Internet of Things survey results revealed

Fortinet has released the results of a global survey that asks homeowners about key issues regarding the Internet of Things (IoT), which gives a global perspective about the Internet of Things, what security and privacy issues are in play, and what homeowners are willing to do to enable it.

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"The battle for the Internet of Things has just begun. According to industry research firm IDC, the IoT market is expected to hit USD7.1 trillion by 2020," said Perry Hutton, regional director - Africa of Fortinet. "The ultimate winners of the IoT-connected home will come down to those vendors who can provide a balance of security and privacy vis-à-vis price and functionality."

Completed in June 2014, the survey asked 1801 tech-savvy homeowners questions relating to the Internet of Things as it pertains to the connected home.

These were the top findings:

- **The Connected Home is a reality**: A majority (61%) of all respondents believe that the connected home (a home in which household appliances and home electronics are seamlessly connected to the internet) is "extremely likely" to become a reality in the next five years. China led the world in this category with more than 84% affirming support. In South Africa, 60% said that the connected home is extremely likely to happen in the next five years;

- **Homeowners are concerned about data breaches**: A majority of all respondents voiced their concern that a connected appliance could result in a data breach or exposure of sensitive, personal information. Globally, 69% said that they were either "extremely concerned" or "somewhat concerned" about this issue. Almost 40% of South African respondents said that they were "extremely concerned" and 40% was "somewhat concerned";

- **Privacy and trust are concerns**: When asked about the privacy of collected data, a majority of global respondents stated, "privacy is important to me, and I do not trust how this type of data may be used". India led the world with this response at 63%. Fifty-eight percent in South Africa agreed with this statement;

- **Data privacy is an extremely sensitive issue**: Relating to privacy, respondents were also asked how they would feel if a connected home device was secretly or anonymously collecting information about them and sharing it with others. Most (62%) answered "completely violated and extremely angry to the point where I would take action". The strongest responses came from South Africa, Malaysia and the US. Eighty-three percent of South Africans agreed with this statement;

- **Users demand control over who can access collected data**: When asked who should have access to the data collected by a connected home appliance, 66% stated that only themselves or those to whom they give permission should have this information. Almost 80% of those in South Africa wanted personal control over collected data. Additionally, 21% of South Africans felt that either the device manufacturer or their ISP should have access to the collected data;

- **Consumers look to their government for data regulation**: Many respondents (42%) around the world stated that their government should regulate collected data, whereas 11% said that regulation should be enforced by an independent, non-government organisation. In South Africa only 25% agreed that the government should regulate collected data;

- **Device manufacturers are mostly on the hook for security**: If a vulnerability was discovered in a connected home device, 48% of all surveyed agreed that the device's manufacturer is responsible for updating/patching the device. However, nearly 31% responded with "as a homeowner, it is my responsibility to make sure that the device is up to date". Fifty-three percent of South Africans put the responsibility on the device's manufacturer;

- **The next looming battle: secure home routers versus clean pipes**: A clear schism appears worldwide when homeowners were asked about how connected home devices should be secured. In nearly equal proportion were those who replied "a home router should provide protection," versus those who said, "my internet provider should provide protection". Twenty-two percent of South Africans indicated that a home router should provide protection and 25% said that the internet provider should provide protection;

- **Homeowners are willing to pay for a connected home**: When asked "would you be willing to pay for a new wireless router optimised for connected home devices", 40% responded with "definitely" and another 48% said "maybe". In a follow-on question, more than 50% said they would pay more for their internet service in order to "enable connected devices to function" in their home. More than 15% of South African homeowners indicated that they would not pay more for their internet service and for a new wireless router; and

- **Price is the primary factor**: Although homeowners report a willingness to pay more to enable their connected homes, when asked what factors impact on their buying decisions of connected home devices, the number one answer that was consistent in all countries was price, followed by features/functionality and then manufacturer brand.

"The Internet of Things promises many benefits to end-users, but also presents grave security and data privacy challenges," concluded Perry Hutton. "Crossing these hurdles will require clever application of various security technologies, including remote connection authentication, virtual private networks between end-users and their connected homes, malware and botnet protection, and application security - applied on premises, in the cloud and as an integrated solution by device manufacturers."

Survey methodology
Research for the Internet of Things: Connected Home survey was conducted by GMI, a division of Lightspeed Research, a leading provider of technology-enabled solutions and online responses for global market research. Each respondent claimed to be a homeowner between the ages of 20 to 50, and was determined to have substantial technology experience. The survey was administered in the following countries: Australia, China, France, Germany, India, Italy, Malaysia, South Africa, Thailand, the UK, and the US.