

Cyber Security: A New Exhibition

Opening winter 2015

# the tech. reinvented.

In 2012, The Tech Museum of Innovation launched a five-year institutional transformation that is redefining the museum as a Silicon Valley resource for innovation. The Tech aims to do this by creating deep experiences that are open-ended, social, and collaborative. New galleries under way include Social Robots, which challenges visitors to design and program a robot for human interactions in real-world settings, and Body Metrics, which uses technology to create a digital reflection of visitors that will enable them to assess their lifestyles’ influence on health in new ways. Multiple new “design challenge” galleries will cover the museum’s 30,000-square-foot lower level. The gallery makeovers on the upper level will also reflect this deeper engagement and highlight technology that benefits humanity.

# what is the cyber security exhibition?

*“It's the great irony of our Information Age – the very technologies that empower us to create and to build also empower those who would disrupt and destroy. And this paradox – seen and unseen – is something that we experience every day.”   
— President Barack Obama, 2009*

Understanding Internet privacy and acting on that knowledge is the best defense against cyber attacks in an increasingly complex online world. The Cyber Security Exhibition at The Tech (working title) will help visitors do this by asking them to assume the role of a professional whose goal is to protect online privacy.

Multiple game modules will allow museum guests to develop the skills to live a fulfilling and safe digital life. The modules will have increasing levels of complexity, just as cyber attacks have distinct degrees of intricacy. In the process, visitors will learn about the components that make up Internet communications, their vulnerabilities, and how these can be exploited if not properly defended.

Through the exhibition’s games and challenges, visitors will learn key facts about cyber security. They will be able to fully comprehend that the Internet is built and protected by real people, and that its structure is constantly evolving. Visitors will also gain an understanding of their personal responsibility to protect their own digital life. They will acquire tools to manage their security at home and an understanding of the creative and innovative processes involved in securing data.

# the exhibition experience

Upon entering the exhibition, visitors will be greeted by gallery staff and an introduction video explaining and describing the activities ahead. They will then be able to learn the skills employed by real security professionals in a training field comprised of zones. At the end of the training sessions, visitors will use their skills to catch a criminal or mole in the final game.

Each zone will cover a specific topic, such as encryption; phishing; strong passwords; data persistence and proliferation; social engineering techniques, which are often ground zero for a cyber attack; computer forensics; and personal behaviors and actions that can affect security.

Visitors will connect with the security professional’s role in each zone through fun and engaging content leveled according to age, experience, and how the interaction is proceeding. Visitors with limited time will be able to interact with one or two zones and still have an empowering experience.

After the training zones, visitors will enter the final game area, where they will learn more about whom they are charged with protecting. The environment of the final game might be a hospital where a criminal is pilfering personal data, a bank where the criminal is stealing money, or a company whose IP network is under threat due to a mole. The story and profiles behind the final game, woven through the entire exhibition, will evoke empathy and motivation.

The final game will allow for multiple ways to find the criminal, combining the skills learned in the training course. This type of activity, known as a design challenge, enables a deep level of engagement using hands-on activities to solve real problems. While there is one goal — to catch the criminal — the visitor will decide how it will be accomplished. Visitors will learn by failing and trying again, reinforcing important 21st century skills such as creativity, problem solving, collaboration, leadership, prototyping, risk taking, and perseverance.

The Cyber Security exhibition will be strategically placed across from the Body Metrics exhibition, where visitors will create elaborate digital profiles of themselves that include health and other personal information. This juxtaposition will remind visitors that everyone has a wealth of stored personal data vulnerable to exploitation.

For the 400,000-plus annual visitors to The Tech, this exhibition will:

* Help visitors better understand how the Internet works, including mobile devices.
* Generate increased awareness about online safety.
* Help visitors learn how to spot a cyber attack and develop strategies to defend themselves.
* Help visitors understand the importance of living securely in the virtual world, in parallel with what they do in the physical world.
* Inspire learning as visitors innovate to solve the design challenge.
* Inspire awareness, and perhaps passion, among children and young adults about careers in the cyber security field.
* Inspire community conversation about cyber security.

# beyond the exhibition

This exhibition will propel additional museum programming on cyber security at The Tech that includes guest lectures, hackathons, meetups, talks, and other high-profile events that foster conversations. The Tech will galvanize and localize discussions that would not happen without our dedication to serving as a community resource for innovation.

# timeline

Opening winter 2015.

# budget

$3 million

# your opportunity

A gift to the Cyber Security exhibition will align your company with a one-of-a-kind learning experience for the 21st century workforce. Donors will be recognized on the exhibition and will be entitled to many other benefits, including friends and family memberships and admission tickets and discounts on museum rentals.

# in gratitude

We value your consideration of partnership to support this work at The Tech and in the Silicon Valley community and look forward to many years of mutually beneficial collaboration. If you have any questions, we would be happy to discuss them and share more details of this exciting project. Thank you for your consideration of this philanthropic opportunity.

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