

# BANONO

## SAY NO TO BANANA BACKS



Say No To Banana Backs

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# What problem are you solving?

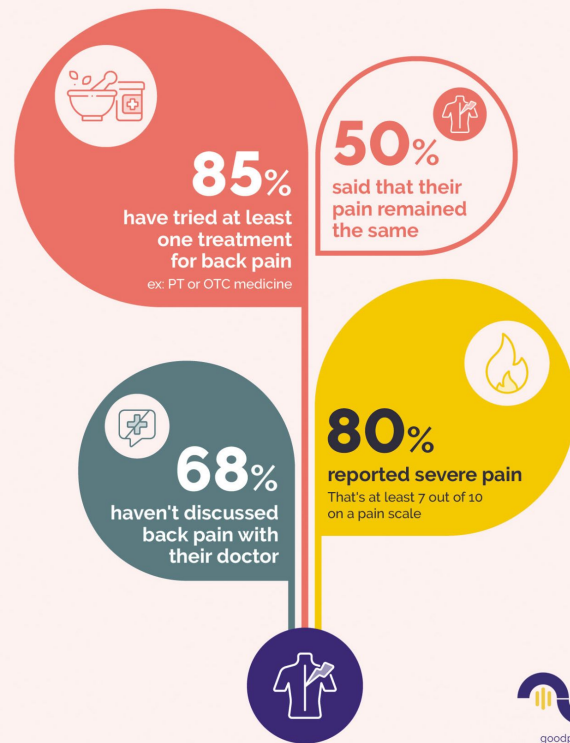
## CURRENT LANDSCAPE

- Today, over 16 million American adults experience chronic backache.
- Primary causes:
  - Sedentary lifestyle
  - Continuous inactivity
  - Bad posture
- Work from home owing to the pandemic has aggravated this issue.
- Existing products are either too expensive or unsuitable for prolonged use.



Approximately 8 out of every 10 Americans will have back problems at some point during their lifetimes.

Recent data from 1,656  
U.S. adults with back pain



# Missions and Goals

## BANONO

- **Mission:** *Empower people to take the health of their backs into their own hands.*
- It analyzes your posture in real-time using a desk mounted or web camera and notifies you periodically if you have been sitting in incorrect posture for too long. This can be anything from slouching to sitting straight, because even that causes that back muscles to stiffen up.
- **Goal:** User Adoption
  - After a successful launch and customer acquisition, the secondary goal will be user retention.

Because bananas are for eating, not to trade with your spine.

# Strategic Focus and Plan

## **Primary Focus:** User Adoption

- At the initial stages, we can put out a survey among 500 people in our immediate and extended network that fit in our initial target customer segment.
- A 60% response rate of interest can be considered as the first success metric.
- As the product details are fine-tuned, more comprehensive success metrics will be defined.

## **Secondary Focus:** User Retention

- After the adoption goal has been met (at this point the product has been released and is in use by people) this will be the focus.
- The next goal would be to find the north star metric for the product.
- After this we would aim at increasing the conversion rate from freemium to premium users
- This will be fine-tuned once the product MVP has been released.

# Core competencies!

- It will assess your posture in real-time and notify you to sit upright if you have been maintaining a bad posture for too long (customizable).
- Through the alerts, users take control of their actions achieving our mission statement.
- With each day of progress, users will be rewarded with incentives to encourage consistency.
- Our product will compliment other attempts at improving posture - ergonomic chairs, tables, etc.
- Holistic view of the user's posture reducing caveats to detecting incorrect posture.

## **Chosen Target Market for MVP:**

- IT company professionals with a sedentary lifestyle for 8-10 hours a day and are fitness enthusiasts.

## **Extended Target Market (for future scope):**

- People who want to improve their posture, majorly those who suffer from back pain problems.
- Thus our potential audience could broadly include people who have a sedentary lifestyle, companies selling ergonomic products, IT companies (aiming to address employee back pain issues).
- Those who are actively investing in posture correcting products but are unhappy with the results or are unable to utilize the product correctly.
- Physiotherapists who have patients that need suggestions on improving their posture.
- Geriatrics with back problems and lack of awareness.

