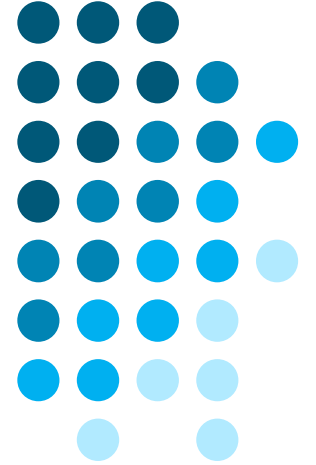


# Kamuda NFC Uygulamaları ve Fırsatlar

Ekrem AKSOY



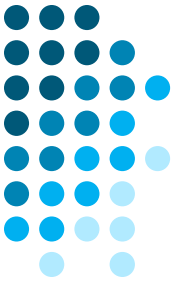
# İçerik

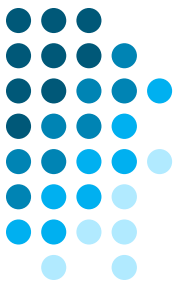
Near-Field Communication Nedir?

Faydaları Nelerdir?

Mevcut Uygulamalara Bakış

NFC ile Geliştirilebilecek Uygulamalar



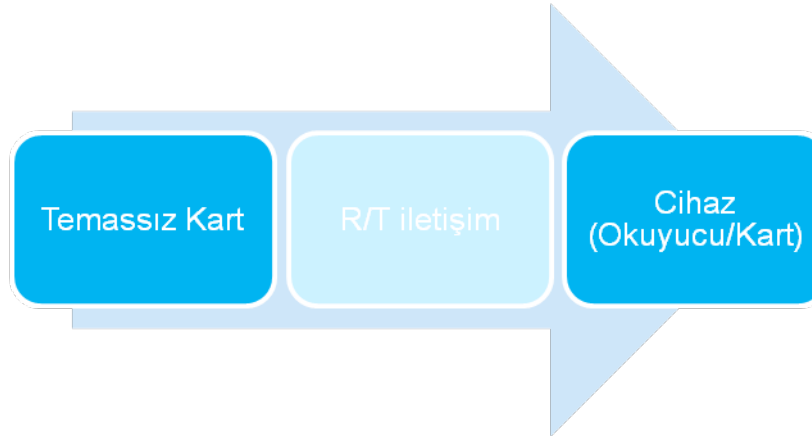


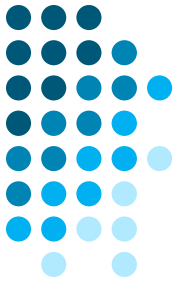
# Near-Field Communication Nedir?

*“Cihazlar arasında yakın mesafeden veri iletimini sağlayan yüksek frekans, kısa mesafeli bir kablosuz iletişim teknolojisidir.” – Wikipedia*

*ISO/IEC 14443 – Temassız Kart*

*ISO/IEC 18092 – NFC I/F Pr.1 (ISO/IEC 21482 – Pr.2)*

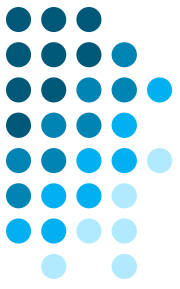




# Near-Field Communication Nedir?

- NFC Forum – 2004
  - Ödeme Teknolojileri – Visa, Mastercard
  - Cihaz Üreticileri – Nokia, Sony/Ericsson, Samsung, ...
  - Çip Üreticileri – STmicroelectronics, NXP, ...
  - Operatörler – AT&T, Telenor, ...

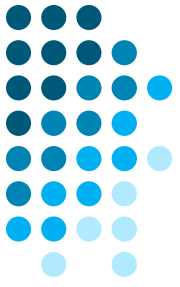




# NFC vs. Bluetooth

	NFC	Bluetooth
Menzil	< 0.2 m	~ 100m.
Veri hızı	424 kbit/s	2.1 Mbit/s
Bağlantı süresi	< 0.1 s.	~ 6 s.
Yapılandırma*	Gerekli değil	Gerekli

