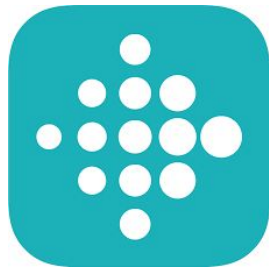




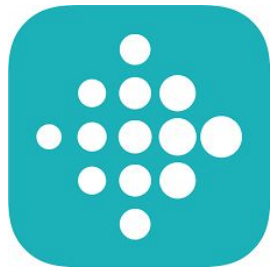
# Tol

Sung Woo Park  
Bertha Hu  
Baekchun Kim

We all care about  
**our health...**



We all care about  
**our health...**



But what about our  
**digestive health?**

**3 in 4**

Americans live with digestive issues

**less than half**

report symptoms to their doctors

**10%**

of GI disorders are diagnosed in the US

# 22 million

people in the US are hospitalized  
because of GI issues

# 250,000

die annually from digestive disorders

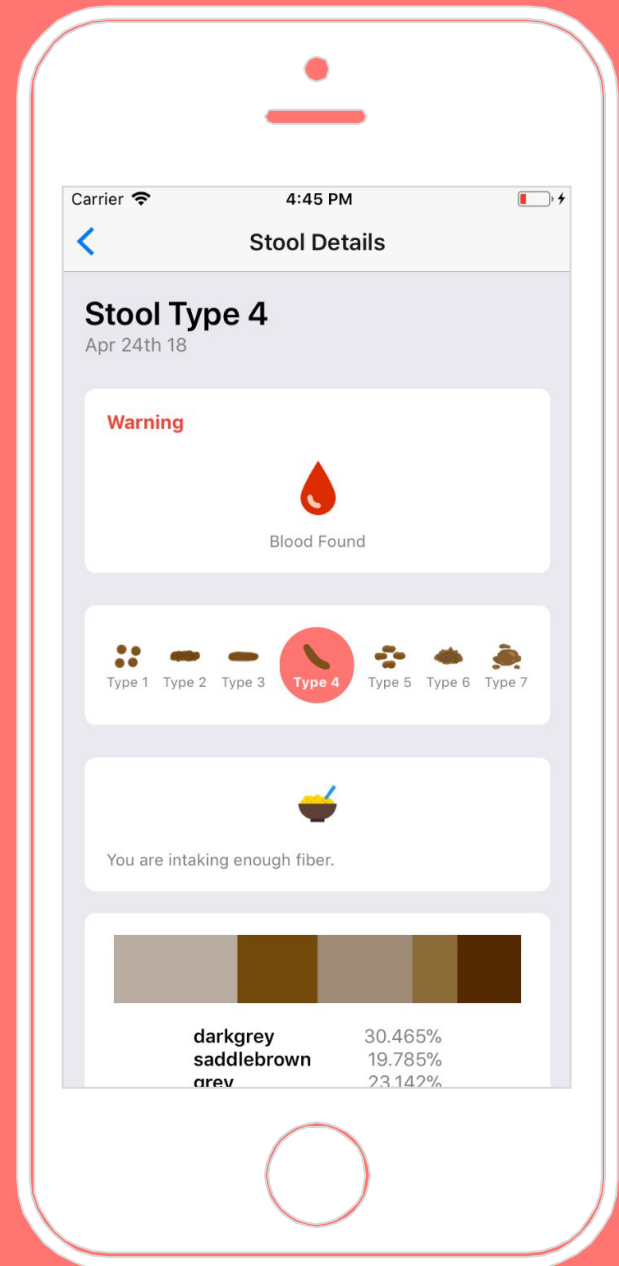
# Take charge of your digestive health.

Toi automatically tracks your  
bowel movements.

Receive **real-time analytics** of your  
digestive health and **identify issues**  
before it's too late.



# Demo



# ■ Our validation



- Worldwide survey (n = 3,000+)
  - 68% interested in using Tol
- Support from gastroenterologists
  - Advised by three Hopkins doctors
- Rise in digestive health interest
  - Fecal transplants, poop pills
  - 300,000+ users on similar apps
- Data-tracking becoming norm



# ■ Target market



1. People with GI issues
2. At-risk individuals
3. Health-conscious people
  - Tech generation
  - Users of health-tracking services
4. Smart toilet adopters
  - Asia

# ■ Entry strategy



- Work with GI-diagnosed people
  - Alyssa's IBD patients
- Expand to credible institutions
- Push out marketing initiative
  - Traditional ads
  - “Competitors”
  - Incentivization
  - Retail sales
  - Insurance deals

# ■ Upcoming features



- Visual analytics summary
- Individualized data
  - Based on given diseases
- Medical report conversion
- Integration with health apps
  - Gyroscope, Apple Health, FitBit, MyFitnessPal, Cara, etc.
- Chemical analysis

# Thank you

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## Team



Sung Woo Park



Bertha Hu



Baekchun Kim

## Advisors



Alyssa Parian  
(MD)



Harold Lehmann  
(MD, PhD)



Douglas Mogul  
(MD, MPH)

# Appendices

# ■ A: Competitors

## Bowel Movement Trackers

- Simple:
  - Poop Log - 100,000+
  - Poop Diary - 100,000+
  - Other similar apps
- Complex:
  - Cara - #1 Food & Symptom
  - Bowelle - IBS tracker
  - Other similar apps

## Smart Toilets

- Kohler Numi
  - \$6,672.60
- Toto Neorest
  - \$4,500.00
- American Standard AT200
  - \$4,200.00
- Idealing Smart Toilet
  - \$24,999.99
- Toto's Intelligence Toilet II
  - \$6,100.00

## ■ B: Market Data

- Preventative healthcare industry
  - \$432.3 billion by 2023
- Smart toilet industry
  - CAGR of 13% by 2023
  - 70% of 54 million households in Japan
- Wearables industry
  - \$25 billion by 2019
  - Fitness trackers take 40% of share
  - 40 million Fitbits sold by 2010
- Health IoT industry
  - \$158 billion by 2022
  - Global health tracking technology market will be \$18.8 billion by 2019

# C: Financial Projections

	Q1 18	Q2 18	Q3 18	Q4 18	Q1 19	Q2 19	Q3 19	Q4 19
Device Sales	\$0	\$0	\$25,000	\$100,000	\$250,000	\$500,000	\$1,250,000	\$3,000,000
Subscription Revenue	\$0	\$0	\$0	\$0	\$25,000	\$90,000	\$300,000	\$900,000
<b>Total Revenue</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$275,000</b>	<b>\$590,000</b>	<b>\$1,550,000</b>	<b>\$3,900,000</b>
R&D	\$0	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Salaries	\$0	\$0	\$0	\$0	\$0	\$60,000	\$120,000	\$180,000
Equipment	\$110	\$1,000	\$5,000	\$20,000	\$50,000	\$100,000	\$250,000	\$600,000
Licensing	\$0	\$5,000	\$5,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Marketing	\$0	\$0	\$1,000,000	\$1,050,000	\$600,000	\$300,000	\$300,000	\$300,000
<b>Total Expenses</b>	<b>\$110</b>	<b>\$6,000</b>	<b>\$1,030,000</b>	<b>\$1,091,000</b>	<b>\$671,000</b>	<b>\$481,000</b>	<b>\$691,000</b>	<b>\$1,101,000</b>
<b>Pre-tax Income</b>	<b>\$110</b>	<b>\$6,000</b>	<b>\$1,005,000</b>	<b>\$1,091,000</b>	<b>\$396,000</b>	<b>\$109,000</b>	<b>\$859,000</b>	<b>\$2,799,000</b>