

10.27 Problems with System Reports & Consequences

Problems with Poor System Reports:

Inaccurate Data: Reports that contain errors or outdated information can lead to misinformed decisions.

Difficult to Understand: If reports are cluttered, unorganized, or use overly complex terminology, they may be hard to interpret.

Lack of Timeliness: Reports that are not generated in a timely manner can result in missed opportunities or delayed responses to critical issues.

Missing Information: Incomplete reports can lead to decisions being made without considering all relevant factors.

Poor Visualization: Ineffective use of charts, graphs, or tables can obscure key insights.

Security Vulnerabilities: Reports that contain sensitive information but lack proper security measures can lead to data breaches.

Not Actionable: Reports that do not highlight key findings or suggest next steps may be of little practical use.

No Customization or Filtering Options: The inability to tailor reports to specific needs can make them less useful to different users.

Consequences:

- **Poor Decision Making:** Inaccurate or unclear reports can lead to decisions that harm the organization's operations or strategic objectives.
- **Wasted Resources:** Time and effort may be spent analyzing erroneous or irrelevant data.
- **Missed Opportunities:** Delayed reports can result in missed market opportunities or the inability to address issues in a proactive manner.
- **Compliance and Legal Issues:** Failure to accurately report financial, operational, or regulatory data can lead to legal penalties and damage to reputation.
- **Security Breaches:** Unauthorized access to sensitive data through reports can lead to financial loss and privacy violations.

What Could Go Wrong:

- **Strategic Missteps:** Organizations may pursue the wrong strategies based on faulty data.
- **Operational Disruptions:** Inaccurate reports can lead to disruptions in day-to-day operations.
- **Financial Losses:** Poor decisions made based on incorrect data can result in significant financial losses.
- **Loss of Trust:** Stakeholders may lose trust in an organization that consistently produces unreliable reports.

How Prototyping Helps:

- **Accuracy and Clarity:** Early prototypes can be tested for accuracy and clarity, ensuring that reports convey the intended message.
- **Feedback Loop:** Prototyping allows for feedback from end-users, which can be used to refine reports and make them more useful and understandable.
- **Security Measures:** Prototyping can help identify security needs, ensuring that sensitive information is adequately protected in the final report.
- **Customization Options:** Through prototyping, developers can identify the need for customization and filtering options, making the reports more versatile.

10.28 Designing a Hotel Registration Output Form

Design Process:

Using Software like Microsoft Visio: Initially, design the form in black and white, focusing on layout, typography, and clarity without the distraction of color.

Apply Color Design Principles: Redesign the form using color to highlight important areas, guide the user's attention, and improve aesthetics.

Black and White Design Strengths and Weaknesses:

- **Strengths:**
 - Easier to focus on structure and content.
 - Ensures readability and clarity without relying on color contrasts.
 - Good for understanding layout effectiveness and text readability.
- **Weaknesses:**
 - May lack visual cues that help guide the user's attention to the most important information.
 - Could be less engaging or appealing to users, potentially reducing usability.

Color Design Strengths and Weaknesses:

- **Strengths:**
 - Color can be used to differentiate sections, making the form more navigable.
 - Important fields or instructions can be highlighted using color.
 - Enhances the aesthetic appeal, which may improve user satisfaction and engagement.
- **Weaknesses:**
 - Improper use of color can distract or confuse users.
 - Overreliance on color for differentiation can make the form less accessible to those with color vision deficiencies.

10. 31 Identified Flaws:

Lack of Meaningful Titles: The report title does not specify the type of customer information provided (e.g., active vs. inactive, geographic location).

No Date of Data Retrieval: Only the report generation date is given, not the date when the data was last updated.

Unbalanced Layout: The report's tabular layout may become cluttered as the number of entries grows, making it difficult to navigate.

Poor Highlighting of Information: Important data points or anomalies in the customer data are not highlighted.

Ineffective Use of Color or Formatting: Assuming the original report is plain text, the use of color or formatting to distinguish between different types of information is absent.

No Summary or Conclusions: The report lacks a summary section that could highlight key findings or trends in the customer data.

Lack of Interactivity: For digital versions, the report does not offer interactive elements such as sorting or filtering options.

Missing Details: The report may benefit from including additional relevant details about customers, such as industry sector, size, or contact information, assuming this aligns with user tasks and needs.

Redesign Proposal:

Enhanced Titles: Include more descriptive titles and subtitles, specifying the nature of the customer data (e.g., "Active Customers as of [Last Update Date]").

Updated Information: Clearly indicate the date when the customer data was last updated, in addition to the report generation date.

Improved Layout: Use a balanced layout with adequate spacing and clear section dividers. Consider grouping customers by relevant categories (e.g., industry, size).

Effective Highlighting: Utilize color, bolding, or other formatting options to highlight key customers, recent additions, or those requiring attention.

Summary Section: Add a summary at the beginning or end of the report, outlining key insights, trends, or recommendations based on the customer data.

Interactive Features: For digital reports, include interactive elements like sortable columns and filter options to allow users to customize their view.

Additional Details: Incorporate more customer details where relevant, using expandable sections or hover-over tooltips to keep the report uncluttered.

Consistency and Clarity: Ensure consistent use of terminology, formatting, and navigation cues throughout the report, adhering to best practices in usability and design.

10. 34 Go to the Internet and find commercial websites that demonstrate each of the common errors listed in Table 10- 11 .

Nonstandard Use of GUI Widgets:

- An example of nonstandard GUI widgets could be a site that implements checkboxes in a way that does not conform to user expectations, such as requiring a nonstandard action to select or confirm choices.

Anything That Looks Like Advertising:

- Websites with pop-ups or banner-like elements that resemble advertising can deter users. They may automatically ignore these sections, mistaking them for ads rather than legitimate site content.

Bleeding-Edge Technology:

- Some sites may require the latest browser versions or plugins to function properly, which can exclude users who do not have the capability or desire to update their systems frequently.

Scrolling Text and Looping Animations:

- Sites that use scrolling text or looping animations can be distracting to users and are often associated with advertisements, which might lead to them being ignored or causing annoyance.

Nonstandard Link Colors:

- Changing the standard colors for links (e.g., blue for new links, purple for visited links) can confuse users and make navigation more difficult as they may not recognize what is clickable.

Outdated Information:

- Websites with content that is not regularly updated may give the impression of being abandoned or outdated, which can lead to a loss of credibility and user trust.

Slow Download Times:

- Websites with large images, numerous high-resolution images, or unnecessary animations can lead to longer loading times, which may frustrate users and lead to higher bounce rates.

Fixed-Formatted Text:

- Fixed-formatted text that requires horizontal scrolling can be challenging to read and navigate, especially on mobile devices, leading to a poor user experience.

Displaying Long Lists as Long Pages:

- Long pages that require excessive scrolling can be overwhelming and may make it difficult for users to find the information they need efficiently.

10. 35 Use a tool for generating wireframe screen designs, such as Visio or Axure, to create a wireframe of Figure 10- 5b .

Displaying Long Lists as Long Pages Avoid requiring users to scroll down a page to view information, especially navigational controls. Manage information by showing only N items at a time, using multiple pages, or by using a scrolling container within the window.