What do you understand by work communication process? The work communication process is the series of steps and elements involved in the successful exchange of information, ideas, or messages between a sender and a receiver in a professional setting. It involves the transmission, reception, and understanding of the message. II. Explain components of work communication process Sender: The person who initiates the message. Encoding: The process of converting the idea or message into words, symbols, or gestures. Message: The actual content or information being communicated. Channel: The medium used to send the message (e.g., email, meeting, report). Receiver: The person for whom the message is intended. Decoding: The process by which the receiver interprets and understands the message. Feedback: The response from the receiver that indicates whether the message was understood as intended. III. Identify Types of Communication channels Verbal: Spoken words (e.g., face-to-face meetings, phone calls, video conferences). Written: Written words (e.g., emails, reports, memos, instant messages). Visual: Images, graphics, and body language (e.g., charts, diagrams, presentations, facial expressions). Theoretical Activity 1.1.3: Description of data collection methods and their related tools Tasks: I. What do you understand by data collection? Data collection is the systematic methodological process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. II. Identify traditional data collection methods and their tools. Interview: A face-to-face or virtual conversation to gather in-depth information. Tool: Interview guide/list of questions. Questionnaire/Survey: A set of written questions to gather data from a large group. Tool: The questionnaire form itself (paper or digital). Observation: Watching and recording behaviors or events in their natural setting. Tool: Observation checklist. Documentation Review: Analyzing existing records and documents. Tool: Documentation checklist. III. What is an online form? An online form is a digital version of a traditional paper form that is accessed and filled out electronically through the internet. It is a web-based tool that allows users to input and submit information online, eliminating the need for physical paperwork (e.g., Google Forms, Typeform). Practical Activity 1.1.4: Preparing tools to be used in data collection Task: Prepare data collection tools (Interview Questions, Questionnaire, Observation Checklist, Documentation Checklist, Online Form) for Bright Future Secondary School's website project. Solution: 1. Interview Questions (for School Management) Introduction: "Thank you for your time. We are developing the new school website and want to ensure it meets all your needs. This interview will help us understand your vision and key requirements." School Profile: Can you tell me about the school's history and its key achievements? What are the core values you want the website to communicate? Programs: What are the most important features of each trade/program that should be highlighted? Are there any common misconceptions about your programs that the website should clarify? Fees & Payments: Can you walk me through the current fee payment process? What are the biggest challenges? What would an ideal online payment system look like for the school and parents? Technical Preferences: Who will be responsible for updating the website content? Are there any specific design styles or other school websites that you admire? 2. Questionnaire (for Parents & Students) (Section A: Demographics) You are a: [ ] Parent [ ] Student Your child is in: [ ] Technical Program [ ] Academic Program [ ] Vocational Program (Section B: Website Needs) On a scale of 1-5, how easy is it currently to find school fee information? (1-Very Difficult, 5-Very Easy) What is the MOST important information you look for on the school's website? (Please select top 3) School Calendar/Events Exam Schedules Teacher Contact Info Fee Structure and Payment Trades and Program Details News and Announcements What feature would most improve your experience with the school? (Open-ended) 3. Observation Checklist (for observing the school's current information flow) Notice boards are updated and easy to read. Parents can easily locate the administrative office. Current method of distributing circulars (e.g., paper, email) is efficient. School receptionist can easily answer common parent queries (e.g., about fees, events). 4. Documentation Checklist (for existing records) School prospectus/brochure is available. Official academic calendar for the current year is available. Detailed, up-to-date fee structure document is available. Staff list with roles and contact information is available. School policy documents (e.g., conduct, attendance) are available. 5. Online Form (Google Forms example) Title: Bright Future SS - New Website Feedback Description: Help us build a better website for you! Please share your ideas. Questions: (Short answer) What is the one thing you wish you could do on the school's website that you can't do now? (Multiple choice) Which device do you use most to access websites? [Phone / Tablet / Laptop / Desktop] (Linear scale) How important is a mobile-friendly website to you? (1-Not Important, 5-Extremely Important) (Checkboxes) What type of notifications would you like to receive? [Event Reminders / Fee Due Alerts / School News / Exam Results] Practical Activity 1.1.5: Collecting raw data by using prepared data collection tools Task: Use the tools from 1.1.4 to collect data. Solution (Simulated Process): Interview: Schedule and conduct a 30-minute meeting with the Head Teacher and Head of ICT. Use the interview guide. Take detailed notes or record (with permission). Key findings might include: "The Head Teacher emphasizes the need to showcase student success stories," and "The Head of ICT insists on a secure login portal for students." Questionnaire: Distribute the questionnaire link via email to the parent-teacher association and student council. Collect 50+ responses. Monitor the response rate in Google Forms/Excel. Observation: Spend one hour at the school reception during peak morning hours. Use the checklist. Note: "Notice board is cluttered," and "Receptionist repeatedly directs parents to a paper fee structure document." Documentation: Request and receive the school prospectus, academic calendar, and fee policy from the administration. Use the documentation checklist to confirm all required documents have been collected. Online Form: Share the form link on the school's current social media pages. After one week, export the responses to a spreadsheet for analysis. (The output here is not the data itself, but a report stating that the data collection was performed using the specified tools and that the raw data has been aggregated for the next step). Theoretical Activity 1.1.6 & Practical Activity 1.1.7: Interaction with Customer These activities involve role-playing a meeting to clarify requirements. The key is to apply the steps from the key readings: preparing an agenda, active listening, asking open-ended questions, summarizing, and following up. Sample Agenda