Cyber Security – Strategy and Approach

Making Cyber Security part of your company DNA

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HUAWEI

Today, Huawei is a world-class company

Who is Huawei

- A leading global **ICT** solutions provider
- A **Fortune Global 500** company, ranking 315 in 2013

Employees

- **150,000+** employees worldwide
- **70,000+** engaged in R&D

Market Progress

- **$39.5B** revenue in 2013
- Serving **45** of the world's top 50 carriers, which account for **77%** of Huawei's revenue generated from the carrier network business
- Serving **1/3** of the world's population

Business Areas

- Carrier
- Enterprise
- Consumer

Huawei in Malaysia

1,900 employees

75 % locally recruited

USD $80 million annual local procurement

Partnership with all major telecom operators including TM, Maxis, Celcom, DiGi

150 local partners

Southern Pacific Regional HQ is based in Kuala Lumpur

6 offices and 11 sharing centres across the country

1 data hosting and 1 logistic centres in Iskandar

Member of Multimedia Super Corridor in Malaysia, contributing to digital development in Malaysia

Technology has fundamentally helped enhance mankind – better education, better health, better economic output, better lifestyle choices. This is set to continue…

Future = Ubiquitous + Omnipotent

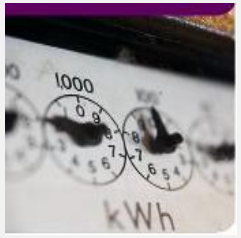
Open networks connect the world, facilitate economic exchanges across regions, and promote global trade. 5G telecommunications technology will increase today's fastest wireless speeds by 100 times – new opportunities and new threats

7 Billion People → 50 Billion Machine

In-vehicle Communication & Smart Traffic

Vehicle communication, navigation, tracing, security and maintenance

Auto Meter Reading



Remote meter reading is safer and easier. Benefit for Green City construction

Merchandise Distribution

RFID is used for merchandise trade and garbage sorting management

Remote monitoring & Health

Remote home-caring, health, safety management

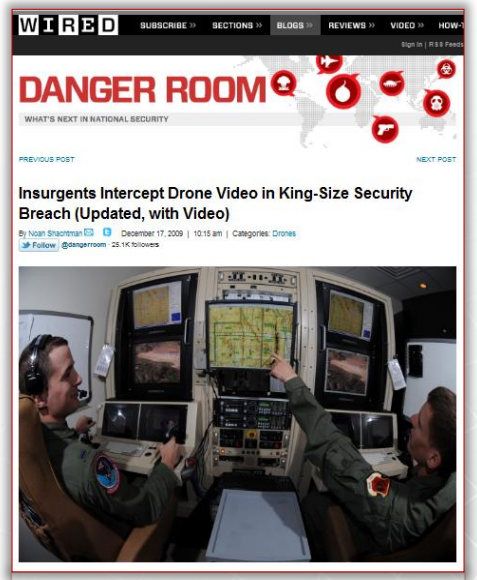
Vending

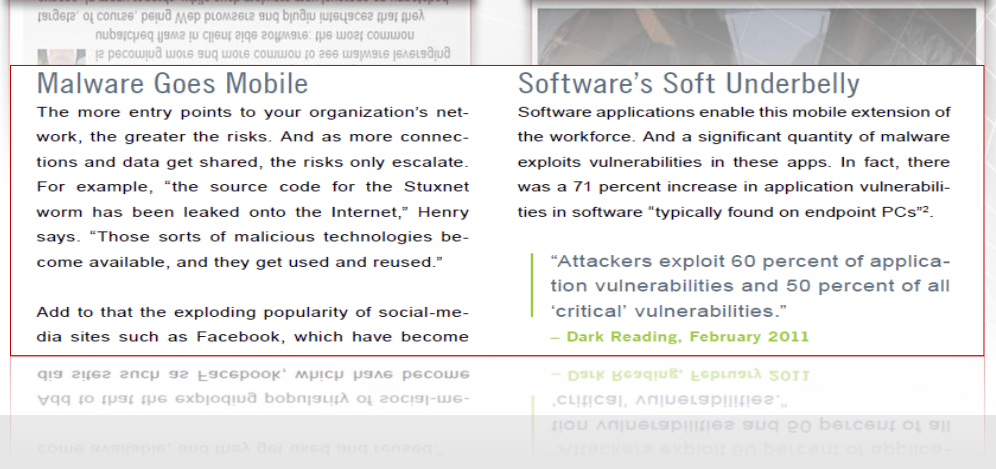
Vending, cargos management, E-wallet management

Electronic Consumer

Info sharing, on-line game, media download, communication, etc.

