DIGITAL NURTURE 3.0 – WEEK 1

Key Topic: What is ServiceNow?

Who is ServiceNow?

15,000+ Employees globally19 Best Places to Work –Glassdoor24 The World's Most Admired Companies –Fortune

Clients: With companies such as AT&T, Coca-Cola, Deloitte McDonald's and Microsoft

Founder & Chairman of the board: Fred LuddyLeadership: Bill McDermott (CEO, formally CEO SAP) Luddy founded ServiceNow in response to inefficiencies he encountered across IT departments during his career.

When is ServiceNow?

Founded: 2003 as Glide soft by Fred Luddy

Changed: ServiceNow moved to... ServiceNow (in 2006)

Key Milestones: #1 in Forbes' Most Innovative Companies 2018, Bill McDermott

became CEO in 2019

Why ServiceNow?

Application: To replace weak / poor IT service provision with an interface that lets business people solve their own problems in a way they understand (throwing the need for centralised 'IT departments' out of the window.

What is ServiceNow?

Platform: A cloud-based application platform as a service (APAAS) for meeting both business and IT developer needs, delivering infrastructure AND Platform & Workflows.

How does ServiceNow work?

IT: ServiceNow is used for IT as they have the infrastructure, security and redundancy/backups function that a business needs in their enterprise.

Data Model: Based on one common enterprise-wide data model and DB.

Workflows by enables IT, Employee, Customer and Creator Workflows in addition to custom workflows & apps.

Key Topic : ServiceNow Platform Overview

Platform Architecture:

ServiceNow being a cloud platform, uses multi-instance architecture which are single tenant ensuring that each customer has its own database and resources isolated.

Characteristic of the architecture are:

Database Layer: A separate database for each customer (so data is well-encapsulated), secure storage and access to the data.

Application Layer: Has its essential applications such as Incident, Problem, Change & Request Management. It also allows developers to build custom applications on top of it.

ServiceNow Platform development: Tools such as Flow Designer, Integration Hub and Studio help you to build custom applications on the Now platform.

Middleware (Middleware Integration with Other Enterprise Systems. Mainly achieved using APIs, connectors and web services(REST/ SOAP))

Security and Compliance: This leverages the built-in security capabilities to perform data encryption, threat detection, audit logs tracking or use access controls operations for all types of sensitive information. It guarantees that compliance with laws such as GDPR (General Data Protection Regulation) and HIPAA is maintained seamlessly.

Applications and Workflow:

ServiceNow provides pre-built applications to satisfy specific business requirements across various field these include:

IT Service Management (ITSM): Basic ITSM apps such as Incident, Problem, Change and Knowledge Management that help to govern and simplify IT processes.

IT Operations Management (ITOM): Encompasses tools meant for Infrastructure management which include discovery, event management, and cloud management.

IT Business Management (ITBM): IT team portfolio management, agile development and financial applications.

HR Service Delivery (HRSD): This automates human resource jobs such as new hire onboarding, case management, and e-documentation for employees.

Customer Service Management (CSM): Allows automatic and streamlined customer service interactions using tools from a vendor

Security Operations: Incident response, threat intelligence, and vulnerability management.

Flow Designer: A low-code tool for building workflows.

Integration Hub: Provides third-party integrations to connect systems.

Role-Based Access and Authentication:

Roles: Permissions are converted into role and roles are assigned to the users. For instance, roles available include 'admin', 'ITIL user', 'HR agent', etc; Roles define what application and data a user has access to as well as the functions he/she is allowed to perform.

Groups: There can be the assignment of roles to groups for better management especially to users with similar functions. The groups can be affiliated to particular projects or departments for improved efficiency of work. **Authentication:** Some of the multiple authentication methods recognized by ServiceNow when it comes to providing an access to the platform include the following.

Local Authentication: User name and password for initial level of security authentication.

Single Sign-On (SSO): Enables users to log in a system, a platform or application with one set of credentials (SAML, OAuth, OpenID Connect, etc. **Multi-Factor Authentication (MFA):** Has an added advantage of an added layer of security in that one has to provide a confirmation number (for instance, a number sent to a phone).

Access Control Rules: Permissions that depend on positions and parameters of users that regulate the records, fields, and operations to which the users have access to in the online platform.

