

Central and Eastern Europe
66% CAGR
373 MB/4.7 GB

Middle East and Africa
63% CAGR
170 MB/2.0 GB

Asia Pacific
51% CAGR
273 MB/2.2 GB
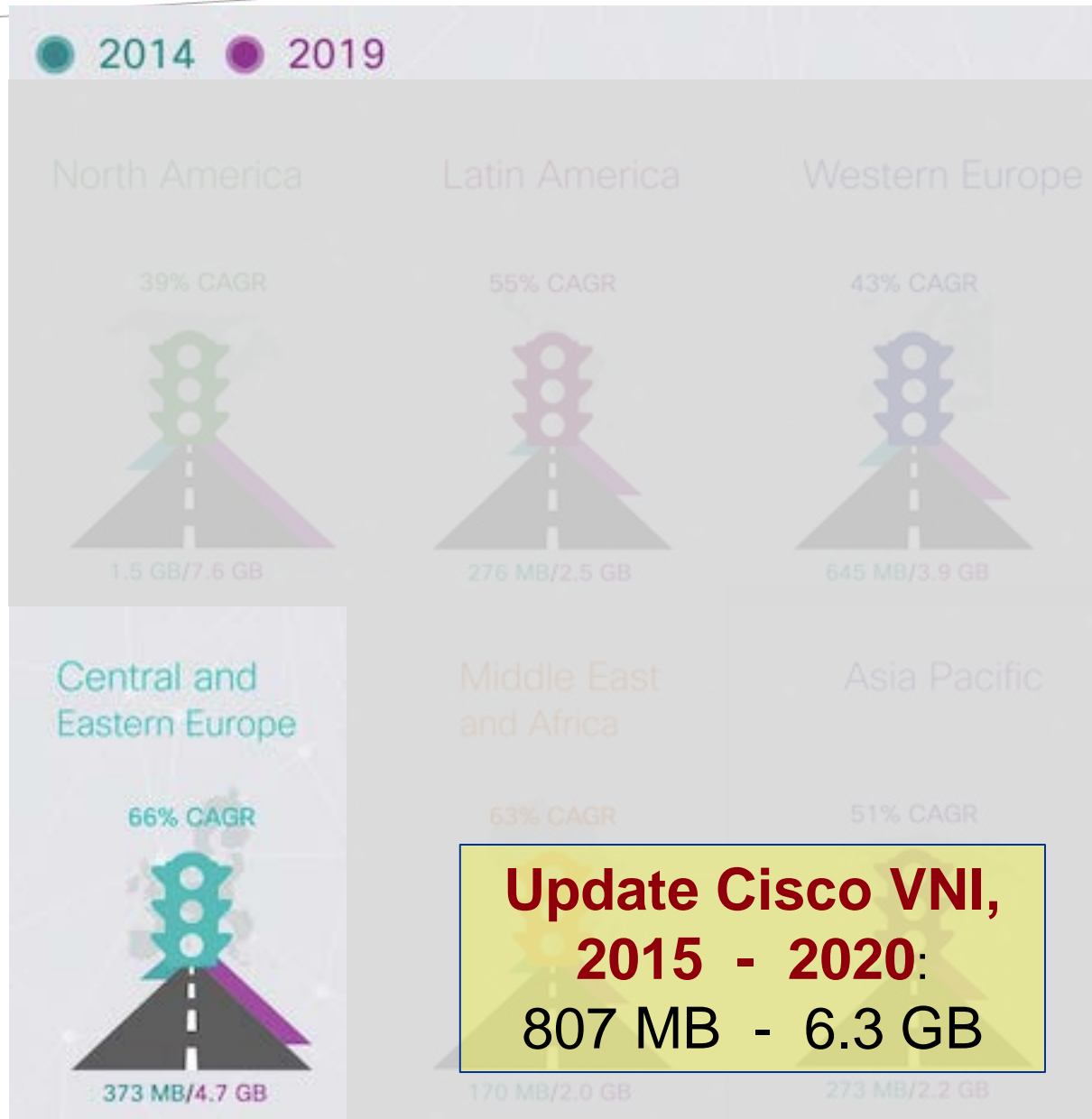
Update Cisco VNI, 2015 - 2020:
807 MB - 6.3 GB