# Target audience with personas

## Indifferent

**Description:** This group works 9-5 sitting at one location and is usually extremely stressed out to focus on their backs or their posture. As a result, they are not concerned about their posture or back health. They experience back aches every now and then, but feel like that can be overcome through stretches and investment in other areas like the gym, ergonomic chairs, etc.

<b>Goals:</b> <ol style="list-style-type: none"><li>1. To maintain good posture without monetary investment</li><li>2. To be able to work comfortably for long hours</li></ol>	<b>Behavior:</b> <ol style="list-style-type: none"><li>1. Sits for long hours and changes positions to be comfortable</li><li>2. Prefers stretching to avoid backache</li><li>3. Not interested in expensive devices that aid backache</li><li>4. Prefers momentary comfort over posture</li></ol>
<b>Needs:</b> <ol style="list-style-type: none"><li>1. Inexpensive means of comfortable posture</li><li>2. Means to improve the overall health</li><li>3. Low effort and free/cheap mechanism to improve posture</li></ol>	<b>Motivations:</b> <ol style="list-style-type: none"><li>1. Long working hours makes it uncomfortable to sit in one position</li><li>2. Apathetic to physical activity</li></ol>

# Target audience with personas

## Want something cheap or sponsored

**Description:** This group works 9-5 on most days and suffers from persistent backache. They need something that would help improve their back and posture and are well aware of bad back health. This group likes the idea of something/someone nagging them to correct their posture and would be willing to invest in something cheap or sponsored and something that gives instant results.

<p>Goals:</p> <ol style="list-style-type: none"><li>1. Achieve good posture</li><li>2. Healthy lifestyle habits</li></ol>	<p>Behavior:</p> <ol style="list-style-type: none"><li>1. At times, spends hours sitting continuously in one place</li><li>2. Uses a pillow to maintain good back posture</li><li>3. Exercises moderately and stretches</li></ol>
<p>Needs:</p> <ol style="list-style-type: none"><li>1. Affordable means of improving posture</li><li>2. Guidance on good posture</li></ol>	<p>Motivations:</p> <ol style="list-style-type: none"><li>1. To be able to work for hours without having to stretch</li><li>2. To be able to feel fresh at work</li><li>3. To relieve exertion during long working hours</li></ol>

# Target audience with personas

## Chronic Backache

**Description:** This group has had a sedentary lifestyle for a while now and is still working 9-5. This group has an extreme case of backache and has been medically involved with improving their back health. This group is willing to use a product that complements their existing medical care as a precautionary measure to their back condition; as long as the product actually does what it says.

<b>Goals:</b> <ol style="list-style-type: none"><li>1. Get rid of chronic back pain</li><li>2. To avoid medical complications related to back posture</li></ol>	<b>Behavior</b> <ol style="list-style-type: none"><li>1. Cautious about health and posture</li><li>2. Works long hours with the same, bad posture</li></ol>
<b>Needs:</b> <ol style="list-style-type: none"><li>1. Preventive measure for backache</li></ol>	<b>Motivations:</b> <ol style="list-style-type: none"><li>1. Aid for existing backache problem</li></ol>



# Target audience with personas

## Fitness Enthusiasts

**Description:** This group, although has a sedentary lifestyle, is a health-conscious and fitness enthusiast where they try to include daily activities in addition to a long, stressful sedentary life. They have already invested in a few health-related products and would love to experience something that helps them improve posture.