Key Topic: ServiceNow User Interface Overview

Global Search:

This means that the users will be able to make a search of all records that are found within the ServiceNow instance. It also allows you to search incidents, changes, knowledge articles, users and many more from a single form.

How to Use:

Go at the top right of your ServiceNow screen and you will see the option of searching for something, click on it.

Type a keyword like "Incident 12345" or "Knowledge: The following are some of the instructions that needs to be followed on how to reset a password.

Press Enter. ServiceNow will even list within all areas including incidents, request, knowledge articles and so on.

This will allow you to add more parameters for search, for example, record type, (Incidents only).

Connect Chat:

Connect Chat is the real time messaging tool that exists within ServiceNow. It enables users to chat and share information with other users which are embedded within the ServiceNow framework.

How to use:

To begin, search in the ServiceNow window the icon Connect, as a rule, this icon is a speech bubble.

For details, please click on the icon to open the chat sidebar.

To talk to another person, you have to go to the 'chat' section and click on the + sign and choose or search for a username or a group.

Send and format messages in real time for shared projects or emergencies.

Contextual Help;

Unlike Traditional Help that offers users general instructions regarding an application, Contextual Help is an application that gives guidance and instructions specific to the page that the user is using in ServiceNow.

How to use:

Go to any page of your choice for instance the incident form or the request page,

locate for the Help icon which could be in form of a question mark or the help button on the top bar.

If I am on the right page, there is the Help icon, which has a brief description below and when the icon is clicked, a new panel will open on the right side with the help which may be in the form of instructions, articles or links to related help on the page.

When under any kind of doubt about the particular feature, refer to the help guide or articles which will provide further clarification about the correct way to use that particular feature.

Application Navigator:

The Application navigator is the vertical bar on the left side of the screen which groups and categorises all applications and modules in ServiceNow by a series of subtopics.

How to use:

On the left side bar, click "Application Navigator" which is followed by a search bar.

To do so you need to enter the name of the application that you want to create, similar to typing 'Incident ' or 'Change'.

In the next screen of ServiceNow, you will then be presented with a list of modules that is in relation to the keyword that you have entered in the previous field.

You can move directly to a certain function for instance to 'create new incident,' 'my incidents,' etc by simply clicking the corresponding module.

I can simply go to the applications list, to manually go through the list in different categories.

Key Topic: ServiceNow Lists and Filters

The ServiceNow List View is among the fundamental user interfaces in the functionality of ServiceNow through which they are able to manipulate records in a tabular form within functions of different modules. Here's everything you need to know about the ServiceNow List View: Here's everything you need to know about the ServiceNow List View:

Tabular Presentation:

Results are presented in the form of a table where each row contains data from a ServiceNow table while each column corresponds to a field.

It is possible for users to work with many records at the same time which makes it possible to work with the data in larger groups.

Sorting and Filtering:

You are able to sort the columns by clicking on the headers of the columns where it rearranges the data either in ascending or descending method.

A filter helps in displaying the records of a certain type depending on set conditions. The filter icon builds criteria for multiple selection required field based on filter type, field value and other logic operators.

Personalizing List Views:

The current data can be sorted in accordance with the users' choice by viewing the Personalize List and where they can add new columns, delete the unwanted ones or change their position.

User-specific personalization is used very often because it means that different users see different context of the same set of data.

List Context Menu:

The options include the Export to Excel button, the ability to Configure List Layout, Create New Record as well as deleting a Record or even right-clicking on the list headers.

Bulk Record Actions:

Records can be multiple selected so that actions can be applied on all selected records at once, such as editing or deleting records as well as exporting data. The 'bulk actions toolbar' is displayed once records are highlighted.

Grouped List Views:

When creating a list, it is possible to select certain fields, divide the list into subcategories, which would make it easier to see the data and navigate them.

Embedded Filters & Queries:

Parameters give the ability to create queries to extract a part of the desired records out of the overall set. These can be saved as the Favorite Filters or List Reports for the later usage

.

List Layout Configuration:

Users with at least certain amount of privileges can set the basic view of the lists for specific tables, meaning that when a user with limited privilege opens the list, he will see only the columns that an administrator chose.

Export Options:

Exporting of the list is possible in different formats including Excel, CSV and PDF for further off line use or for sharing with other persons.

Search Functionality:

The search bar located at the top of each of the recorded list above enables a full-text search of the records of that table. However, the search bars under the list headers allow to search by value of each field presented in the list.