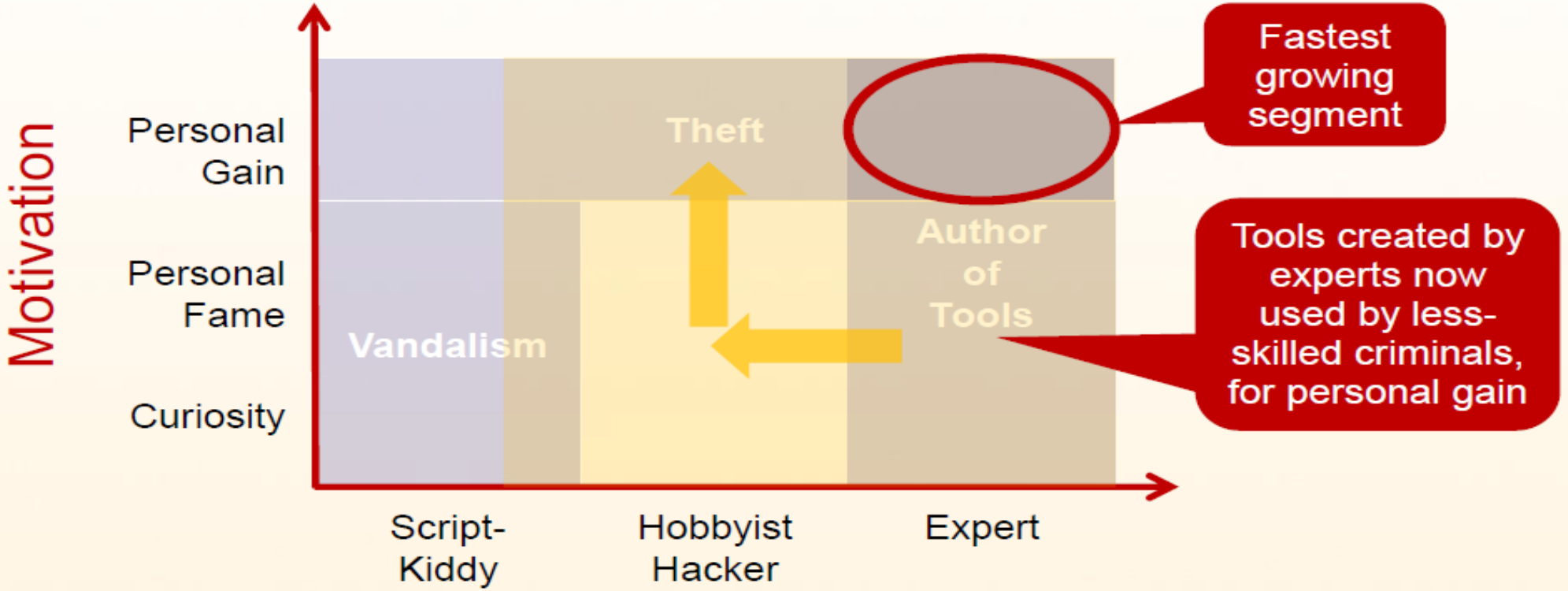
Technology and its use is advancing at an amazing rate and brings substantial benefits to all, but so are the threats to the users of technology advancing





- It is hard to stop the tide of progress and technology innovation. Threats are increasing every day.
- The bad guys are getting significantly more sophisticated.
- And international law provides its own security twists and turns.
- And finally it is impacting on almost all hardware and software – even systems not connected to the internet are being breached.

