Summary Scope of Revisions

Boss Tires

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2.1 Preface of Changes:

To begin to discuss our technical changes within our database solution, we need to reiterate our objectives from Assignment 1. It's important to note that these overall objectives from a business process perspective do not deviate significantly within our final Access database. We serve the same business needs as discussed, though our changes are expansionary in nature due to the lack of technicality within our original database design. Our original assignment included the overall objectives within 4.1 – which are listed below:

1. Create a database which digitizes the current paper-based system.
2. Design a system that organizes the Boss Tires' inventory and financials into a readable format.
3. Design a system that allows the employees to track inventory levels and document the purchase/ sale of inventory.
4. Create a database component that calculates and reports the financial insights to the database user.

We realized in the creation of the database, *our original goals: 1 & 2*, were relatively unimportant and implied. So, we opted to convert these into goals that included an extension of our technical goals; a newly introduced feature for a client/customer list (mainly for promotional purposes, and for tracking past transaction/service history), and a new feature focused on not just inventory sales, but services performed on customer vehicles as well. Though this goal originally seemed out of scope, we found that implementing a service feature that captures non-inventory related services (Such as tire rebalancing, replacement, etc.) on top of our inventory management system would be more beneficial as a long-term solution for Boss Tires. Within the next few tables, we will review the changes made to our initial database design – as defined in *4.2 of Assignment 1* – and outline the technical additions added on top of this change.

Our first tables below (**2.2-2.4**), are focused on addressing the changes made from our original 4.2 technical outline. The column on the left describes the component outlined in assignment 1, and the other columns provide context to the changes made and the rationale.

2.2 Table Changes

Original Database Component	Changes Made	Rationale for the Change
Client Table	**None**	No Changes Required
Invoice Table	This table serves to capture elements from both inventory tables, and Services tables in a way that goes beyond simple invoicing.	Changing the invoice format to account for both Servicing and Inventory sale met the needs of the business better - it also allowed for enhanced transaction details.
Inventory Table	Kept, but expanded into two parts; InventorySale and InventoryIntake Tables. This allows us to have more flexibility in managing forms for Inventory Management when both accepting new inventory and selling existing inventory.	This changed allowed for easier modification through forms by interfacing with both the onboarding and offboarding of inventory.
Services Table	**None**	No Changes Required.

2.3 Form Changes

Original Database Component	Changes Made	Rationale for the Change
Client Intake Form	**None**	No changes Required
Inventory Received Form	Kept, but changed name to "Inventory Intake Form" - Used to onboard inventory into the DB application, rather than a confirmation form as we originally planned.	More flexibility in inventory management.
Invoice Form	**None**	No Changes Required

2.4 Report Changes

Original Database Component	Changes Made	Rationale for the Change
Profit and Loss	**None**	No changes required
Cost of Goods Sold	Removed	We found that this report in our initial planning became redundant when we built our profit/loss report. Within profit/loss, you can track the cost of sold jobs within that form.
Current Inventory	No Changes - Renamed to Inventory List (Serves the function of showing both inventory on hand and inventory sold/purchased)	These minor changes capture more than just current inventory, captures both total purchased/sold, to get a better understanding of best-selling items.
Client Base Information	Kept - Renamed to "Client List"	No technical changes made
General Service Statistics	Removed	We found that this report once again was redundant as services will be tracked over time through digital invoices, and within Profit/Loss.

2.5 Feature (Table/Reports/Forms) Additions Table

Feature Added	Rationale for Adding Feature	Benefit to Business Process
Employee Table	Adding an employee table allowed us to have a bank of the employees that work at Boss Tires and allowed us to assign specific jobs to employees.	Track which employees were assigned to jobs, more autonomy over transaction processing.
Employee Form	Allows the owner to add/remove employees as the business grows.	Scalability for changes in staffing levels.
Service Line Extension Form	Allows the owners to integrate new services/work offerings to the database without massive technical overhaul	Scalability - allows the business to diversify and add more service offers as seen fit.

2.6 Query and Backend Additions Table:

Feature Added	Rationale for Adding Feature	Benefit to Business Process
Client Full Name Query	This Query compacts the First/Last Name results in the Client table and sends it to the Job table for Sales tracking.	Allows Business to identify clients by First/Last Name rather than using a "Client ID"
Employee Full Name Query	This Query Compacts the First/Last Name Results in the Employee table and sends it to the Jobs table for tracking	Allows Business to identify employees by first/last name rather than using "Employee ID"
Inventory Intake Query	This Query facilitates the quantity of inventory onboarded, collects information from the Intake form, and puts it into the Inventory intake/sale table	Faster and more malleable transaction processing - more accurate inventory counts.
Inventory Out Query	This query is responsible for facilitating the removal of inventory from the inventory tables when a sale or "job" is paid for.	Allows inventory to be accurate to payment terms, sales aren't recognized until business collects a payment.
Profit/Loss Query	Connects information from sales and inventory to track profit/loss, and the cost of goods sold.	Allows financial information to be within 1 report (Profit/Loss) - rather than having a separate form for COGS.
Sale Detail Query	Tracks sale quantities sold in a particular job, as well as the financial components attached. This information is then fed into the sales detail subform for invoice tracking.	Easier back-end processing of complex orders while ensuring complete database normalization.