

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A prominent red speech bubble shape is centered on the page, containing the text.

VENTURE FOR HERRIGHTS
Transformative Technology

Safety Enhancement Devices For Women

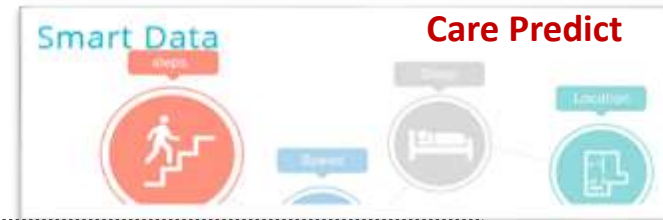
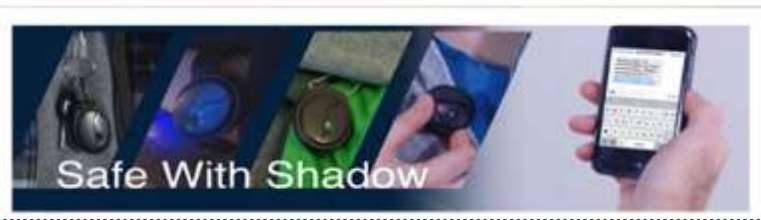
- Ideas presented in this deck are offered freely as open source building blocks to projects that support women and reduce gender violence. HerRights is happy to help facilitate now projects with the help of corporate sponsors.
- Feel free to build on the ideas here, and create your own prototypes, proposals or business plans that feature devices that provide protection and enhanced quality of life for women.
- HerRights hopes that the technology reviewed and imagined here will inspire young professionals, college students, entrepreneurs, investors, engineers and others to conceptualize and produce products that transform and elevate women's lives.
- If you have the talent and means to help us push forward with tech strategies increase women's safety and promote gender parity, connect with us: herrights@herrights.website

Executive Summary

- A promising opportunity exists in the field of safety and living condition enhancement for companies like Intel that have adopted a corporate strategy of “virtuous cycles” (*Refers to complex chains of events that reinforce themselves through a feedback loop. A virtuous circle has favorable results, while a vicious circle has detrimental results.*)
- Production of personal safety enhancement devices for women that are synced to cloud infrastructure is a win-win, serving business interests, and enhancing reputation for social responsibility.
- Gender violence is rampant worldwide. Beyond rape and sexual assaults, other devastating forms of attack (acid attacks and similar attacks to disfigure and maim) are on the rise (South Asia, Columbia) and have a high economic and human cost.
- Gender equality is a key milestone prioritized by developing nations for achieving economic and social development goals.
- There is significant need for devices that improve women’s working and living conditions, especially in emerging markets in the developing nations.
- Women drive 70-80% of all consumer purchasing, and also have a multiplier effect.
- Women’s global income is predicted to reach \$18 trillion by 2018 with highest growth rate coming from emerging/developing economies
- Previous/existing wearable devices and apps transfer data from end user during crises
 - The infrastructure needed to support processing of such data doesn’t exist in the emerging markets
 - Current solutions are not tailored to consumer need, preference and spending power

Ecosystem Analysis: Available Options

Specialized for Women's Safety



Elderly care and child monitoring



FiLip2 (Amulyte product)

- Price points range from \$25 (Shadow) to \$150 : most averaging around \$50 – \$100
- All are user condition monitoring based alert generation/alarm trigger devices
- Amount of data collected and functionality differs. Some of these (e.g. ARN/B) are modular

Ecosystem Analysis: Demand, Supply Disconnect

Need exists \neq Options exist

Existing solutions are not tailored to the markets with need

Western developed/high purchasing power consumers

- Most of the features offered by these devices can be obtained by downloading smartphone/smart watch apps
- Consumers can afford all in one smart devices
- Infrastructure and logistics exist to support these signal/data from these devices
- Alternative support exists (e.g. 911)
- Wearables prioritized based on consumer preference and need (e.g. Fitbit vs. Cuff)