<b>Goals:</b> <ol style="list-style-type: none"><li>1. To have a healthy lifestyle</li><li>2. To achieve a level of fitness</li></ol>	<b>Behavior:</b> <ol style="list-style-type: none"><li>1. Mindful about posture and self-aware</li><li>2. Exercises and stretches regularly</li><li>3. Makes sure not to sit in the same position for hours</li></ol>
<b>Needs:</b> <ol style="list-style-type: none"><li>1. Something to complement their existing means of improving posture</li><li>2. Something to keep them from slouching during work</li></ol>	<b>Motivations:</b> <ol style="list-style-type: none"><li>1. To try not to aggravate backaches while working for long hours</li><li>2. To be physically fit and active</li></ol>

# Target Audience and Why

Our current target audience is the “Fitness Enthusiast”. This is the group is highly motivated and would be willing to invest in something that helps them improve back posture. This group normally sits for 8-10 hours in one position, in front of their laptops. At the same time, they are very conscious of their back health and regularly spend time in physical activities and stretches. They have invested in other products like ergonomic chairs, etc. but in vain. This is the prime group that whose needs can be quickly addressed.

The following SET factors further helped us strengthen our findings and make a concrete persona choice to begin with.

# **PESTLE Analysis for Market analysis and current product requirement.**

### **Political**

1. Political operations started taking place from home and the ones who tried to meet in public places received backlash
2. Sedentary lifestyle of political leaders who would otherwise move around and are not used to working out, worsened their situation

### **Economic**

1. **Companies started saving a lot of money on infrastructure and other resources during WFH**
2. **Sponsorship to the employees for a WFH setup costed lesser than usual expenses to the companies**
3. **Employees started saving a lot of time, effort and money in working from home that would normally be spent on travel.**

### **Social**

1. **In response to the pandemic, people tried to gym from home (alone or in groups) with incorrect postures**
2. **Online group sessions lost “personal touch” and there was nobody to correct them when they went wrong**
3. **Work from home kits supported home ergonomics but failed at improving back and body posture problems**
4. **Workload increased significantly reducing the little attention given to health-related activities**
5. **Sedentary lifestyle affected physical and mental health**

### **Legal**

1. Many medical clearances and certifications are required for ergonomics and medical health related products

### **Technological**

1. **Many work from home workouts with applications promoting home gym**
2. **Pose detection software have emerged**
3. **AR VR field started expanding**
4. **Zoom and Teams allowed trainers to interact with trainees online but experienced limitations of a 2-D video feed**
5. **Voice assistants and other emerging technologies allowing users to interact with voice**

### **Environmental**

1. During winters and extreme cold, motivation to step out and access to open spaces reduces
2. Overall, electricity and water usage reduced compelling people to consider continuing working from home in the future

## SOCIAL

- COVID and WFH has influenced people to set up a home office and invest in ergonomic chairs and tables
- People are becoming more and more aware of a healthy lifestyle and good back health

A product that can improve posture habits easily, and cost-effectively among IT professionals with a sedentary work - life > 8-10 hours.

## ECONOMIC

The Working-class that has a sedentary lifestyle also has a moderate disposable income to invest in solutions to aid backache and maintain posture

- Many gym form home and back massagers, along with back belts and ergonomic chairs are available
- Posture checking software and methods to check body angles and distances are available

## TECHNOLOGICAL

# Competitors

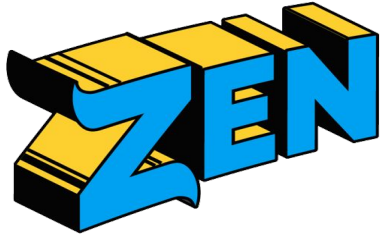
Closest competitor products/services:

- Standing desks
- Ergonomic chairs
- Posture-correcting belts
- Posture correction softwares
- Posture correcting neck-pieces

Potential competitors:

- [PostureCo](#), evaluates client posture, but not in real-time.

# Competitive Analysis



## DRAWBACKS

Erroneous posture correction.

Limited visibility as it only uses laptop mounted camera for posture correction.

Allows user to calibre the initial, correct posture; point of failure as the user might not be aware of the right posture.

Only works when taken working from a table, fails when calibrated from bed and other locations.

## DIFFERENCES

Additional camera that will be mounted at a specific distance and angle from the user.

Zoomed out view of the body would give accurate results and avoid caveats.

This would not be limited to sitting on a table, posture can be measured in standing, sitting on bed and other positions too.



# Competitive Analysis



## DRAWBACKS

The application has bugs, does not run properly.

