Explore the different frameworks/Tech Stacks available for cross platform mobile application development. Prepare a report that include following:

1. A comparison of Native and Cross Platform mobile app development.

**Native Mobile app Development :**

Native app development is the process of creating a mobile app for a specific mobile operating system. Native apps are developed for a specific mobile operating system, such as iOS or Android. Native apps are developed using the programming languages and tools that are native to the mobile operating system. For example, you can develop a native Android app with Java or Kotlin and choose Swift and Objective-C for iOS apps. Native apps are the most efficient and performant apps available. Native apps have broad functionality and better store support but native applications are time consuming and costly because if you want your app to on both android and iOS you will need to hire two mobile applications developers

**Cross Platform app development :**

Cross-platform app development is the process of creating a mobile app that can run on multiple mobile operating systems. Cross-platform apps are developed using a single code base. Cross-platform apps are developed using a single programming language e.g. We use JavaScript in React Native and Dart in Flutter and now C# can also be used in Cross Platform Development. In this apps are developed using a single development environment and single development tool. These apps are developed using a single development framework and single development platform. These apps cost lower then native mobile applications. There development process is way faster than native .but there functionality slower and have limited functionality and there UI Components cannot match native applications. Because we there SDK’s first convert code to native code which slow there functionality.

1. Different scenarios where each native and cross platform mobile app development is preferred.

**Ans:**

**Native Development or Cross Platform Development Which One to Use?**

It all depends on our requirements if we want data to fetched over network cross platform is better option for that and if we want to interact with hardware or it involves heavy processing you will need to choose native development. If you got limited resources then you should Definity choose cross platform because it cost less then native application but If you want high performance you need to choose native way. If you want best UI/UX and stunning Visuals, the answer is Native Development. Cross platform will greatly limit the UI/UX element of the app. if you have less time to develop than you should go for cross platform because it just take one cycle to develop the software and in native development you will need to work with 2 versions of software one with iOS and one with Android

1. List of frameworks/Tech Stack for cross platform mobile Application development.

**Ans:**

* React Native
* MERN Stack(MongoDB, ExpressJs, React Native, NodeJs): for FullStack App
* Flutter
* Ionic
* Xamarin
* PhoneGap
* Appcelerator
* NativeScript
* Kony