HMI EXPERIMENT 1

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|--------------------------------|----------------------|
| Class: BE-A | Batch: A3 |
| Date of Experiment: 19-01-2022 | Date of Submission |
| Grade: | |

B.1 Domain selected by student:

Selected Domain- ERP Softwares

- → Enterprise resource planning (ERP) is the integrated management of main business processes, often in real-time and mediated by software and technology.
- → ERP is usually referred to as a category of business management software—typically a suite of integrated applications—that an organization can use to collect, store, manage, and interpret data from many business activities.
- → ERP Systems can be local-based or Cloud-based. Cloud-based applications have grown in recent years due to information being readily available from any location with internet access.

Selected Softwares-

1. Oracle NetSuite

NetSuite ERP is an all-in-one cloud business management solution that helps organizations operate more effectively by automating core processes and providing real-time visibility into operational and financial performance.

2. SAP ERP

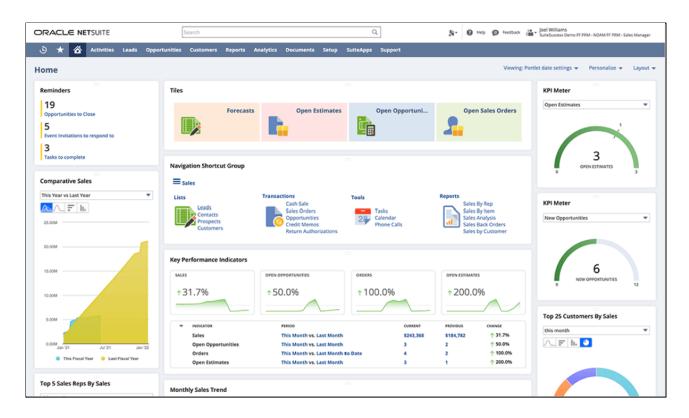
SAP ERP is an enterprise resource planning software developed by the German company SAP SE. SAP ERP incorporates the key business functions of an organization.

3. Microsoft Dynamics 365

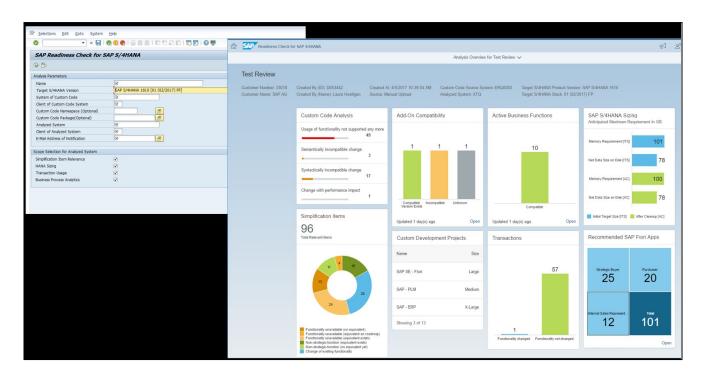
Microsoft Dynamics 365 is a product line of enterprise resource planning and customer relationship management intelligent business applications announced by Microsoft

B.2. Home Page Screen Snapshot:

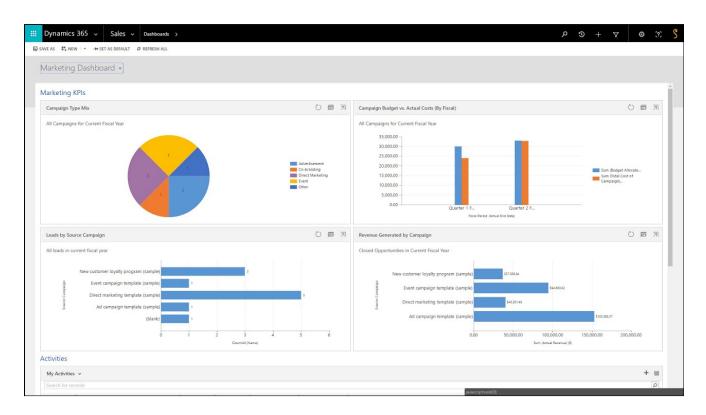
ORACLE NETSUITE



SAP ERP



MICROSOFT DYNAMICS 365



B.3 Analysis of website:

| PARAMETERS | Program 1 | Program 2 | Program 3 |
|---------------------------|-----------------|-----------|------------------------|
| | ORACLE NETSUITE | SAP ERP | Microsoft Dynamics 365 |
| Accessibility | 10 | 9 | 8 |
| Aesthetically Pleasing | 8 | 9 | 6 |
| Availability | 8 | 5 | 8 |
| Clarity | 8 | 5 | 6 |
| Compatibility | 8 | 8 | 6 |
| Configurability | 10 | 8 | 7 |
| Consistency | 9 | 9 | 6 |
| Control | 9 | 7 | 7 |
| Directness | 8 | 8 | 8 |
| Efficiency | 7 | 10 | 5 |
| Familiarity | 8 | 8 | 9 |
| Flexibility | 10 | 8 | 6 |
| Forgiveness | 8 | 6 | 7 |
| Immersion | 8 | 10 | 7 |
| Obviousness | 8 | 8 | 8 |
| Operability | 8 | 9 | 7 |
| Perceptibility | 10 | 10 | 7 |
| Positive First Impression | 9 | 9 | 8 |
| Predictability | 9 | 7 | 6 |
| Recovery | 8 | 8 | 9 |
| Responsiveness | 10 | 9 | 7 |
| Safety | 8 | 6 | 10 |
| Simplicity | 7 | 7 | 9 |
| Transparency | 10 | 8 | 8 |
| Trade-Offs | 9 | 7 | 6 |
| Visibility | 8 | 8 | 6 |
| | | | |
| AVERAGE | 8.6 | 7.9 | 7.2 |

