TOTO®

# Smart Toilet Tablet Controller

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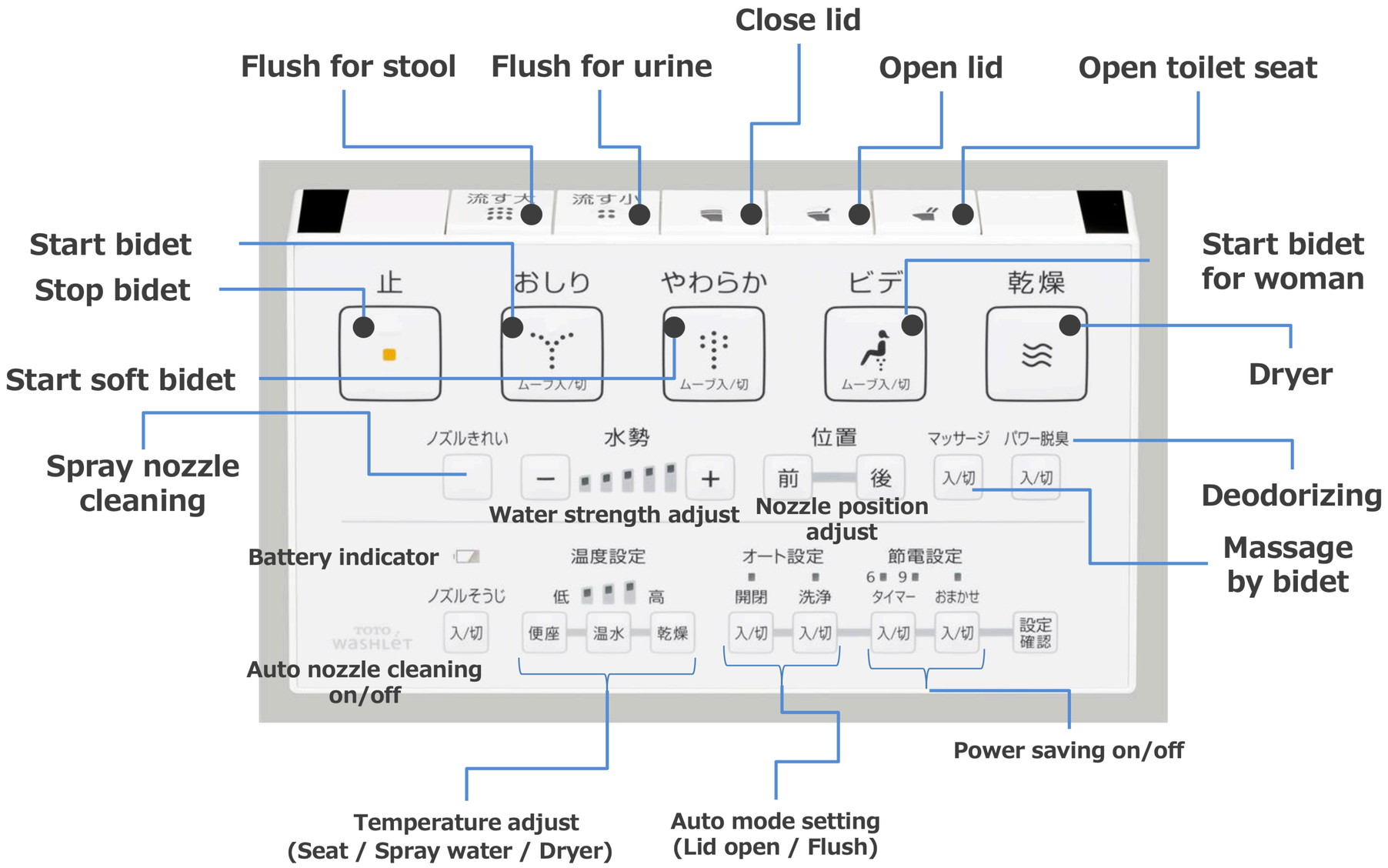
# Design Requirement

TOTO is the worlds largest toilet manufacturer wanted to get a Tablet Controller designed for their customers, this will be paired with their newly launched Smart Toilets.

This toilet system had a ton of capabilities,
like Heated Seats, Heated Water, Automatic Lid Opening, etc.
In addition the toilet also had the capabilities to make the customers aware about their body vitals from the stool samples collected.

TOTO was looking for a controller to ease the use of this toilet and break the tradition of using a fixed controller on the pot itself.


Close lid
Flush for stool
Flush for urine
Open lid
Open toilet seat
Start bidet
Stop bidet
Start soft bidet
Spray nozzle cleaning
Start bidet for woman
Dryer
Deodorizing
Massage by bidet
Water strength adjust
Nozzle position adjust
Battery indicator
Auto nozzle cleaning on/off
Temperature adjust (Seat / Spray water / Dryer)
Auto mode setting (Lid open / Flush)
Power saving on/off
流す大
流す小
止
おしり
やわらか
ビデ
乾燥
ムーブ入/切
ムーブ入/切
ムーブ入/切
ノズルきれい
水勢
位置
マッサージ
パワー脱臭
入/切
入/切
前
後
温度設定
オート設定
節電設定
ノズルそうじ
低
高
開閉
洗浄
タイマー
おまかせ
入/切
便座
温水
乾燥
入/切
入/切
入/切
入/切
設定確認

# Testimonials from the Japaneese Audience

*"The remote in the smart toilet is usually fixed on the one side of the toilet seat or on the wall"*

*"The icons on the remote are confusing sometimes"*

*"Operating a smart toilet through mobile app would be too many steps, it's better if the controls are right there. Saves time!"*

*"I was in this hotel where curtains would open automatically in the morning."*

*"The bed automatically rises to wake you up. That was pretty amazing"*

*" Sometimes the water is too hot or the pressure is too strong. It would be good if the best temperature and pressure is detected automatically"*

# Design Vision

As a designer, I wanted to present TOTO with a design solution that simplifies customers everyday journey, reduce the clutter of choosing between the right buttons and inculculate a habit forming solution thats is functional to use, right after a deep sleep or even in dimlight. This application should help form Habit easily and imbibe a sense of personalisation for it's users.

For this, I will elevate the strengths of an iPad application in contratry to the fixed remote controller, following the recent design trends and adapt to a simplisitic design approach.

