



Content as a Driving Force in Developing Mass Storage Solutions

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Personal Data



Personal Secure Data



Mobile Content



Commerce, Authentication and Enterprise



Sizing the market

Mobile Content

Mobile Content TAM Projected for 2007

\$ 25B

Music



Video



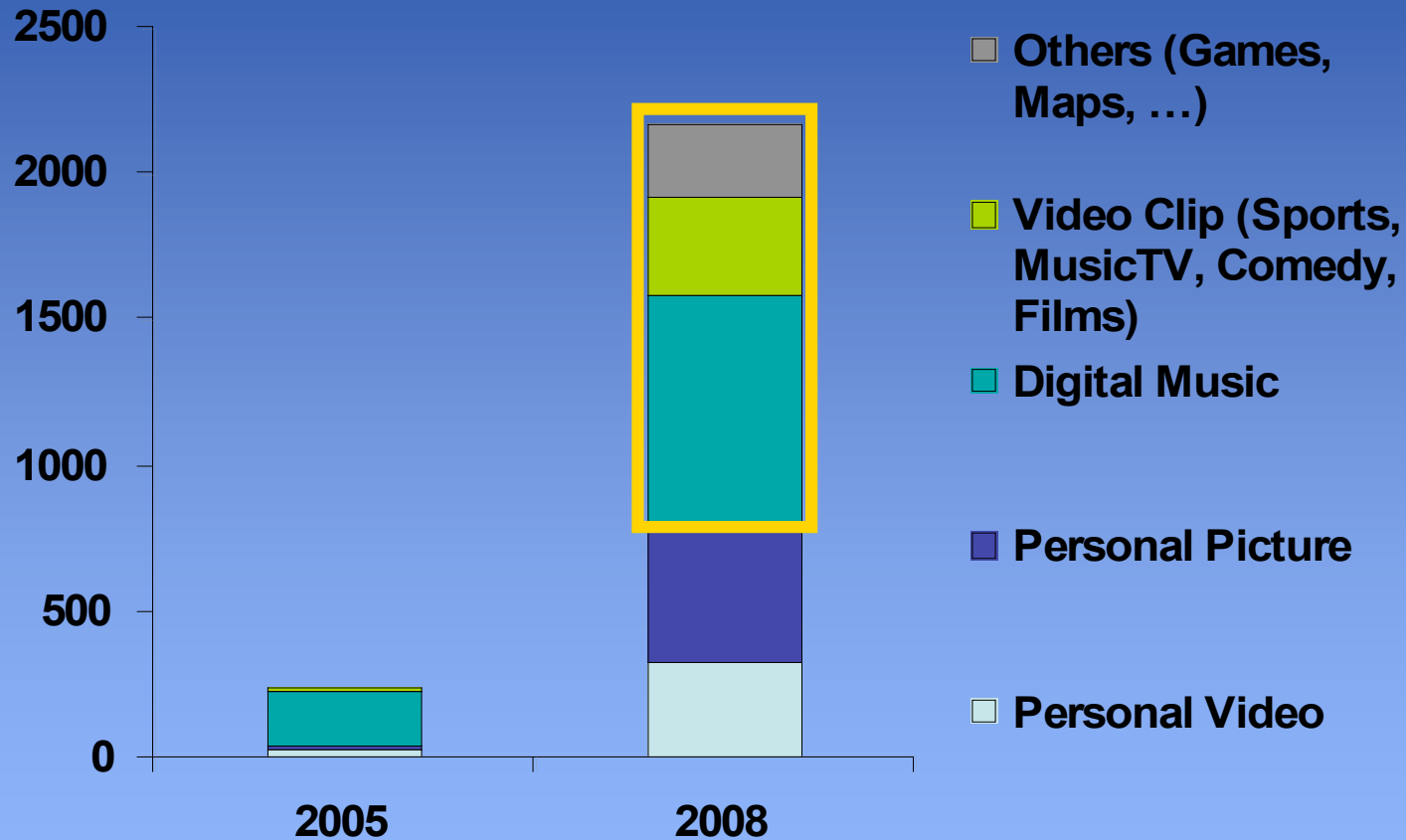
MobileTV



Games

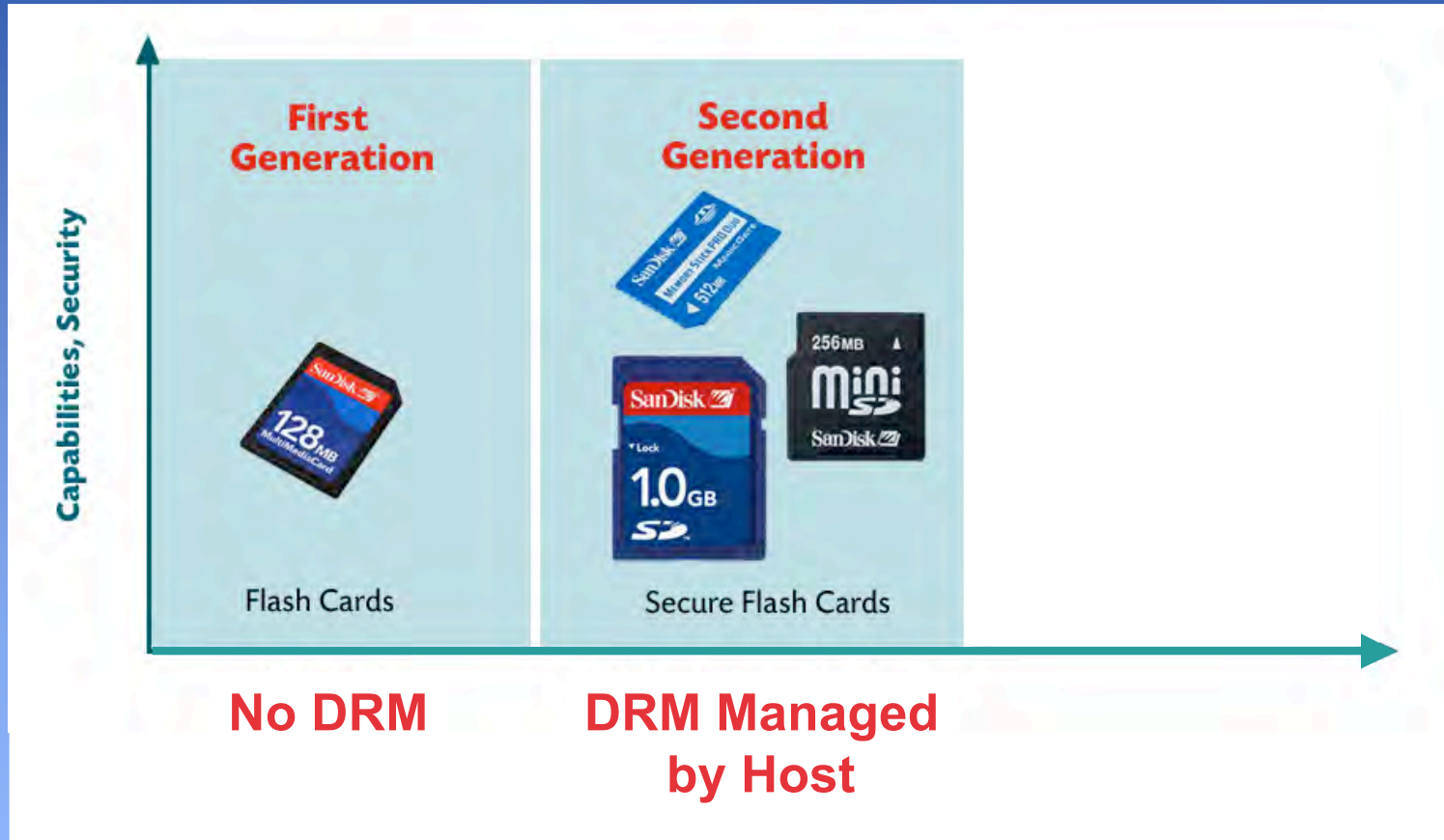


Content drives storage Capacity



Digital Rights Management (DRM) solutions will accelerate consumption of storage/capacity)

