**LECTURE # 03**

**Microsoft Power Platform:**

The Power Platform provides organizations with the opportunity to empower their team members to build their own solutions through an intuitive low-code or no-code set of services. These services help simplify the process of building solutions. With Power Platform, solutions can be built in days or weeks, as opposed to months or years. Microsoft Power Platform is composed of five key products:

* Power Apps
* Power Automate
* Power BI
* Power Virtual Agents
* Power Pages.

**Power Apps**

Power Apps provides a rapid low code development environment for building custom apps for business needs. It is a suite of apps development services with a scalable data platform (Microsoft Dataverse) and an ability to interact with cloud & on-premises data sources. Power Apps enables the creation of web and mobile applications that run on all devices. Power Apps eases users into app development with a simple interface, so that every business user or pro developer can build custom apps.

**Power Automate**

Power Automate lets users create automated workflows between applications and services. It helps automate repetitive business processes such as communication, data collections, and decision approvals. Power Automate can provide automation not only for the individual user, but also for enterprise-grade process automation. Its simple interface allows users with every technical competence (from beginners to seasoned developers) to automate work tasks.

**Power BI**

Power BI is a business analytics service that delivers insights for analyzing data. It can share those insights through data visualizations, which make up reports and dashboards to enable fast, informed decisions. Power BI scales across an organization and has built-in governance and security, to allow businesses to focus on using data more than managing it. A Power BI dashboard could potentially replace a standing meeting to report on company metrics such as sales data, progress against goals, or employee performance.

**Power Virtual Agents**

Power Virtual Agents enables anyone to create powerful chatbots using a guided, no-code graphical interface. It minimizes the IT effort required to deploy and maintain a custom solution by empowering subject matter experts to build and maintain their own conversational solutions. Users can enable chatbots to perform an action, by simply calling a Power Automate flow, which helps users to automate activities or integrate with back-end systems.

**Power Pages**

Microsoft Power Pages is a secure, enterprise-grade, low-code software as a service (SaaS) platform for creating, hosting, and administering modern external-facing business websites. Whether you are a low-code maker or a professional developer, Power Pages enables you to rapidly design, configure, and publish websites that seamlessly work across web browsers and devices. Power Pages provides you with rich customizable templates, a fluid visual experience through a reimagined design studio and an integrated learning hub to quickly build sites that suit your unique business needs.

**Describe the business value of the Power Platform:**

As the business climate changes, new factors are impacting businesses.

* Changing workforce expectations
* Increased costs for custom application development
* Need to become more agile
* Need to scale development efficiently

The Power Platform makes it easy for organizations to address all the challenges mentioned. The combination of low code tools, along with the ability to use enterprise level application development tools, provides a collaborative solution. Citizen developers and professional developers can work together to build targeted solutions, based on needs of the people who use these applications every day.

Explore connectors and Microsoft Dataverse:

**Connectors**

With Power Platform, data connectors make working with different data sources easier. They act as the bridge between data sources and your app or workflow. Power Platform has more than 900 connectors available to various data sources. Connectors also include a series of actions that simplify the process of working with those data sources.

**Microsoft Dataverse**

Microsoft Dataverse allows organizations to securely store and manage data used by your business applications. Dataverse data is stored in tables. A table is a set of rows and columns. Each column in a table stores specific type of data such as names, locations, ages, dates, salaries, and so on. In addition to data storage, Dataverse also has other elements that help with securing data, data validation, and productivity.

Each Dataverse instance includes a base set of standard tables that cover typical business scenarios such as accounts, contacts, and activities. This base set of tables reduces the amount of time that it takes for organizations to start building solutions since there are already standard business tables available. Additionally, organizations can also create custom tables specific to their needs and populate them with data.