

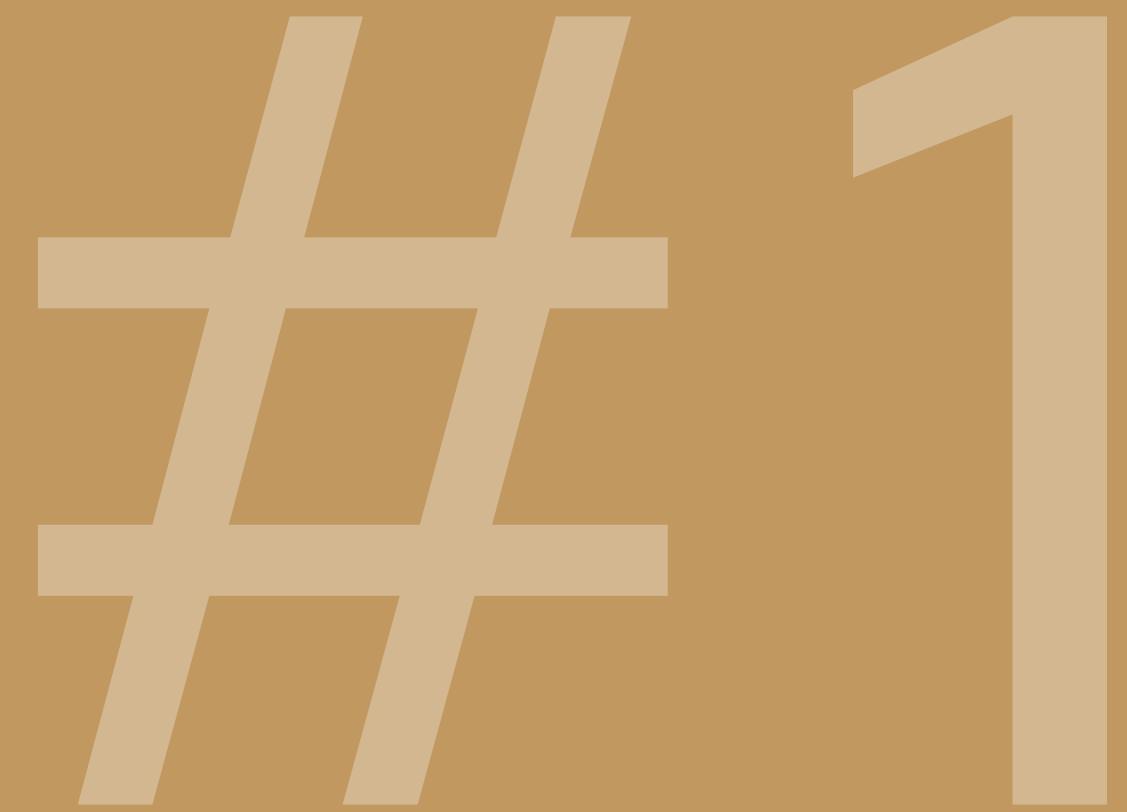
Web ERP System

GitHub:

<https://github.com/Evan-Wong-FSD/ERP-Korise-finalVersion>

Remark:

The following information is fictional; all confidential information has been redacted by █.



Tech stack

Front end

Vue.js, Vuex, Quasar
Framework



Data communication

Axios, Socket.IO



Back end

Node.js, Express.js,
Formidable, ExcelJS,
MongoDB



Main functions

Financial management

- Including accounting, financial reporting, budget management, and cost control functionalities.

Production management

- Planning and controlling the production process, including material requirements planning and resource allocation.

Inventory management

- Tracking and managing inventory levels.
- Creating material codes for inventories to establish a standardized and structured system for identifying and categorizing inventory items.

Project management

- Managing project schedules, resource allocation, and project costs.