Flash Cards Today





Barriers

Mobile Content

- **Mobile Market Fragmentation**
 - HW, SW, Platform
- **Multiple DRM Standards**
- **Content is NOT portable (e.g. Forward Lock)**
- **Inadequate Security of Removable Cards**



Challenges

Mobile Content

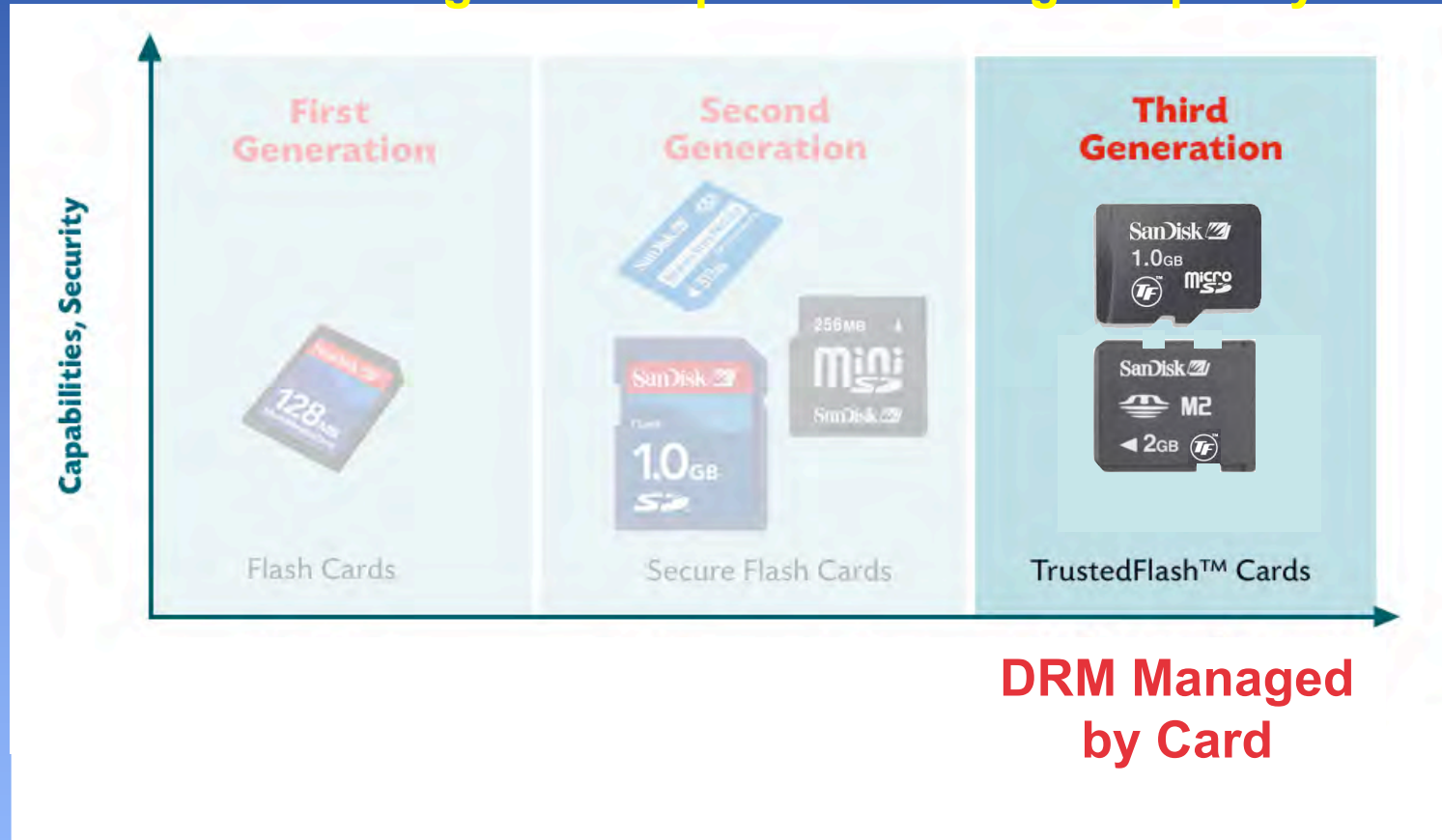
- "Problems like **poor usability**, **uncompetitive prices**, a **lack of flexibility** and **limited consumer usage** of their phones' internet capabilities will constrain the download of full music tracks by mobile phones for years to come."
 - Rebecca Jennings, senior analyst, Forrester