# NFC



ISO/IEC 14443

Güvenli Uygulama Platformu

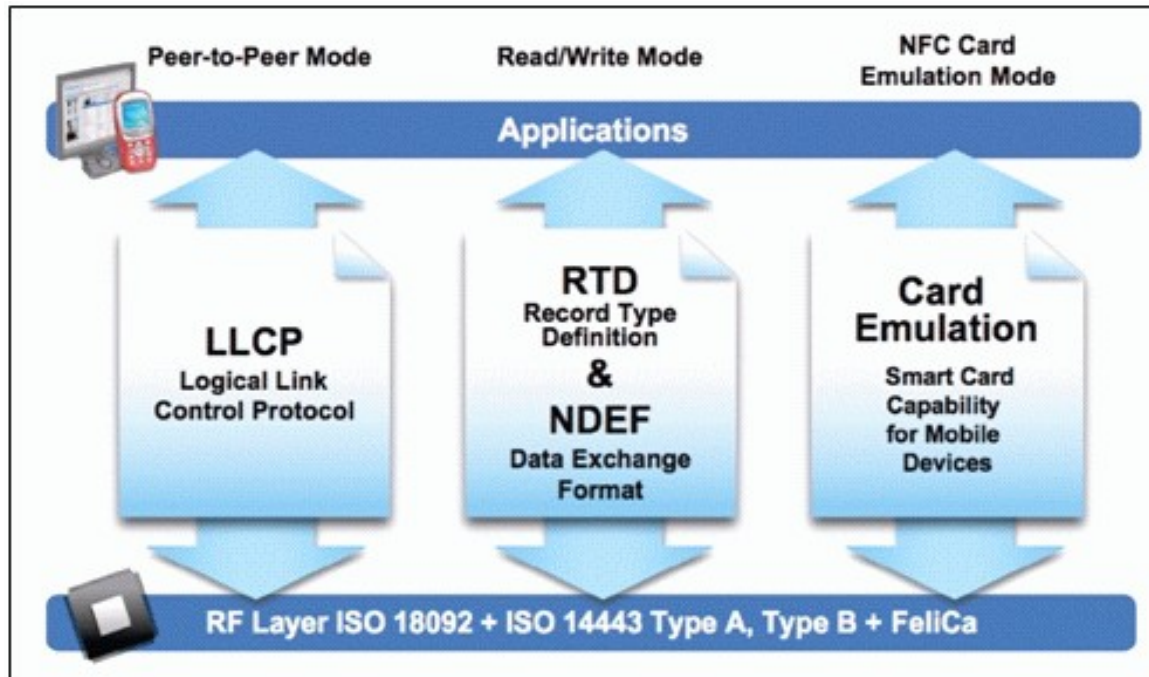
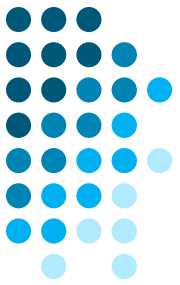
Kredi  
Kartı

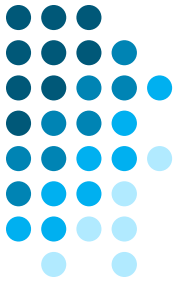
Ulaşım  