Inline Editing:

In some implementations, inline editing enables records to be edited on the list view without having to switch to the form view thereby increasing efficiency.

Action Bar:

To the right of the list is the Action Bar which consist of options such as New Record, Filters, and Export Current View.

ACLs (Access Control Lists): In the list view you are able to define the type of activities that can be seen or done by other users based on the ACLs assigned.

Paging Controls: Large data sets are also exhibited using the paging controls located at the lower part of the records list through which you can move from one

page to another.

Key Topic: Forms n ServiceNow

What is a form?

A form in ServiceNow is a user interface widget or template which is used to input, view, and manipulate data records in a table. Organizations and data elements in ServiceNow are pervasive, and the related forms are the means of viewing, creation and modification of records. For instance, if a user wants to open an incident record, then he fills the form that is associated with the incident record table where each field of the table is represented by an input component that allows the user to enter data or modify it.

The Standard Layout of forms in ServiceNow:

Header: Includes such verbs as save, submit and delete.

Fields: Entry points that can be related with the set of columns of the table.

Sections: Fields in form may be grouped in sections to enhance its layout to enable

users to locate the specific fields easily.

Related Lists: Located at the bottom of the page related lists are records from other tables associated to the current table or record.

Form field types:

- String (Text): For entering alphanumeric text.
- Choice: A drop-down list where users select from predefined options.
- Reference: Links to a record in another table, allowing users to select related data.
- Date/Time: Captures date and time information.
- Boolean (Check box): For true/false values.
- Attachment: Allows users to attach files to the form.

Saving Changes:

Save: Saves the record without exiting the form.

Submit: Saves the record and exits the form.

Cancel: Exits the form without saving any changes.

Insert: Creates a new record and redirects the user back to the list view or the previous page.

Insert & Stay: Creates a new record but keeps the user on the form, allowing them to continue working with the newly created record.

Related Lists and Formatters:

Related Lists: These are lists displayed at the bottom of a form that show related records from other tables. For example, an incident form might have a related list showing all tasks associated with that incident.

Formatters: UI elements that enhance the form by providing additional context or functionality, such as the activity formatter which shows a timeline of actions related to the record.

Creating and Editing views:

Creating and editing views in ServiceNow involves setting up different **views** that display specific fields and sections depending on the user role or task. Administrators can define these views to ensure that users see the most relevant information without clutter.

Key Topic: Introduction to Importing Data in ServiceNow

Series Overview: The series focuses on setting up and executing standard data imports in ServiceNow, covering data sources, import sets, transform maps, field maps, and data import scheduling.

Import Process: The data import process in ServiceNow involves three entities:

- Source Data Entity: Where the original data resides.
- Staging Table (Import Set Table): An intermediary table automatically created by ServiceNow during the import process to temporarily hold the data before it is transformed and moved to the target entity.
- Target Data Entity: The final location where the data is imported.

Terminology: The speaker uses "staging table" interchangeably with "import set table" for simplicity. This table is crucial in bridging the source and target during data imports.

Next Step: The next note will explain the creation of a data source, which is the first step in building an import in ServiceNow.

Key Topic : Creating a Data Source in ServiceNow

• ServiceNow imports data by utilizing an intermediary table called an "import set table" or "staging table" between the source data and the target entity.

Data Source Creation:

- A data source is a record in ServiceNow that stores parameters about the source data (e.g., type, connection details, data format).
- The process includes defining the source type, specifying the data to import, and naming the staging table.

Navigating to Data Sources:

• The data sources can be accessed via the application navigator or by typing "sys_data_source.list" in the filter navigator.

Steps to Create a Data Source:

- Click the "New" button to create a new data source.
- Provide a name and label for the staging table (e.g., "Test Import").
- Select the source type (file, jdbc, REST, etc.) and provide additional connection details depending on the type.

Example: Importing from Excel:

- For file-based imports, the user selects the file format (e.g., Excel) and specifies the retrieval method (e.g., attaching a file).
- The tutorial used an Excel file with columns such as Name, Address, City, State, and ZIP. The data source creation process automatically maps these columns into fields in the staging table.

Completing the Data Source:

•	After attaching the file or configuring the connection, the data source is saved, and ServiceNow can proceed to import data into the staging table.