Developing world, low/mid purchasing power consumers

- Most consumers can't afford all-in-one smart devices
- Infrastructure not in place to support existing safety apps
- Data generated (triggers and alarms) hard to process (over/false signaling expected because of living conditions) requiring very high logistical bandwidth for processing
- Price point of existing safety devices high for this market

To be successful, its important to enter with the right device in the right way

Business Case: Feasibility Assessment

- **Highlights**

- Tremendous amount of research and interest exists for addressing gender violence: user preferences and conditions well understood
- Demographic studies have analyzed impact, causes, market and effects – makes this easier entry area to tailor to
- Government and non government will and funding exists for viable solutions
- Partnerships for marketing, testing of prototypes and proliferation opportunities are numerous

- **Lowlights**

- Limited takers in advanced, higher price point consumers
- Prototype doesn't exist – product architecture design and test needed
- Market introduction needs to be targeted – through community support groups, Non-profits and Govt. Programs

Strategy: define success criteria, mitigate the lowlights by taking advantage of the highlights

Success Criteria for Entrant Devices

- Minimal functionalities based on prioritized need to \$10 or less price point
- **Clear boundary conditions tailored to specific user and on ground conditions to prevent false triggers**
- Ability to function in minimum infrastructure and developing digital bandwidth
- Needs to be introduced through govt. schemes and NGO partnership – proliferation by recommendation post demonstrated results
- Needs to be bundled with cloud development/improvement govt. initiatives
- Device should be simple, well-defined, and introduced through partnerships **in targeted population bundled with data infrastructure establishment and improvement initiatives**

Concept – Simplicity and Affordability

The general wearable challenge – iPhone vs iPod

iPhone can do it all, making the iPod obsolete

But when the iPhone is **not viable** (price too high, uncomfortable for those who are not tech savvy) or **rendered useless** (lack of infrastructure), iPod will win for those who want only to listen to music



Needed: enhanced iPod equivalent for safety for lower purchasing power consumers in developing infrastructures



The Rape Whistle

The Whistle vs. the iPhone: **dumb down the iPhone and enhance the whistle for the ideal entrant device**



Device Functionalities

Target End User

Single working urban women middle / lower class

Working mothers middle/lower class

Women in crowded living conditions / family exposed to multiple persons at vulnerable hours

Commonalities

- Alarms are a significant deterrent for offenders
- Benefit demonstrated from creation of virtual safe places and advanced monitoring (heat maps)
- For most violent attacks (e.g. acid attack), offenders are known to victims (<90% of cases)
- Prosecuting offenders is challenging because of lack of evidence in bureaucratic systems

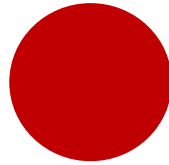
Functionalities Needed

- Makes loud noise
- Gathers data on programmed environment
- Alerts on programmed user condition change
- Records and transmits if needed
- Modular to allow flexibility in price vs. functionalities
- Syncs with servers and clouds developed in partnership with government initiatives for safety and living condition improvement (e.g. Digital India)

Product Design Fundamentals VFHR

Small so that it can be easily embedded in appealing wearable

Sounds alarm in response to **pre-fed trigger conditions** (approach distance, number of people, time of day, etc. – configurable)



Has instructions in **local language** on helpline and resources (configured by user) and accessed on screen

Records incidents and transfers to master server **if and when** needed

* Starting prototype for this functionality can be easily developed as an extension to devices already on the market + currently available electronic alarms



Reimagining Existing Technology

\$150 and Plus - Advanced



\$5 – price point at which orgs can bulk consume and distribute

~~Discover a whole new world of fitness.~~ **Safety**

Option to bundle with mini servers/local clouds: neighborhood groups, safety orgs, family safe cycle

- Intruder and inclement condition sensor
- Helpline autodial to resources and instructions

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- Data storage and recording, transmission to clouds configurable

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- Data storage and recording, transmission to clouds configurable
- Heat map, Geos, realtime alerts

