

## SRE ..(Formal)

Book : Software Requirements by kurt weiger

Important Topics Start from here.

Business Requirements :

Req. to increase customer satisfaction.

Statement: want to develop a software from which our sale will increase to 50%.

B.R: sale increase.

→ Success Criteria.

User always tell functional Req. to us, not the business req.

Like, ~~What is the business req.~~

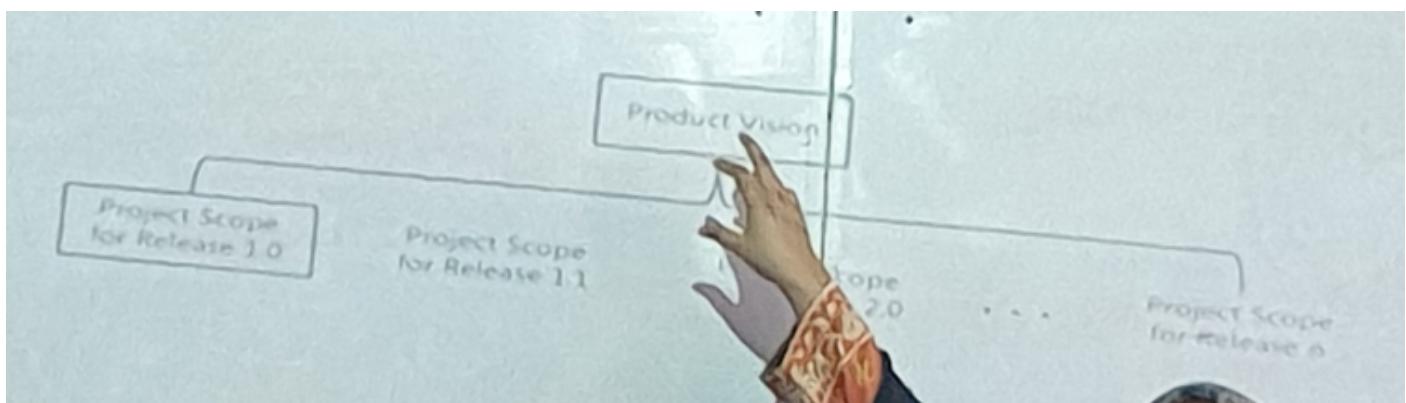
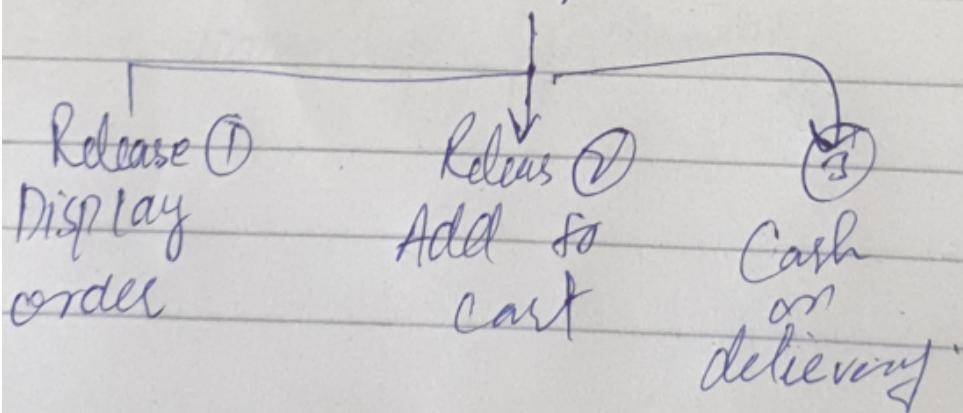
Product → Complete Software.

1.

Product → Complete Software.

Product Vision: What software will do or produce? + Functionality what it include?

Project → Scope.



# for Vision and Scope

- 1. Business requirements**
  - 1.1 Background
  - 1.2 Business opportunity
  - 1.3 Business objectives
  - 1.4 Success metrics
  - 1.5 Vision statement
  - 1.6 Business risks
  - 1.7 Business assumptions and dependencies
- 2. Scope and limitations**
  - 2.1 Major features
  - 2.2 Scope of initial release
  - 2.3 Scope of subsequent releases
  - 2.4 Limitations and exclusions
- 3. Business context**
  - 3.1 Stakeholder profiles
  - 3.2 Project priorities
  - 3.3 Deployment considerations

## Background

- Summarize the rationale and context for the new product or for changes to be made to an existing one.
- Describe the history or situation that led to the decision to build this product

## Business Opportunity

- This section could include a comparative evaluation of existing products, indicating why the proposed product is attractive and the advantages it provides.

