Assessment 1

1. If you are planning to start your Local Pharma business, which type of enterprise you will choose and why?

We are planning to start a social enterprise into Medical Industry. Our Objective is to

Develop an easy access to purchase medicines and get treatment online. There are:

- Easy purchase of medicines.
- Less expensive.
- Home delivery feature.
- User-friendly.
- 24/7 service.

2. List and explain the steps for the process of organizing an enterprise teams for your startup business <u>Local Pharma</u> platform.

- Determining Activities
- Grouping of Activities
- Assigning Duties
- Delegating Authority
- Coordinating Activities

Determining activities:

- Download App
- Create account.
- Sign-up
- Login/logout.
- Forgot password.
- Providing user address.
- About yourself.
- Consultancy with doctors.
- Pharmacy
- Diagnostics.

- Health Store
- Payment help
- Payment method
- Customer feedback.
- Security and privacy.

Grouping of activities	Assigning Duties
Account	 Create account, Sign-up, Login/Logout, Forgot password, Providing user address.
Service provided	 Consultancy with doctors, Pharmacy, Diagnostics, Health store.
Support	 Payment help, Payment Method, Customer feedback, Security and Privacy.
Others	Download App,About yourself(description).

3. What is business activity? For your <u>Local Pharma</u> business, Which type of business activity you will choose and why?

Business activity is any activity related to the purpose of making a profit. It is often divided into operating activities, investing activities and financing activities. Of these, operating activities tend to be considered the most important as they have the most direct impact on a company's performance.

The main aim of <u>Local Pharma</u> enterprise is in it's operation and investment.

• Operating Activities - Operating activities are the functions of a business directly related to providing its goods and/or services to the market. These are the company's core business activities, such as manufacturing, distributing, marketing, and selling a product or service.

- **Investment** Investing activities are in the second section of the statement of cash flows. These are business activities that are capitalized over more than one year. The purchase of long-term assets is recorded as a use of cash in this section.
- 4. How can you achieve the concept of business process automation for your <u>Local Pharma</u> business? Why should you automate your business and what makes the difference with automation?

There are many ways in which <u>Local Pharma</u> can achieve BPA. The 2 main ways are:

- In pharmacies, the medicines are generally stacked and stored in containers with a label which carries the name of medicine. This makes it difficult for the shop holder to search for the medicine, it also consumes a lot of time and energy and it is a stressful job. But in Local Pharma this process is completely automated where there is a separate database to store the medicine's names. This database if connected to the client PC. Hence with a click of a button the shop holder can spot the medicine reducing the time and energy wasted.
- Storing the user details in the database and connecting it to the <u>Local Pharma</u> database. This is done so that everytime the user consults a doctor or purchases medicines they need not provide their personal details. These users have a unique ID which is provided at the time of registration which shows the medical history of the patient and number of consultancy taken by him/her.
- Without automation, scheduling staff must navigate several software systems, physician schedules, and insurance portals while patients wait on hold. Automation streamlines the process while substantially minimizing data inaccuracies. It even reduces dependency on human employees by including voice- and chat-enabled AI assistants.
- Revenue cycle management is critical to success, but it entails several data-intensive and time-consuming operations, especially for providers with different locations. End-to-end digital automation can bring together disparate operations like claim filings, data transfer,

accounting, and pricing adjustments into a simplified process managed by an AI-powered BPM system.

• Each year, healthcare professionals in the United States alone submit billions of medical claims. Robotic process automation solves the rule-based and transactional duties associated with claims processing quickly and accurately, while automation for end-to-end procedures can tackle any hospital's claims backlog, freeing up employees to focus on more patient-focused work.

Business process automation eliminates the bottlenecks that lead to lost time and revenue. The improvements in efficiency and control spread to every facet of the organization — from increased productivity and compliance to better customer experience and performance.

The difference that BPA makes:

1. Time savings

- Business process automation saves your employees a great deal of time and allows them to work smarter, not harder.
- By charging machines with completing recurrent, rule-based tasks, employees can free up time to focus on work that requires critical thinking, creativity, or the human touch.