<h3>Key Partners</h3> <ul style="list-style-type: none"> Govt. of pilot countries and states http://digitalindia.gov.in Non Profits: ASFI, HerRights www.herrights.website Internal partners: Intel Grameen 	<h3>Key Activities</h3> <ul style="list-style-type: none"> Finalize functionalities Design and review Prototype generation On ground testing Marketing and launch 	<h3>Value Propositions</h3> <ol style="list-style-type: none"> Empower women Create point of entry for Intel in developing markets in field of safety and infrastructure Use Intel edge in server and cloud to tap into initiatives by Govt. 	<h3>Customer Relationships</h3> <ul style="list-style-type: none"> Intel to Non profits and Govt. Initiatives Non profits and Govt. Initiatives to end users 	<h3>Customer Segments</h3> <ul style="list-style-type: none"> Single working urban women middle/lower class Working mothers middle/lower class Women in joint families/multifamily living Women in crowded living conditions exposed to multiple persons at vulnerable hours
<h3>Cost Structure</h3> <ul style="list-style-type: none"> COGS: \$6/unit RnD and Marketing: \$2/unit End price: \$10/unit Revenue: \$2/unit 	<h3>Revenue Streams</h3> <ul style="list-style-type: none"> BU funding until prototype generation Non-profit/Fundraising through partners Govt. initiatives Device sale to end users 			
<p>Date: _____ Version Name: _____</p>		<p>Iteration: _____</p>		

I am Meera (fictional persona with common-user conditions compiled from ICR-UXR research). I live in Delhi in the Raniganj area, at a women's hostel. I live with multiple people in the building, which has primarily open access to the public. The roof is close to other roofs, increasing security concerns. I travel every day by Delhi metro which requires me to traverse both crowded and deserted localities, and wait for public transportation in fixed areas (predictable, highly visible routine).

I fear: groping on public transportation; offenders snatching or appropriating my purse during wait time; retaliation from rejected/rebuffed/people with whom I have had conflict.

What I need: A device that is discrete, nice-looking, and makes loud noises when I need it to. It should register, retain and share urgent information during a violent event. It should be durable enough that it can't be smashed or destroyed.

Deters immediately in most venues

Stores data about usual hotspots to provide real-time alerts to user (bus route cancellations, construction detours, auto strikes, etc.) by remote monitoring of conditions of programmed locations

In case of an event, assists in prosecution later. Once well-known through marketing, the fact that the device exists will itself be a deterrent

Increases fear of consequences for offenders as well as prosecution and conviction rates

Helps user prepare by providing up-to-the-minute information

Of the attacks in India registered between 2010-2014 (most prior to 2013 went into the “grievous assault bucket”), only 60% resulted in the filing of charges. 81% of perpetrators were able to obtain bail; 49% absconded.

Rape conviction rates in India has fallen alarmingly over the years (44.3% in 1973, 37.7% in 1983, 26.9% in 2009, 26.6% in 2010 and 26.4% in 2011)

- Acid attack and other such maiming is terrifying to women, impacts their independence, and discourages their ability to protest / report offenders.
- In over 90% of attacks, the offender is known to the victim, and there were been pre-warnings / threats made.
- Almost all attacks are premeditated.
- Rejection of improper advances, and protesting harassment remains the leading cause of acid attack on women.
- Sonali Mukherjee and her sister were attacked in 2003 while **they were asleep** on their roof (common practice in hot areas), when a spurned suitor poured acid over them.
- In 2015, a Russian tourist staying in Varanasi was attacked **in her sleep** by the landlord's son who felt rejected by her.
- Aruna Shanbaug, a nurse who passed away in 2015 after spending a lifetime in a coma post- brutal rape and assault, was attacked in 1973 **in the basement of her workplace by a ward** she had reprimanded earlier for poor performance at his job.