## Business Objectives

- Summarize the important business benefits the product will provide in a quantitative and measurable way.

## How to measure Business Objectives :

### Success Metrics

- Specify the indicators that stakeholders will use to define and measure success on this project.
- Identify the factors that have the greatest impact on achieving that success, including factors both within and outside the organization's control.
- Choose your success metrics wisely. Make sure they measure what is important to your business, not just what is easy to measure. A success metric to "Reduce product development costs by 20 percent" is easy to measure.
- It might also be easy to achieve by laying off employees or investing less in innovation. However, these might not be the intended outcomes of the objectives.

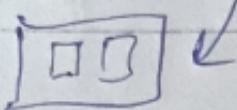
→ Business Objectives Evaluation?

mention → Success Criteria

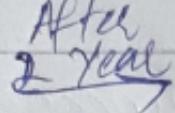
↳ Business Risks:

→ Related to marketing

In 1 year



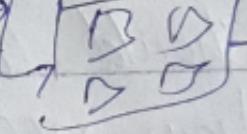
After  
2 years



→ Our Soft.

□ → Functionality

Risk



→ Other  
or  
Competitive  
Soft.

↳ Business Assumptions:

How much daily sale?

How much visitors?

We will share the Vision & Scope doc. with user.

### ① Back ground:

Describe history of old software.  
Its drawbacks. (exist or not the)  
prev. software.

### ② Business opportunity:

#### ~~③ Objective~~

### ③ Business Objectives:

It should be quantitative.

There should be a mechanism to check how need meets.

Eg:

Sale of 50% Increases.

→ Vision Statement:

## Vision Statement:(max 2 lines)

### Vision Statement

- Write a concise vision statement that summarizes the long-term purpose and intent of the product.
  - For [target customer]
  - ■ Who [statement of the need or opportunity]
  - ■ The [product name]
  - ■ Is [product category]
  - ■ That [major capabilities, key benefit, compelling reason to buy or use]
  - ■ Unlike [primary competitive alternative, current system, current business process]
  - ■ Our product [statement of primary differentiation and advantages of new product]

Ex:

Sale of 50% Increases.

→ Vision Statement:

- ① For (Small Business / big).
- ② who (to increase productivity).
- ③ That (All features).
- ④ Unlike (~~can~~ compare with competitive soft).

Our Product (Advantages).

**Example(TELL THE VISION STATEMENTS)**

## Vision Sample

- StaffSquared
  - For a small company that needs to ensure they meet employment legislation demands and overall compliance, Staff Squared is HR software that manages onboarding, employee data and files, and time off in a web-based platform. This keeps businesses compliant with employment legislation and, in particular General Data Protection Regulation (GDPR). Unlike other services our focus is on compliance legislation specifically targeted at small companies.

Is(product category) = HR software (related to Human Resource Software)

## Another Example:

### Vision Statement

- For scientists who need to request containers of chemicals, the Chemical Tracking System is an information system that will provide a single point of access to the chemical stockroom and to vendors. The system will store the location of every chemical container within the company, the quantity of material remaining in it, and the complete history of each container's locations and usage. This system will save the company 25 percent on chemical costs in the first year of use by allowing the company to fully exploit chemicals that are already available within the company, dispose of fewer partially used or expired containers, and use a standard chemical purchasing process. Unlike the current manual ordering processes, our product will generate all reports required to comply with federal and state government regulations that require the reporting of chemical usage, storage, and disposal.

## Scope Presentation:

## Scope Representation Techniques

- You don't need to create all of these models; consider which ones provide the most useful insight for each project.
- The purpose of tools such as the **context diagram, ecosystem map, feature tree, and event list** is to foster clear and accurate communication among the project stakeholders.