Kartı

Loyalty  
Kart

Erişim  
Kartı

# NFC





# Temel Kullanım Alanları



Ödeme

Bilet



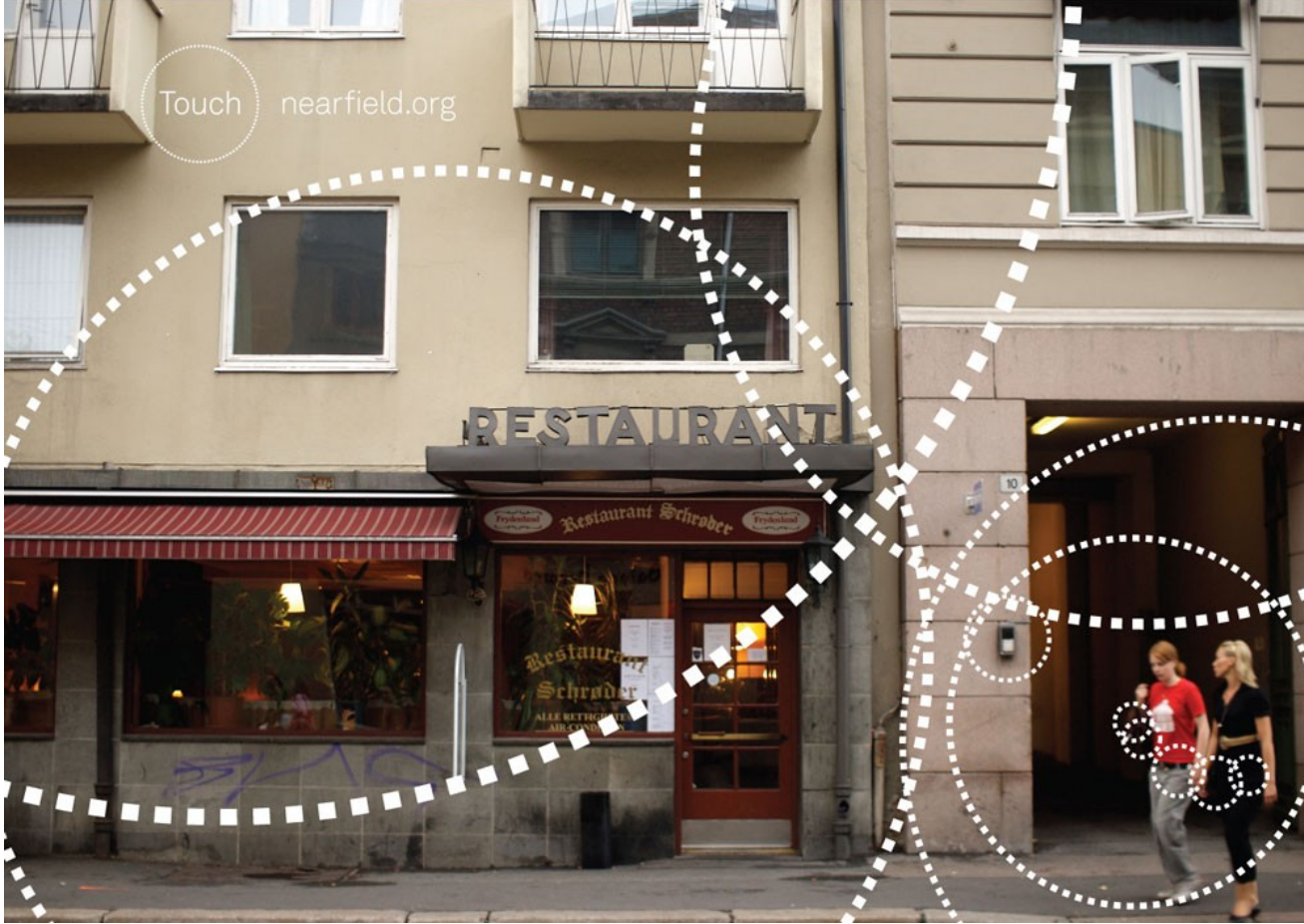
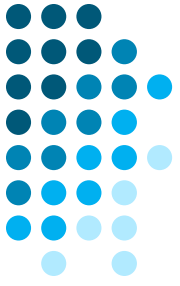
Servis  
Sorgulama