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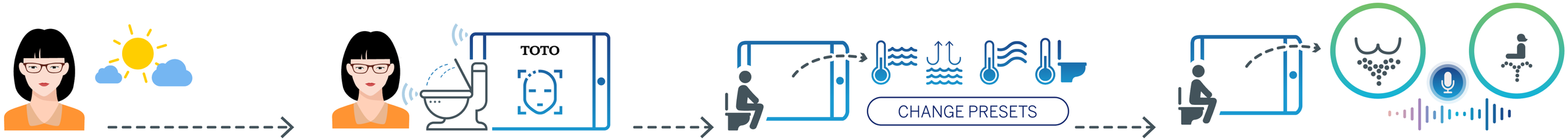
# Hisako's 'Toilet' Journey

Pre-installed toilet ipad application with existing user profile.

# Hisako's Journey with TOTO Smart Toilet System.

TOTO




### Wakes Up! & Is in a rush.

Hisako wakes up, she has to get ready quickly and leave for work.

### iPad Face Recognition

Hisako enters the washroom and the lid of the toilet lifts automatically. iPad recognizes her with face and selects her morning profile. Hisako is impressed with this technology.

### iPad Makes her aware of Presets

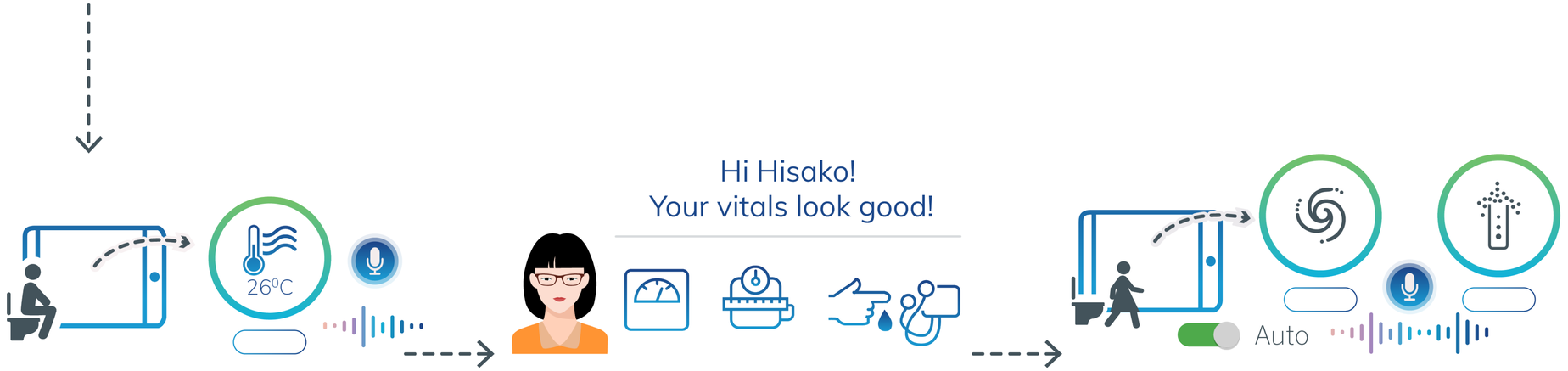
While Hisako is using the toilet, application greets and shows her the active presets - Water Temperature, Water Strength, Dryer Temperature and Seat Temperature. She could also change them as per her preferences.

### Controls Automatically Selected & can be initiated through Voice

Necessary bidet controls are selectedbased on stool/urine sample. Action can be initiated either through 'Voice Command' or by simply tapping on the 'Bidet Button'

# Hisako's Journey with TOTO Smart Toilet System.

TOTO




### Actions Run Sequentially

Once Hisako is done with both the bidets, 'Dryer' starts automatically and the same is visually represented on the application.

### Health Vitals are Displayed

Application also updates Hisako with her health vitals -Weight, BMI, Glucose Level and Blood Pressure. She can also view a detailed report on the iPad or on her mobile application.

### Toilet Cleans itself Automatically

When Hisako leaves the toilet, it flushes and cleans the nozzle automatically.

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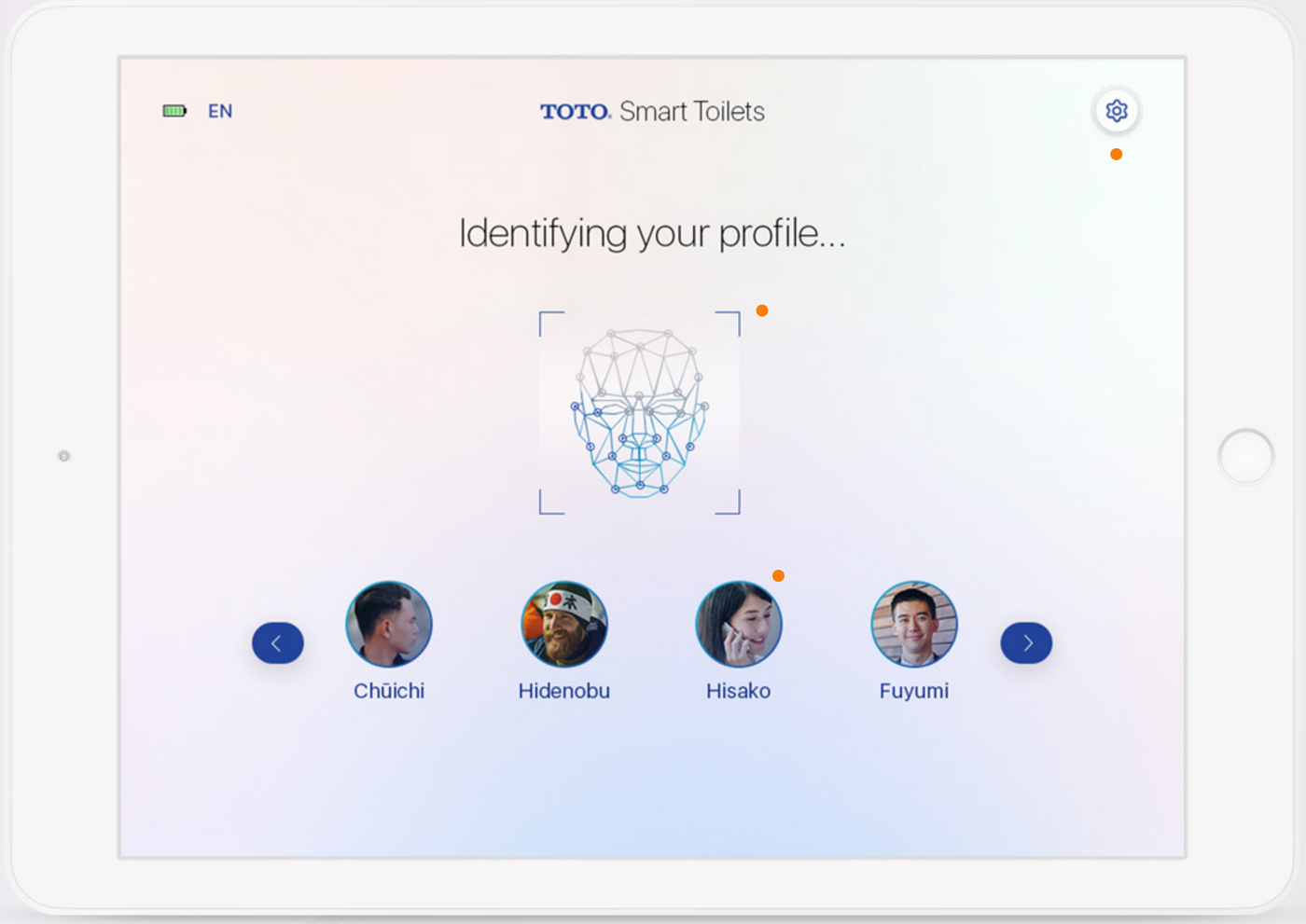
# Toilet Visuals iPad