Although provides a dashboard view, does not provide stretching suggestions in case of back ache / prolonged wrong posture.

Does not take into account different areas of back - lower and upper, etc.

## DIFFERENCES

Apart from alerting the user regularly (customizable notifications), basic stretches and movements will be suggested.

Users will be provided with a detailed review of various sections of the back.

Gamified incentives - coupons and offers.

# Competitive Analysis

Ergonomic Chairs



## DRAWBACKS

Does not serve the purpose of teaching right posture habits to the user.

Although provides a good overall support, the user might forget from time to time to sit upright, especially during high stress situations (a common state of being for our target persona).

The right support provided only by expensive ones.

## DIFFERENCES

Our product would compliment this chair. It would remind the user to make use of the features provided by the chair.

During high stress situation, the app might speak to the customer in a customized tone and language - with empathy or with humor, etc. so the user does not get annoyed by constant nagging.

# Competitive Analysis



## DRAWBACKS

Uncomfortable to wear for a longer period of time.

Not a sustainable solution.

Not everyone has the same back history, this is a common solution for common back issues.

Might become too tight when the user sits / walks and hence, regular adjustments might be needed.

## DIFFERENCES

Our product easily merges into the background of the user, does not require the user to put it on or off.

Does not cause physical inconvenience. Works well in professional as well as personal environments.

Helps build a habit through a slow, comfortable process.

# Competitive Analysis



## DRAWBACKS

Uncomfortable to wear for a longer period of time.

Not a sustainable solution.

Alerts through vibrations which not everyone is comfortable with.

Might not be able to give a comprehensive feedback on your back: lower and other areas.

## DIFFERENCES

Our app sits in the background without disturbing the user much.

Does not require the user to put it on or off regularly, requires minimal efforts from the user.

Can be used even when the user is sleeping or working out.

Product Positioning



One slouches despite good back support



Works through vibrations

Uncomfortable to wear all day



Usability

# Additional customer analysis

## What did our customers say?

*“Maybe I’ll use it for sometime and it’ll give me benefits but I’ll end up getting lazy again and just ignore the notifications.”*

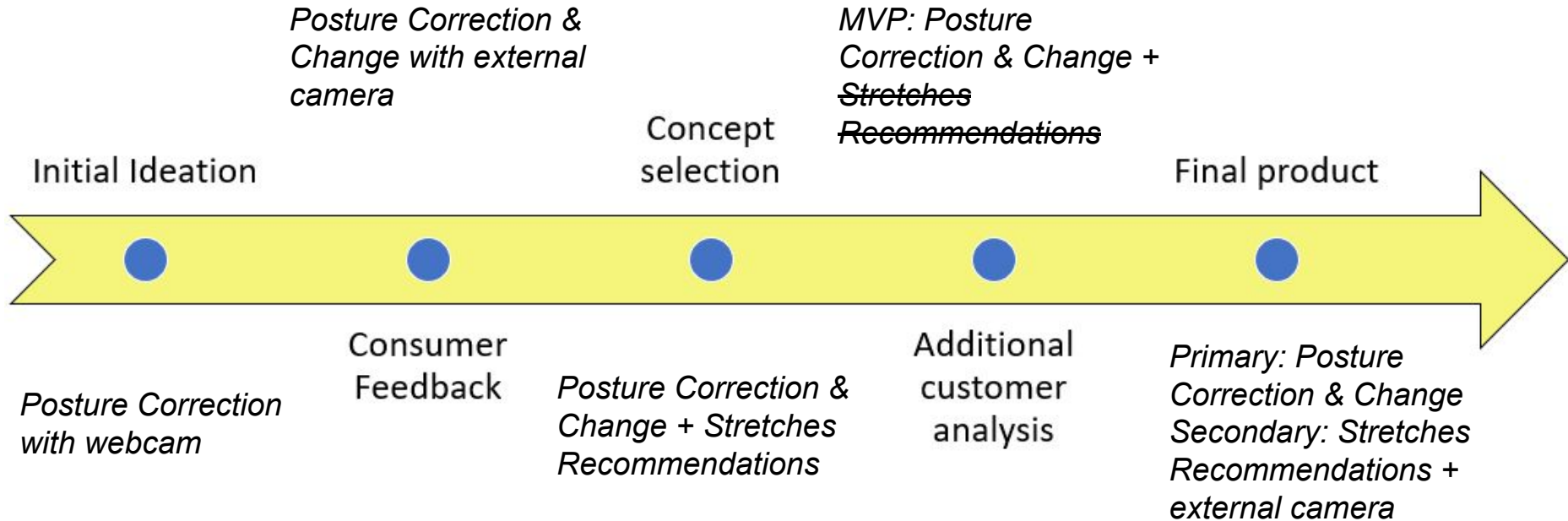
*“I’d really like to invest in this product as long as I know how much it costs me. Or I’d like it to be sponsored by my work organization”*

