Wearable Internet of Things for Health Care in Canada

Shannon School of Business, Cape Breton University

Marketing Research - MRKT 5312 Section 21

Dr. Ayse Ersoy

**Group – 9 Research Questionnaire**

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| Name | Student ID | Student Email |
| **Simarpreet Kaur** | 0285168 | CBU22CLBN@cbu.ca |
| **Srinivas Kyanam** | 0286299 | Cbu22cnhv@cbu.ca |
| **Simarpreet Singh Arora** | 0284320 | cbu22cjqh@cbu.ca |
| **Ishwer Singh** | 0281266 | CBU22CCDR@cbu.ca |

**Objective**

* To analyze and present the growth prospective of WIOT in healthcare management in Canada.

**Research Questions**

1. What are the major categories of users relying on WIOT devices for healthcare.
2. To identify the widely used application in health care.
3. Have WIOT devices been able to reduce the number of visits to doctors or help in early diagnoses.
4. What are the influencing factors for better user adoptability of WIOT devices.
5. What are the factors restricting the usage of WIOT devices.
6. What suggestion can help in the Growth of WIOT.
7. How can the regulatory framework in Canada impact the adoption and deployment of WIOT in healthcare management, and what regulatory challenges need to be addressed?

**Conceptual Map**

A diagram of a conceptual map

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**Research Questionnaire**

Demographic Information and familiarity

1. Gender:
2. Male
3. Female
4. Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Age:
   1. Under 18
   2. 18-24
   3. 25-34
   4. 35-44
   5. 45-54
   6. 55-64
   7. 65 or above
6. Location (Province/City) - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Occupation:
   * 1. Salaried
     2. Self-Employed
     3. Business
     4. Other
8. Have you ever used WIOT devices or applications?
   * 1. Yes
     2. No
9. How familiar are you with the concept of Wireless Internet of Things (WIOT)?
   * 1. Very familiar
     2. Somewhat familiar
     3. Not familiar at all
10. Are you currently employed or studying in a field related to technology or IoT?
    * 1. Yes
      2. No

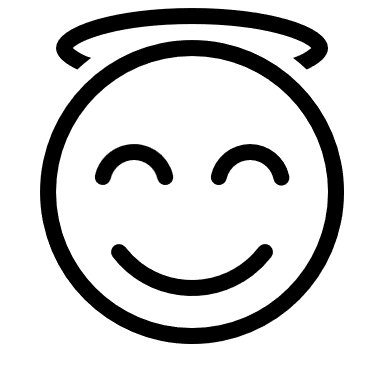
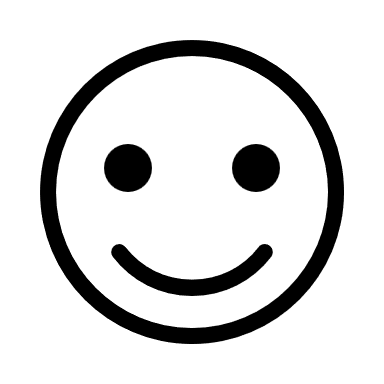
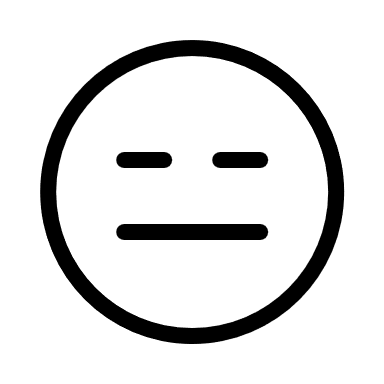
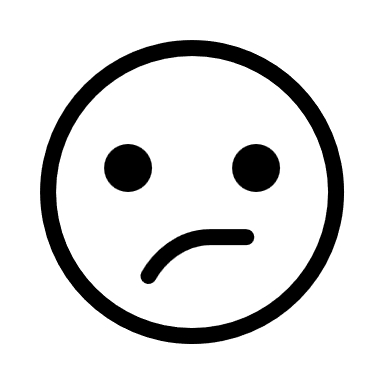
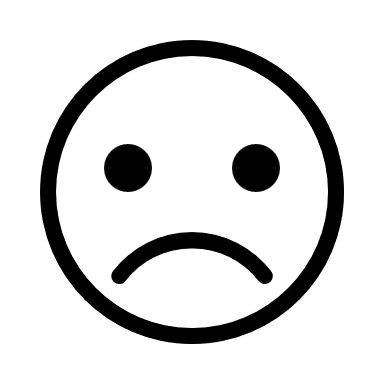
Application