- **9 out of 10** of potential digital music customers would rather **pay DOUBLE** for **interoperable content** (having the right to use it in more than one device) instead of paying for device bound content.
 - Indicare - 2005

Third Generation Cards



Accelerating Consumption of Storage/Capacity



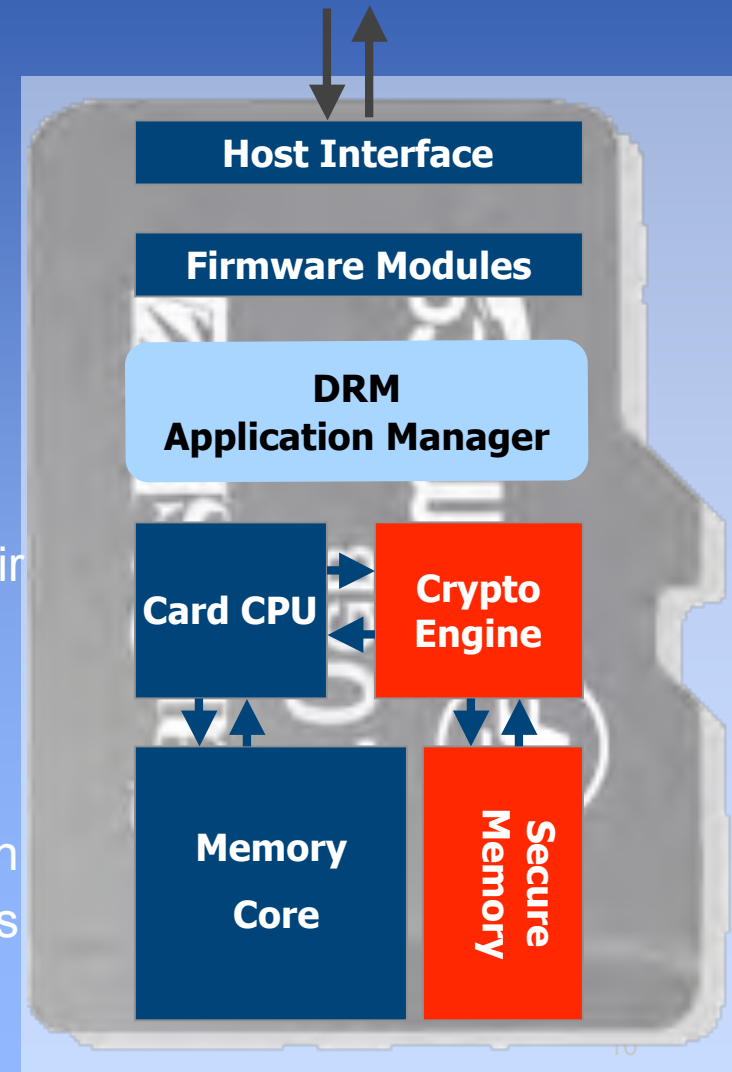
- ✓ Card-Based Content Protection and Digital Rights Management (DRM) Solution
- ✓ State-of-Art Security Architecture

Enabling Content Portability TrustedFlash Card



TrustedFlash Technology

- **Backward compatibility with standard cards**
 - No hardware change required
- **Not Card Format Specific**
 - First implementation on SD family
- **State-of-art Cryptographic Processor**
 - Random Number Generator
 - Symmetric encryption (AES/DES/3DES)
 - Asymmetric encryption (PKI) and key pair generation
 - SHA1 Hash
- **Flexible architecture to offload Host**
 - Performs on-the-fly encryption/decryption
 - Secure communications channel protects against “bus snooping”
 - Support Multiple DRM Schemes