*“I will invest in this one if it does what it promised. I think the idea is great unless I can customize it according to my own needs.”*

## What did we infer?

- Different people have different need and usage of the product - one common ground being low costs
- Redefining the future scope of the product to revolve around “need states”
- The most important and low risk target market turned out to be IT working professionals who are fitness enthusiasts
- The scope of the product is not limited to posture correction while sitting in a chair but also encompasses posture correction while exercising, standing, etc. in the future
- This product has a scope to be expanded into an IOT system as the users require a comprehensive knowledge of their overall posture

# Product Journey



# Moments of truth

- We realised that people suffered from backache not only due to incorrect posture but due to sitting in the same posture for too long
- Most people didn't want posture correctors rather they'd want to be reminded to change their posture before their back starts aching
- Apart from fitness enthusiasts, people resorted to stretching exercises for aiding backache. This narrows our initial target market to fitness enthusiasts for MVP.

## Concept Screening:

Posture Detection Camera  
Pose Detection Software  
Vibration Belt for Spine Correction  
Ergonomic Chair with IR Sensors  
Posture Analyst & Stretches Recommender  
~~Personal Human Posture Advisor~~  
~~Standing Desk with Pressure Sensors~~

## Concept Scoring:

Posture Detection Camera & Stretches  
Recommender  
~~Vibration Belt+ (With Sound instead of  
Vibration)~~  
~~Ergonomic Chair with Sensors~~



# Product points of difference

1. Real-Time Posture Analysis
  - A camera will continuously analyze your posture throughout the time you sit
2. Gamification to incentivize sustained use
  - With each day of progress, users will be rewarded with incentives (~points) to encourage consistency.
  - Points and daily bonuses can be used to redeem coupons at popular brands.
  - This will build brand value and further reinforce people to follow through on using this product for their posture.

	<b>Our Product</b>	<b>Ergonomic Chairs</b>	<b>Standing Desks</b>	<b>Posture Belts</b>	<b>PostureCo</b>
<b>Cost</b>	Inexpensive	Expensive	Expensive	Inexpensive	Expensive
<b>Health Hazards</b>	None	Possible Slouching	-Wheelchair inaccessible -Leg Pain/ Vein Damage from prolonged standing	Pressure lines on skin	None
<b>Ease of Prolonged Use</b>	Easy	Easy	Hard	Hard	Medium
<b>Incentives</b>	Coupons / Points	None	None	None	None

# Roger's 5 Factors of Innovation

**Relative Advantage:** Our product provides better accuracy and a holistic analysis of the user's posture as compared to other devices whose capabilities are limited.

**Compatibility:** With the rising health awareness and user's comfort with using camera in daily life, the product can be easily accommodated in the user's life.

**Complexity:** The product is relatively simpler to use as compared to ergonomic chairs, standing desks, etc. It also requires minimal efforts on a daily basis

**Trialability:** With our two-month freemium model, every user has a chance to experience the product and assess its usability

**Observability:** Backache problem being prevalent in our target market, the results that the product provides in terms of aiding backache can be seen immediately within a week of use.

