Hardware security benefits

**Transparency**
- By de-encryption, users can quickly and easily access the data they need.
- Comparison can be performed without the need for manual decryption.

**Simplification**
- For software-based encryption, applications and services have to be modified to decrypt the data and for hardware-based encryption, only the operating system drivers need to be modified to manage security.

**Zero impact**
- With SED, users benefit from:
  - No interference with upstream processes; drive controller (electronics) and is always on, providing a solution superior to less secure and performance-heavy software-based encryption.

**Sedimentation**
- With an SED, data is always encrypting through a process called pre-boot authentication, remote management, and/or re-use.

**Cost**
- The average cost of data per lost/stolen laptop is $154.
- The average total cost of data breach is $3.8M.

**Data Breaches**
- Worldwide, there were 4,817 Data Breaches reported in 2015:
  - 2 million pass on to 2016, with 8,920 Data Breaches.
  - Data centers can be devastion, with 3 billion applications.

**Protection**
- Data breaches are hitting the headlines for the loss of an unencrypted drive containing personal records.
- Dr. Robert Thibadeau, contributor to SED standards, predicts a rapid acceleration of SED and SED specifications contributed to the TCG adopted and upstream processes.

**Sanitizing drives**
- To sanitize or re-purpose drives, users or admins simply delete the encryption key and data is rendered unreadable, eliminating the need for time-consuming drive data-overwriting processes and breach notifications (state, federal, and international legislation often explicitly grant an "encryption safe harbor" for encrypted data).

**Save the data-Encrypting Drives**

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**SED Benefits**

- Compared to software-based encryption solutions, SEDs offer many benefits:
  - **Remote SED management**
  - **Decryption capabilities**: SEDs are able to automatically and transparently notify users, allowing the specific actions to be performed and required.
  - **Ease of management**: SEDs are easy to set up and manage remotely.
  - **Cost**: SEDs are cost-effective and can reduce the likelihood of a business coming 24 months.
  - **Security numbers accounts for 2%, and by year 2020 that will increase to 50%.

**The Internet of Things**

- Much of it relates to the advent of the Internet of Things (IoT), connecting a vast universe spanning from jet engines and cars to mobile phones and, yes, dog collars.

- The Internet of Things is...