References


SENSIBLE
A novel menstrual pad

WHAT IS THE PROBLEM?
- 91% of women in low-income countries use cloth or rubber pads
- 65% of women in certain areas cannot afford pads

COST BREAKDOWN

TRAINING

SUPPLY CHAIN

WHY MENSTRUAL BLOOD?
- 80% of women menstruate
- 500 million women menstruate worldwide

PRODUCT
- PAD

COMPETITIVE ANALYSIS

HOW TO USE

OUR IMPACT

WHAT IS YOUR CONTRIBUTION?

PAD LAYERS

PAD VS. SANITARY TAMPON

PROVIDE

PROTECT

PROSPER

500 MILLION

100 MILLION

20 MILLION

1 MILLION

PRESENTATION BY: ELLIE BONTE, ELLA MARCH, AND REBECCA
SENSIBLE
a novel menstrual pad

Provide
Protect
Prosper

PAD
Blood Sample Pad
Translucent Organdy Fabric
Clasp
Later Flow Assay Fabric Strip
Superabsorbent Microfibre

PAD Layers
1. Organdy Fabric: transparent and hydrophilic layer that wicks sweat from the skin, while its open weave prevents blood from contaminating the assay.
2. Super Absorbent Microfibre Fabric: absorbs majority of the blood. There are two layers of a light blue line indicates double layers.

PANTY
A. Boxer Short Undergarment: made of durable plain cloth
B. Charcoal Bamboo Fabric: attached to the boxer’s lining. The active charcoal infused intima eliminates odour and prevents 90% of bacteria growth.

Lateral Flow Assay (LFA)

Competitive Analysis

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How to Use

- 1 pack = 12 pads + a boxer short, meant to last 1 year
- Users must use a new pad for each cycle to preserve the function of the HPV diagnostic mechanism.
- After daily use, the pad needs to be washed and dried so it can be used the next day. In the mean time, users can use a pad from a previous cycle.
- If there are two blue lines on the pad after washing it, then the user is HPV positive.
**WHAT IS THE PROBLEM?**

- Human papillomavirus (HPV) is a sexually transmitted virus that causes abnormal tissue growth (like warts).
- It is a precursor to cervical cancer (CC), a malignant tumor of the cervix.
- CC is very preventable, but third world countries lack the resources and infrastructure for early detection.

- HPV16 is the most common high-risk strain of HPV, so it was chosen as the target-virus to cover more ground.
- Women in third world countries also lack adequate access to menstrual health resources like pads.
- Many use old clothes, paper, cotton/wool, and even leaves to manage their menstrual bleeding.
- Such unsanitary alternatives can cause bacterial vaginosis or urinary tract infections.
- Developing countries also lack proper infrastructure for waste disposal, so disposing of plastic pads can be harmful to the environment since most of them aren't biodegradable.

**HPV causes 91% of cervical cancers**

**HPV16 causes 65% of cervical cancers**

**80% of cervical cancer deaths occur in developing areas.**

**500 MILLION**

Women lack access to menstrual products.

**WHY MENSTRUAL BLOOD?**

- Accurately diagnoses HPV 94.2% of the time
- Blood from the first day of a menstrual cycle is 87.5% accurate at diagnosing HPV
- Since menstrual cycles occur monthly, users are routinely tested for HPV hands-free

**COMPETITIVE ANALYSIS**

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**PRESENTED BY: ESTHER, SOPHIE, ANISH**