# Financials

(Medium Risk) Cost Assumptions:

<b>Product quantity</b>	<b>100</b>	<b>1000</b>	<b>10000</b>	<b>100000</b>	<b>795000</b>
Raw Material Cost	\$3,000	\$30,000	\$300,000	\$300,000	\$23,850,000
Research and Development	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Labour variable cost	\$1,500	\$14,000	\$130,000	\$1,100,000	\$7,155,000
Packaging variable cost	\$100	\$800	\$7,000	\$50,000	\$278,250
Marketing Cost	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Miscellaneous	\$100	\$800	\$7,500	\$60,000	\$397,500
Total Cost					\$31,705,750
Profit Margin 20%					\$6,454,250
<b>Selling Price per product</b>					<b>\$48</b>

(High Risk) Cost Assumptions:

<b>Product quantity</b>	<b>100</b>	<b>1000</b>	<b>10000</b>	<b>100000</b>	<b>927500</b>
Raw Material Cost	\$3,000	\$30,000	\$300,000	\$300,000	\$27,825,000
Research and Development	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Labour variable cost	\$1,500	\$14,000	\$130,000	\$1,100,000	\$8,347,500
Packaging variable cost	\$100	\$800	\$7,000	\$50,000	\$3,246,250
Marketing Cost	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Miscellaneous	\$100	\$800	\$7,500	\$60,000	\$4,637,500
Total Cost					\$44,081,250
Profit Margin 25%					\$11,020,312
<b>Selling Price per product</b>					<b>\$59</b>

(Low Risk) Cost Assumptions:

<b>Product quantity</b>	<b>100</b>	<b>1000</b>	<b>10000</b>	<b>100000</b>	<b>662500</b>
Raw Material Cost	\$3,000	\$30,000	\$300,000	\$300,000	\$19,875,000
Research and Development	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Labour variable cost	\$1,500	\$14,000	\$130,000	\$1,100,000	\$5,962,500
Packaging variable cost	\$100	\$800	\$7,000	\$50,000	\$231,875
Marketing Cost	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Miscellaneous	\$100	\$800	\$7,500	\$60,000	\$3,312,500
Total Cost					\$29,406,875
Profit Margin 15%					\$4,411,031
<b>Selling Price per product</b>					<b>\$51</b>

# Pricing Strategy

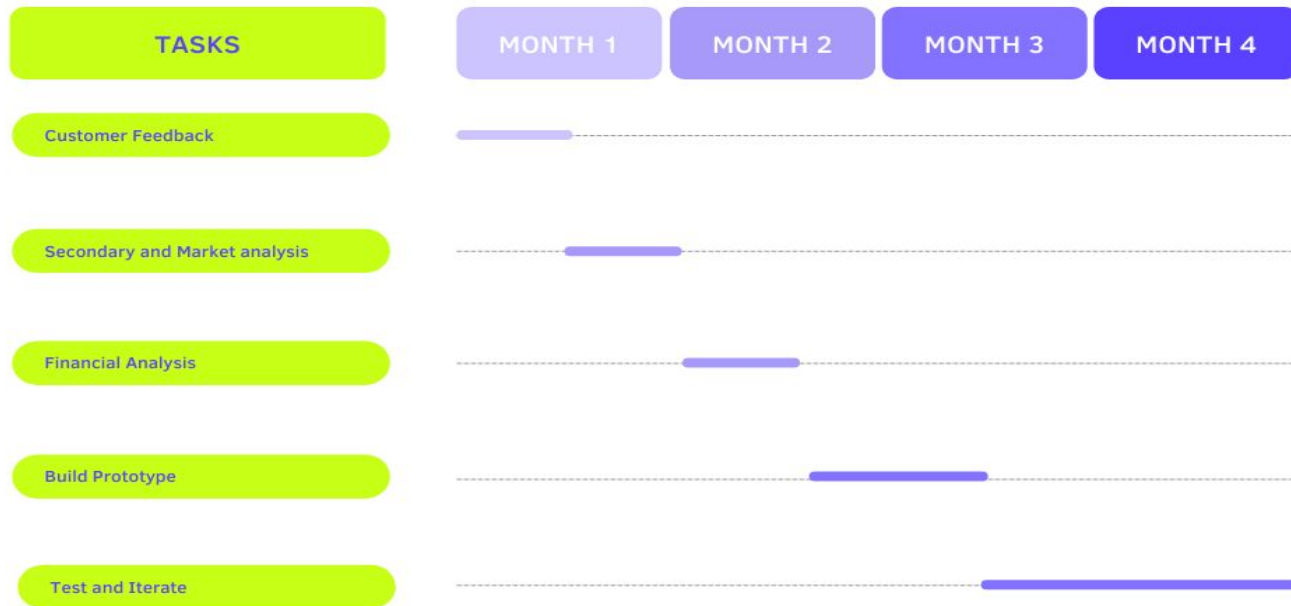
We use a combination of value based and cost based pricing strategies.

