### MOBILE COMPUTING AND CROWDSOURCING



Swaraj Andhale 21102A0011

Vedant Rane 21102A0012

Shreekant Pukale 21102A0013

Deep Salunkhe 21102A0014

**Gauri Naik** 21102A0015

#### INTRODUCTION

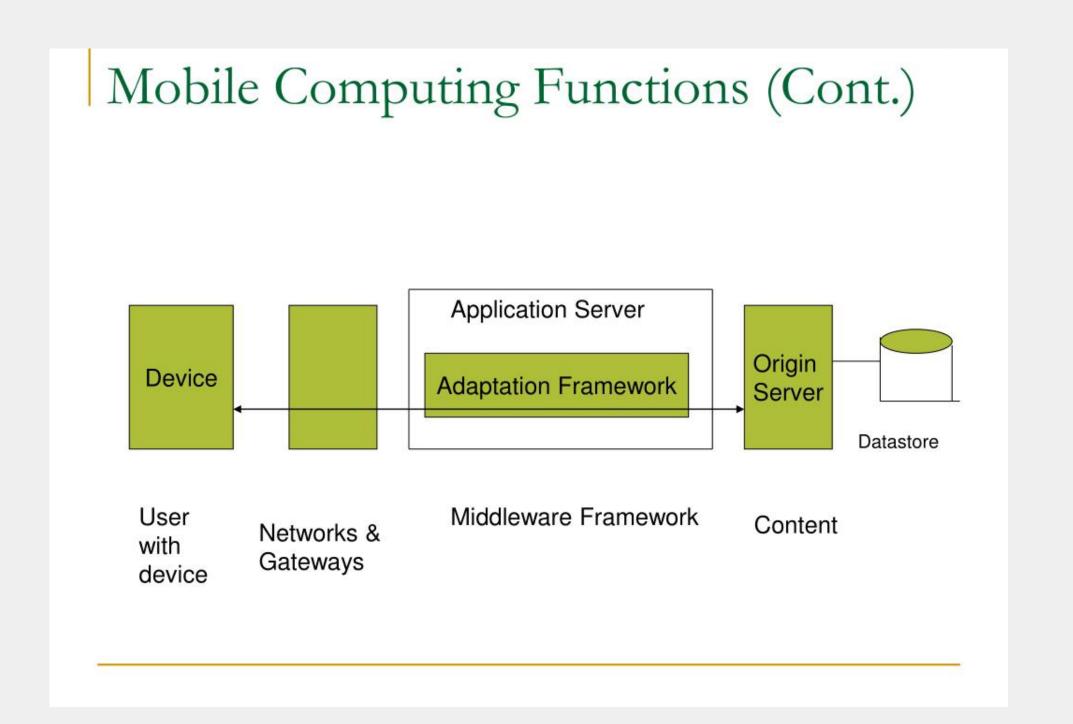
#### What is Mobile Computing?

Mobile computing refers to using portable devices like smartphones and tablets to access digital services and information wirelessly, enabling users to stay connected and productive while on the move.

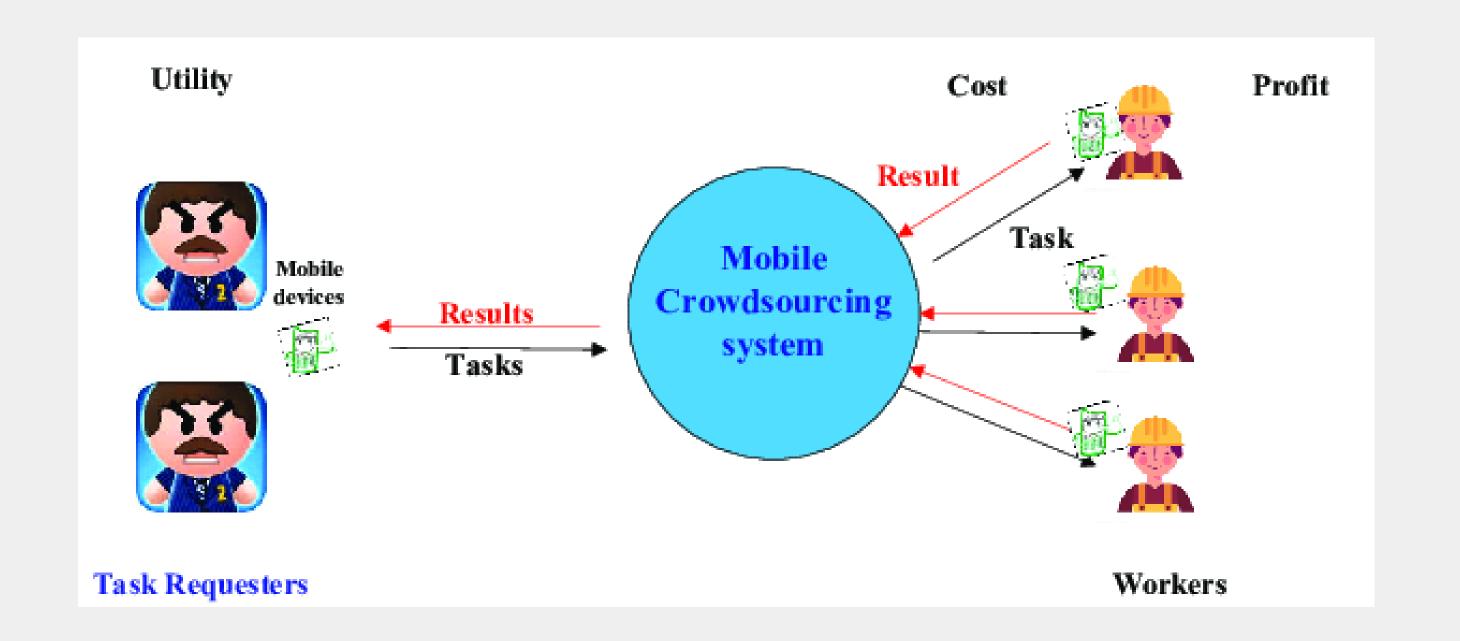
#### What is Mobile Crowdsourcing?

