Business Proposal:   
Deleum Tool String Editor

**Prepared for: Deleum**

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# Executive Summary

The Deleum Tool String Editor (name subject to change) is a software solution designed to streamline the planning and documentation of wireline tool strings. By enabling engineers to efficiently design and export tool string configurations, this software enhances operational efficiency, reduces errors, and improves documentation accuracy.

# Problem Statement

Currently, the tool string planning process is manual, time-consuming, and prone to human errors. Engineers rely on Microsoft Excel spreadsheets and limited tool images, which can be inconsistent and difficult to update. Formatting varies among tool string diagrams made by different engineers within Deleum. Certain details such as the weight, lengths, and OD of uncommon tools can be difficult to ascertain when manuals and documentation are incomplete. A digital solution is needed to automate, standardize, and enhance the process.

# Proposed Solution

The Tool String Editor will provide a drag-and-drop interface for building wireline tool strings. Engineers will be able to select tools from a database, align them automatically, and generate standardized reports in Excel and PDF formats. Key features include:

- \*\*Drag & Drop Tool String Builder\*\*

- \*\*Automated Tool Alignment & Snap-to-Grid Feature\*\*

- \*\*Real-time Summary of Total OD, Length, and Weight\*\*

- \*\*Export to Excel & PDF with Predefined Templates\*\*

- \*\*Database for Tool Management and Searchability\*\*

# Implementation Plan

The software will be developed using the Software Development Lifecycle (SDLC), ensuring a structured and efficient process.

## Phase 1: Planning & Requirement Analysis

* Identify user requirements and key functionalities.
  + **Potential Stakeholders:** Slickline Engineers, AIS Engineers, Operation Managers, Wireline Specialists, and Clients.
  + **User Requirements:**
    - Easy to learn
    - Quick to design tool string configuration
    - Neat report layout
    - Full details of every tool
  + **Key Functionalities:**
    - Drag and drop functionality
    - Select required tool size
    - Auto-calculate max OD and total length/weight
    - Able to export
    - Save and load for future jobs
    - User-friendly interface
* Define project scope and technical specifications.

## Phase 2: System Design

- Design the user interface and software architecture.

- Develop database schema for tool management.

## Phase 3: Development

- Code the core functionalities: drag-and-drop builder, data validation, export features.

- Implement tool search and filtering options.

## Phase 4: Testing & Debugging

- Perform unit testing on individual components.

- Conduct user testing and feedback sessions.

## Phase 5: Deployment & Maintenance

- Deploy software for internal use.

- Provide documentation and user training.

- Maintain and update the software as needed.

# Current Results

# Expected Benefits

- \*\*Increased Efficiency\*\*: Reduces time spent on tool string preparation.

- \*\*Error Reduction\*\*: Standardized configurations reduce misalignment issues.

- \*\*Improved Documentation\*\*: Generates consistent and professional reports.

- \*\*Better Decision-Making\*\*: Real-time summary of key parameters.

# Budget & Cost Estimate

Estimated budget includes software development, licensing, and maintenance.

- \*\*Development Cost:\*\* $XX,XXX (One-time)

- \*\*Annual Maintenance:\*\* $X,XXX per year

# Conclusion & Call to Action

The Tool String Editor is a vital investment for optimizing wireline operations. By approving this proposal, Deleum can improve efficiency, reduce errors, and enhance documentation accuracy. We recommend proceeding with development and deployment in the upcoming quarter.