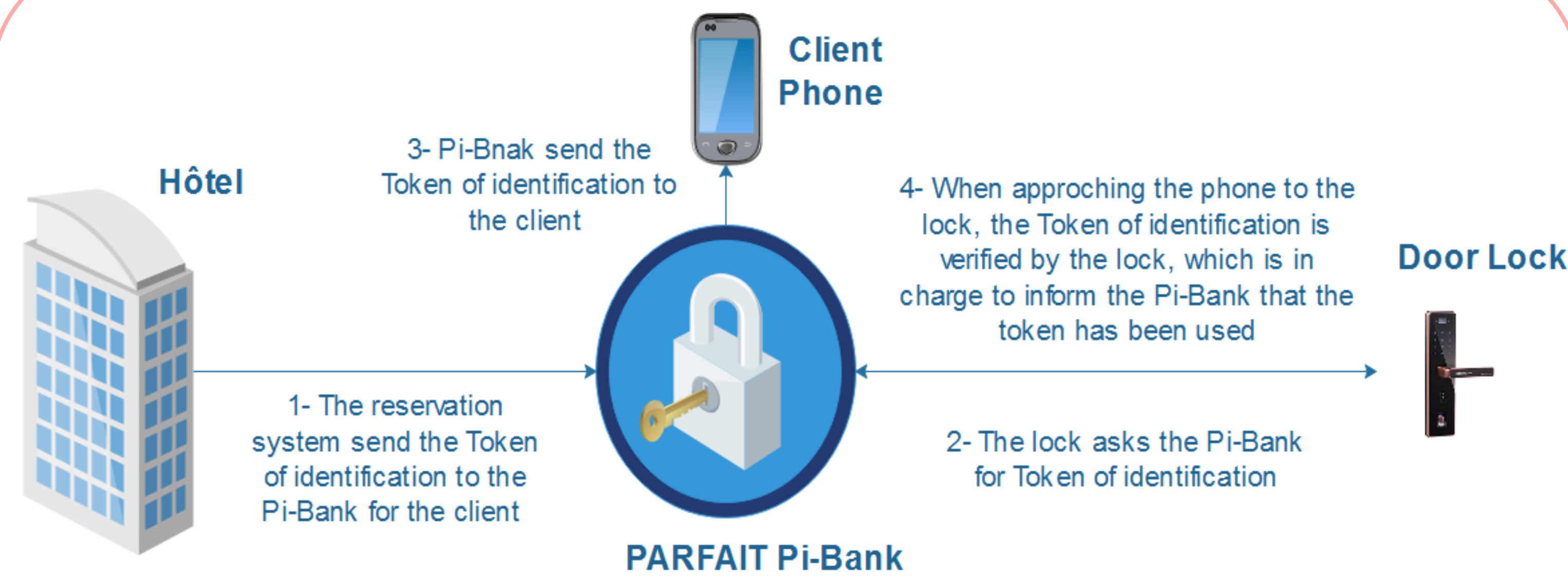