Mobile crowdsourcing is the utilization of cloud computing resources to handle computational tasks and services from mobile devices, enhancing performance and functionality by leveraging remote servers and data centers.

#### BASIC WORKING OF MOBILE COMPUTING



#### BASIC WORKING OF MOBILE CROWDSOURCING



#### APPLICATIONS OF MOBILE COMPUTING

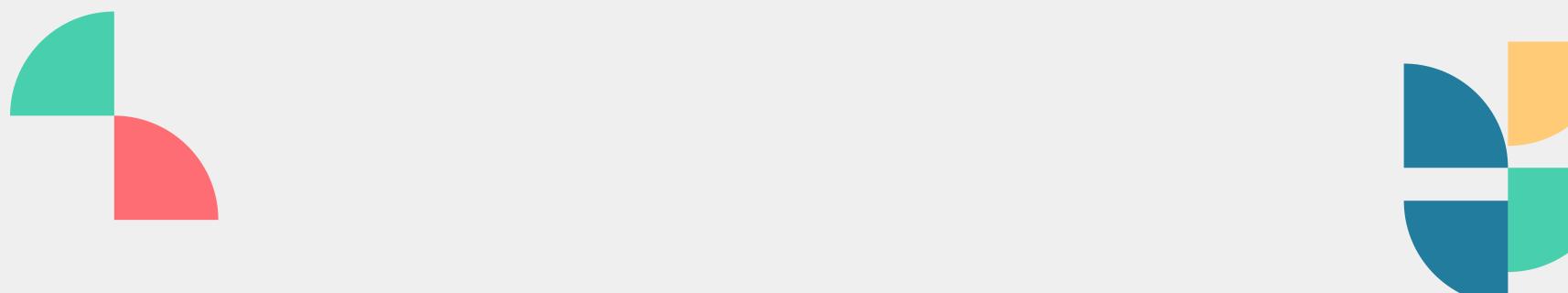
- 1. Mobile Banking: Perform transactions, check balances, transfer funds.
- 2. Location-Based Services (LBS): Navigation, real-time traffic, location-based ads.
- 3. **Mobile Health (mHealth):** Health monitoring, fitness tracking, remote consultations.
- 4. Mobile Commerce (mCommerce): Online shopping, payments, coupons.
- 5. Mobile Entertainment: Streaming, gaming, social media.
- 6. Mobile Learning (mLearning): Access course materials, online classes.
- 7. Enterprise Mobility: Workforce management, CRM, inventory tracking.
- 8. Mobile Communication: Calls, messaging, social networking.
- 9. Augmented Reality (AR) and Virtual Reality (VR): Immersive experiences, gaming, training.
- 10. Smart Home Automation: Control devices, automate home functions.
- 11. Emergency Services: Report emergencies, receive alerts, share location.

#### APPLICATIONS OF MOBILE CROWDSOURCING:

- 1. Crowdsourced data collection for research and analysis.
- 2. Collaborative content creation for projects and documents.
- 3. Location-based services and navigation assistance.
- 4. Disaster response and emergency management.
- 5. Healthcare support through remote monitoring and telemedicine.
- 6. Microtask crowdsourcing for various small-scale tasks and projects.

#### CHALLENGES IN MOBILE COMPUTING:

- 1. Limited battery life
- 2. Connectivity issues
- 3. Security and privacy concerns
- 4. Device fragmentation
- 5. Limited processing power and memory
- 6. User interface design
- 7. Data synchronization and consistency





- 1. Data quality
- 2. Trust and privacy
- 3. Incentive mechanisms
- 4. Task coordination
- 5. Network constraints
- 6. Scalability
- 7. Ethical considerations





#### FUTURE TRENDS AND OPPORTUNITIES IN MOBILE COMPUTING:

• Future trends and opportunities in mobile computing include advancements in 5G technology, edge computing, loT integration, Al, AR/VR, wearable tech, m-commerce, improved security, mobile cloud computing, and sustainable practices.





#### FUTURE TRENDS AND OPPORTUNITIES IN MOBILE CROWDSOURCING:

- 5G Boost: Enhanced speed and connectivity for more efficient mobile cloudsourcing.
- Al Integration: Smarter task management and resource allocation through Al.
- IoT Collaboration: Seamless integration with IoT for data processing.
- Security Enhancement: Strengthening data security measures.
- AR/VR Evolution: Advancements in cloud-powered AR/VR experiences.
- Smart City Solutions: Real-time analytics for urban management.
- Telemedicine Growth: Expansion of remote healthcare services.
- Crowdsourcing Innovation: Collaborative problem-solving through crowdsourcing.
- Green Computing: Energy-efficient cloud computing practices.
- Business Optimization: Streamlined operations with mobile cloudsourcing solutions.





## CONCLUSION In conclusion, mobile computing and mobile crowdsourcing present promising prospects for innovation and efficiency in an increasingly connected world. Despite challenges, the ongoing evolution of technology offers significant opportunities for growth and collaboration. Embracing emerging trends and leveraging data can unlock their full potential, shaping the future digital landscape.

# THANKYOU