## Woman Bidet Flow - Stool and Urine

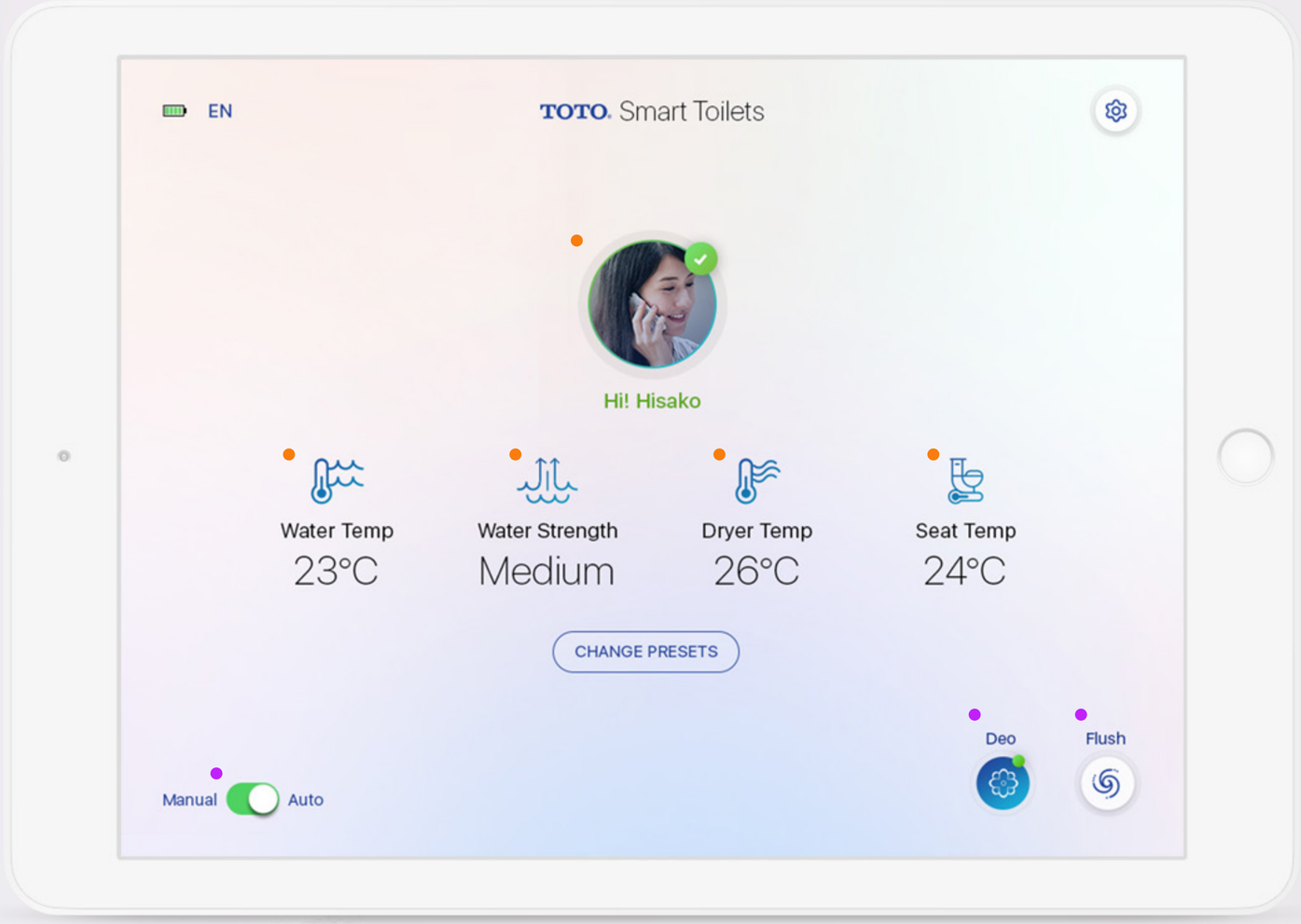
# Landing Screen




## Key Features

- Profile Identification through face recognition.
- User can also select the profile manually.
- Connectivity Settings