## Top level Diagram :Flow of Control:

### Context Diagram

- It identifies external entities (also called terminators) outside the system that interface to it in some way, as well as data, control, and material flows between the terminators and the system.
- The context diagram is the top level in a data flow diagram developed according to the principles of structured analysis

## Notations:

### Notations

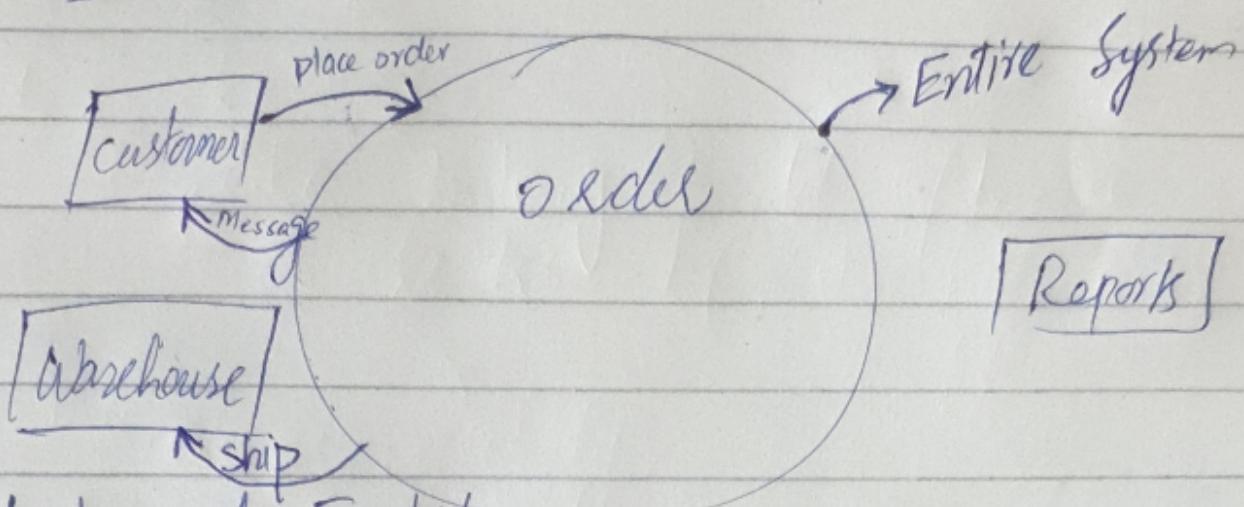
- The entire system is depicted as Circle
- The external entities in the Rectangles can represent
  - user classes
  - organizations
  - other systems
  - hardware devices
- The Arrows on the diagram represent the flow of data

## Case Study :

## Case Study

- Precision Tools sells a line of high-quality woodworking tools. When customers place orders on the company's Web site, the system checks to see if the items are in stock, issues a status message to the customer, and generates a shipping order to the warehouse, which fills the order. When the order is shipped, the customer is billed. The system also produces various reports.

### Case Study:



### Internal Entities:

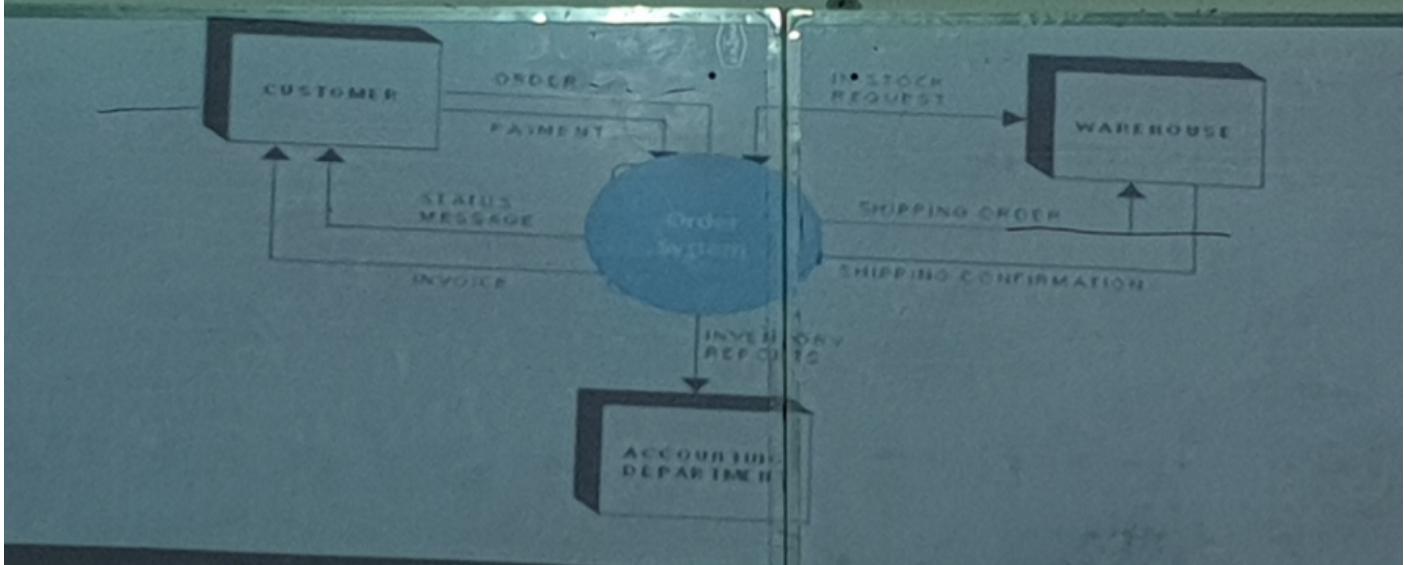
What the Software manages?