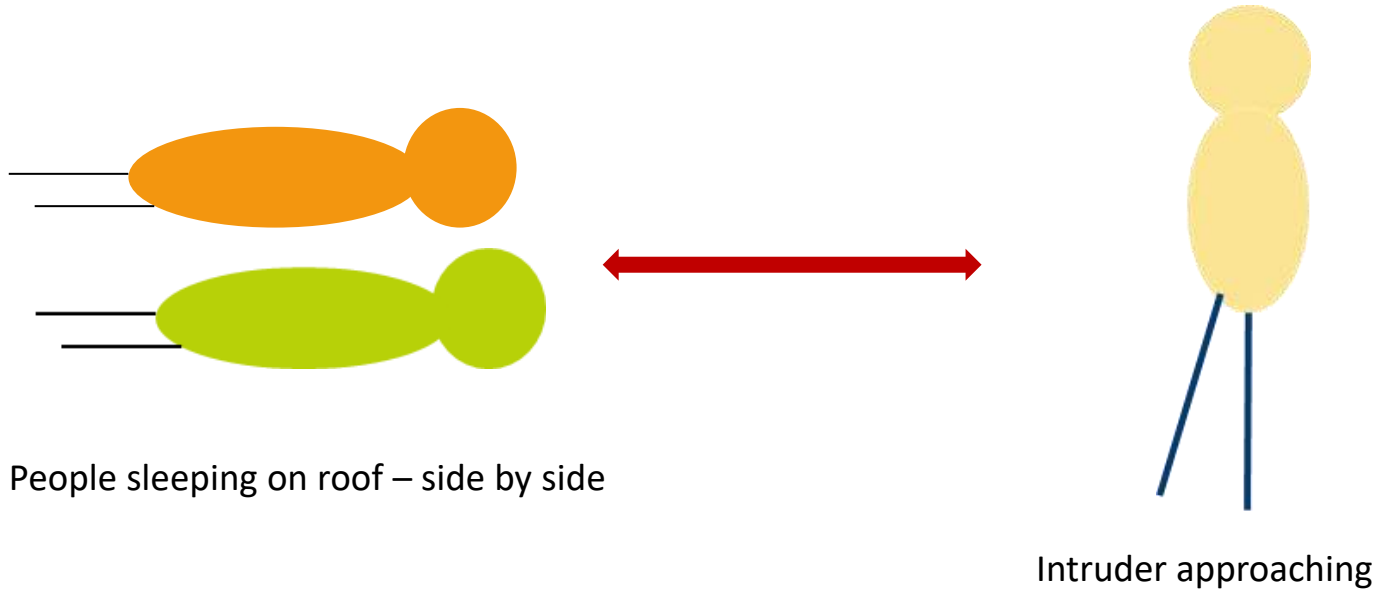
The fear of deadly retaliation – which has complex patriarchal and societal roots – prevents women in their day-to-day life from speaking up against wrongdoing. Extremely low odds of prosecution and conviction allow perpetrators to commit violent assaults with no consequences.

Imagine a device that can prevent these atrocities. Note that it could also include a motion sensor, and sound an alarm during the night when women are sleeping and in a vulnerable area.

- **If Sonali had this, she would have jumped up, causing the splashing acid to miss most of her physique, if not startling the assailant and preventing him from approaching in the first place**
 - *Above is true for most acid attack survivors interviewed by HerRights (www.herrights.website)*
- **In addition, she would have had help rushing to her sooner, minimizing the impact of damage**
- **If her device also stored instructions/resources such as instant connectin to a helpline, she might have also had ready information as to how to treat the burned area (i.e. douse with milk, not water); this can reduce damage from an acid by 70%.**

Boundary conditions for detection/sensor at low price point

User Case 1 Example:



Alarm triggers based on:

1. Body heat sensing
2. Distance of separation
3. Rhythm and frequency of movement (to prevent triggering from co-sleepers)