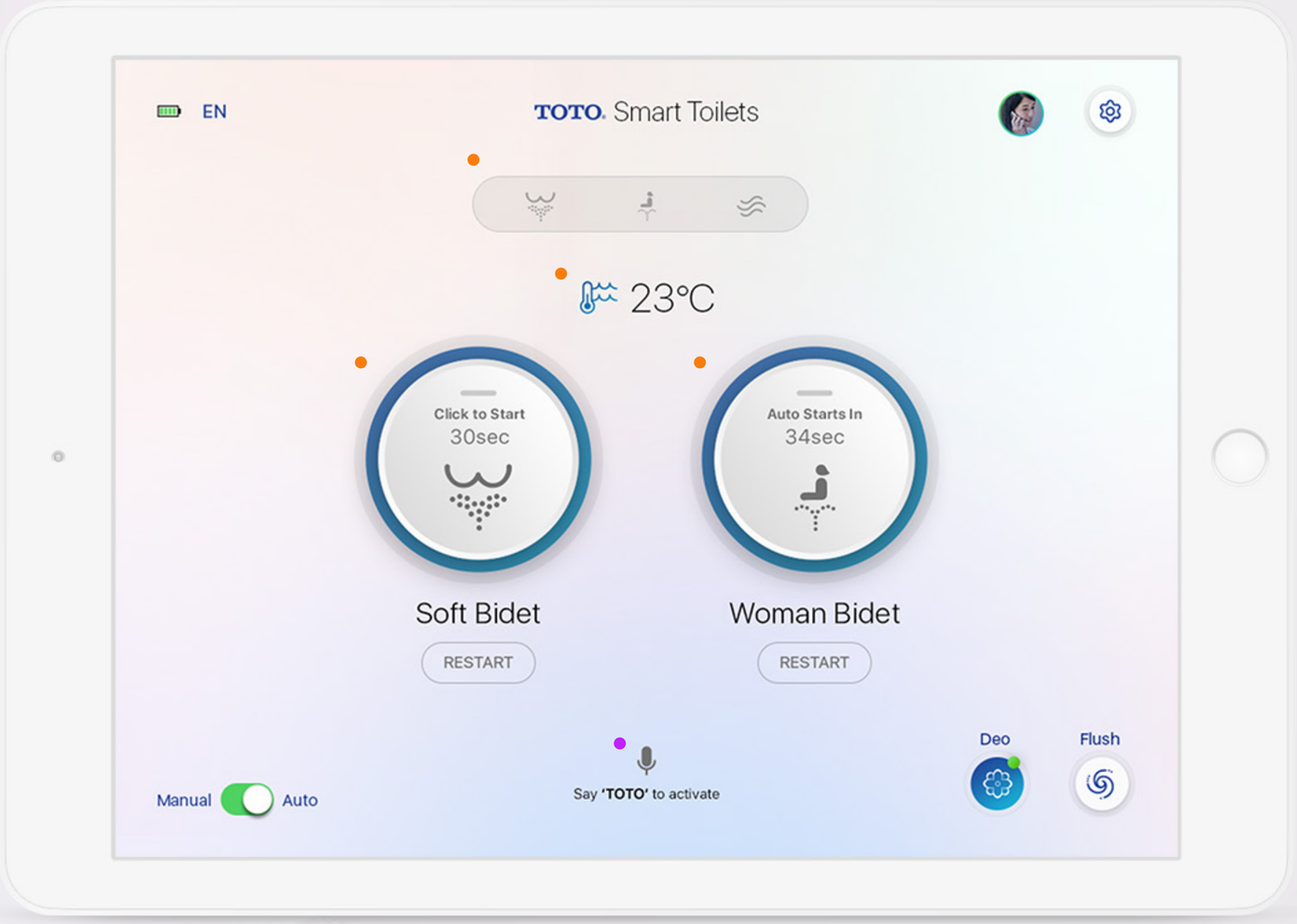
# Welcome Screen




## Key Features

- Display identified profile and the active profile presets.
- Option to proceed with an automated experience or switch to a manual controller.
- Active button of the running deodorant.
- Button to start the flush at any point in time.

# Bidet Screen (Default)



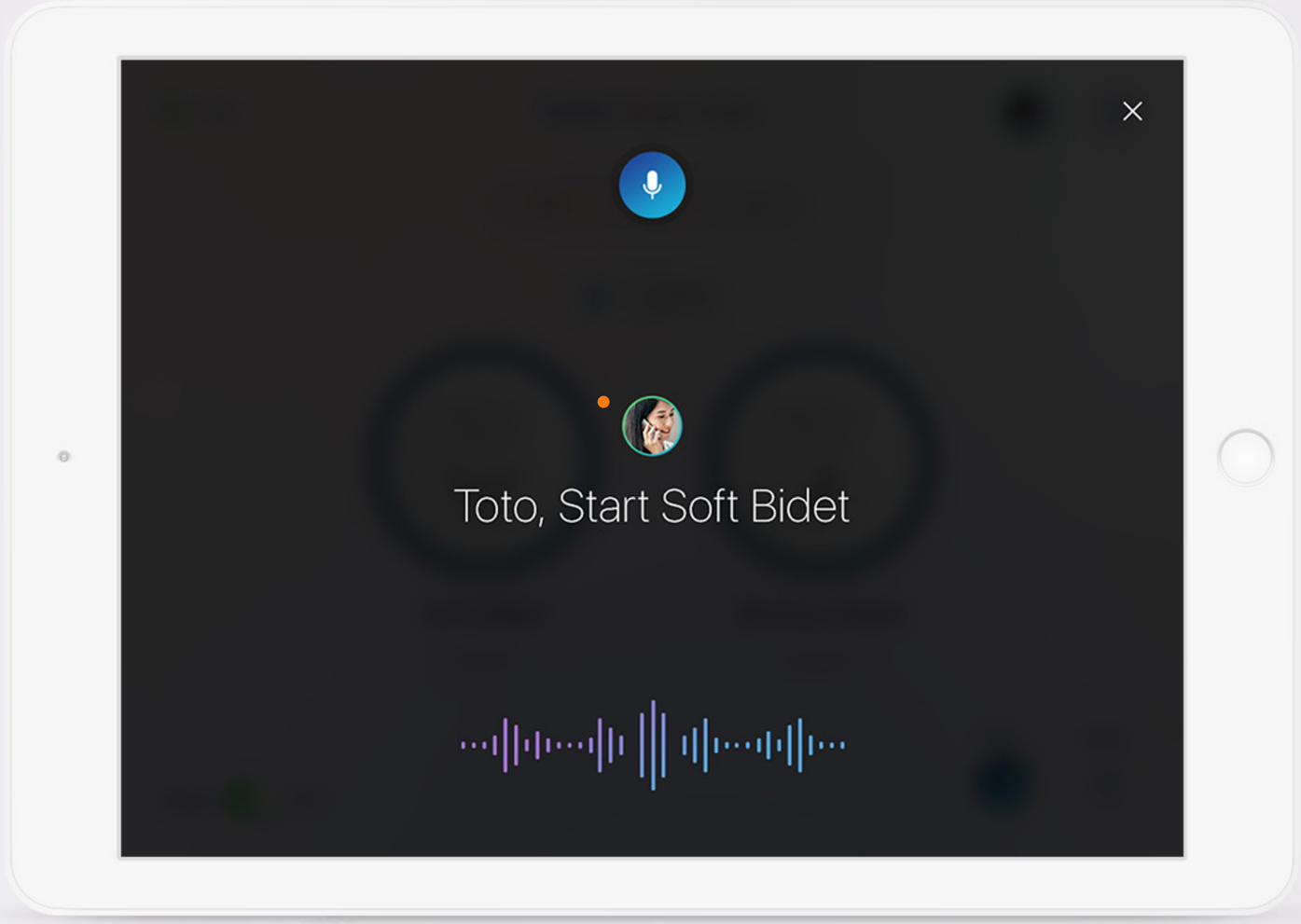

## Key Features

- Display for the series of actions in the toilet journey and current status of pending/active/running action.
- Current information of the preset water temperature.
- Click to start/stop bidet controls based on the type of toilet sample identified.
- Facility to trigger voice initiated commands.