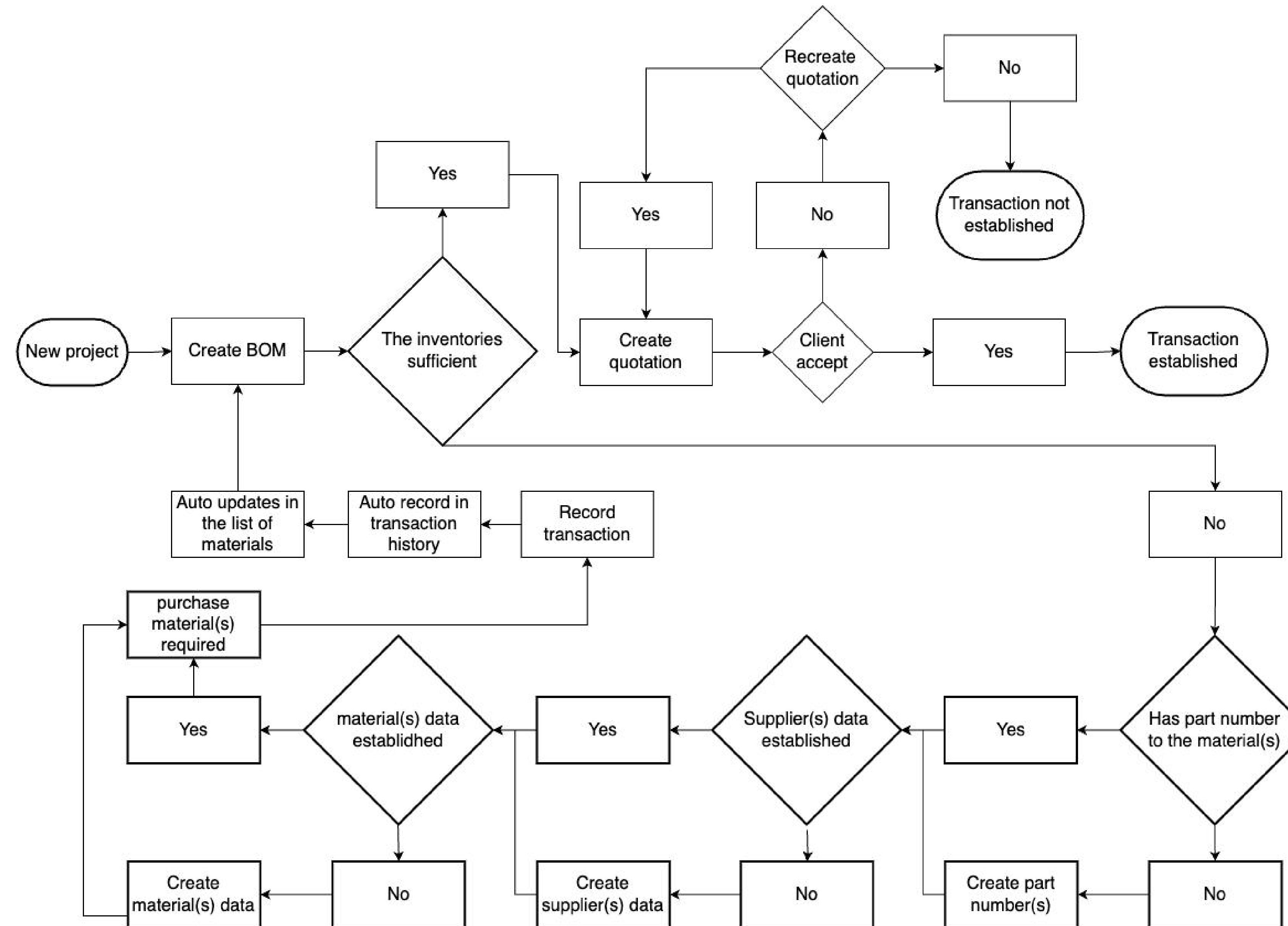
Purchasing management

- Managing the procurement process, including supplier selection, purchase orders, and supplier payments.

Customer and Supplier management

- Tracking customers and suppliers information.

Flow chart



Customers and Suppliers information

Customer and Supplier management

- Record customer and supplier data.
- Validate user-entered data before submission to ensure compliance with rules and prevent duplicates.
- Provide CRUD functionality.

The screenshot displays a software interface for managing customer and supplier data. On the left, a sidebar lists various modules: 進銷庫存記錄, 歷史進銷查詢, 物料清單, BOM表, 材料資料管理, 產品種類, and 廠商資料. The '廠商資料' module is currently selected and highlighted in blue. The main content area shows a search bar at the top with a placeholder '搜尋'. Below it is a list of firms, each with a red box around it. The first item in the list is '00866720 神隆五金有限公司'. A red box labeled 'Search bar' points to the search bar. A red box labeled 'List of firms' points to the list of companies. To the right of the list is a detailed view of a company record for '神隆五金有限公司'. This view includes fields for 統編 (00866720), 公司名稱 (神隆五金有限公司), 傳真國際區號 (886), 傳真區碼 (02), 傳真號碼 (24246455), 地址 (基隆市中正區義二路100號), 負責人 (吳美玲), 電話國際區號 (886), 電話區碼 (02), 電話號碼 (24246455), 產品類型 (批發商), 主要產品 (鋼板、鋼線、鋼鐵、鋼線), 資本額 (\$ 500000), 網址, and 備註 (選填). At the bottom right of this view is a red box labeled 'Open update dialog' with an arrow pointing to the '更新' (Update) button. Another red box labeled 'Open delete confirmation' with an arrow points to the '刪除' (Delete) button. In the bottom right corner of the main window, there is a '下一頁' (Next Page) button.

