UNIVERSITY of GREENWICH
Alliance with FPT Education

BTEC

Higher Nationals in Computing

UNIT 14

UNIT 14: BUSINESS INTELLIGENCE

ASSIGNMENT No.1

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Class: GCS0801_NX

Subject code: 1641

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Assignment due: February 2021

Assignment submitted: February 2021

ASSIGNMENT 1 BRIEF

Student Name/ID Number	Trinh Thi Dieu Huyen / GDD18606
Unit Number and Title	**14: Business Intelligence**
Academic Year	2019 - 2020
Unit Tutor	Nguyen Ngoc Tu
Assignment Number & Title	**Assignment 1: Discover business process and BI technologies**
Issue Date	February 2021
Submission Date	February 2021
IV Name & Date	Nguyen Ngoc Tu January 2021

SUBMISSION FORMAT
The submission is in the form of a 15-minutes Microsoft® PowerPoint® style presentation to be presented to your colleagues. The presentation can include links to performance data with additional speaker notes and a bibliography using the Harvard referencing system. The presentation slides for the findings should be submitted with speaker notes as one copy. You are required to make effective use of headings, bullet points and subsections, as appropriate. Your research should be referenced using the Harvard referencing system. The recommended word limit is 500 words, including speaker notes, although you will not be penalised for exceeding the total word limit.
UNIT LEARNING OUTCOMES
LO1 Discuss business processes and the mechanisms used to support business decision-making. **LO2** Compare the tools and technologies associated with business intelligence functionality
ASSIGNMENT BRIEF
Your company is currently working in [Assumed Domain] for 2 years. For a new, young company, the competition in the market is very high. Therefore, the Board of Director has decided to apply Business

Intelligence to improve the company business process by making better decisions.

The Board of Directors assigns a small group including you in the Research & Development Department to study business intelligence to apply for the company in the coming years.

You need to research about business processes and decision support processes in the company and identify the types of data (unstructured, semi-structured or structured) generated by these processes with examples. You also need to research about current software used in the business process or decision support process and evaluate these usages (benefits and drawbacks).

Next you need to understand the types of support for decision-making at different levels (operational, tactical and strategic) within the company and study which business intelligence features can help with that type of support. Study the information systems or technologies (of BI) can be used in this case, compare and contrast them to conclude which should be used.

Your group needs to present the research results to the board in a presentation of 15 minutes.

<table>
<tr><th colspan="3">Learning Outcomes and Assessment Criteria</th></tr>
<tr><th>Pass</th><th>Merit</th><th>Distinction</th></tr>
<tr><td colspan="2">LO1 Discuss business processes and the mechanisms used to support business decision-making</td><td rowspan="2">D1 Evaluate the benefits and drawbacks of using application software as a mechanism for business processing</td></tr>
<tr><td>P1 Examine, using examples, the terms ‘Business Process’ and ‘Supporting Processes’</td><td>M1 Differentiate between unstructured and semi-structured data within an organization</td></tr>
<tr><td colspan="2">LO2 Compare the tools and technologies associated with business intelligence functionality</td><td rowspan="2">D2 Compare and contrast a range of information systems and technologies that can be used to support organizations at operational, tactical and strategic levels</td></tr>
<tr><td>P2 Compare the types of support available for business decision-making at varying levels within an organization</td><td>M2 Justify, with specific examples, the key features of business intelligence functionality</td></tr>
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ASSIGNMENT 1 ANSWERS

1. Introduce

1.1. Business Intelligence (BI)

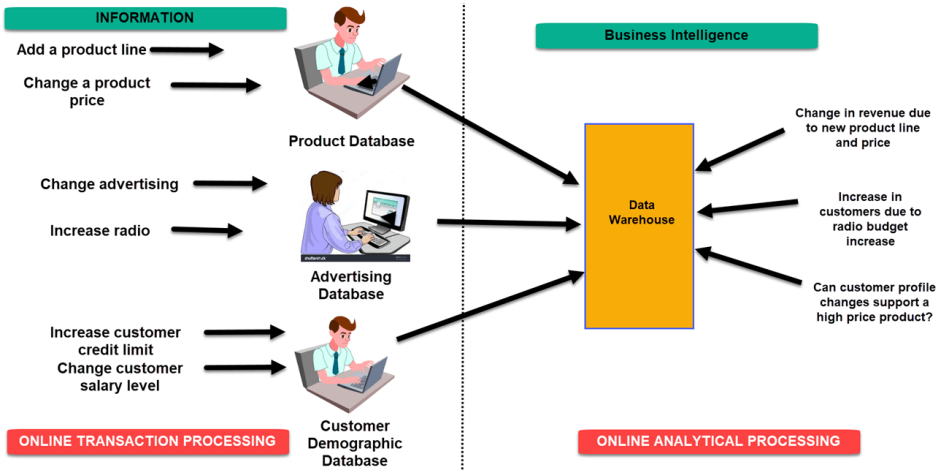

Figure 1: Business Intelligence

Before the advent of new generation technologies then the process of collecting, organizing, codifying, monitoring and analyzing data was a pretty strenuous manual task that needed people to perform. Therefore, it was difficult to achieve the item spend because of the huge amount of data. Nowadays, appearing BI helped us to handle this issue. BI leverages software and services to transform data into actionable insights that inform an organization's strategic and tactical business decisions. BI tools access and analyze data sets then present analytical findings in reports, summaries, dashboards, graphs, charts and maps to provide users with detailed intelligence about the state of the business.

1.2. Dataset

Dataset 1 (grouping and sorting dataset)

Region	Year	Category	Revenue
Mid-Atlantic	2002	Books	$6,771
Mid-Atlantic	2002	Electronics	$1,196,217
Mid-Atlantic	2002	Movies	$288,814
Mid-Atlantic	2002	Music	$292,820
Mid-Atlantic	2003	Books	$6,807
Mid-Atlantic	2003	Electronics	$1,085,630
Mid-Atlantic	2003	Movies	$268,436
Mid-Atlantic	2003	Music	$267,845

Dataset 2

Region	Year	Profit
Mid-Atlantic	2002	$432,541
Mid-Atlantic	2003	$393,828

Dataset 3

Region	Category	Cost
Mid-Atlantic	Books	$9,948
Mid-Atlantic	Electronics	$1,658,723
Mid-Atlantic	Movies	$419,327
Mid-Atlantic	Music	$498,973

Figure 2: Example for Dataset

The dataset is a collection of data, usually presented in tabular form. Each column represents a particular variable. Each row corresponds to a given ingredient of the dataset in question. It

lists values for each of the variables, such as the height and weight of an object. Each value is known as a datum. The dataset may comprise data for one or more members, corresponding to the number of rows.