## Notes

These are set of sequential predefined steps for specific durations, which the user will define at the time of profile creation/first time use.

# Voice Integrated Command

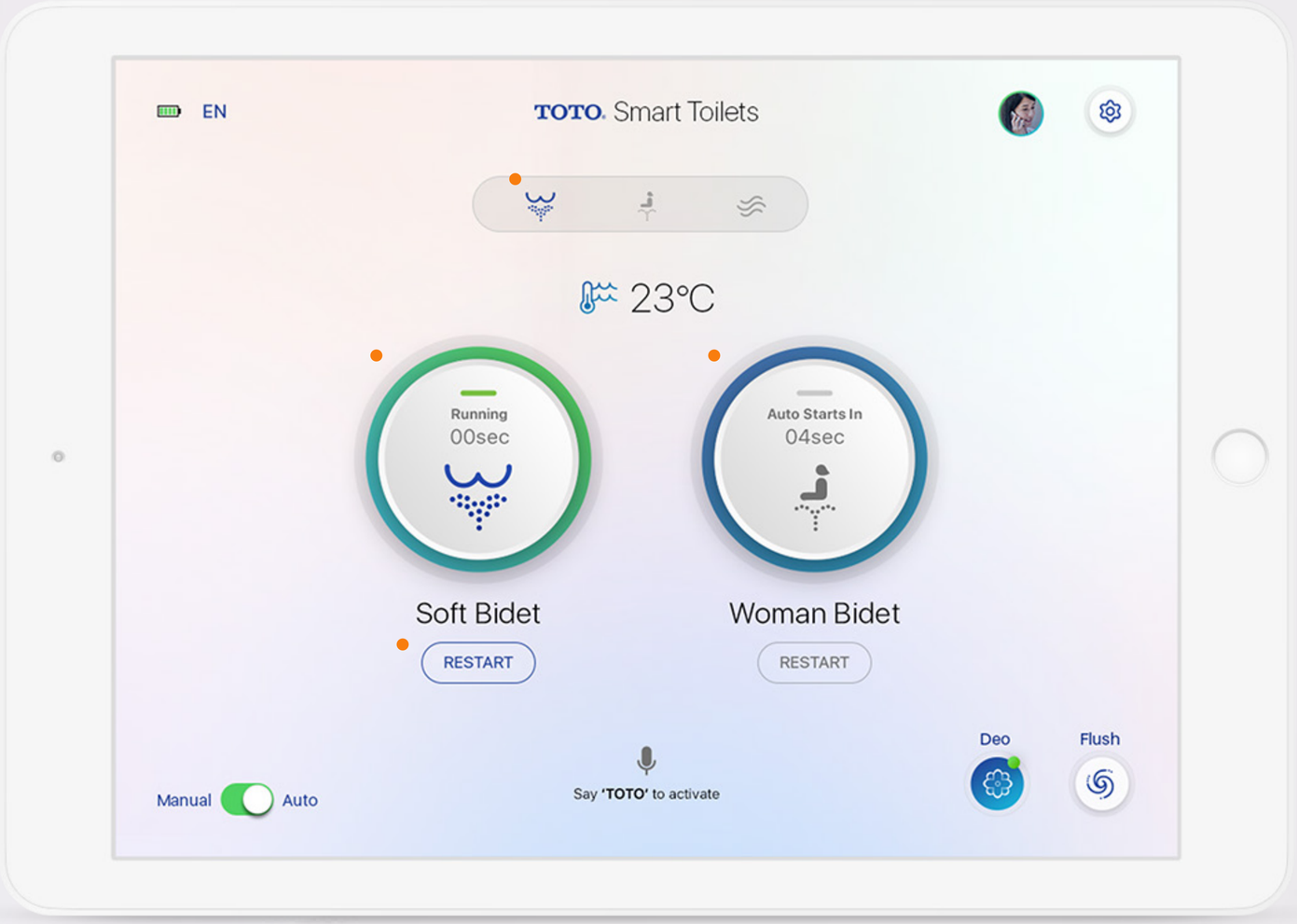



## Key Features

- Voice commands to initiate or stop any step or go to the next step.

  This facility will relieve the user from everyday hassle of finding the right button and amplify this journey of zero click user interface.