- **3-fold increase accelerator:**

  ➢ **More** end-users

  ➢ **More** devices per end-user

  ➢ **More** mobile traffic per end-user connection

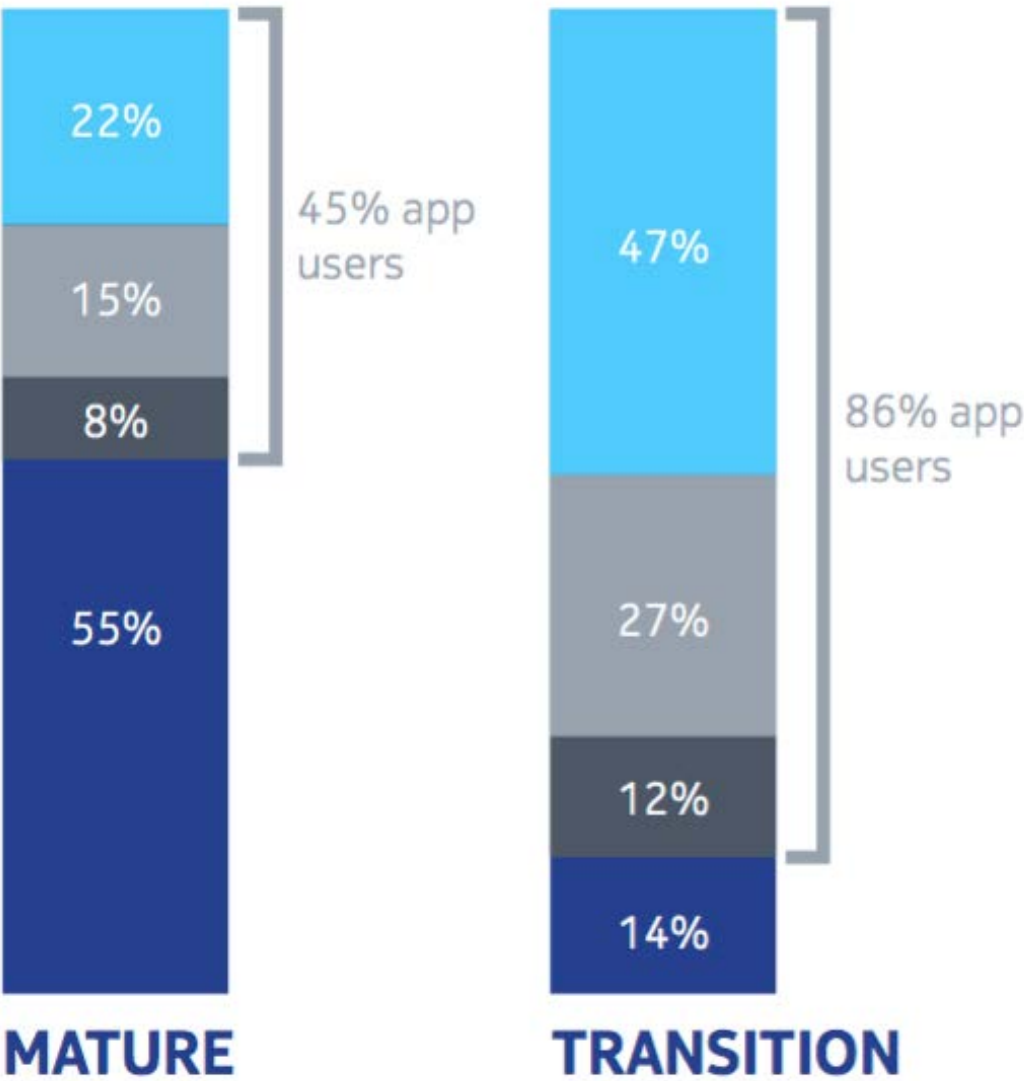# Nokia 2016 Acquisition and Retention Study