- Costs incurred:
  - Physical hardware costs for the camera
  - Camera mount cost
  - Research and development cost for the posture analysing software

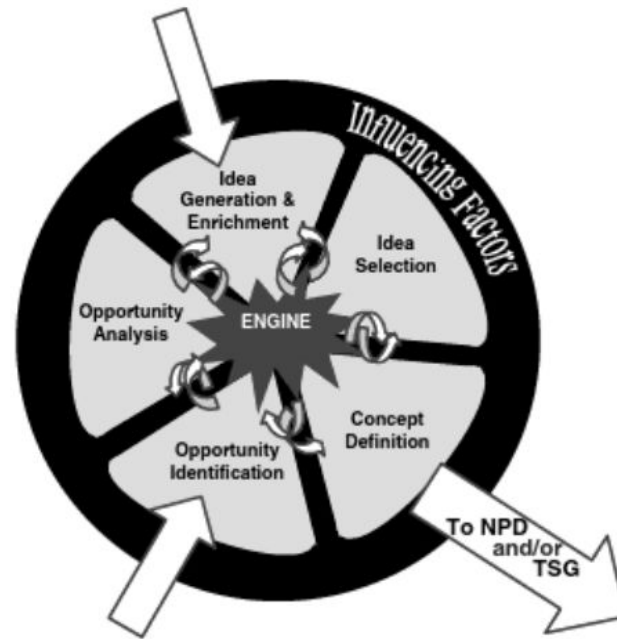
Taking into account the above costs, we priced the product at 50\$ per user, a one time cost.

- Value based cost:
  - Posture analysis based on historical data
  - Focused alerts: lower back, upper back, neck
  - Improved, IOT system for a comprehensive analysis anywhere in the room
  - Improved safety and security for data privacy

# Launch Plan



Iterative tasks will follow the following lean entrepreneurial development stages



**FIGURE 1-2. The new concept development (NCD) construct is a relationship model, not a linear process.**

*It provides a common language and definition of the key components of the fuzzy front end (FFE). The engine, which represents senior- and executive-level management support, powers the five elements of the NCD model. The engine and the five elements of the NCD model are placed on top of the influencing factors. The circular shape of the NCD model is meant to suggest that ideas and concepts are expected to iterate across the five elements. The arrows pointing into the model represent starting points and indicate that projects begin at either opportunity identification or idea generation and enrichment. The exiting arrow represents how concepts leave the model and enter the new product development (NPD) or technology stage gate (TSG) process.*



# Go-To Market Plan

**Product:** A camera - based offline working posture correction software that runs in the background without disturbing the customer or requiring any additional efforts apart from reacting to the alerts and correcting posture regularly.

**Pricing:** Two versions: freemium and premium. Freemium would be provided for two months after which the user will be prompted regularly to upgrade to premium. Cost would be around 40-50\$.

**Promotion:** A complimentary product to buying ergonomic chairs and tables. Google ads, Instagram influencers with Google search results

**Placement:** Physical stores in IT Hubs like Seattle, Austin and San Jose. Digital presence on Amazon and personalized website.

**me: I need to fix my posture.I'll start  
now**

**also me few mins later:**



# References

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