# Bidet Screen (Active)



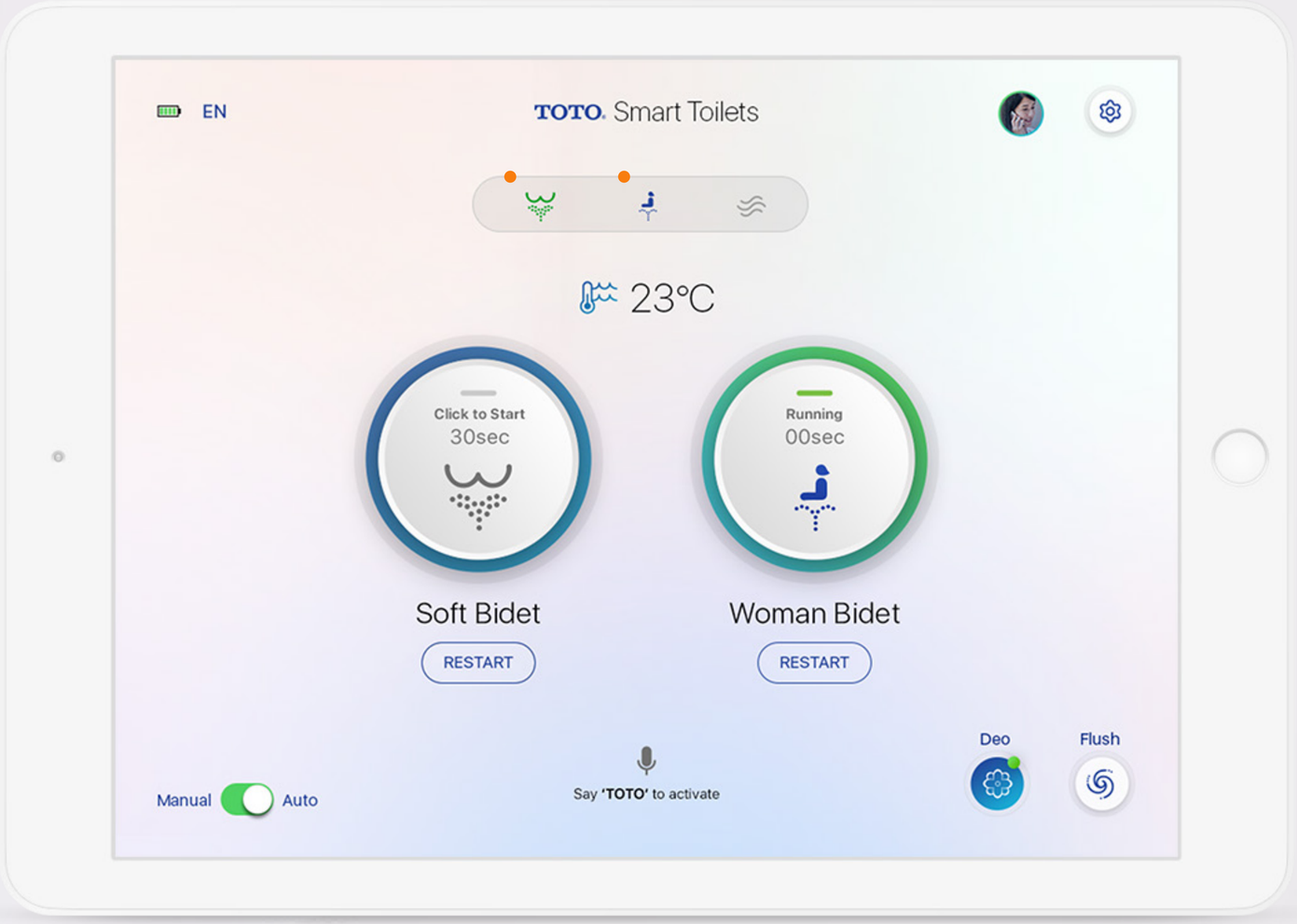

## Key Features

- Status updates to 'Active' once the step starts.
- Soft Bidet gets activated as per the presets.

  Current running step can stop at any time by clicking on the same button.
- Restart (Repeat) option activates halfway through the running step and is actionable before the current or the next step completes.
- Next step will start after a small buffer, once current step is completed and there are no active repeats.

  Users can also start the next step manually by clicking on the designated button.

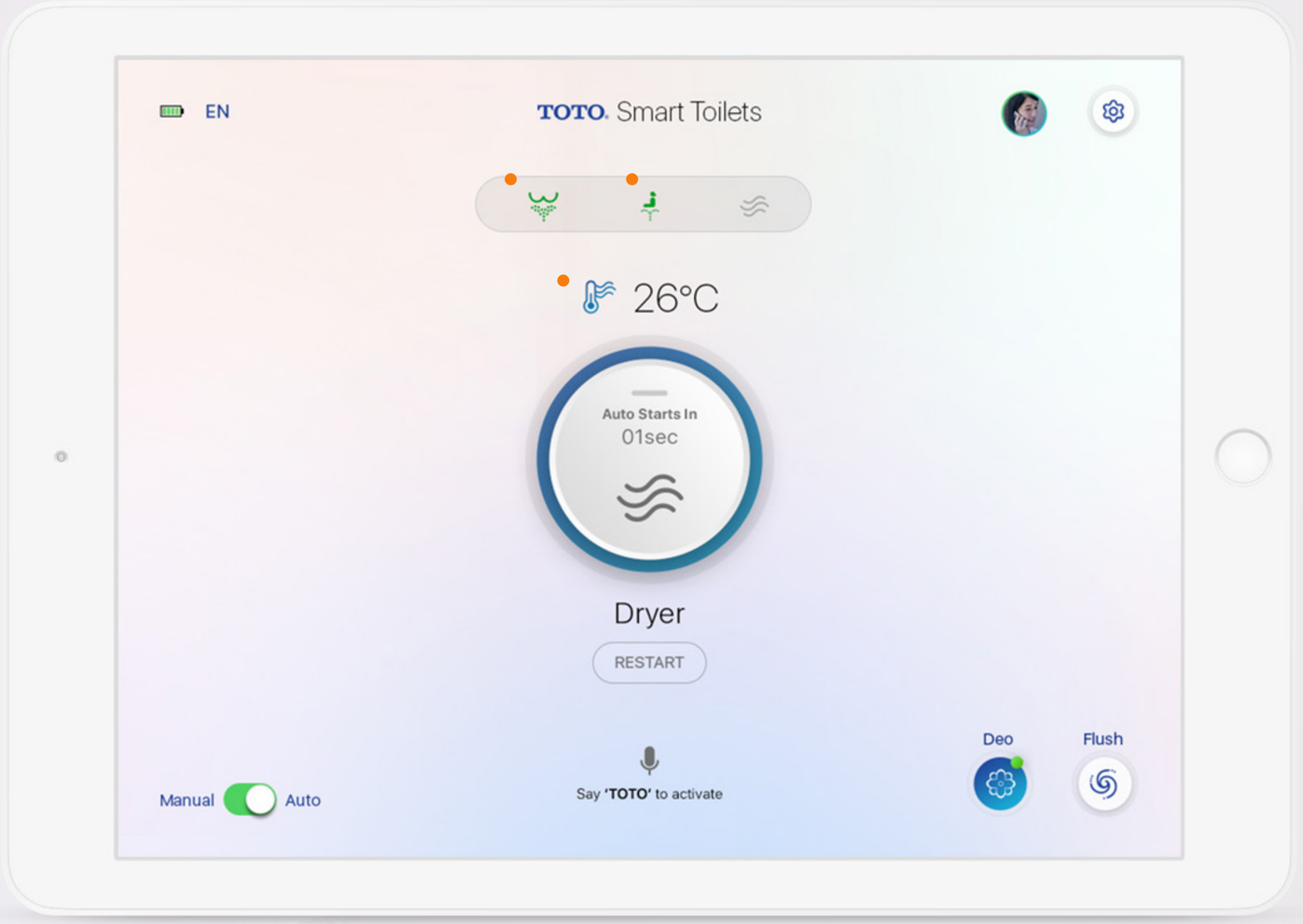
# Bidet Screen (Active)




## Key Features

- Status updates to 'Active'(blue) for the next step and shows 'Completed'(green) for the previous step.