1.3. Our dataset

Our datasets involve Amazon Kindle Stone, which is about customers buying books and reviewing those books. Our aim with this dataset is to apply techniques in which we can perform sentiment analysis on the dataset. We also need to preprocess the data by filtering out the outliers and removing unnecessary columns if they do not contribute to the sentimental analysis's final result. Moreover, we will have to plot the data to understand better what factors can influence the customer's review. In definition, machine learning sentiment analysis will help any organization assess public opinion, optimize customer service, and automate activities with quick turnarounds. It does save not only time but also money. The sentimental analysis findings will also give concrete, actionable perspectives, helping to make the correct choices. Our dataset has two files in the format of JSON and CSV. We will probably use the CSV file since it is usually easier to work with. The libraries that we will mainly use in Python are Pandas, Numpy and Matplotlib. Pandas can help with easier plotting specific types of the diagram and process the CSV file. Numpy can be used to manipulate higher-dimensional arrays and Matplotlib for plotting more complex diagrams.

2. Discuss business processes and the mechanisms used to support business decision-making

2.1. Business process model

2.1.1. Overview about business process modeling

Business process modeling is the graphical representation of a company's business processes or workflows as a means of identifying potential improvements. This is usually done through different graphing methods, such as the flowchart or data-flow diagram, etc. Besides, it is used to map different states of the process are As-is and To-be. Therein, As-is is the state of the process as it is right now, without making any changes or improvements; To-be is the future state, after making the changes or improvements. On the other hand, it deals specifically with low-level process maps with the main purpose being process improvement. While business process modeling as a concept is extremely useful but it's not usually used as a stand-alone. Therefore, having a graphical representation of a process is good but without the right implementation then you won't go too far. For example, the key performance indicator you

picked to benchmark could be wrong. In that case, you wouldn't have a realistic way to benchmark the new process to the old.

2.1.2. Overview about unstructured, semi-structured and structured data

Below is a table overview of unstructured, semi-structured and structured data.

Table 1: Overviews about unstructured, semi-structured and structured data

	STRUCTURED DATA	SEMI-STRUCTURED DATA	UNSTRUCTURED DATA
What is it?	Data with a high degree of organization, typically stored in a spreadsheet-like manner. Think of a spreadsheet (e.g. Excel) or data in a tabular format	Data with some degree of organization. Think of a TXT file with text that has some structure (headers, paragraphs, etc.)	Data with no predefined organizational form and no specific format. Essentially anything that is not structured or semi-structured data (which is a lot)
Example formats	Excel spreadsheets, comma-separated value file (.csv) or relational database tables	Hypertext Markup Language (HTML) files, JavaScript Object Notation (JSON) files or Extensible Markup Language (XML) files	Images such as .jpeg or .png files, videos such as .mp4 or m4a files, sound files such as .mp3 or .wav files, plain text files, word files or PDF files
Characteristics	Data is structured in a spreadsheet-like manner (e.g. in a table). Within that table, entries that have the same format and a predefined length and follow the same order are and easily machine-readable and can therefore be analyzed without major preprocessing of the data. It is commonly said that around 20% of the world's data is structured.	Data is stored in files that have some degree of organization and structure. Tags or other markers separate elements and enforce hierarchies but the size of elements can vary and their order is not important. Besides, it needs some preprocessing before it can be analyzed by a computer and has gained importance with the emergence of the World Wide Web.	Data that can take any form and thus be stored as any kind of file (formless). Within that file, there is no structure of content and typically needs major pre-processing before it can be analyzed by a computer but often easily consumable for humans (e.g. pictures, videos, plain texts). Most of the data that is created today is unstructured.

2.1.3. Difference between structured, semi-structured and unstructured data

Below is a table of say about the difference between structured, semi-structured and unstructured data.

Table 2: Difference between Structured, Semi-structured and Unstructured data

PROPERTIES	STRUCTURED DATA	SEMI-STRUCTURED DATA	UNSTRUCTURED DATA
Technology	It is based on Relational database table	It is based on XML/RDF (Resource Description Framework)	It is based on character and binary data
Transaction management	Matured transaction and various concurrency techniques	Transaction is adapted from DBMS not matured	No transaction management and no concurrency
Version management	Versioning over tuples, row, tables	Versioning over tuples or graph is possible	Versioned as a whole
Flexibility	It is schema dependent and less flexible	It is more flexible than structured data but less flexible than unstructured data	It is more flexible and there is absence of schema
Scalability	It is very difficult to scale DB schema	It's scaling is simpler than structured data	It is more scalable.
Robustness	Very robust	New technology, not very spread	
Query performance	Structured query allow complex joining	Queries over anonymous nodes are possible	Only textual queries are possible

2.2. Business processes

A business process is a series of steps performed by a group of stakeholders to achieve a concrete goal. Each step in a business process denotes a task that is assigned to a participant. It is the fundamental building block for several related ideas such as business process management, process automation, etc. Business processes occur at all organizational levels; some of them are visible to customers while others are not. To make it easier, we can draw a business process using a flowchart. For example: making forms or generating invoices, receiving orders, shipping products, marketing of the products and company, updating personnel data. Those are the simple steps or processes for a company that can be followed to achieve certain outcomes or goals. There are

mainly three types of the business process are management processes, operational processes and supporting processes. Therein:

- *Management processes* are the process where the application will be governing the system
- *Operational processes* are operational process constitutes the core business of the company and also creates the primary values stream
- *Supporting processes* are all processes whose sole purpose is to ensure the functioning of core (backbone processes) processes and the overall operations of the company. Since their sole purpose is to support main processes, they ensure the business resources in the quality and quantity needed, ensuring the quality of the resource supplies or support services and covers the overall effective functioning of the organization. For instance, the support process includes: Human Resource Management; Financial Management Processes; Building and property management, facility management, cleaning and maintenance; IT processes; Vendor management process; Risk management process; Security management process; Corporate management process; Quality management process.

2.3. Business Process Management Systems

2.3.1. List software (information system) used in business process

15 Best BPMS (Business Process Management Systems) in 2021:

1. monday.com
2. Kissflow
3. Quixy
4. Orchestly
5. Process Street
6. ProWorkflow
7. Trisotech
8. IBM Blueworks Live
9. iGrafx
10. K2 Platform
11. Novacura

12. Wrike
13. OnBase by Hyland
14. Oracle BPM Suite
15. Signavio

2.3.2. Advantages and disadvantages

Below is the table say about the main advantages and disadvantages of using application software as a business management software.