Defiant Dreams - Tales of Everyday Divas

by Rhiti Bose (Goodreads Author) (Compiler), Lopamudra Banerjee (Compiler), Sanghamitra Bose (Goodreads Author), Sutapa Basu (Goodreads Author), Paulami Duttagupta (Goodreads Author), Radhika Maira Tabrez, Sreeshha D. Santosh Bakaya, Anirban Nanda (Goodreads Author), Moinak Dutta, Mahesh Sowani, Aashisha Chakraborty, Bhuvaneshwari, Deepthi Menon (Goodreads Author), Kirthi Jayakumar (Goodreads Author), Esha Chakraborty, Debosmita Nandy, Vasudha Gulati, Arpita Banerjee, Ramaa Sonti, Gita Negi, Tanushree Ghosh Dhall, Sridevi Datta, Namrata Chauhan, Avanti Sopory, Paromita Mukherjee Ojha ...less

★★★★★ 4.80 · Rating Details · 5 Ratings · 3 Reviews

Defiant Dreams:Tales of Everyday Divas is a collection of twenty-four stories handpicked through a nationwide contest. It is a collage of love and patience, courage and determination. Between the covers is a chronicle of dreams that refuse to be crushed by the heel of Life's injustices. The tales are portraits of everyday women rising to extraordinary challenges; women who ...more

Paperback, 1st, 228 pages
Published December 18th 2015 by Readomania

Want to Read

Rate this book
★★★★★



Happiness is striving for a change that leaves a mark

WELCOME TO MY WORLD

I am a mother, an activist, an artist, a writer and a woman - in that order. My education has been primarily in the STEM fields, but I have pursued 'the arts' defiantly throughout my life and will continue to do so forever. My intention with this site is to establish a forum to champion and share all things creative and catalytic with like minded individuals

For all Huffington post articles, check out: <http://www.huffingtonpost.com/tanushree-ghosh/> or HuffPost tab



Tanushree Ghosh

Techie, Author, Artist, Activist, impatient but persistent DIYr

Tanushree Ghosh (Tanu) currently works at the Intel Corporation as an engineer and supplier manager. She is also an activist, an artist, a writer and in her own words, a relentless DIYr. She has a PhD in Material Science and Chemistry from Cornell University and has worked at the Brookhaven National Laboratories. She has actively volunteered for and chaired several national and international non-profits (ASHA, AID, Smile Donors, Mercy Corps, Global Reserve). She has contributed to multiple anthologies including the acclaimed 'Defiant Dreams' which was selected into Oprah's reading list 2.0 and has published poetry and fiction in several literary magazines (including honorable mention for Glimmer Train and Tuck magazine). Her blog posts and stories are in effort to provoke thoughts towards social issues, especially issues concerning women. She is currently working on opening her own NGO - HerRights to facilitate resource mobilization for victims of gender violence. Her personal website is: www.thoughtsandrights.com

08/22/16
The Syrian Child In The Back Of The Car And My Three Year Old



08/11/16
Brazil Is Not My First Or Second Country But I Stand In Solidarity With Her On The Rio Olympics Coverage By Media



Her Rights

HOME PROJECTS TEAM - ABOUT US JOIN US RESOURCES

Partners

The Red Elephant Foundation

The Acid Survivors Foundation India

Law offices of Ruber Reyes

Her Rights is a team of individuals committed to ending gender violence and facilitating social justice

ACTION ITEMS

- Resource facilitation, victim support and rehabilitation
-Rape, Acid Attack, Violence
- Prevention and awareness
- Support, proliferation and implementation of Human rights through policy level intervention



Contributor Intel SIA- 2012

Founder, HerRights Global

Contributor Huffington Post
Author, Poet, Blogger

Supplier Manager and BE Substrate Equipment Pathfinding Owner – Global Supply Chain Management (Previous: Back-end Area Coordinator GSM-SME; Group Lead, Module Engineering ATTD)

Simple Water Purification

'Water for all'

Jan-Feb 2013

'Clean, safe drinking water is the foundation of life. Yet today, all around the world, far too many people spend their entire day searching for it, or die from inability to access it'



Scope Trichy



Association for India's Development

Courage Commitment Change

Step by step guide to making a water purification system



- This can purify and store a half a bucket at a time
- Can be customized based on household size and consumption