TrustedFlash Approval by Major Content Providers



Enabling Business Models

TrustedFlash Cards



Preload



Download

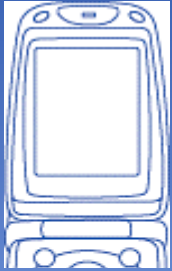


Sideload

Preload Content TrustedFlash Cards



- A **secure** and **flexible** distribution media
- Allows content to be played (securely) in **multiple devices**
- Enthusiastically embraced by major labels
- As a **promotional tool** for Operators and handset manufacturers

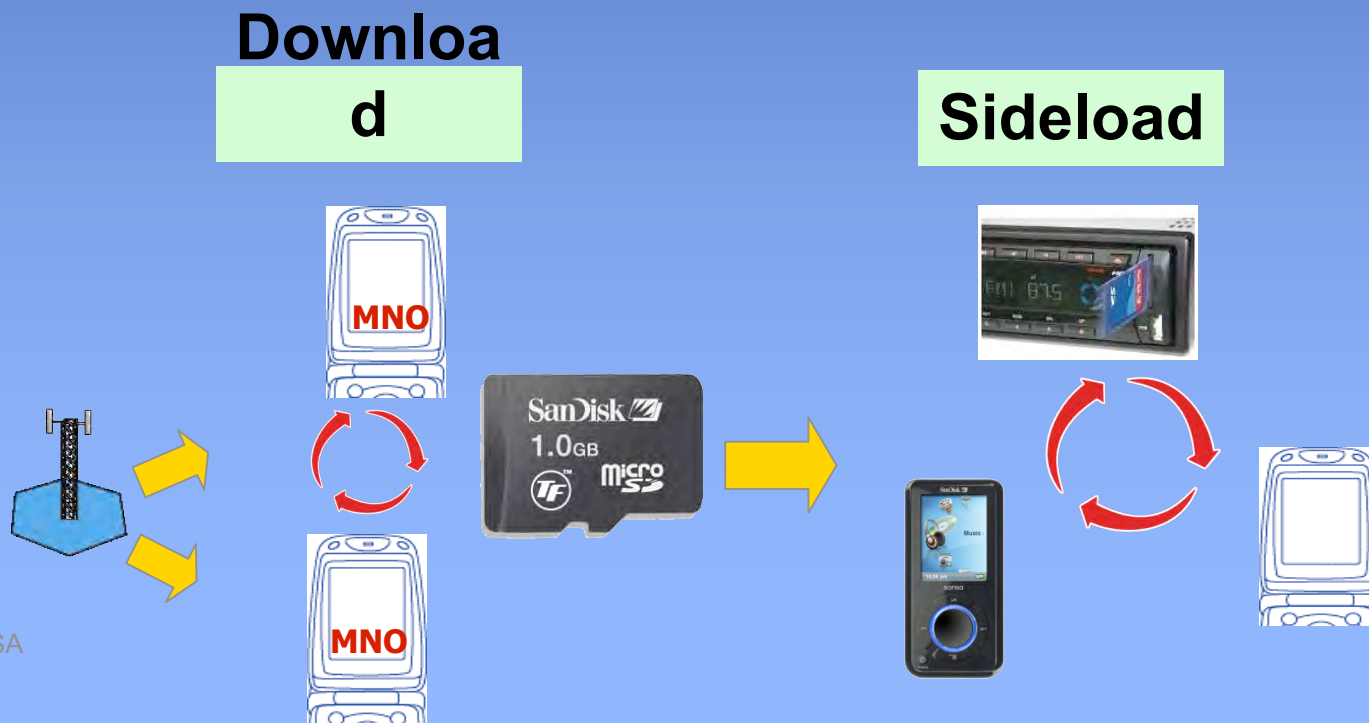


Preload



TrustedFlash Cards

- TrustedFlash allows **Content Portability** among handsets
- Higher security** enables downloading higher value content (AAA Content) to Flash Cards
- Allows **control** of content distribution



Summary

- **Protected Content is a major driver for higher capacity Flash Cards**
- **Flash Cards must be evolved to solve “content portability” and “security concerns” existing in the market**
- **TrustedFlash cards allow storage and distribution of valuable protected Content on Flash Media**