Table 3: Advantages/disadvantages of using application software

ADVANTAGES	DISADVANTAGES
1. All the business information will be organized in an accessible and user-friendly manner which leads to work time saving and increasing productivity **2.** Automating the business process and reducing manual efforts that lead to minimizing mistakes in documents and errors in the business operations **3.** Speeding up making the right business decisions that lead to the company's ability to complete the business operations much faster and with better quality results **4.** Cloud business management software can enable the enhancements of the business calculating **5.** Electronic communications, particularly emails enable companies and their clients, vendors, and business partners to contact and handle business **6.** Storing data on cloud or computers enables saving of the cost of the outside file storage and eliminates purchasing copies and buying typewriters, fax machines, and other office items	**1.** Developing an application software designed to meet a specific purpose can prove to be more costly for developers which can also affect the budget and their revenue flow, especially if too much time is spent developing software that is not generally acceptable **2.** When a business is reliant on software applications, any loss of service due to power or computer outage could cause a work disruption, which may cause loss of data or service **3.** Information stored electronically can be manipulated and accessed if proper controls and security measures are not in place **4.** Since everyone will be using application software that can carry a very real threat of infection by a computer virus or other malicious programs **5.** Developing an application software takes a lot of time because it needs constant communication between the developer and the customer, this delays the entire production process which can be harmful in some cases

2.3.3. Evaluate the benefits and drawbacks of using application software as a mechanism for business processing

Using application software as a mechanism for business processing has improved the effectiveness and productivity of not only professional individuals but companies from small businesses to huge corporations too. Large amounts of personal, industrial and business information are stored and processed on computers by application software. On the other hand, it also helps organizations to efficiently use their staff and reduce their expenses. Computer technologies have advanced to such an extent that if a company doesn't use software solutions in its business, it will be at a disadvantage against its competitors. Even small businesses performing different kinds of service or not technology-related goods may find that without software programs it is difficult to place and complete the orders and provide managing and controlling their business finance and activities.