Cyber Security – The threat is changing, roles are changing and the purpose of the attack is changing – politics, protectionism, money and hacktivism



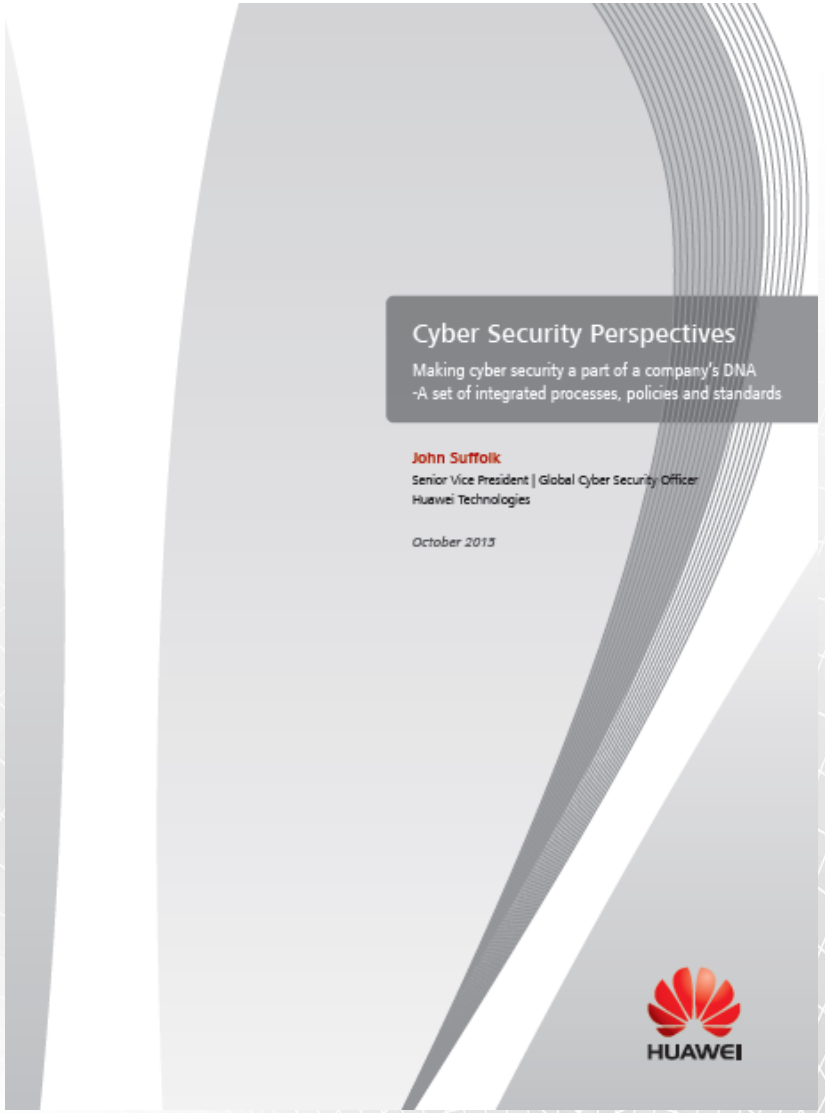
Source: Microsoft/ Secunia