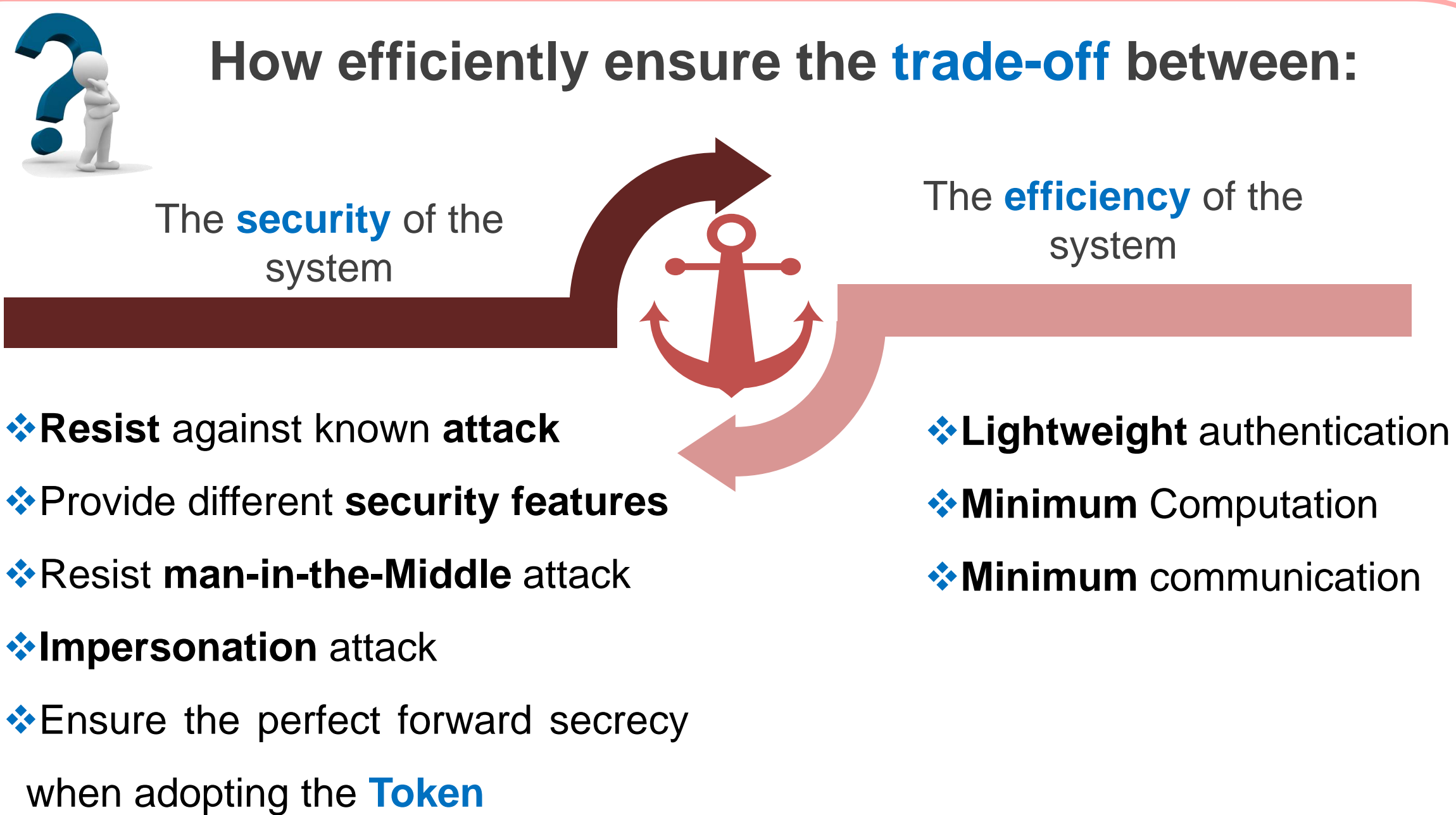