# Dryer Screen (Default)



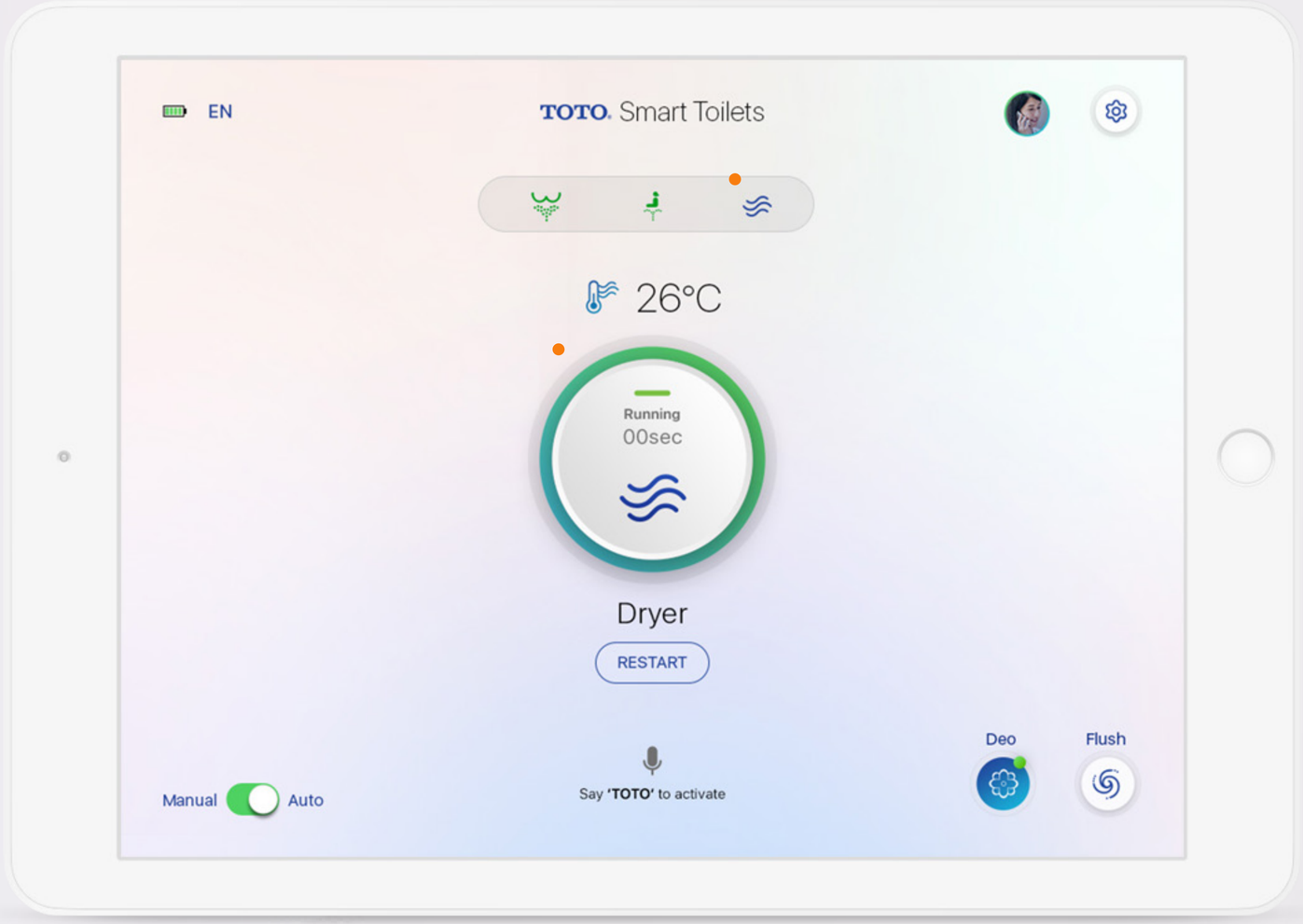

## Key Features

- Dryer screen arrives once the previous step is complete and status is updated for the completed step.
- Current dryer temperature is visible on the screen.

## Notes

User can choose to swipe back to the previous step if they want to use the bidet again.

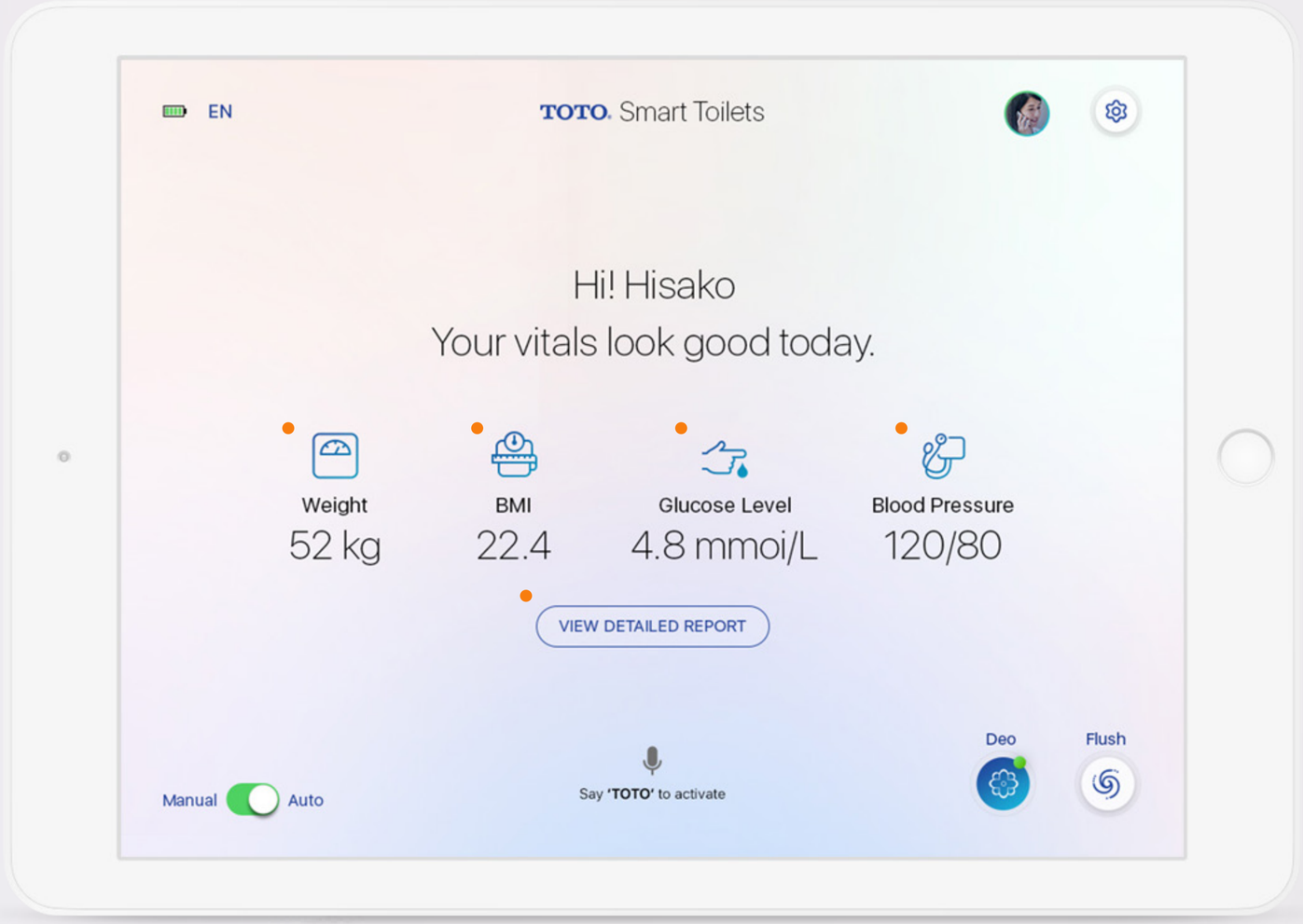
# Dryer Screen (Active)