Huawei’s Second Cyber Security White Paper

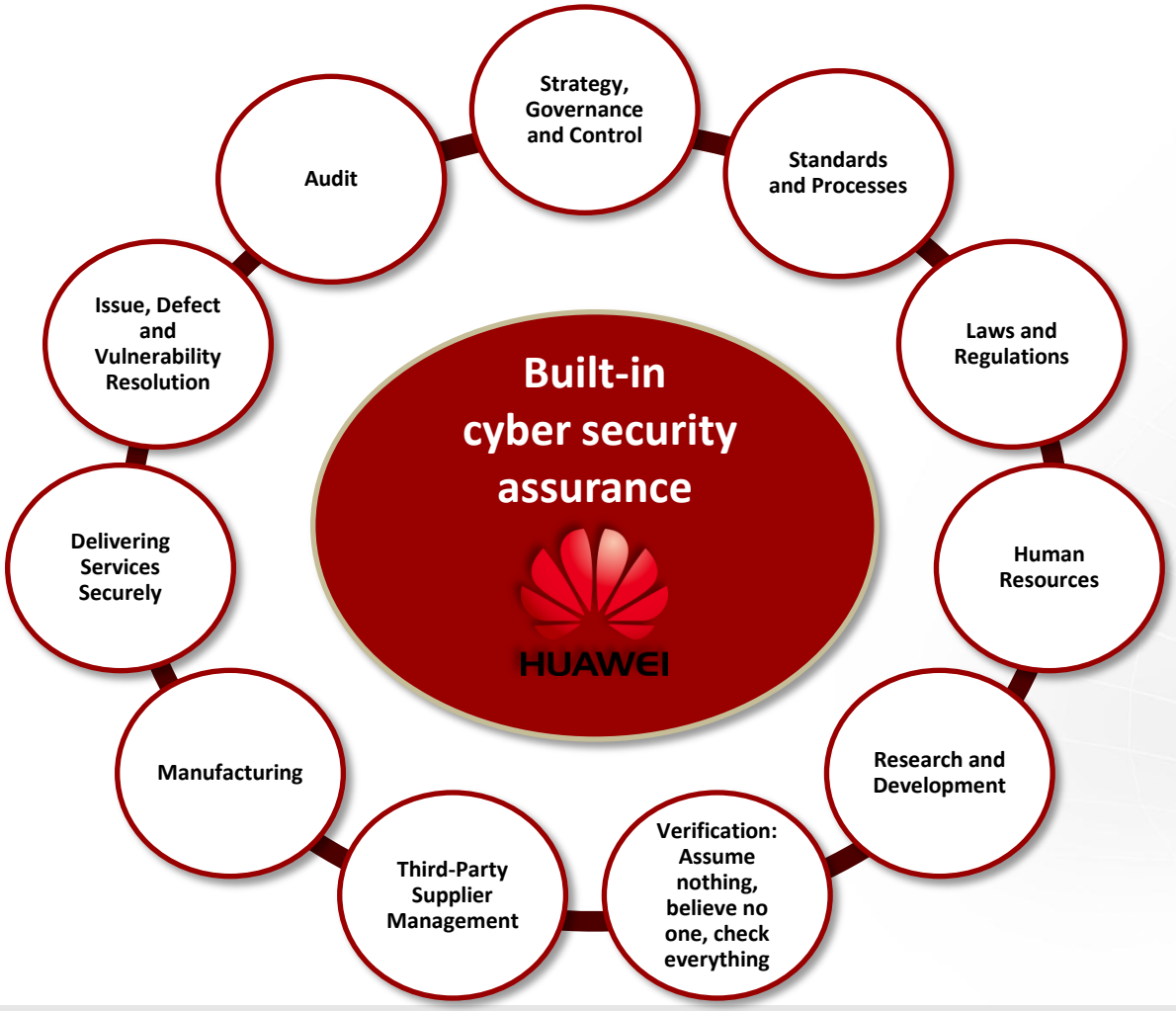
Cyber Security Perspectives

Making cyber security a part of a company’s DNA – A set of integrated processes, policies and standards