2. Increased profits

- While routine processes are necessary for the functioning of every company, they do not create value for your customers. Therefore, manually performing these processes often leads to lost profit.
- With business process automation, organizations can increase their profitability by delegating mundane tasks to machines and spending more time on activities that add value to their customers.

3. Higher productivity

- Organizations that rely on technology to automate processes also see an increase in productivity. The main reason is that machines can handle multiple tasks simultaneously, thus speeding up processes.
- By relying on technologies to help with some of their tasks, employees will also get more work done in the same amount of time.

4. Greater efficiency

• Business process automation helps companies fulfil tedious tasks with minimal resources. Companies get faster and more reliable results with lower costs, thus improving efficiency significantly.

5. Error minimization

- Even the most capable and skilled employees make mistakes. Lack of attention, absent-mindedness, forgetfulness, and multitasking can all hinder the performance of your employees especially when performing routine tasks.
- Unlike humans, computers don't forget. Plus, they never get tired or distracted. Therefore, automating processes helps companies decrease the likelihood of human error dramatically.

6. Better standardization

- Different employees often perform the same processes in different ways. But unfortunately, these ways are not always the most efficient.
- On the other hand, automation solutions always follow the same steps to complete tasks and never stray from the rules you define. Hence, business process automation can help you standardize processes, achieve consistent results, and increase transparency across the organisation.

5. Research a case study of a company regarding a business process automation.

HSBC:

- The banking and financial organization HSBC wanted to boost workplace performance and productivity, with the overall aim of improving shareholder returns and enhancing customer service.
- In order to do this, they implemented intelligent automation strategies across the company.
- In the past, many of their administrative tasks had been manual and cumbersome, especially when it came to HR processes. These had become complex, and many employees struggled to find the information they needed quickly.
- Through integration, data mapping, and other relevant automated systems, they were able to make life much easier for their employees.
- This, in turn, freed up their time to better support and offer advice to customers and improve the overall customer experience.

6. Research a case study for convergence of IT and OT.

Nissan:

Nissan Motor Corporation, the global car manufacturer, headquartered in Yokohama Japan, leads the industry in new technology developments for electrified, intelligent, and connected vehicles. The company rolled out a high-speed, secure Cisco IoT network that streamlines operations to support production lines at the Tochigi Plant. The solution uses big data analytics to identify maintenance procedures that can avoid breakdowns before they occur. "We wanted to obtain quality data on a real-time basis and use the same data to analyze trends to help prevent defects before they occur. In addition, we want the person in charge to be notified immediately if any of the equipment malfunctions or if there is an outage so that we might reduce the time the production line is down to a minimum," explained Masayoshi Chiyoda, Engineer of the Powertrain Production Engineering Department, Nissan. By standardizing network design they improved manufacturing efficiency with a fully automated production line. The combination of Cisco IE switches and Cisco Identity Services Engine (IS E)

makes it possible for Nissan to securely manage and control network access, production lines and equipment, creating a secure and highly functional IoT network that can obtain information from the production line. Capturing data this way allows both the IT and operation technology (OT) departments to work together by merging manufacturing-related data from the OT space and information related data from the IT space.

7. Research a case study for a company which had success by using Digital Transformation concepts.

McDonald's:

As one of the world's best-known fast-food chains, the Italy division of McDonald's sought to optimize their procurement process and move to manage all of their supplier relationships across the entire supply chain online from selecting their vendors to contract negotiation through digital transformation in procurement. They decided to use an online portal to facilitate collaboration and communication between themselves and suppliers and to digitize all of their documentation. They've got about 400 suppliers registered through the portal to handle all of their food and promotional products as well as construction and renovations of new restaurants.

8. Create a project plan for your **Local Pharma** business.

Objective – The main goal of <u>Local Pharma</u> is to provide an efficient and user friendly software to users incase of medical emergencies, provide easy consultancy of doctors to handicaps and old aged people.

Key-outcomes – The key outcome of the project is to:

- Purchase medicines online
- Easy and reliable consultation with doctors.

Stakeholders: Development – Shriyan, Sharath

Design - Shriyan, Sharath, Supreeth

Support - Shriyan, Sharath, Supreeth.