Paylaşım



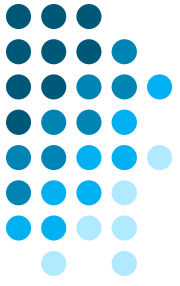
# Örnek Kullanımlar

(photos courtesy of Touch)



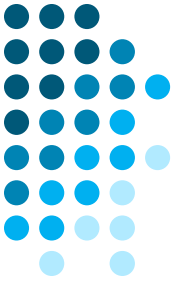
# Örnek Kullanımlar

(photos courtesy of Touch)



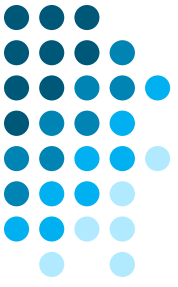
# Örnek Kullanımlar

(photos courtesy of Touch)



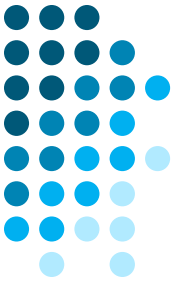
# Örnek Kullanımlar

(photos courtesy of Touch)



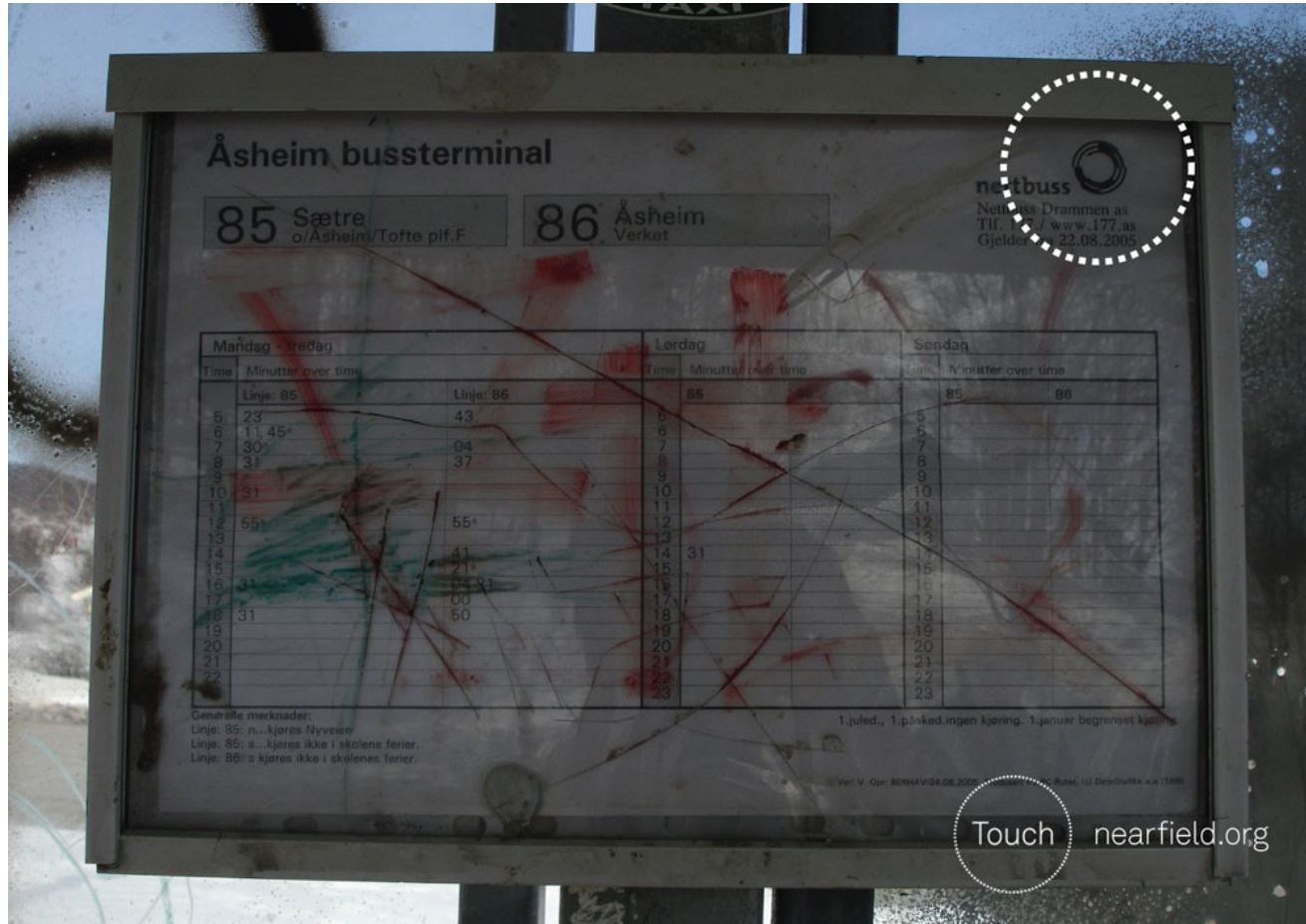
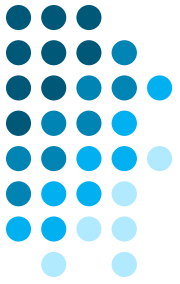
# Örnek Kullanımlar

(photos courtesy of Touch)



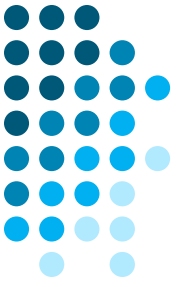
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(photos courtesy of Touch)

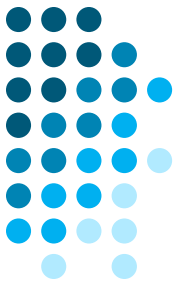


# Örnek Kullanımlar

(photos courtesy of Touch)

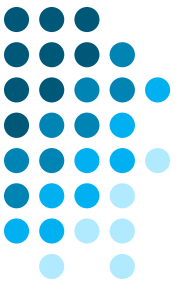


Touch nearfield.org



# Mevcut Denemeler

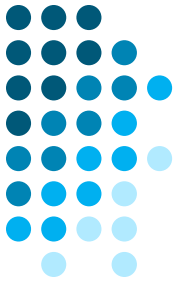
- Manchester FC / Orange – Seson Biletleri
- O2 / Oyster Card London – Ulaşım Kartı
- Sprint / SanFransisco Transport – Ulaşım Kartı
- VivoTech – Avustralya – Ödeme ve Ulaşım
- RaboBank – Hollanda – Ödeme
- Türkiye\* – Garanti/Turkcell, Avea



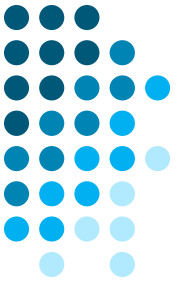
# Kamu Uygulamaları

- Ulaşım Hizmetleri
- Şehir Rehberi / Kent Haritası
- Fen İşleri / Saha Çalışmaları
- Abonelik / Tahsilat
- Evrak / Döküman Yönetimi / Arşivleme
- Güvenli Geçiş / Erişim
- Kültürel Faaliyetler / Etkinlik Biletleri
- Turizm Bilgi Noktaları / Kiosk

# Sorularınız



# Teşekkürler...



Ekrem AKSOY – [eaksoy@ogu.edu.tr](mailto:eaksoy@ogu.edu.tr)