2.4. Decision making process

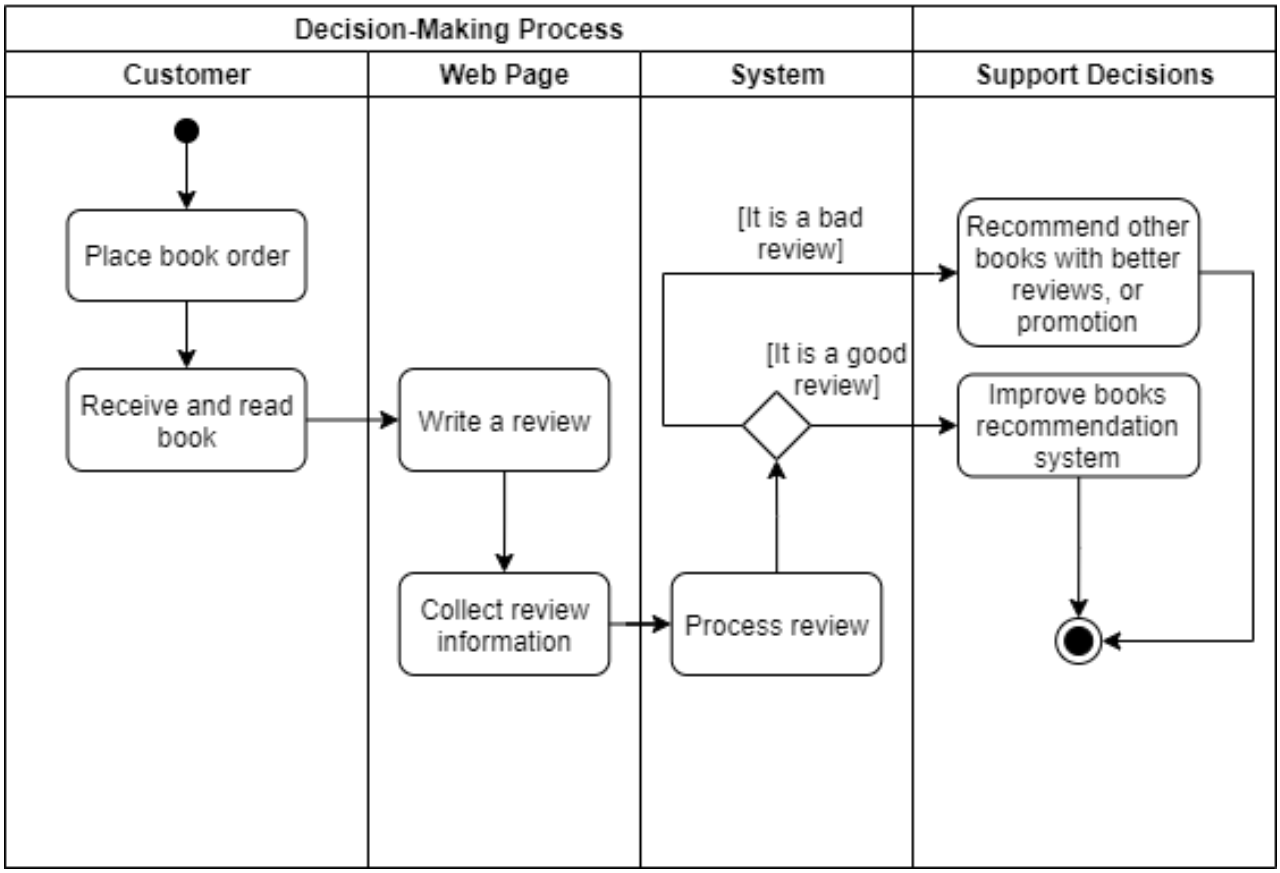

Figure 3: Decision making process

2.5. Operational Process

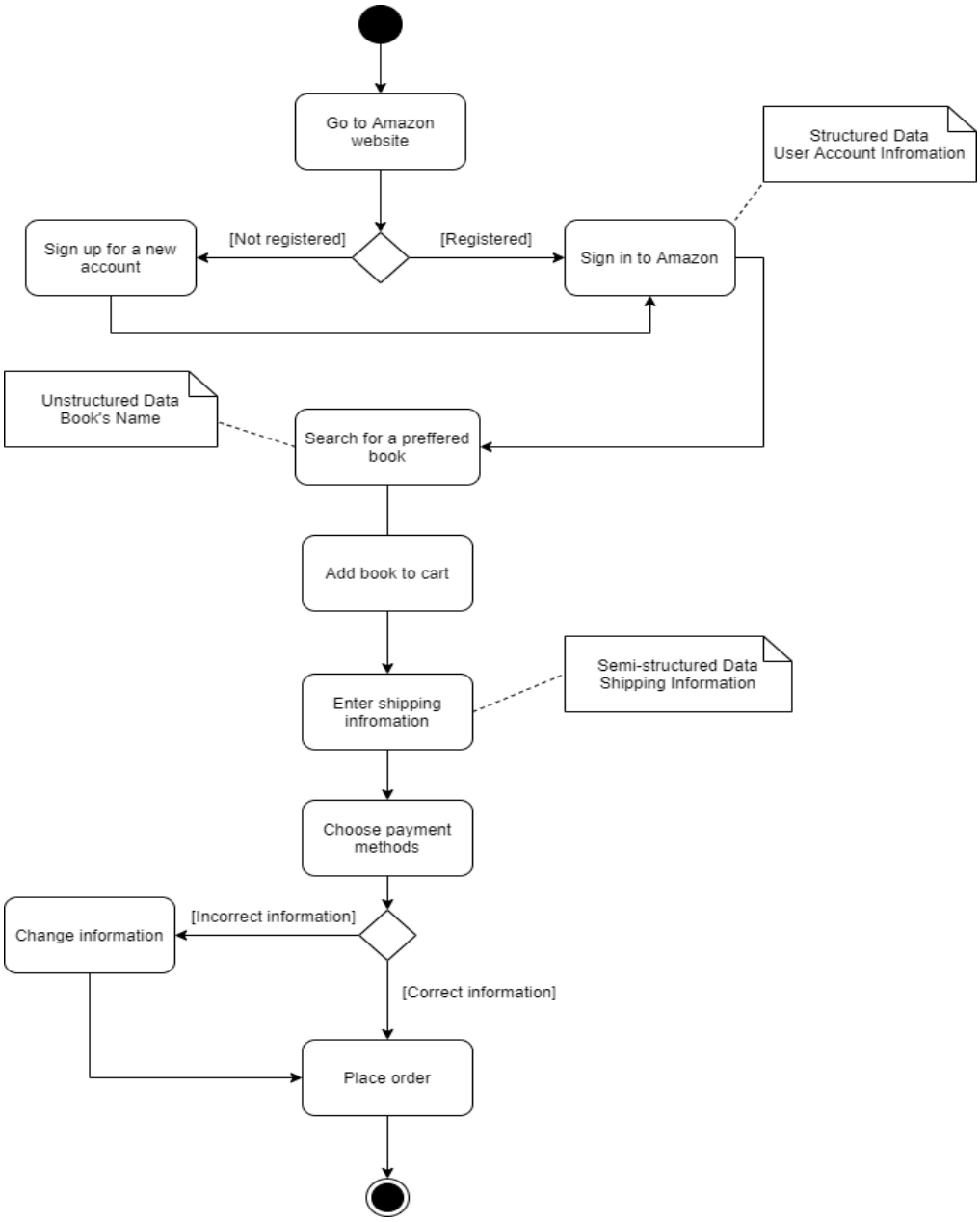

Figure 4: Operational Process

Description:

- Go to the Amazon website to sign in with a registered account or create a new one.
- Search for the preferred book one wants to buy and it to the cart.
- Enter shipping information and choose the payment method.
- If the information is correct, move to place the order. Otherwise, change the information.
- Place the order.

2.6. Supporting Process

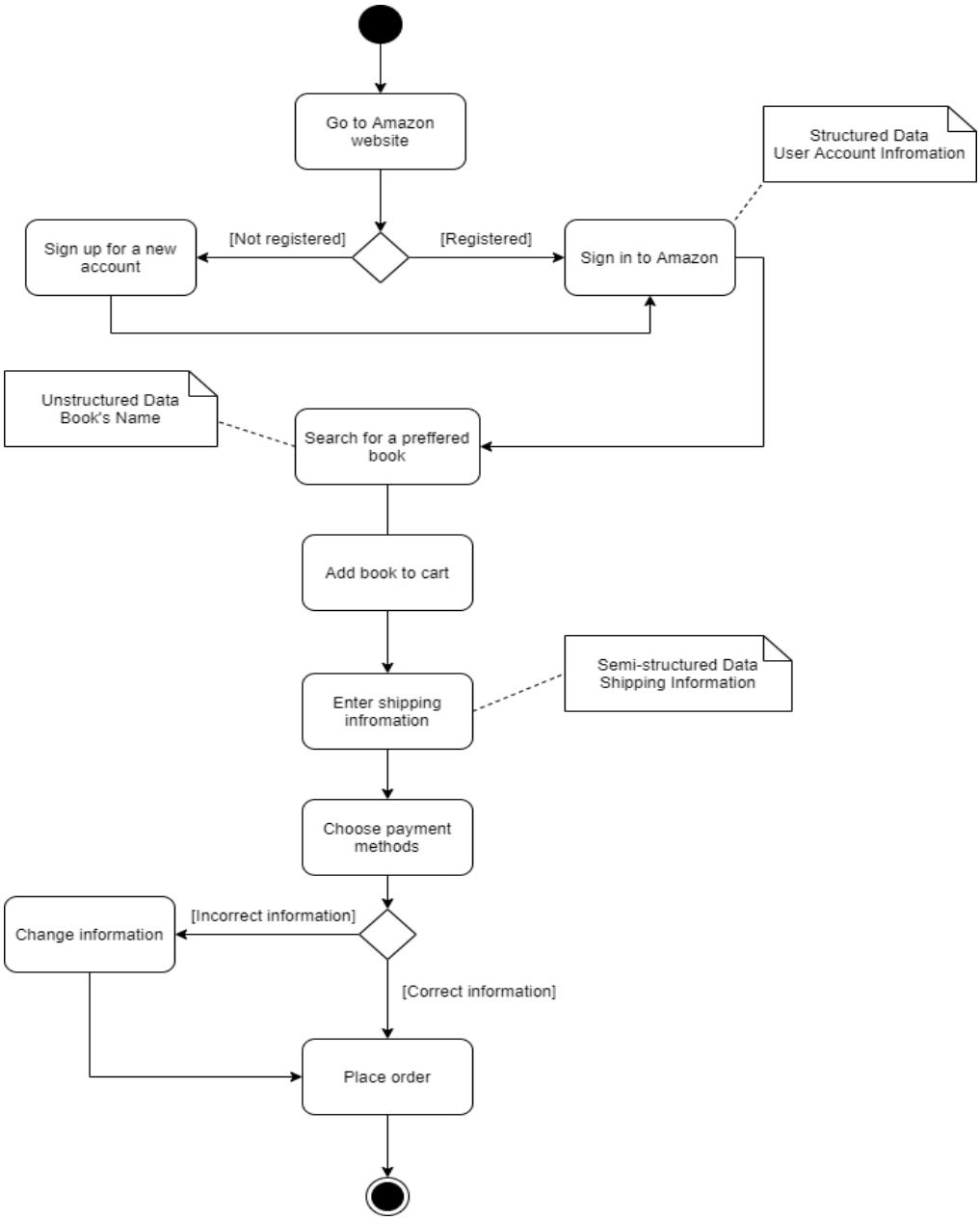

Figure 5: Supporting Process

Description:

- Go to the Amazon website to sign in with a registered account.
- Select a book for review.
- Return to the home page if the user is not eligible for writing a review.
- Choose a star rating and optionally add text, photos, or videos for review.
- Submit the review.