1. What category or application you are using wiot devices?
2. Epidermal skin technology
3. Health monitoring
4. Entertainment and gaming
5. Sports and fitness

Types

1. If it is Health monitoring, then please specify the type of wearable IoT device(s) you use (e.g., fitness tracker, smartwatch, medical monitoring device, etc.):
2. Healthcare device
3. Smart Glasses
4. Smart Watch
5. Activity Tracker
6. other
7. If it is another what device it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

WIOT Benefits:

1. What factors influence your decision to adopt WIOT technologies? (Select all that apply)
2. Convenience
3. Efficiency
4. Cost-effectiveness
5. Security and Privacy Concerns
6. Environmental Impact
7. How satisfied are you with the performance and reliability of WIOT devices or applications you have used?
8. Very satisfied 
9. Somewhat satisfied 
10. Neutral 
11. Somewhat dissatisfied 
12. Very dissatisfied 
13. Which features do you consider most important in a wearable IoT healthcare device? (Rank in order of importance):
    * 1. Emergency notification
      2. Fitness tracking
      3. Medication reminders
      4. Monitoring vital signs

WIOT Disadvantages:

1. What do you perceive as the primary challenges or barriers to the widespread adoption of WIOT (Wireless Internet of Things)? Please select all that apply.
2. Concerns about data privacy and security
3. High initial implementation costs
4. Lack of standardized protocols and interoperability
5. Limited availability of skilled workforce for WIOT deployment and management
6. Regulatory hurdles and compliance issues
7. Potential for job displacement due to automation
8. Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Are there any specific concerns regarding privacy or security associated with WIOT (Wireless Internet of Things) technologies that you would like to highlight? Please check all that apply.
10. Data breaches or unauthorized access to sensitive information
11. Lack of control over personal data collected by WIOT devices.
12. Potential for surveillance or misuse of data by third parties
13. Vulnerabilities in WIOT devices or networks leading to cyberattacks.
14. Challenges in ensuring data integrity and authenticity.
15. Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Future Growth and Opportunities:

1. Are you suffering from any of the disease?
2. Ischemic Heart Disease
3. Heart Failure Symptoms
4. Hypertension
5. Diabetes
6. others \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. None
8. Would you be willing to share your wearable IoT data with your healthcare provider for better health management?
9. Yes
10. No
11. Unsure
12. Using WIOT help you in any means for managing your healthcare?
13. Reduce Doctor Visit
14. Helps in Early Diagnosis
15. Help in taking precautions.
16. More cost friendly
17. None
18. What improvements or additional features would you like to see in future wearable IoT (Internet of Things) devices for healthcare? Please select all that apply.
19. Enhanced accuracy in health data monitoring (e.g., heart rate, blood pressure)
20. Integration of advanced sensors for detecting additional health metrics
21. Longer battery life for extended usage without frequent charging
22. Improved connectivity for seamless data transmission to healthcare providers
23. Incorporation of AI-driven analytics for real-time health insights
24. Customization options to cater to specific healthcare needs.
25. Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
26. In which sectors or industries do you foresee the greatest potential for WIOT (Wireless Internet of Things) growth in Canada? Please check all that apply.
27. Healthcare
28. Agriculture
29. Transportation
30. Manufacturing
31. Energy
32. Retail
33. Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Suggestions

1. What regulatory or policy measures do you believe are necessary to support the growth and development of WIOT (Wireless Internet of Things) in Canada? Please check all that apply.
2. Establishing standards for interoperability and data security
3. Providing incentives for research and development in WIOT technologies
4. Creating frameworks to address privacy concerns and data ownership rights.
5. Allocating spectrum and infrastructure resources for WIOT deployment
6. Developing guidelines for ethical use of WIOT data
7. Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Top of Form
8. If big companies invest in WIOT, on which factors you will buy the products along with health management.
   * 1. Brand Value/Market Value
     2. Cost effectiveness
     3. Better Products Features
     4. Easy Availability
     5. All the above

Feedback

1. Have you compared the readings of IOT vs traditional devices?
   * + 1. Yes
       2. No
2. If Yes, how do you rate the variation in terms of percentage?
   * 1. 5-10%
     2. 10-30%
     3. >30%

**Conceptual Map With Questions Marked**

A diagram of a company

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