Scope of the project:

Must have:

- Login/Logout,
- Pharmacy,
- Diagostics,
- Consultancy,
- Payment method,
- Security and privacy

Nice to have –

- Payment help
- Customer feedback
- 9. Identify the tasks involved in the process of receiving admission tickets for the semester exams in your college. Which of the identified tasks can be automated and illustrate automation of the identified tasks.

Process of receiving admission ticket:

- To fill in the details while paying the exam fees.
- The filled form must be submitted in the bank with appropriate fees paid.
- The bank verifies and signs the document submitted by us. We submit the signed document in collage in order to apply for admission ticket.
- Again we must physically fill the student details with our photo in order to apply admission ticket.
- The teacher, hod & principal cross verifies the details provided by the students and signs them if the details are correct and matching with the student details in the admission book.
- Once the above step is done, the details will be sent to the technical board of education and in a few days time we will receive the hall ticket and should collect it in that particular institute.
- In the above procedure of receiving the admission ticket, some of the tasks can be automated.

In the above steps:

- The process where bank verifies the student details can be automated because they manually verify it.
- The process where details of student must be filled can again be automated as it is manually filled and can cause lot of mistakes and errors.

- Another task which can be automated is when the educational institute's authority cross verifies the details of student filled in and if it is matching with the student details provided while joining the college.
- Once the hall tickets are prepared, they're sent to respective colleges, where the students are supposed to collect it, this step can be automated by sending the softcopy of the admission ticket to the student's phone number or gmail.

Illustration of automation of 1 task:

Cross verification of student details by college authority:

This is a very complicated step or process where the principal, class teacher and the HOD must check details of each and every student and match it with details provided by the student at the time of joining. This matching process can be automated by storing the student information in a database at the time of application. Then a software can be created to fill the details of students. This software can consider a button "verify" after filling out the details which will be directly connected to the student information database. So this automatically verifies the details and approves the form and reduces the time, hard work and effort of the authorities.

10. Explain how the digital transformation can bring revolution in the teaching learning process.

Let's understand how technology can help bring efficiency to the new learning methods.

Video Conferencing Solutions for Overseas Studies

The crisis currently impacts international education, and students are unable to go abroad and pursue their higher studies. Delaying courses or studies is not an option. Online assessments can be done and universities can facilitate virtual onboarding and admission of students. Schools/universities can integrate video conferencing solutions into their app or website to allow students in different countries to continue their studies. They can attend online classes and webinars and attend physical classes once international traveling is permitted.

• AR/VR for the better learning experience

The education sector needs to embrace new technologies to stay up-to-date in the ever-evolving world. Augmented and virtual reality is the next level of evolution in the learning system. With Virtual Reality and Augmented Reality, you can create an interactive and virtual environment for your students. These technologies can make the process of explaining complex concepts easier by implementing an interactive visual-audio factor.

Using VR, you can take your students on the virtual tour to different places and children will feel like they have actually reached there. Also, it can help you deliver a practical explanation of educational concepts and students can understand it effectively.

For example, one of the AR apps, Elements 4D allows students to combine various elements to study chemistry in action. Elements 4D is a set of beautifully designed wooden blocks that can come to life using DAQRI's 4D app. Each face of the block represents a different chemical symbol, depicting elements of the periodic table. Beaming the app's viewfinder onto the blocks would instantly convert them into 4D representations of that element. It will help learners gain a better understanding of chemistry concepts.

Implementing VR/AR would also reduce the need to touch the physical object that you are using for experimentation. As touching the same objects successively can increase the risk of spread of the virus, VR can enable touchless learning experience for students, minimizing the risk post-COVID-19.

• Learning Apps/Platforms

COVID-19 has resulted in schools shutdown of schools all across the world. As a result, the education sector has transformed drastically with the rise of online learning, where students are joining digital platforms for learning. Many educational institutes are turning into edtech startups and launching learning apps for students using which students can access notes, their curriculum and give mock tests for exam preparation. It helps them continue their studies without any interruption. As an education

Full Stack Development		
	provider, you can build an interactive learning platform for your students that allows them to access the best study content in the form of text, PDFs, images, audios and videos.	
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