Mature markets:

Transition markets:

20k online respondents, 14 markets, 140 in-depth consumer interviews

Messaging Apps Prevalent

Usage of phone service vs. apps for messaging

- 45% vs. 86% use apps for messaging

MATURE:
- 22%
- 15%
- 8%
- 55%
- 45% app users

TRANSITION:
- 47%
- 27%
- 12%
- 14%
- 86% app users

Legend:
- Using apps more often than phone service
- Using apps and phone service about the same
- Using phone service more often than apps
- Don't use apps

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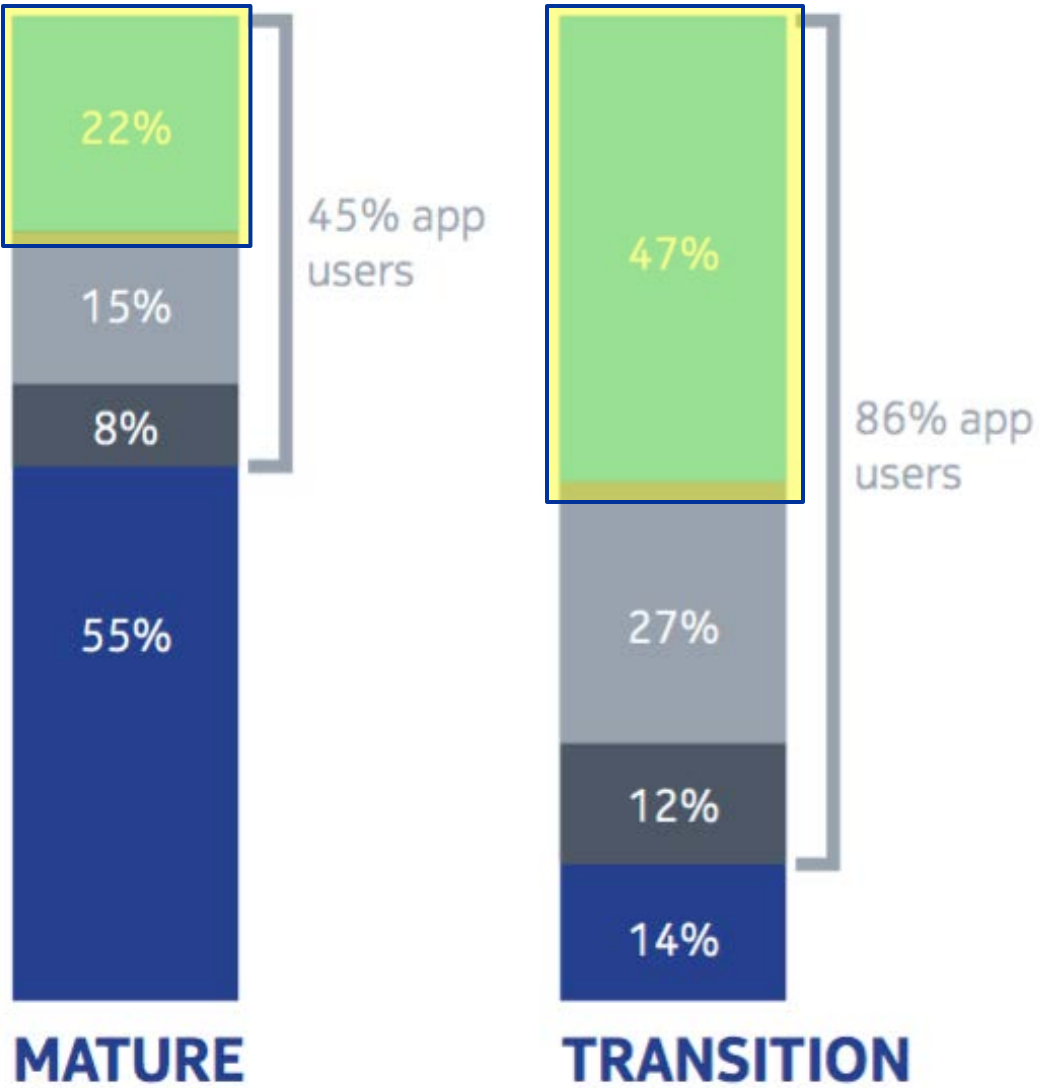
- 45% vs. 86% use apps for messaging
- 22% vs. 47% use messaging apps more often than SMS