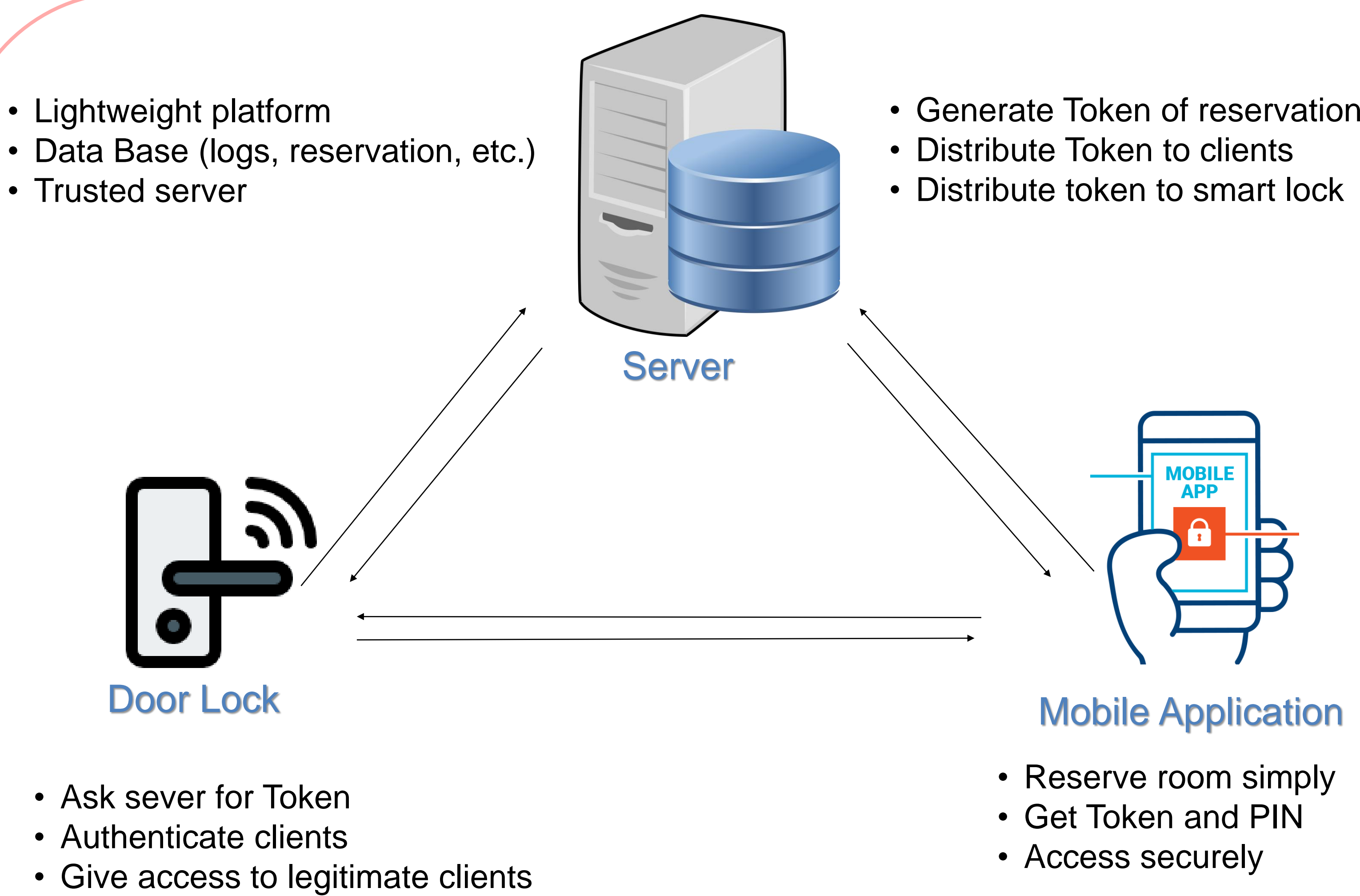
## Smart hotel use case



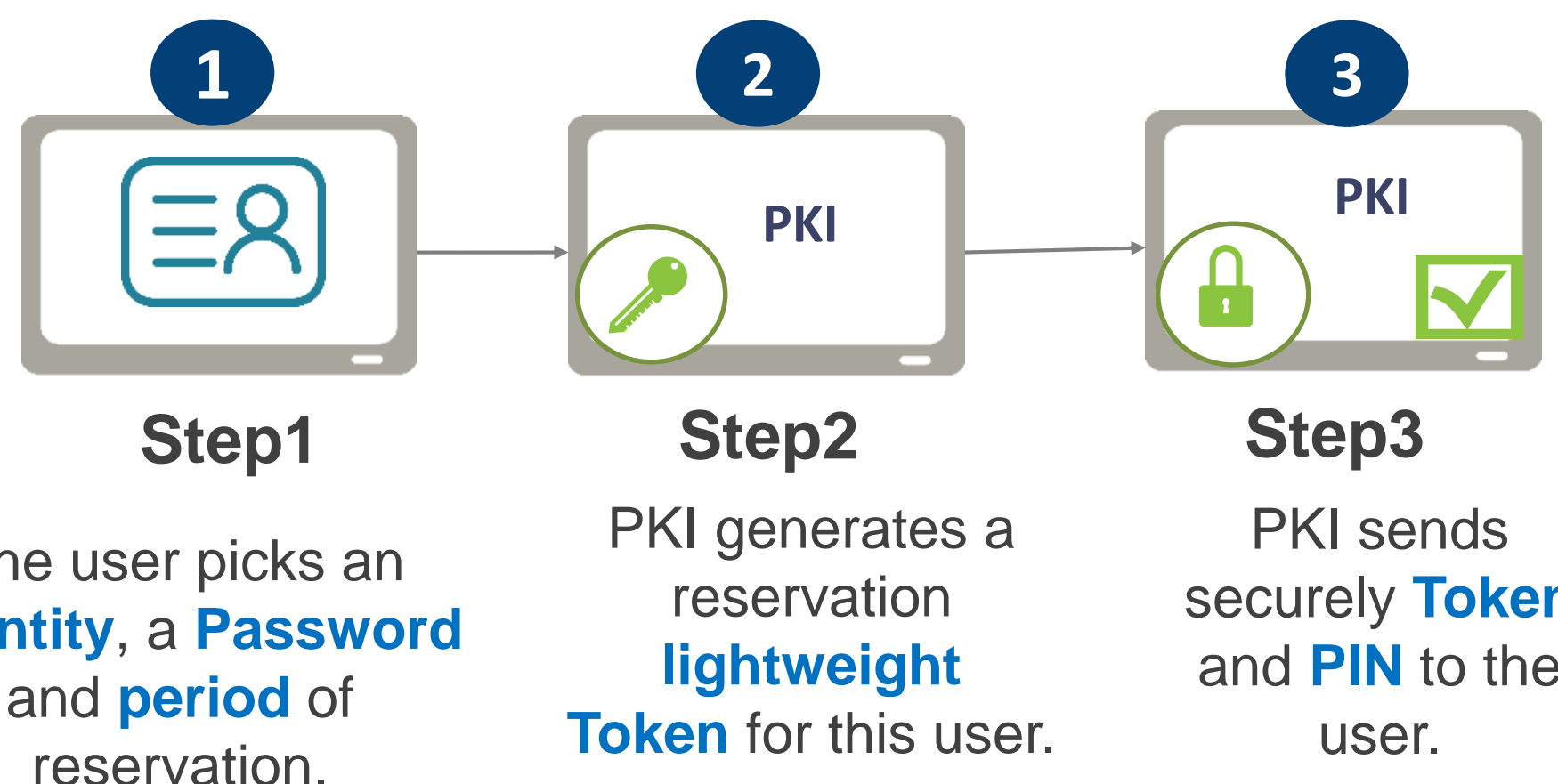
## Challenges



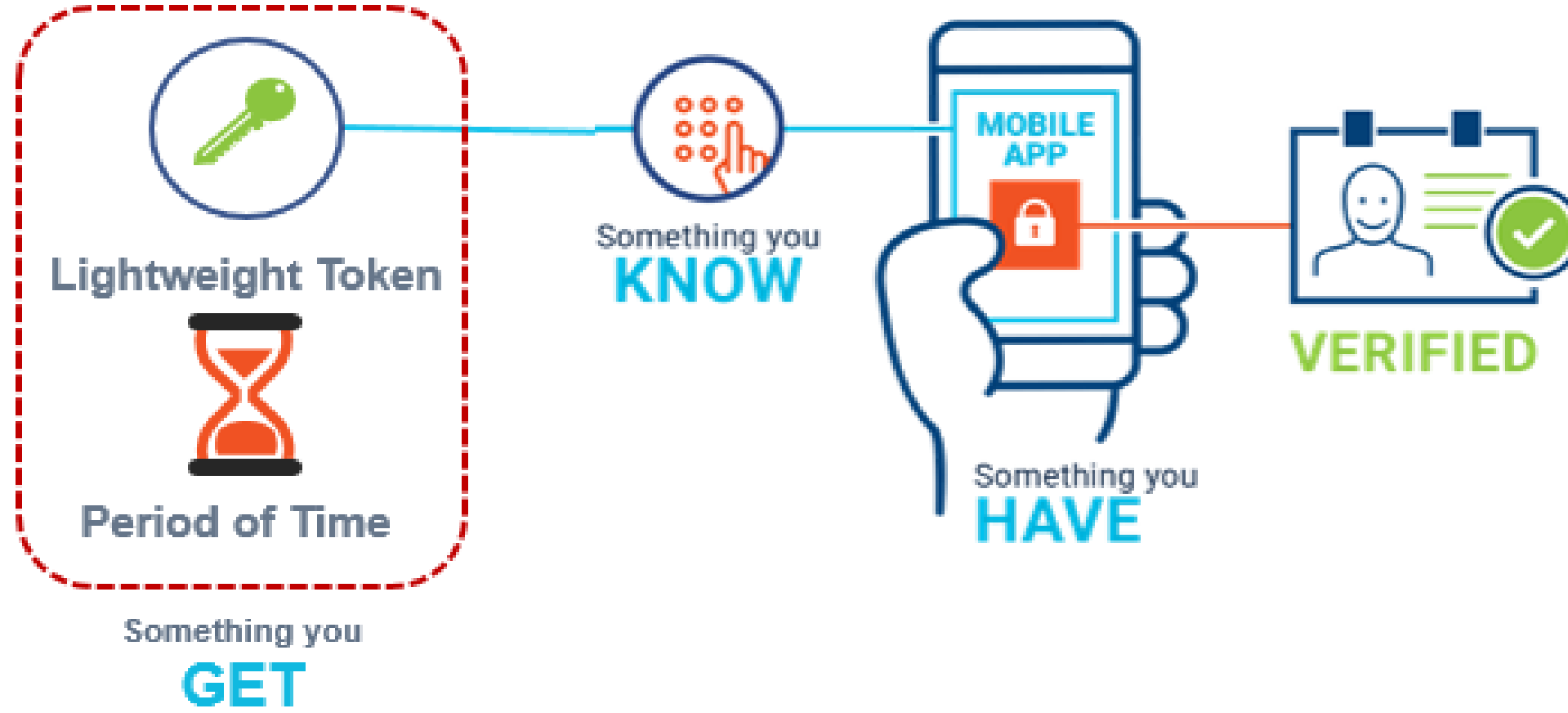
## Architecture



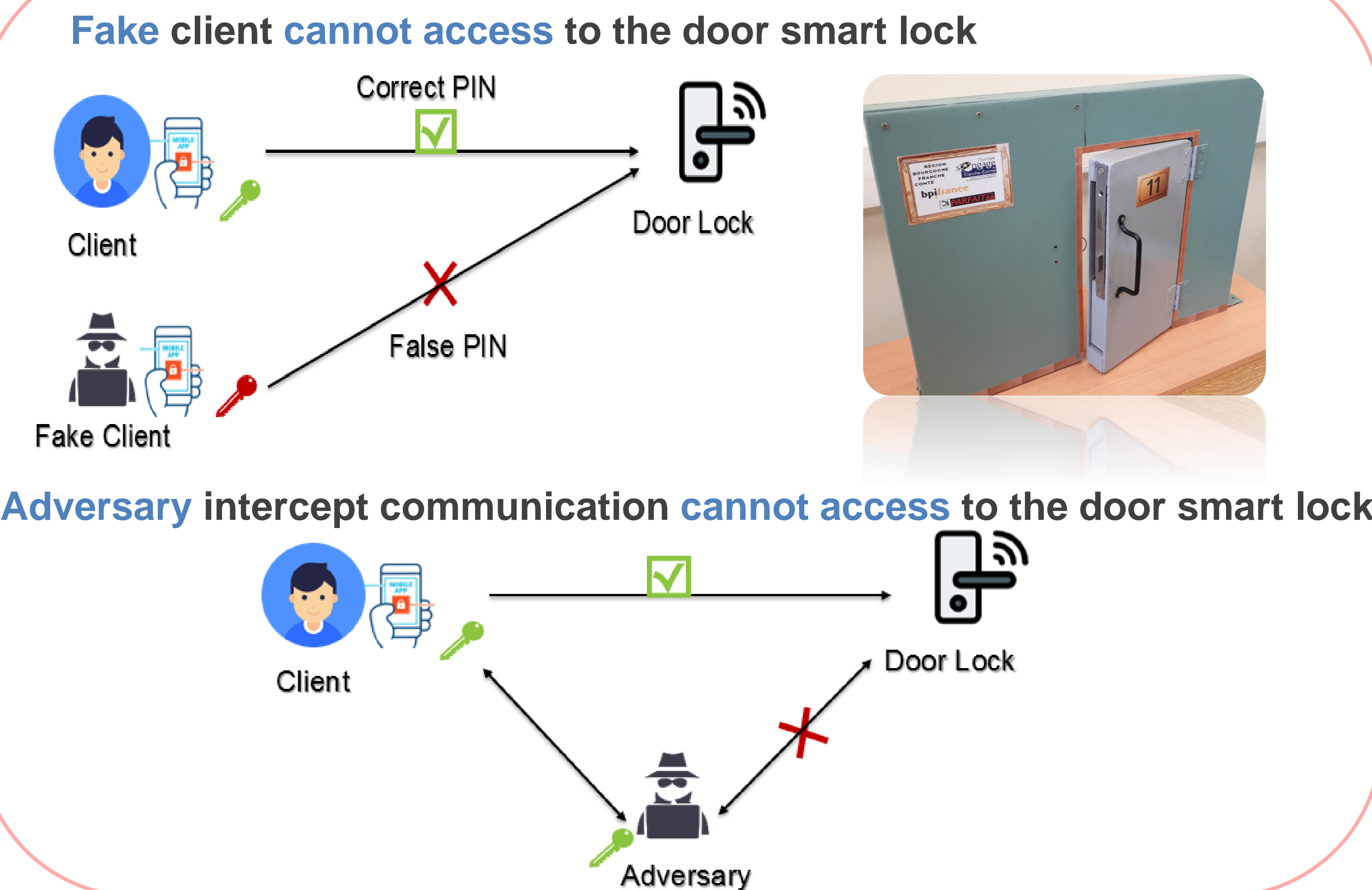