October 2013

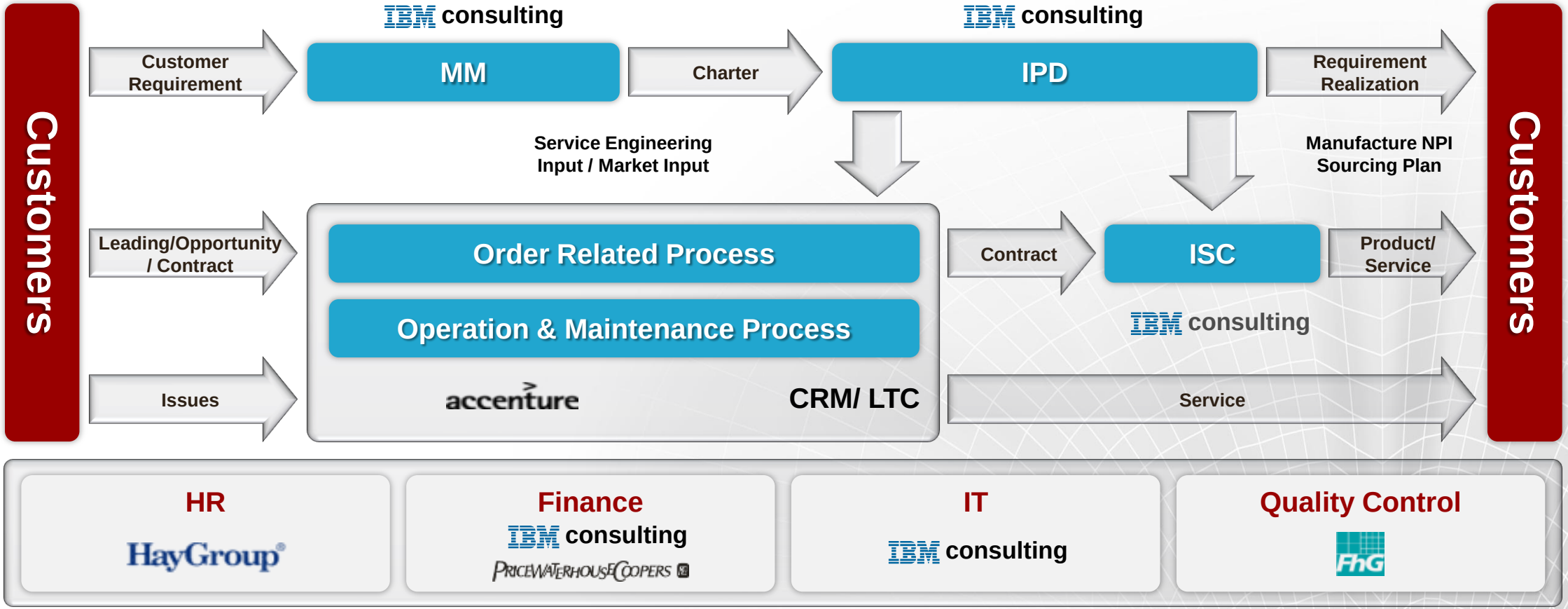


Every part of Huawei, and every person, is included in our “built-in” strategy.



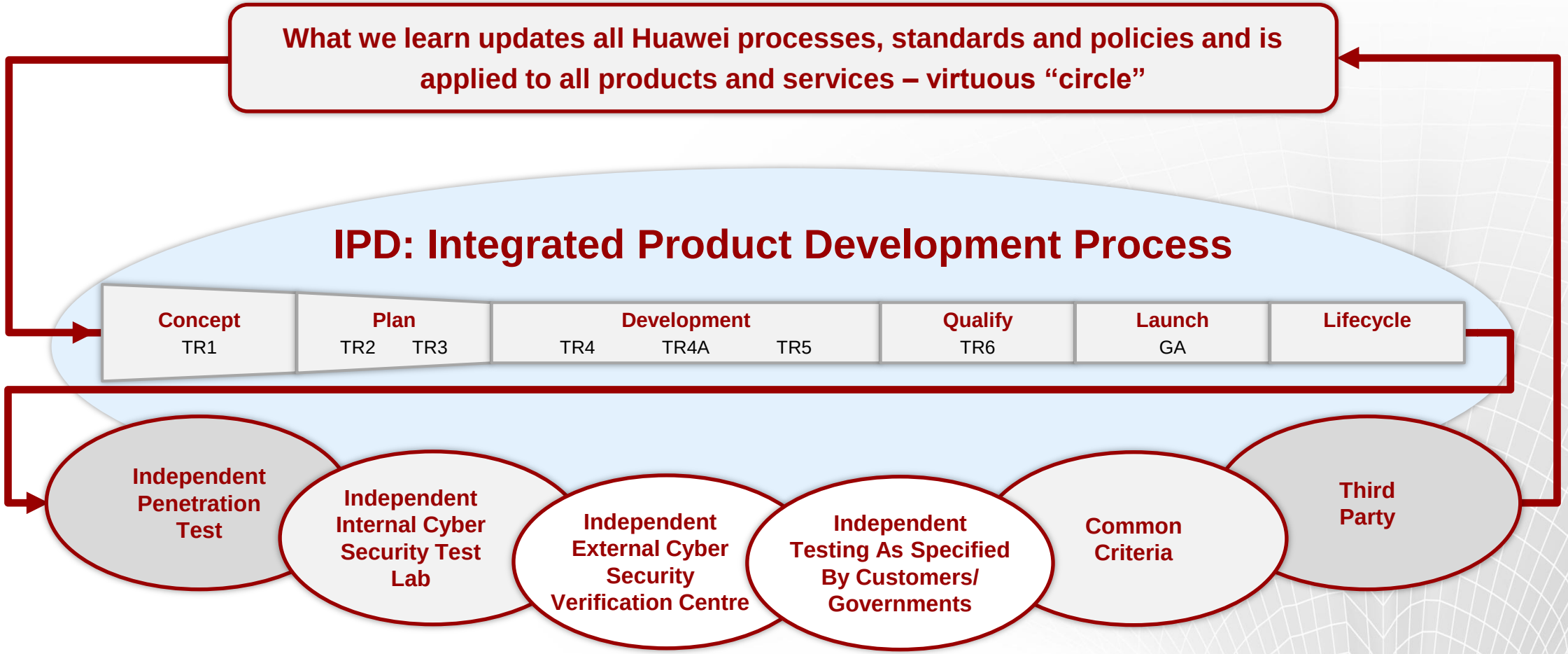
Area	Focus
Strategy, Governance and Control	Having an overall strategy and the accountability to make it happen
Standards and Processes	Using the best standards and approaches to protect against threats and risks
Laws and Regulations	Making your products and operations legally compliant in every country you operate in
Human Resources	Getting the right people, in the right roles with the right behaviour to limit insider issues
Research and Development	Designing, building, testing products in a secure way that builds on the above building blocks
Verification: Assume nothing, believe no one, check everything	Many eyes, many hands many checks. Tiered independent approach to security verification
Third-Party Supplier Management	Getting your suppliers to take security seriously – 70% in the box is not Huawei’s
Manufacturing	Manufacturing products that secure each step along the way – right through to delivery
Delivering Services Securely	Ensuring installation, service and support is secured. No tampering, fully auditable
Issue, Defect and Vulnerability Resolution	As issues arise, solving them quickly and ensuring customers technology is secured
Audit	Using rigorous audit mechanisms to ensure every part of Huawei conform to the strategy