- Protect personal and private information

  - mBanking
  - Health information
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Concern and personal experience of the security issues
This chart highlights the security threats that consumers globally stated as concerning, overlaid by personal experiences of them.

68%

39%
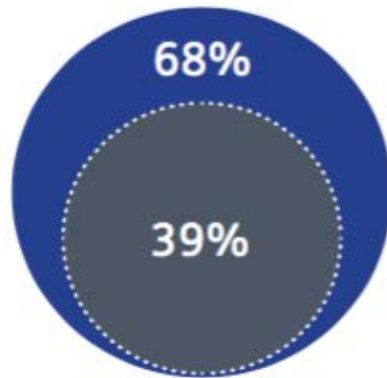
Viruses/Malware

1. Viruses / Malware
2. Internet fraud
3. Identity theft
4. Online privacy breach
5. Fraudulent charges
6. Spam

Issues consumers are worried about ●

Issues personally experienced ●

Figure 6: Consumer attitudes to paying with a phone

48%

of smartphone owners would rather use their phone to pay for goods and services

Source: Ericsson ConsumerLab Analytical Platform, October 2014

Base: 5,024 iPhone/Android smartphone users in Johannesburg, London, Mexico City, Moscow, New York, San Francisco, São Paulo, Shanghai, Sydney, Tokyo
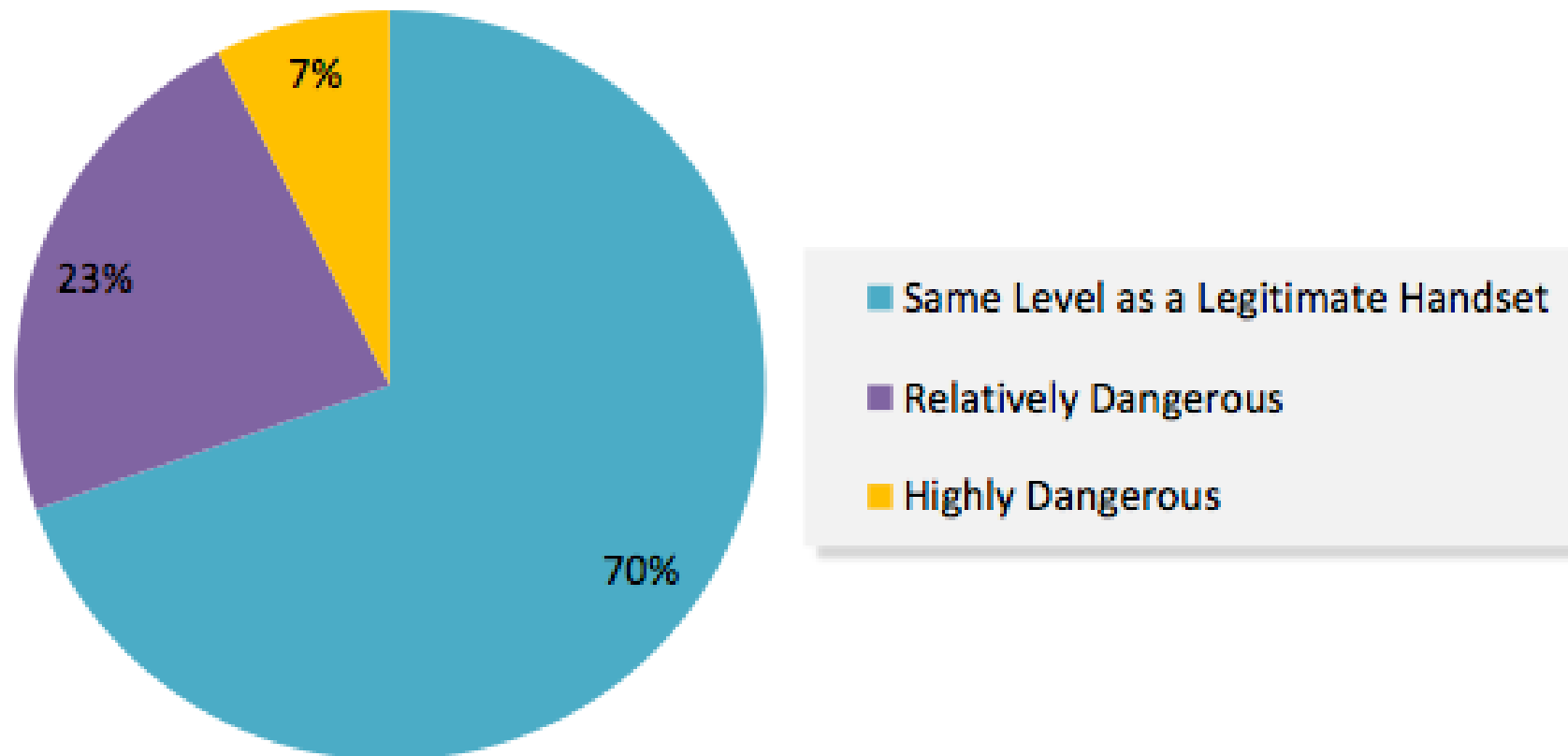
Challenges for Manufacturer and Operators