3. Compare the tools and technologies associated with business intelligence functionality

3.1. Overview about three types of decision-making levels

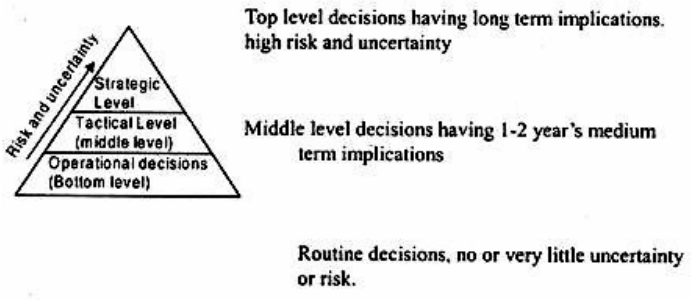

Figure 6: Relative Frequency of Decisions at Different levels

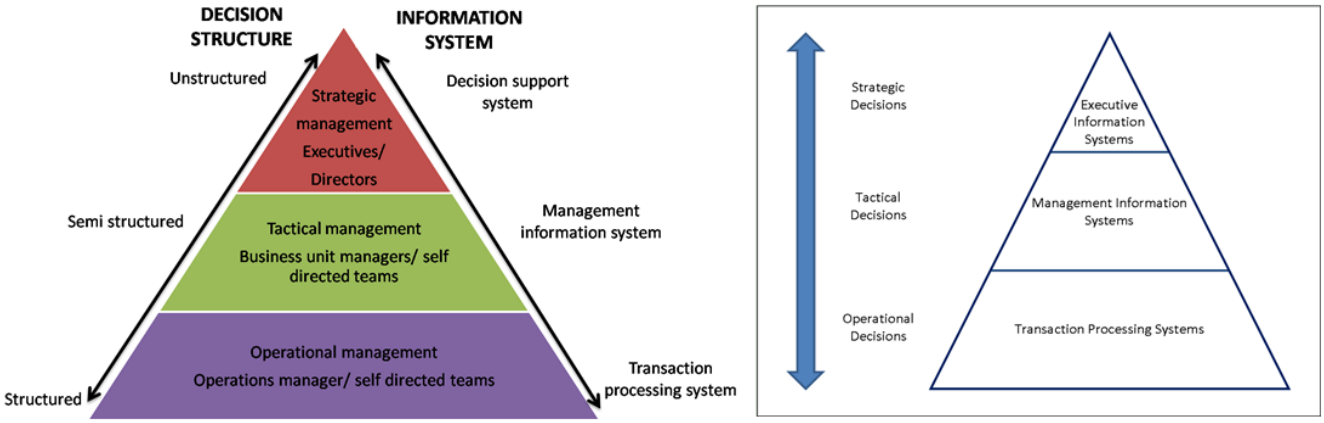

Figure 7: Three types of decision-making levels

3.1.1. Operational level

Operational decisions explain how things work, dependencies, details, process and implementation. For example, let's offer a 20% discount that we can offer via email and implemented via a discount code to be redeemed online. Besides, barcode or promo code can be used in our stores by scanning at the point of sale. Let's allow customers to use the discount many times over the course of the month. So, a unique code is not needed.

3.1.2. Tactical level

A tactical decision is made in isolation. It is short-term focused and does not take into account the overall business or other factors. For example, let's offer a 20% discount to get more sales this month.

3.1.3. Strategic level

A strategic decision is connected to multiple tactical decisions that work together to support the higher corporate strategy, not in isolation. For example, we wanted to offer a discount, but we are selling a premium brand. While a discount may bring in customers this month, it will erode the value of our brand. Instead, we should be doing marketing that promotes the quality and uniqueness of our products.

3.2. Features of Business Intelligence solution and example

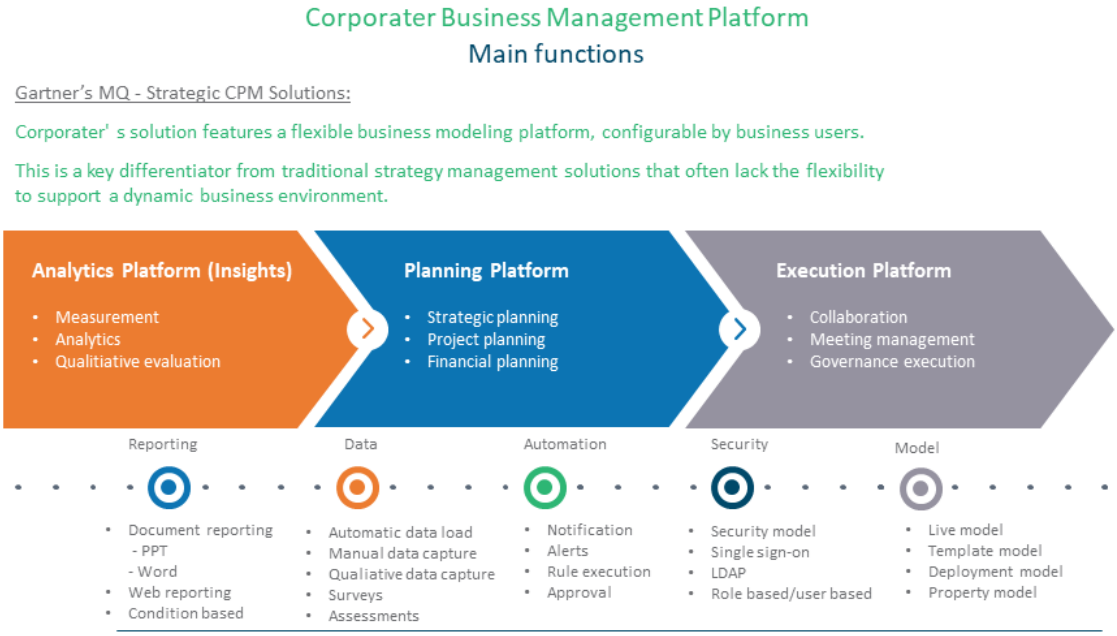

Figure 8: Features of Business Intelligence solution

Here are six features you should insist upon in any BI solution, no matter the circumstances of its application:

- ***Executive dashboards*** are personalized dashboards that deliver relevant, easily understood real-time data to business leaders, enabling faster and better decision-making whilst lowering response times to internal and external events. Executives need access to personalized dashboards that deliver easy-to-understand KPIs and summary information on a regular, scheduled basis. Additionally, exception reporting should alert the executive to unexpected events and scenarios that require action. Personalized data delivery means executives are able to make decisions quickly, without any guesswork, and without having to wade through irrelevant information.
- ***Location Intelligence*** is the ability to map and visualize data in geographical formats. Exploring and visualizing data sets based on spatial elements enables organizations to understand their business operations from new perspectives, such as sales per region.