REASONING

Accessibility

All these software can be used through a large number of various device platforms however Netsuite is better on android and SAP data visualization APIs are not consistent in mobile phones

Aesthetically Pleasing

All the software have extensively visual dashboards and comparatively SAP and Oracle Data Visualisation software looks more appealing

Availability

All the software are available on the net and are paid software however Netsuite is the cheapest among the three

Clarity

The aim of all the software is to provide a clear and easy way to handle all operations on a single dashboard and here SAP have better clarity compared to the other two

Compatibility

Microsoft Dynamics has 4 separate services on the basis of the scale of an enterprise which I feel is less compatible with the changing scenario of the current business

Configurability

Oracle Netsuite allows developers to change the backend code of the data visualization APIs as well which is a great feature

Consistency

NetSuite and SAP are more consistent than Microsoft clearly because of the distinctions MS Dynamics has created

Control

Oracle NetSuite allows maximum control in the hands of end-user and program developers of the enterprise

Directness

All the software is equally simple and challenging to use. After initial understanding, anyone can use them as they are user-friendly

Efficiency

All the software are very efficient in terms of business central transactions, however, SAP is better in tracking and displaying changes

Familiarity

Microsoft Dynamics takes an edge in terms of familiarity as a majority of users are used to fundamental tools like MS Excel, Word, etc.

Flexibility

In terms of flexibility, I would rate Netsuite because of the personalization and customization options which truly makes it really flexible to use

Forgiveness

Rather than just data handling SAP also handles real-time transactions and in such transactions, user mistakes should be able to retract hence it is more prone to not forgive the user mistakes

Immersion

All the software have a great appearance and visually appealing dashboards that can immerse a user into the software, while SAP has the best appearance of the three

Obviousness

All these software have very easy to understand portal and data visualization APIs which makes it easy for any user, hence we can rate them on similar lines

Operability

SAP has the highest operability as the access to the data and changes to the data are really smooth

Perceptibility

The more attractive and human-readable is the data, the more is the perceptibility. Oracle and SAP have the most extensive reporting systems hence would be rated higher

Positive First Impression

SAP has the best impression and looks better compared to the other two

Predictability

While all the software is user-friendly and to an extent is predictable in nature, Netsuite appears the most.

Recovery

All the software has recovery options and data loss is recoverable as all the user changes and transactions are tracked in the database. MS Dynamics would be the best since it has different software for a different level of organization, it stores data more efficiently

Responsiveness

Netsuite appears to be most responsive followed by SAP as we can directly customize data from the dashboard which gives the visual representation

Safety

Microsoft Dynamics 365 would be rated higher as Microsoft is been known for its safety standards followed by Oracle

Simplicity

This software requires some basic training for understanding the work but for a layman, Microsoft Dynamics would be a better option as it does not overwhelm the user with tons of features all at the same time.

Transparency

Oracle NetSuite gives permission to change the backend code in order to enhance user personalization hence would be rated higher

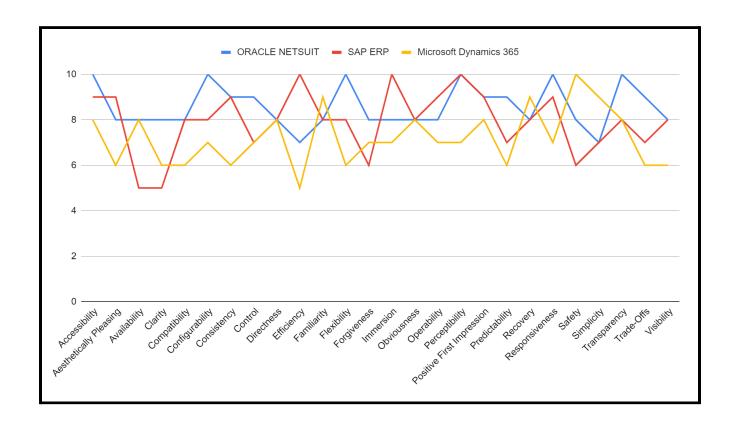
Trade-Offs

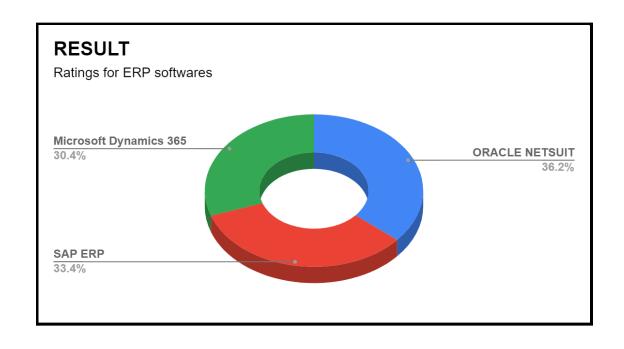
NetSuite allows users to customize the backend for personalization without any software updates or changes hence has a high trade-off capability

Visibility

MS Dynamics would have the least visibility as it is not suited for scalable organizations and hence can't keep track of the progress of the company

VISUALIZATION OF ANALYSIS





B.4 Conclusion:

From the above analysis, it can be concluded that **Oracle NetSuite** is a better alternative to SAP and Microsoft Dynamics 365 ERP software.

However, every software has its own pros and cons.

Some major features of the three are:

ORACLE NETSUITE

- customizable, scalable
- various personalization options
- can customize backend as well

SAP

- extensive reporting systems
- visual dashboards
- data editing APIs like sheets word etc
- Mostly used in transactions

MS DYNAMICS 365

- divided into 4 types of software based on the size of the organization
- safe and secure
- good recovery