Increase Consumer Awareness

- 70% wrongly believed that the counterfeit devices were of the same quality as the

Pie chart segments:
- 7% (Highly Dangerous)
- 23% (Relatively Dangerous)
- 70% (Same Level as a Legitimate Handset)

Legend:
- Same Level as a Legitimate Handset
- Relatively Dangerous
- Highly Dangerous

Source: ARCchart

Communications

- Global & regional communications strategies

- Social media campaigns

- Media briefings

- Fact sheets

- Consumer website: www.spotafakephone.com

- Work with stakeholders to
  - develop communication campaigns
  - build awareness
  - support reforms in key markets

- Build partnerships
- Engage in institutional collaboration

- Identify and define regulatory best practices
- Propose standards to improve product security
- Research impact and compliance

- Network performance testing on standard 3GPP testing protocols found significant impact as
  - Fakes drop 1 in 4 calls
  - Fakes delay handover on average by 41%
  - Fakes even fail in every 3rd handover
  - Fakes operate poorly, on average at only half the distance away from a base station than an original device
  - Fakes have limited data speeds (despite packaging claims)
- Note: results are important for enhancing QoS

- Accredited labs tested EU RoHS compliance and found:

Industry Collaboration: Joint Device Identifier Task Force (JDIT)

- established by MMF and GSMA

- first face-to-face meeting: April 2016

- to align and drive the industry's management and development of mobile device identifiers

- to promote best practice to optimise the value and use of mobile device identifiers to resolve issues of concern including

  ➢ device identification and verification,

  ➢ service provision,

  ➢ combatting device counterfeiting and theft,

  ➢ increase protection of mobile devices, mobile networks and their users.

- Work stream 1:
  - Recommendations on current system, processes and engineering implementations

- Work stream II:
  - Studies on strategic issues and longer term solutions to industry needs including new form factors and IoT devices

- mobile device identifiers (MDI), their use and administration in the mobile ecosystem by
  - ➢ **consensus building and harmonisation**;
  - ➢ producing **guidance** on device identifier formats and their evolution;
  - ➢ contributing to the development and maintenance of a **harmonised legal framework** pertaining to MDI ownership, use and revocation;
  - ➢ facilitate **collaborative industry efforts** to combat the counterfeiting and theft of mobile devices; and
  - ➢ **liaise with external organisations.**

Further Information

Download MMF brochure:
"Counterfeit / Substandard
Mobile Phones – A Resource
Guide for Governments"

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