- ***"What if" analysis*** allows businesses to assess the potential effects of the critical business decisions before they're actually made. Using existing data, users can formulate strategies to achieve business targets and avoid the default "hit and miss" approach. This helps management undertake accurate strategic planning.
- ***Interactive reports*** help users convert data into knowledge. They allow users to better understand the analysis within reports, and the underlying data those reports are based on, to support better decision-making.
- ***The metadata layer*** makes reporting easy and eliminates the need for coding SQL. It allows users and report writers to see and access information in simple business language. Users solely interact with data at the metadata level without having to comprehend the complexities of the underlying data or database.
- ***The ranking reports feature*** allows you to create reports that order specific categories of information from across multiple dimensions by selecting specific criteria. Besides, it also lets you view the best and worst-performing aspects of your business. For example, you could create a report that ranks your 10 best-selling products, regions, or salespeople.

3.3. Dashboard decision

A business intelligence dashboard is an information management tool that is used to track KPIs, metrics, and other key data points relevant to a business, department, or specific process. Through the use of data visualizations, dashboards simplify complex data sets to provide users with at a glance awareness of current performance.

Decision: Recommend other books with better promotion or reviews

Rules:

→ There must not be too many books with low average "book's overall", it should be less than 5000 books

→ Focus on books with many reviews, more than 8000 reviews

→ It should be a year where people read many books (based on the number of reviews per year), above 0.3 million reviews

Data:

- Number of reviews per year (column reviewTime)

  → *For understanding people's trend in reading book*

- Number of reviews per book (column asin)

  → *To see why such a book is often recommended to everyone*

- Number of books and average book's overall (columns asin, overall)

  → *To see if the recommendation system is performing well*

Decision: Improve the recommendation system with the book that is marked as good reviews. If it is a bad review recommend other books (previous decision).

Rules:

→ The reviewText value must be present (not empty)

→ It is a good review if the predicted score is above 4

Data:

- Review text (column reviewText)
- The overall score of a book

  → *For predicting whether a review is good or not*

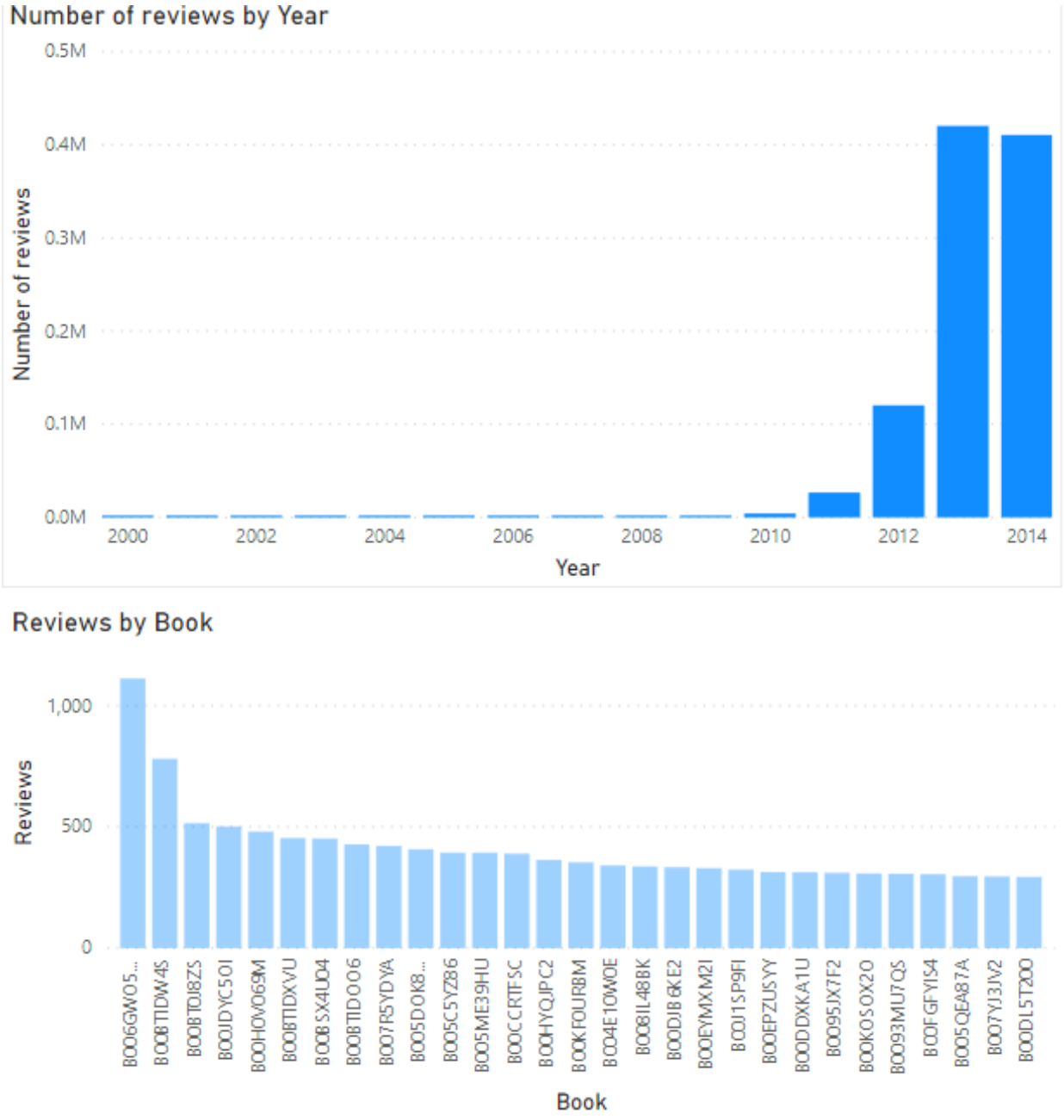

Figure 9: Our Dashboard

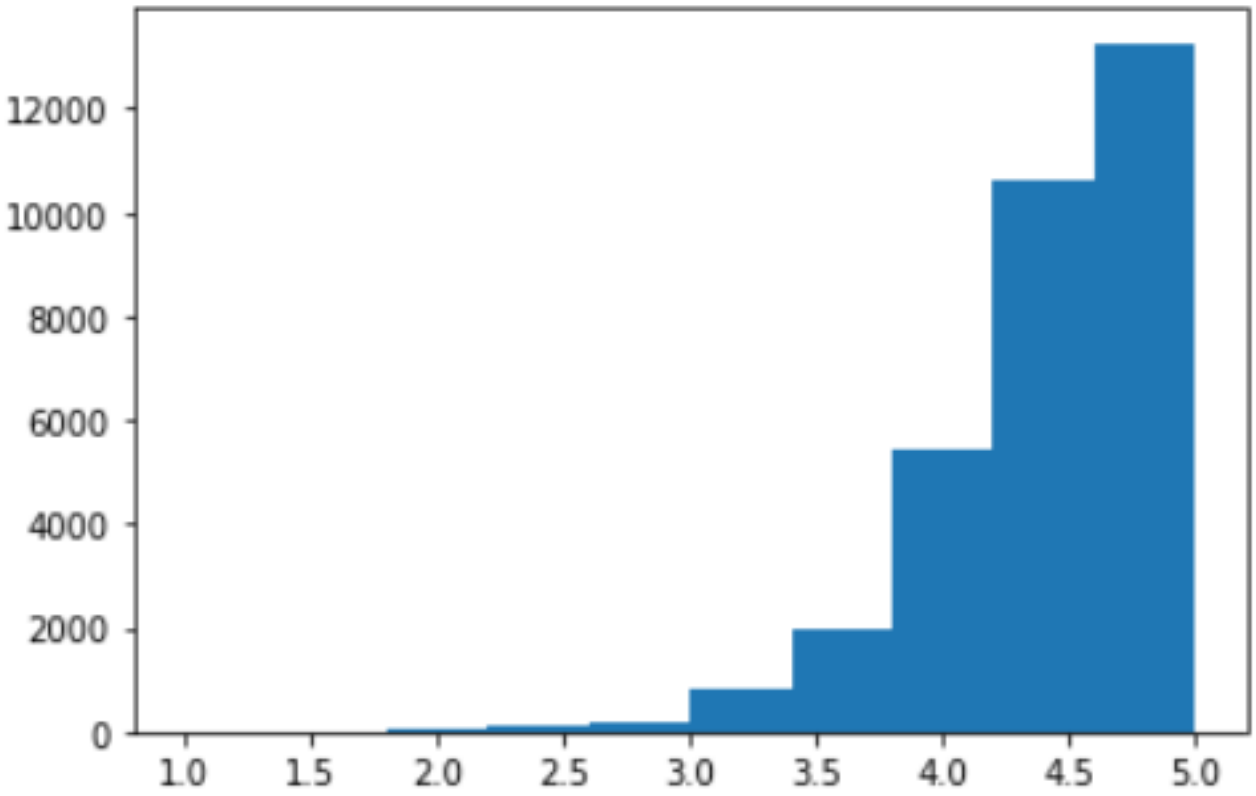

Figure 10: Our Dashboard

3.4. Tools/techniques to decision-making

Tools for decision-making include:

- ***Market research*** is an important tool to understand the needs of the business in the market. What kind of customers are supposed to be targeted.
- ***Decision Matrix*** can help in identifying all the possibilities and options to execute a decision
- ***The cost-benefit analysis*** helps in analyzing the cost for the decision execution and benefits that will be achieved by the execution
- ***T- chart*** used for comparison purposes
- ***SWOT analysis*** is performed to understand the strength and weaknesses of a business
- ***The Pareto analysis*** used when major decisions are required
- ***Feasibility study*** to understand if the project will make a profit, or what will be the impact of the particular decision or project

➔ Being a business analyst, we have to manage data using different business intelligence tools so that can take decisions effectively. If want to track the records of every employee and the progress of projects and tasks then need to develop Business Intelligence tools or application or programs which can solve the specific problem of your project. But, before designing any tools/application/program, need to conduct small-scale research to identify other organizations that have used business intelligence to improve their operation. And, one of the most important things is to determine whether your designed tools are user-friendly or not. So, we need to customize that tool too.

3.5. Compare the three types operational, tactical and strategic levels

Strategy, Operations, and Tactics are often misunderstood. The strategy is most effective when divided into a two-step process including operations and tactics. In the operational stage of a strategic process, the examination and discussion concentrate on resources and doctrine as the opposing waystations in setting objectives. The tactical stage takes the objectives of a given operation and determines the levels of control and chance needed to meet operational objectives. So tactics seek to attain the goals for operational and thus its strategic success. With that in mind, let's consider the different "plans" associated with each, starting with tactics:

→ Tactical plans set specific goals guided by an overarching objective. We often associate these with the SMART system or other methods of establishing clear and definite stepping stones of intent. However, because these goals come the natural opposite to the order and control a plan seeks to create change. Therefore, the influence of the other in achieving these goals is one of the variables influencing the level of a chance our plans will encounter. That plus environmental variables outside the control of the tactical agents will impact our strategic success. On the other hand, depending on the nature of strategic vision, the agents seeking to attain these goals may have to divert from the original plan in order to achieve tactical success. This means it is important to recognize what you can and cannot control as you move towards each objective. This plan establishes specifically what you intend to do in the here and now and in the near future.

→ The Operational plan will determine how to meet objectives for strategic success. This stage of a strategy is designed to create the framework for tactical goals. The operational level has predominant tasks are set objectives, delineate the resources, set guiding principles and values that enable or limit achieving the objective. This sets expectations for how each objective and the spectrum of potential operations will help achieve strategic success. Unlike tactical goals and objectives are broad. Therefore, we

should present a spectrum of acceptable operations the structure can put into play, should the need arise. Besides, each operation will have specific resources and guidelines regarding how it is to meet the objective. Each operation can then be broken down into goals given those limitations. An agent will look to the operational objective when the tactical plan fails to meet a goal. Agents often look to the operational level because the resources and values guiding the original tactical plan were either too limiting or too permissive and proved insufficient for success. Here, we may find a more permissive set of actions that can be taken or assistance we can call on in our search for tactical success. So, imperative to include at the operative level backup resources in addition to doctrinal options so that agents can make the best of chance as it presents. Here as well, though, the concept of the plan is problematic. While the operative level may have a plan, it is more likely they need a playbook of potential operations that can each attain the objective. This is done to mitigate the potential for failure should specific tactical goals not be met. The question surrounding the plan is, which operations need to be implemented this time if previous actions have proven unsuccessful. This leads us to the Strategic plan.