External Entities: (Hardware)-

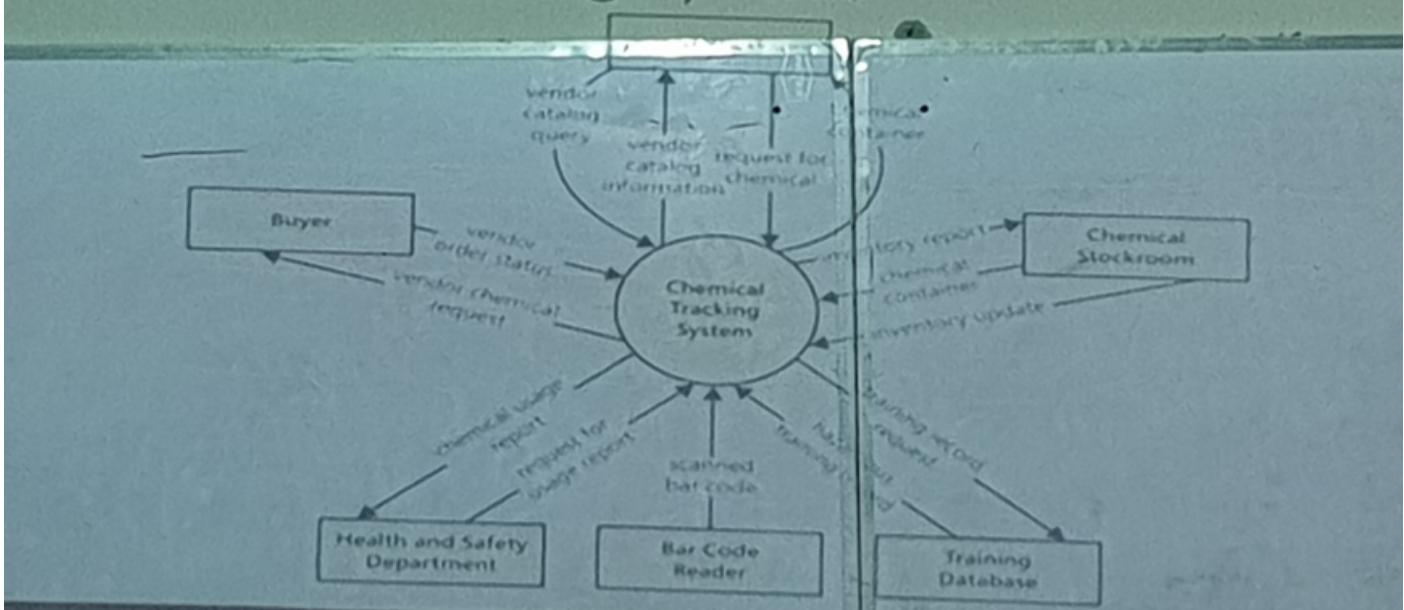
Any physical Entity ~~the Software~~, department

Enp: customer, warehouse, Reports.

## Context Diagram



## Chemical Tracking System



With whom your system interact after show directly....

**Ecosystem Map :**

## Ecosystem Map

- An ecosystem map shows all of the systems related to the system of interest that interact with one another and the nature of those interactions
- An ecosystem map represents scope by showing all the systems that interconnect and that therefore might need to be modified to accommodate your new system.

With whom your system interact after show indirectly.....

- Entire system is depicted as **Bold Box**
- External systems are depicted in the **Boxes**
- The **Arrows** on the diagram represent the flow of data

## Ecosystem map Vs Context Diagram

- Ecosystem maps differ from context diagrams in that they show other systems that have a relationship with the system you're working on, including those without direct interfaces.
- The major difference between this model and a context diagram is that the ecosystem map will show systems that do not interact directly with the system under discovery

Ecosystem Map includes **only system** as entities whereas CD has human interface as well