**PACT analysis for a Smart Museum**

**People**

**Diverse User Base**: A broad spectrum of visitors from various age groups and backgrounds should be served by the smart museum system. Users may differ in their linguistic proficiency, degree of technological knowledge, and physical and cognitive capacities.

**Accessibility**: Acknowledge the significance of providing all users, including those with impairments, with equal access to the system. This covers treating physical difficulties, hearing problems, and visual impairments. Make sure that everyone can utilize the system.

**Cognitive Abilities**: Recognize that consumers could differ in their preferences and cognitive capacities. Give top priority on creating an intuitive, simple, and mostly visual user interface that can adapt to different levels of cognitive ability.

**Computer Literacy/Knowledge**: Recognize that even tech-savvy consumers might not be entirely conversant with all of the functions included in the smart museum app. Make sure that both novices and professionals can easily use the system.

**Activities**

**User Engagement**: When users scan TUIO markers, the system should provide them with a rich and interesting experience which include detailed information about museum objects.Make sure that all users can easily and intuitively engage with this interaction.

**Educational Value**: By providing comprehensive information on the displays, you may encourage learning and the transfer of knowledge. For instructional purposes, take into account accessible content and audio descriptions.

**Context**

**Language Barriers**: Users may speak various languages, which could lead to difficulties in communication and translation. Languages with distinct scripts may also make user interactions much more difficult, increasing the sense of vulnerability. Multilingual support for the app is necessary to handle these language-related issues.

**Geographical Change**: It's possible that visitors won't recognize the layout of the museum, which could make them lost. The app should have wayfinding capabilities to assist users in efficiently navigating the museum and give them location-specific information about the exhibitions.

**Technologies**

Technology is crucial to the smart museum project because it allows users to access information about museum objects via smartphone cameras and TUIO markers. To guarantee accessibility, the system must support various web browsers, assistive technologies, and smartphone operating systems. Data security, content management, and device sensor integration are important factors to take into account in order to facilitate effective information retrieval and user interaction, which will eventually improve the museum experience.