



# Vibencode Software Development Approach.

## Approach Matters

We share common goal, getting things done, in a well defined time period.

According to a 2019 Product Manager survey from Gartner, 45% of product launch are at least delayed by a month.



So how to turn odds in our favor?

"78% of product managers who viewed improving collaboration internally as one of their top three roles, experienced low product failure rates." - 2019 Product Management survey from Gartner.

Communication is the key to successful product launch.

No, countless long meetings is not the answer.

To turn odds in our favor we have designed a framework that follows Software Development Lifecycle the way it was meant to be.

# Our Approach

A client brings up a document with requirements, timeframe and budget. Let's begin from here. Our framework.

1. Planning and Discovery
2. Defining Objectives, Product Roadmap
3. The Sprint
4. Pre Launch
5. Post Launch

## Phase 1: Planning and Discovery

This has to be the most ignored phase by both Technology Service Providers (TSP) and clients.

TSP are given a document with requirements to begin with and client want TSP to start development immediately so as to get things done on or before time.

Here is the problem, at this point there is a possibility that requirements is misunderstood by TSP and there can be several reasons to it. Notice how "communication" can be a problem here. This only become evident after first few development sprints when client realizes that what needs to be developed is different than what we see.

Both TSP and client can be held responsible for this, TSP for not digging in requirements to get clarity and client not able to properly explain the requirements.

We solve this problem by "Planning and Discovery" Phase. It involves:

## ★ **Competitive Analysis**

- Shortlist top 5 most relevant competitors for analysis.
- Identify similarities and differentiation between the competitors.
- Evaluate user experience performance thoroughly.
- Conduct brainstorming sessions to shape product based on inputs.

## ★ **Technical Analysis**

- Assess the technical feasibility.
- Identify potential technical challenges and obstacles.
- Identify and document potential technical risks.
- Plan and define high level structure of the product.
- Choose the most suitable technology stack and evaluate available libraries and open-source components for potential integration.

## ★ **Community Analysis**

- Identify user pain points in existing solutions.
- Go through related articles, blogs or information available which can be useful.
- Identify customer groups, this is useful when working on UI/UX.

## ◆ Business Centric Analysis

- Go through reports generated by industry experts, unions or federations. This will help generate business centric insights.
- Identify micro/macro problems existing players are facing.
- Identify business models defects.

All this work makes sure client and us (TSP) are on the same page. Not just on the same page, we have more insights which will set a tone for all the following phases.

## Phase 2: Setting Objectives and Creating Roadmap

It's time to set clear objectives and create a proper roadmap.

**We already have requirements, what do you mean by setting objectives?**



**Requirement changes. Objective don't.**

When we have a clear objective in mind as in "The big picture" it helps to avoid "Major Changes" mid project which can significantly increase required time, effort and cost. It helps take better technical and product decisions in the beginning which will in long run increase efficiency of everyone involved.

Now let's discuss about roadmap

## What is a roadmap? Why is it important?

A roadmap is like a detailed plan for a project. It breaks the project into smaller tasks and tells us time required to complete it.

The best part is that it helps us set the order in which the tasks need to be completed, so well defined priorities.

## Phase 3: The Sprint

Let's begin development of the project now. Based on the roadmap we will pick set of inter-related tasks and start working on them.

We do it in a structured way and consistently take feedback from our client which make sure we all are on same page throughout entire process.

Steps involved:

### 1. UI/UX design

Create UI/UX design of the selected part.

### 2. Frontend Development

This involves working on the part which will be visible to the users of this application. First be build functional part i.e. logical part (This is done parallely to UI/UX design. Thus saving time.) and as soon as the UI/UX design is completed and client is happy with it, we implement it.

### **3. Backend Development**

This involves working on the part that is not visible to user, it contains all business logic. Frontend communicates with backend using REST API's. The backend serves all the data and manipulation of data via API to frontend. This is also done parallelly (No wait for any part). Frontend is though dependent on backend for the APIs, so frontend team needs to wait until the APIs are ready (frontend team uses mock APIs until then, to keep up the pace).

### **4. Manual Testing**

This is self explanatory, after development is completed, we start manual testing to make sure the application is fully functional.

### **5. Deployment**

Now we are all set to deploy the work on our "dev environment" for the client to test it and provide us the feedback.

### **6. Working on the feedback**

If few changes are requested by the client, we complete it before starting the new sprint. This is very important for us, our client really appreciate our flexibility to changes a lot.

### **7. Documentation**

Documentation is important, here we define the technical decisions we took for this product.

We keep doing this until we complete all the tasks.

## Phase 4: Pre Launch

When we are ready for the launch it's important that we make sure of the following.

### ✦ **Isolated production and development environment.**

Before launch it's important that we have two environments "Production" (The one which will be used by the users) and "Development" (The one used by us to Vibencode Software Development Approach 5 continue new development work and properly test it before deploying it to Production environment).

### ✦ **Load testing**

It is important to load test and check the scalability of the solution and make sure it can handle the expected traffic.

### ✦ **Tighten security**

Double check the Production environment and make sure the product is fully secured.

### ✦ **System monitoring**

This is critical, after launch it is important to track system performance and make required changes to further optimize the systems.

## Phase 5: Post Launch

Congratulations for the successful launch!

In this phase we continuously monitor system and make sure everything is running smoothly.

After the launch as the need for more development arises we go again to the “Phase 2: Setting Objectives and Creating Roadmap” and start the process again.

## Conclusion

In all these phases we have make sure we have proper communication, so as to make this product a success. Thanks for reading this far!