## Room Reservation



## Room Access

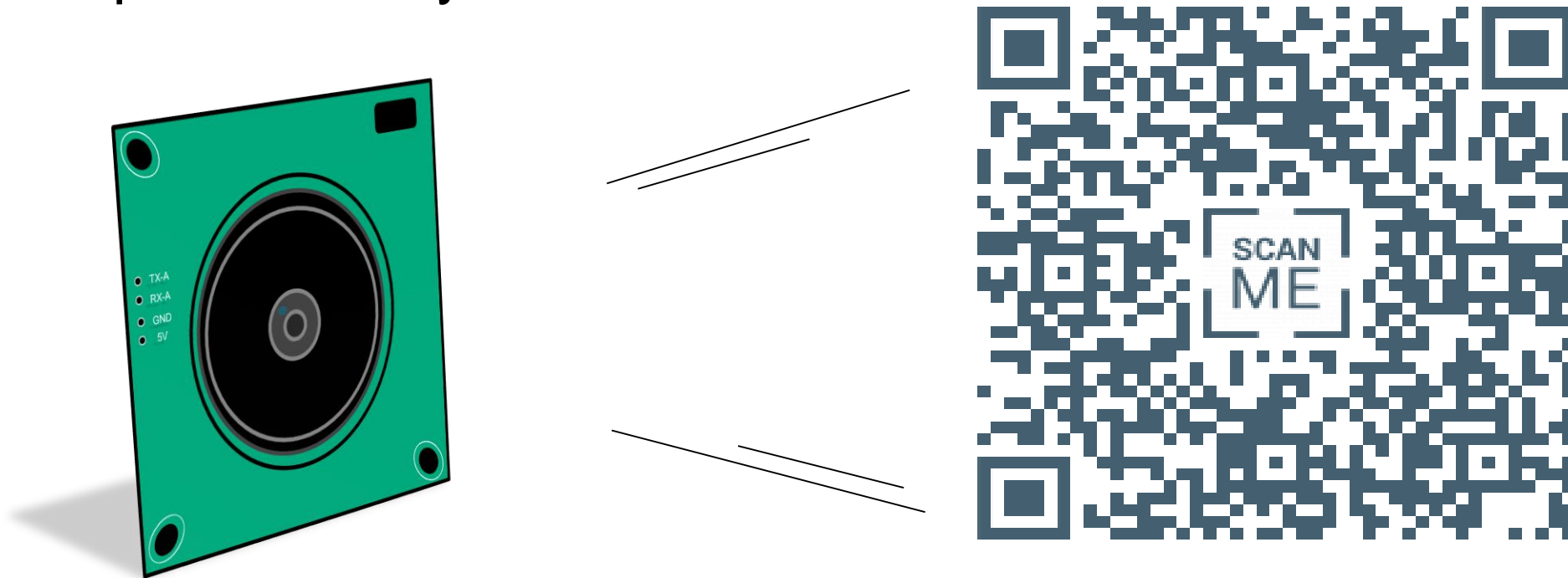


## Attack Scenario



## Defense Strategy

- The attacker cannot generate the **Token** because it is **randomly generated**.
- The attacker can eavesdrop the reservation **Token** but it is **encrypted**, so, it cannot gain access.
- The attacker can have the access pass. However, it is **hashed** and the hash function is irreversible.
- The attacker could not have access with the user's smartphone if he does not have the PIN code
- We can replace PIN by **QRcode**



## Conclusion

- Easy reservation and access to rooms using your personal smartphone.
- The system is lightweight and ensures a secure communication among system entities.