→ Strategic planning is a whole different ball game than operational or tactical planning. The role of strategic planning is threefold. First, explain the world as we see it now. Second, explain the fields in which we have a structured play. Finally, set a vision for how the world should be. In summary, the strategic level is an integrative one. The vision it instills is not limited to the strategic or operational levels but is a mutually shared one throughout the organization. Clearly, each agent will have their perspective on the vision, but ascribing to this vision is an integral part of each person's strategic purpose within the organization. The strategic level does not look inward at what we can do or how we can do it. Strategy instead considers intent and purpose. In order to do that it has to consider the world as it is. This leads to an understanding of where we are today in this reality and gives us the opportunity to examine what we want to be changed in the future. We use that understanding to determine our vision.

→ So, while the purpose of the organization may stay the same, the understanding driving action towards the future vision, the strategy implemented through operations and tactics will have to change for continued strategic success.

3.6. Compare and contrast a range of information systems and technologies that can be used to support organizations at operational, tactical, and strategic levels

A decision support system (DSS) is a computer programmed application that analyzes business data and presents it so that users can make business decisions more easily. It is an "informational application" to distinguish it from an operational application that collects the data in the course of normal business operation.

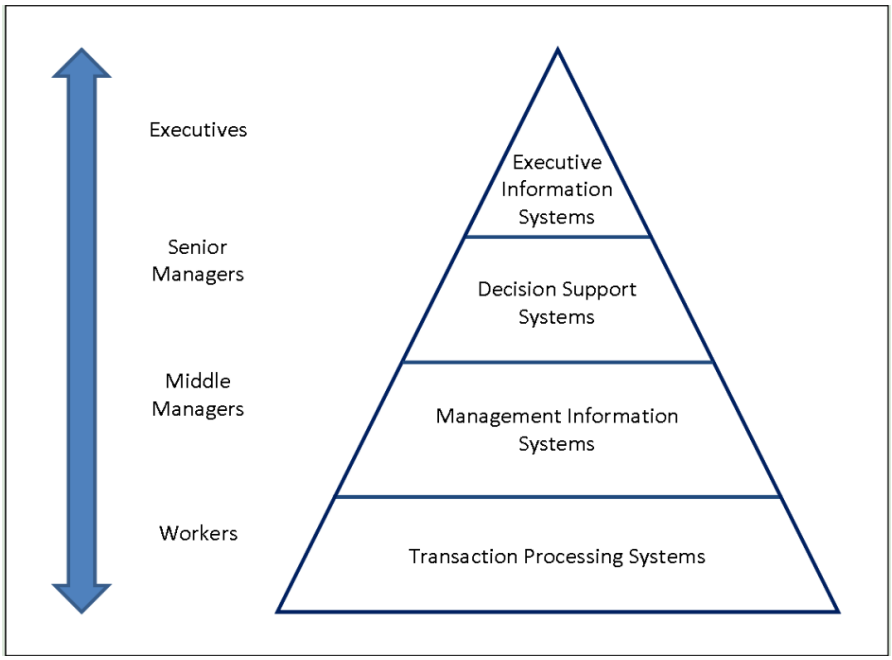

Figure 11: Four level pyramid model based on the different levels of hierarchy in the organization

Comparison of different kinds of information systems:

Using the four-level pyramid model, we can now compare how the information system in our model varies from each other.

- ***Transaction processing systems*** are operational-level systems at the bottom of the pyramid. They are usually operated directly by shop floor workers or front-line staff which provide the key data required to support the management of the operations

Table 4: Transaction processing systems

INPUTS	PROCESSING	OUTPUTS
Transactions Events	Validation Sorting Listing Merging Updating	Lists Detail reports Action reports Summary reports

	Calculation	

- ***Management information systems***: for historical reasons, many of the different types of Information Systems found in commercial organizations are referred to as "Management Information Systems". However, within our pyramid model, Management Information Systems are management-level systems that are used by middle managers to help ensure the smooth running of the organization in the short to medium term.

Table 5: Management information systems

INPUTS	PROCESSING	OUTPUTS
Internal transactions	Sorting	Summary reports
Internal files	Merging	Action reports
Structured data	Summarizing	Detailed reports

- ***A Decision Support System*** can be seen as a knowledge-based system used by senior managers, which facilitates the creation of knowledge and allows its integration into the organization. These systems are often used to analyze existing structured information and allow managers to project the potential effects of their decisions into the future. Such systems are usually interactive and are used to solve ill-structured problems. They offer access to databases, analytical tools, allow "what if" simulations, and may support the exchange of information within the organization.

Table 6: A Decision Support System

INPUTS	PROCESSING	OUTPUTS
Internal transactions	Modelling	Summary reports
Internal files	Simulation	Forecasts
External information	Analysis	Graphs/posts
	Summarizing	

- ***Executive Information Systems*** are strategic-level information systems that are found at the top of the Pyramid. They help executives and senior

managers analyze the environment in which the organization operates, identify long-term trends, and plan appropriate courses of action. The information in such systems is often weakly structured and comes from both internal and external sources. The Executive Information System is designed to be operated directly by executives without the need for intermediaries and easily tailored to the preferences of the individual using them.

Table 7: Executive Information Systems

INPUTS	PROCESSING	OUTPUTS
External data Internal files Pre-defined models	Summarizing Simulation "drilling Down"	Summary reports Forecasts Graphs/plots

4. Conclusion

I described the term 'Business process' and 'supporting process' with some examples. Likewise, I have discussed the difference between unstructured, semi-structured, and structured data within an organization then I compare them together. Besides, I have also given a dataset, process, and activity diagrams for the process of us. In addition, I have mentioned the benefits and drawbacks of using application software as a mechanism for business processes. On the other hand, I have described three types of support available are strategic, tactical, and operational. After discussing the supports available I have also elaborated on the key features of the business intelligence functionality and tools. And then, compare all anything. Lastly, I described the range of information systems and technologies that can be used to support organizations at operational, tactical, and strategic levels where I have gone with the pyramid model, and also I have presented the comparison in graphical view with the help of pyramid model which is also the important technology that can be used to support organizations at various levels.

5. Evaluation

The information contained in the report is reliable because it is referenced from books, lecture slides and reputable websites. Besides, there is still some content that is evaluated in my opinion, it is viewed from an objective perspective and my level of understanding so there will be some not quite accurate.

Finally, through this report, I have fulfilled all the criteria of each section, which have been marked as specific above, each section has been arranged in a certain order, thereby bringing the most intuitive look. Any questions please contact me via: huyenttdgdd18606@fpt.edu.vn

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