**System Vision**

Now coming to the part of Vision of the Car Infotainment System, We shall discuss the main points that are involved in the Vision of the system.

* **For Whom**  
  The **CIS** will be generally developed for the customer who will ultimately drive the car. But if we talk about the customers categorically, then the main category that pops up is the car manufactures and engineers who embed the system in the car.   
  The initial and most important users, as stated, are the Manufacturers. If they don’t like the system, they may reject it and contact a new company to develop an infotainment system.  
  The other secondary (and most important) category is the driver of the car – the one who will actually use the system on a daily basis. Thus it’s important to make the system more and more user friendly and provide a simple and flexible interface.
* **What is the need**The Basic need of the system will be to provide an interface for entertainment and information control that is easy to use while still being flexible and highly advanced.  
  The System will be used in cars for infotainment control. The system will provide and interface that extremely simplified and easy to use by making use of HCI rules. This system will use as less buttons as possible to lower the risk of confusion in the driver.
* **Product Name**The product will be named **Car Infotainment System (CIS).**
* **Product Category**The category of the product is Car Entertainment.
* **Benefits of the Product**The main benefit of the product would be simplified interface. The new and advanced technology helps the user to perform easy tasks with no difficulty whatsoever.   
  The customers will buy this system because of the use of HCI rules that helps the user to perform tasks with very less difficulty.
* **Primary competitive alternative**One of the main problem with the existing infotainment systems is the complexity. The available systems are so complex that it becomes difficult and even frustrating for a user to perform different tasks.   
  The existing systems use an array of buttons – each having a different purpose. This is, by far, the main drawback of the existing infotainment system. How? Well, a person driving a car has to concentrate on the road. If he looks away for more than 2 seconds, a disaster may occur. The vast variety of buttons makes it difficult to perform a task in less time.   
  The Proposed **CIS** uses very less buttons. Each button is used for a different purpose. Thus the driver can perform the task without even looking at the system.
* **Our Product  
  CIS** is the easiest and most intuitive way to control entertainment, information, communication and navigation functions. The goal is to separate display and steering.   
  The system mainly comprises the [Control Display](javascript:self.location.href=buildValidServerRelativeUrl('/com/en/insights/technology/technology_guide/articles/control_display.html?content_type=&source=/com/en/insights/technology/technology_guide/articles/idrive.html&article=control_display')) and the [Controller](javascript:self.location.href=buildValidServerRelativeUrl('/com/en/insights/technology/technology_guide/articles/controller.html?content_type=&source=/com/en/insights/technology/technology_guide/articles/idrive.html&article=controller')) in the central console.The height and width of the [Control Display](javascript:self.location.href=buildValidServerRelativeUrl('/com/en/insights/technology/technology_guide/articles/control_display.html?content_type=&source=/com/en/insights/technology/technology_guide/articles/idrive.html&article=control_display')) are optimally positioned to suit the driver. All the information is displayed in the glare-free, high-resolution screen above the central console. The menu navigation follows the standard method used in computing and can thus be used intuitively. Animations and other visual aids quickly make using **CIS** a pleasant everyday activity.

**Now that we have an idea of the vision of the system, we shall formally elaborate the vision of the system .**

* + - **Vision statement**The **CIS** gives the driver complete control over many of the vehicle’s functions while allowing him to concentrate on the road.  
      The main vision of **CIS** is to make the car flexible enough to perform any task easily. CIS allows user to control entertainment media and information much more easily and safely. Thus allowing the user the user to concentrate more on the road and less on the multimedia system.
    - **Major features**CD/DVD player.  
      Mp3 Player.  
      iPOD Dock **.**Car climate control.  
      GPS navigation.  
      Engine information.  
      Mobile communication. And much more……
    - **Assumptions**The assumptions that were made while developing the **CIS** are as follows:  
      The system shall be operate able in any sedan manufactured after 2005.  
      The system shall concentrate more on ease of use and flexibility.  
      The system shall be able to provide an interface that relies more on recognition than memorization.  
      The system shall incorporate new technologies like GPS navigation, touch screen, Bluetooth connectivity etc. in such a way that that the user won’t get confused in the pool of vast features. The user shall fell more comfortable and utilize the features every feature with much ease and confidence.
    - **Major dependencies to external factors outside of the project’s control**   
      the system is dependent on several external factors.  
      For secondary hardware like microprocessor chip, touchscreen glass, memory integration, the project has to rely on other companies that manufacture or develop these products.  
      The operating system of the CIS is developed on a platform that is open-source. Nut for other features like database integration and graphics rendering, the system has to use other development platforms.  
      The System must follow ethical codes and HCI rules for the interface.  
      The system must also incorporate the features that help disabled people to use the system with less difficulty.  
      Another major factor that affects the system in the compatibility of **CIS** with cars. Due to hardware design, the car must have slots available where **CIS** shall be fitted into.

**System Boundary**

The system boundary defines the interaction of the system with the outer world and the people involved in the system by any means.  
**CIS** is basically used in the motor vehicle. Its main users involve the driver and passengers of the car.

In the following lines, we shall identify different actors that would deal with the **CIS** by answering different questions.

* + **Who will supply, use or remove information from the system?**The CIS shall be supplied by the automobile manufacturing company.   
    The main user of the system is subsequently the driver. In the end, it is he who will use the system and its features.
  + **Who will operate the system?**As stated above, the driver will be the one who will operate the system in its fullest meaning.   
    There may be, however, some exception as per the user of the system. For example, if the driver needs some expert advice, then he may require the guidance of the expert of the system. In that case, the primary operator of the system is the Expert.
  + **Who will perform system maintenance?**The **CIS** comes under one-year warranty. Each and every technical fault would be covered in that warranty. However the maintenance is provided by the technical staff of the manufacturers.
  + **Where does the system get its information?**The system incorporates many features.  
    For navigation, the system shall get the info via satellite.  
    The car maintenance information is fed in the firmware of the system.  
    The entertainment files shall be fed into the system by the user.
  + **What other external systems will interact with the system?**The other systems that the **CIS** interacts are:   
    Mobile phones, iPOD, mp3 players etc.

**System Constraints**

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| **Source** | **Sample Consideration** |
| **Economic** | **Financial or budget constraints** |
|  | **Costs of goods or products** |
| **Political** | **Internal or External Political Issues** |
|  | **Inter-departmental problems** |
| **Technical** | **Restriction in choice of technology** |
|  | **Constraints within existing platform** |
| **System** | **Existing system to be used** |
|  | **Compatibility with existing solutions** |
|  | **OS to be supported** |
| **Environmental** | **Environmental or regulatory constraints** |
|  | **Legal issues** |
|  | **Security requirements** |
| **Schedule and Resources** | **Is the schedule defined?** |
|  | **Restriction to use existing resources** |
|  | **Can resources be expanded? Temporary? Permanent?** |