The white paper details our approach to implementing consistently understood, globally rolled-out repeatable processes on which to embed the change – a “built-in” strategy – our corporate processes are the foundation stones

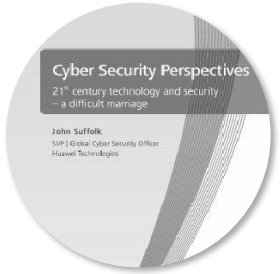


MM: Market Management | **IPD:** Integrated Product Development | **ISC:** Integrated Supply Chain | **LTC:** Lead To Cash

We have created a virtuous circle of “many eyes and many hands” ensuring we continuously improve our knowledge our technology, our people and our processes, this creates a win-win-win process – customers, Government, Huawei



A series of cyber security white papers--Cyber Security Perspectives Remain open and transparent; demonstrate Huawei's policies, challenges, and solutions in terms of cyber security.



2012

21st century technology and security-a difficult marriage

Share with the industry and the general public about how Huawei perspectives cyber security

Making cyber security a part of company's DNA-A set of integrated processes, policies and standards

Introduce how Huawei resolves this issue through its end-to-end cyber security assurance system

2013

2014

100 requirements when considering end-to-end cyber security with your technology vendors

Provide customers with suggestions on how to mange and improve cyber security

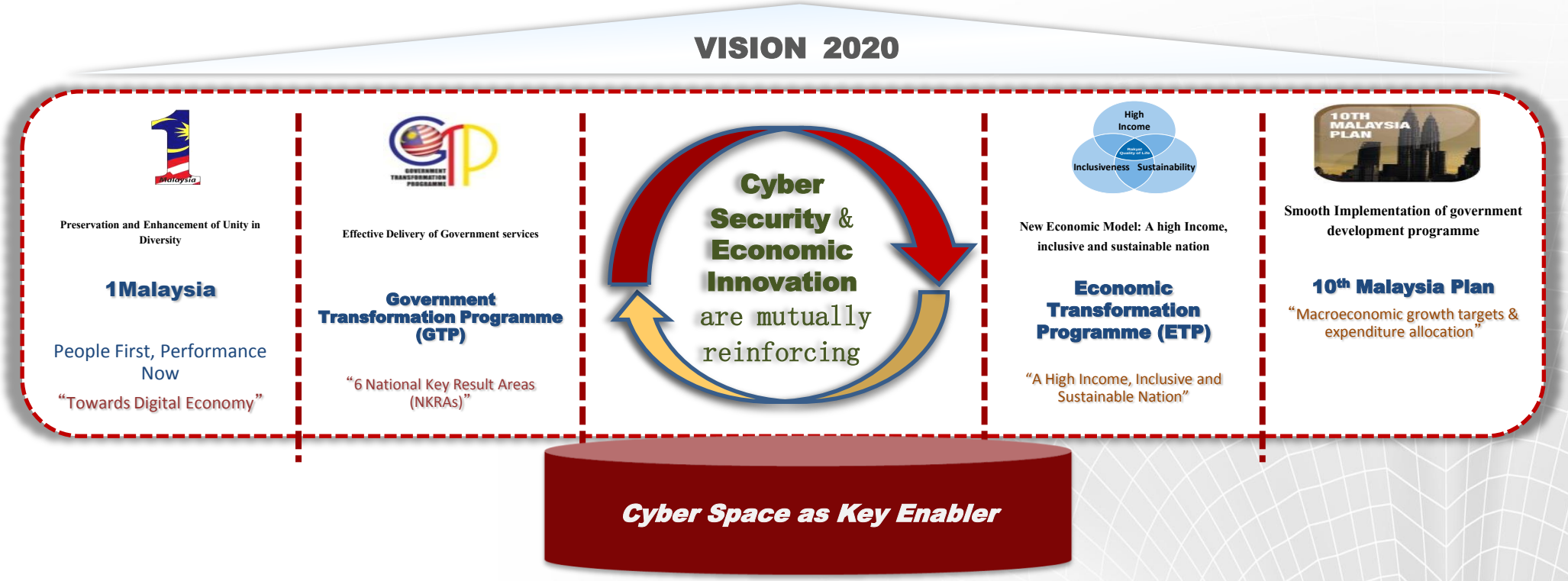
4th version of cyber security white paper

Analyze cyber security issues based on future-oriented technology trend

2015/6

Malaysia has developed clear cyber security policies and comprehensive approaches based on the well developed ICT infrastructure

1 HSBB project, 67.3% broadband household penetration rate, 19.2 million digital citizen



- The national cyber security policy has been designed to facilitate Malaysia's move towards a knowledge based economy.
- Cyber Security Malaysia was set up to implement national cyber security policy

Collaborations with Malaysian government

To establish a collaborative relationship on the issue of cyber security between Malaysian Government and Huawei to communicate and implement activities to increase cyber security awareness and improve competence

- **Communication Mechanism**: establish a Steering Committee to respond to the changing external environment on cyber security including technical standards of cyber security, the innovation of ICT technology, the approach to identify and manage potential risks. Meeting twice a year and visit to Huawei.
- **Knowledge transfer:** Cooperate on cyber security knowledge-sharing and training based on Huawei's end-to-end cyber security best practice. Organize cyber security research discussions and meetings routinely.
- **Increase Awareness**: leverage international/regional are to jointly promote cyber security cooperation and dialogue. Jointly develop training courses to increase cyber security awareness across industries.

Closing Thoughts： Threat will never stop，we never stop

- The development of networks has helped to advance social progress. Open networks have encouraged information flow and sharing, provided more opportunities for innovations, lowered the costs of innovation, and has helped improve the world's health, wealth and prosperity.
- Cyber security is not a single country or specific company issue. All stakeholders – governments and industry alike – need to recognize that cyber security is a shared global problem requiring risk-based approaches, best practices and international cooperation to address the challenge.
- As a crucial company strategy, Huawei has established and will constantly optimize an end-to-end cyber security assurance system.
- This is a continual effort, and Huawei is committed to providing best-in-class products and services to meet the needs of our customers. We take cyber security seriously and have invested substantial resources into our efforts to promote and improve the ability of our company, our peers and others to provide the best-possible security assurance and ensure a safer and more secure cyber world for all.

Thank you

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