Security at your Fingertips

Unleashing the Power of Biometrics

Locks should only open for the right person- but who is that?

Traditional locking systems are far from fool-proof:

- Keys can be lost, stolen, or copied.
- Combinations, codes and passwords may be guessed or forgotten.
- Physical locking mechanism can be picked by anyone with access to YouTube tutorials .

Everyone already carries with them a unique, foolproof identifier. Your fingerprints:

- Cannot be lost or misplaced.
- Are unique to their "carrier".
- Are near impossible to replicate.

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Why only phones?

Currently, smartphones are the only product group in which fingerprint scanning is becoming ubiquitous – why is that?
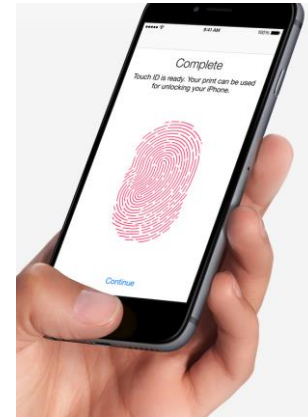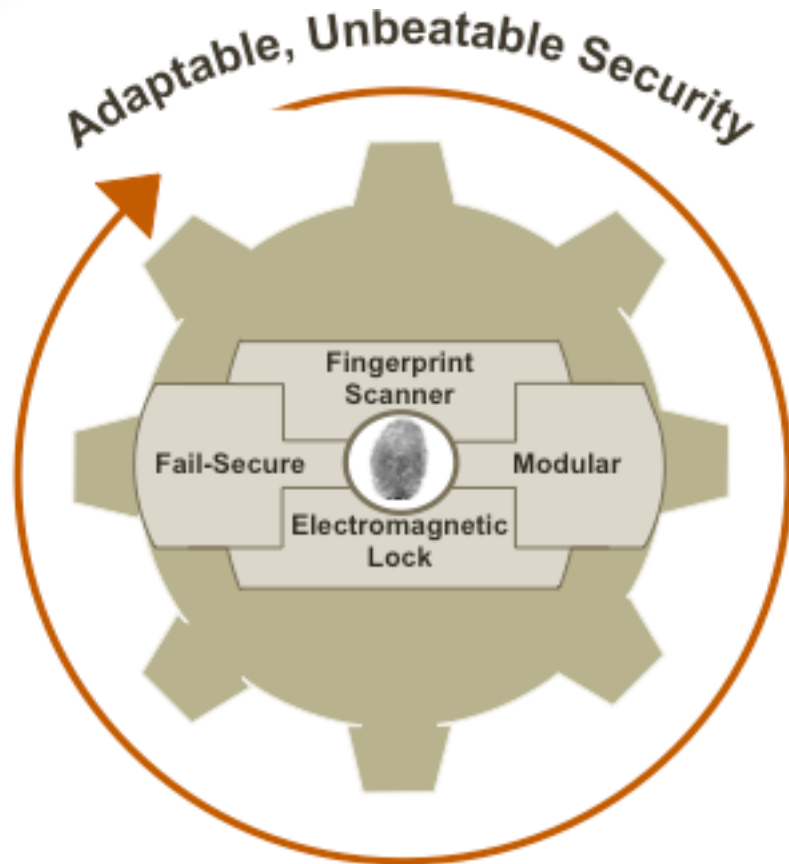
Most of our valuables are carried external to our phones; the use cases for fingerprint scanners are endless:

- Wallets
- Luggage and briefcases
- Backpacks
- Bike locks
- Storage lockers
- Laptops

Building a world-class security system

Fingerprint Scanner
- Fingerprint scanners ensure the highest level of security for the user.

Electromagnetic Lock
- Electromagnetic locks have no moving parts to break or pick.

Fail-Secure
- A fail-secure mechanism allows for minimal power usage with a portable battery, and offers protection even without power.

Modular
- A modular implementation allows for integration into a wide range of production methods and end-products.

Envisioning a biometrically secure world with a two-step approach

The time is ripe for a product to disrupt the personal locking industry and help biometrics achieve ubiquity. This may be done in a two-step approach:

Develop a simple, elegant, and flexible security system based on fingerprint scanning and EM locking technology.

Partner with leading brands (retailers, manufacturers, etc) to integrate this technology into already-popular products.

Security System

Industry Players

End Products

Development plan and team

While the constituent components of the proposed security system (fingerprint scanner, electromagnetic locking, operated by a microcontroller) are not in themselves innovative, their combination and implementation in everyday locking needs has the potential to disrupt the lock industry.

Furthermore, the established and improving nature of the component technologies suggests that this is not only feasible, but also economically viable.

The 6-month horizon will be spent developing and coding a barebones prototype whilst seeking out potential partner companies (Kryptonite, Master Lock, etc.) willing to integrate the security system into their products. We estimate that the production cost of each security system can be kept under $100, even on a small scale. Once established, we will be able to take advantage of economies of scale to reduce this cost.

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