## Key Features

- Status of the current step reflects on the status bar.
- Dryer starts after a delay of few seconds.

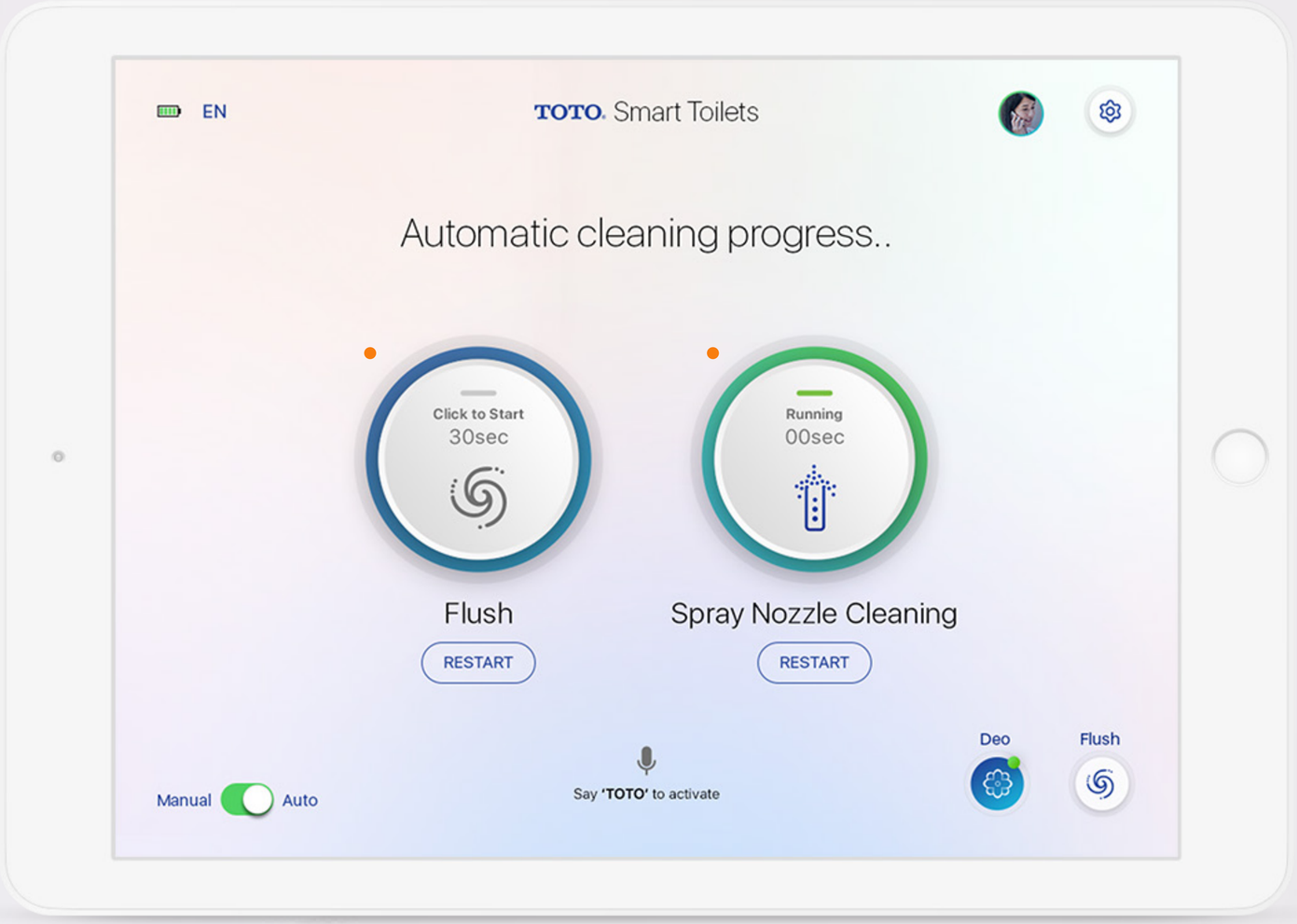
# Health Vitals




## Key Features

- User is updated with the important vitals with a high level summary.User can choose to view a detailed  report of the vitals. This can also be done on the sweet home application later.

# Toilet Cleaning Active




## Key Features

- Once the user leaves the toilet seat the cleaning function starts automatically.

# Thank You!

TOTO
TOTO Smart Toilets
Soft Bidet
RESTART
Running
00sec
23°C
Woman Bidet
RESTART
Auto Starts In
04sec
Deo
Flush
9:41
SWEET HOME
Hi Hisako! Welcome
ROOM STATUS
Living Room
On
26° C
Kitchen
On
26° C
Bathroom
Occupied
Off
26° C
Hisako's Bedroom