for Meeting with Bright Future Secondary School: Topic: Clarification and Refinement of Website Requirements Attendees: School Principal, Head of Admin, Project Analyst Agenda: Review of data collected so far. Clarification on priority of features (e.g., Is online payment more critical than the event calendar?). Discussion on technical constraints (e.g., Who will manage the CMS?). Agreement on next steps and timeline. Outcome: A list of clarified and prioritized requirements, signed off by the school management. Indicative Content 1.2: Interpretation of Data Theoretical Activity 1.2.1: Description of data interpretation Tasks: I. What do you understand by data interpretation? Data interpretation is the process of reviewing data through predefined processes to assign meaning, identify patterns, relationships, and trends. It involves transforming raw data into information that can support decision-making. II. Differentiate data visualisation from data manipulation methods of data interpretation Data Manipulation: Used for qualitative (non-numerical) data. It involves organizing, categorizing, and summarizing text-based data to identify themes and patterns. Techniques: Thematic Analysis, Categorization. Data Visualization: Used for quantitative (numerical) data. It involves creating graphical representations (charts, graphs, maps) to make large volumes of data easier to understand and to reveal trends, outliers, and patterns visually. Practical Activity 1.2.2: Interpreting data using data manipulation method Task: Interpret the provided qualitative data (feedback from staff, parents, students) using data manipulation. Solution (Thematic Analysis): Theme 1: Transparency and Ease of Access to Information Evidence: "Parents and students often ask about school fees... information needs to be transparent." (Head of Electrical Engineering). "I often find it difficult to understand the breakdown of school fees." (Parent). "We need more information about the various technical programs..." (Student). Interpretation: There is a clear, cross-cutting need for clear, easily accessible information on finances and academic programs. Theme 2: Desire for Interactive and Real-Time Features Evidence: "A login feature would be beneficial." (Head of ICT). "We want to see real-time updates about upcoming events... A notifications feature would be helpful." (Parent). "An online fee payment system would make things so much easier." (Student). Interpretation: Users want to move beyond a static information site to an interactive platform that saves them time and keeps them informed. Theme 3: Showcasing School Identity and Community Evidence: "The website should emphasize our commitment to excellence and highlight the success stories of our students." (Head Teacher). "It would be great if the website offered details on extracurricular activities..." (Parent). Interpretation: The website is seen as a tool for branding and community building, not just an administrative tool. Practical Activity 1.2.3: Interpreting data by using data visualisation method Task: Interpret the provided quantitative data using data visualization. Solution (Creating Visualizations): For the data provided on page 51-53, the following visualizations would be created: Student Enrollment Trend (Line Graph): X-axis: Years (2020, 2021, 2022, 2023) Y-axis: Number of Students Interpretation: Shows a steady annual increase in enrollment, justifying the investment in a new website to support growth. Student Distribution by Program (Pie Chart): Slices: Technical (36%), Academic (38%), Vocational (22%) Interpretation: Academic and Technical programs are the largest, so their sections on the website should be prominent. Preferred Fee Payment Options (Bar Chart): Bars: Installments (55%), Full Payment (35%), Online (10%) Interpretation: While installments are most popular, the low preference for online payment likely reflects its current unavailability. This highlights a major opportunity for the new website. Preferred Contact Methods for Parents (Donut Chart): Segments: Email (65%), Phone (25%), Social Media (10%) Interpretation: Email is the dominant channel, so the website should integrate email sign-ups for newsletters and alerts. Indicative Content 1.3: Organisation of Customer Needs Theoretical Activity 1.3.1: Description of customer needs organisation Tasks: I. What are the data categories? Numerical Data: Measurable numbers (e.g., number of students, fee amount). Categorical Data: Data that can be sorted into groups (e.g., program types: Technical, Academic, Vocational). Time-series Data: Data collected over time (e.g., annual enrollment figures). Text Data: Unstructured written data (e.g., interview transcripts, open-ended survey responses). Image Data: Data in the form of pictures (e.g., school logo, campus photos). II. What is data cleansing process? Data cleansing (or cleaning) is the process of finding and removing errors, inconsistencies, duplicates, and missing entries from data to increase its quality and consistency for analysis. Phases include: Data Deduplication, Data Analysis, Data Standardization, Data Normalization, and Quality Check. III. What are the parts of a data report? Title Page, Executive Summary, Introduction, Methodology, Results/Findings, Analysis/Discussion, Conclusion, Recommendations, Appendices, References. Practical Activity 1.3.2: Organising data based on customer needs Task: Categorize data, perform data cleansing, and create a data report. Solution (Structured Approach): 1. Data Categorization: Create folders or spreadsheets for each data type: Numerical\_Data.xlsx (Enrollment numbers, fee amounts, survey ratings). Categorical\_Data.xlsx (Program types, staff roles, preferred contact methods). Textual\_Data/ (Folder containing interview transcripts, open-ended survey responses). Images/ (School logo, branding materials). 2. Data Cleansing: Remove Duplicates: Check survey responses for duplicate entries from the same email. Handle Missing Values: If a parent didn't answer the "preferred program" question, tag it as "Not Specified" instead of leaving it blank. Standardize Formats: Ensure all dates are in the same format (e.g., DD/MM/YYYY). Standardize program names (e.g., "Comp Sci" and "Computer Science" become "Computer Science"). Correct Inconsistencies: If an interview note says "login for students and teachers" and another says "secure portal for users," standardize the terminology to "User Login Portal." 3. Data Report (Outline for Bright Future SS): Title: Data Analysis Report for Bright Future Secondary School Website Project Executive Summary: This report summarizes findings from 50+ stakeholder interactions. Key needs are: 1) Transparent information on fees and programs, 2) An interactive portal for payments and updates, 3) A platform to showcase school identity. Introduction: Outlines the project goal and data collection methods used. Methodology: Describes the use of interviews, surveys, observation, and documentation. Results/Findings: Quantitative: 80% of interviewees want an online payment system. Student enrollment has grown 19% since 2020. Qualitative: Three key themes emerged .