Materials classification

- 進銷庫存記錄
- 歷史進銷查詢
- 物料清單
- BOM表
- 材料資料管理
- 產品種類**
- 廠商資料

產品種類

Search field **Input field**

統編	公司名稱	產品種類	種類料號	產品材質	材質料號
<input type="checkbox"/>	[REDACTED]	管材	K000	透明水管	14
<input type="checkbox"/>	[REDACTED]	管材	K000	自來水管	09
<input type="checkbox"/>	[REDACTED]	管材	K000	軟管	13
<input type="checkbox"/>	[REDACTED]	管材	K000	軟管	13
<input type="checkbox"/>	[REDACTED]	管材	K000	EMT管	12

每頁筆數: 5 ▾ 1-NaN / [object Object]

Materials classification

Inventory Management

- Manage (CRUD) part numbers help the company track the flow of materials in the supply chain. By assigning part numbers, the company can accurately identify each material and replenish inventory when needed, ensuring an adequate supply while avoiding overstock or stockouts.

Quality Control

- Part numbers enable precise identification and tracking of different materials. This helps ensure consistent product quality and facilitates quick traceability to specific material batches or suppliers in case of defects or issues.

Supply Chain Coordination

- In the supply chain, the company interact and collaborate with suppliers, manufacturers, and distributors. Using part numbers allows different trading partners to precisely identify and communicate specific materials, ensuring accuracy and consistency in orders and deliveries.

Cost Management

- Part numbers assist in better cost management. By assigning standardized numbers and tracking materials, the company can more easily analyze and compare prices and performance from different suppliers, enabling more informed procurement and sourcing decisions.

Efficiency Improvement

- The use of part numbers can enhance internal process efficiency. For example, in procurement and manufacturing, using part numbers simplifies the ordering process, reduces errors and confusion, and speeds up material sourcing and production schedules.

Material Management

Inventory management

- Record, track, and manage (CRUD) detailed information about materials, inventory levels, supplier information, and part numbers.

Upload / Download invoice

- Upload invoices before submitting material data for future downloading and viewing.
- Facilitate comparison of supplier price increases.
- Helps the accountant record purchase costs accurately and supports activities such as tax filings, cost calculations, and financial analysis.

The screenshot displays a Material Management system interface. On the left, a sidebar menu lists several options: 進銷庫存記錄 (Sales and Inventory Record), 歷史進銷查詢 (Historical Sales and Purchase Query), 物料清單 (Material List), BOM表 (BOM Table), **材料資料管理** (Material Data Management), 產品種類 (Product Type), and 廠商資料 (Supplier Information). The '材料資料管理' option is currently selected and highlighted in blue.

The main area contains two forms:

- 材料資料管理 (Material Data Management):** This form is used to input detailed material information. It includes fields for: 統編 (Serial Number), 公司名稱 (Company Name), 產品種類 (Product Type), 產品材質 (Product Material), 型號 (Model), 產品名稱 (Product Name), 電壓 (Voltage), 描述 (Description), 電流 (Current), 電率 (Frequency), 輸出功率 (Output Power), 規格 (Specification), and 特性 (Characteristics). A red box highlights the 'Upplad invoice' button, which is associated with the '上傳發票' (Upload Invoice) button in the top right corner of the form.
- 材料資料管理 (Material Data Management):** This form shows a list of material items. The columns include: 統編 (Serial Number), 公司名稱 (Company Name), 產品種類 (Product Type), 產品材質 (Product Material), 產品名稱 (Product Name), 管材口徑 (Piping Diameter), 管材名稱 (Piping Name), 產品料號 (Product Part Number), 型號 (Model), 描述 (Description), 電壓 (Voltage), 電流 (Current), 電率 (Frequency), 輸出功率 (Output Power), 規格 (Specification), and 特性 (Characteristics). A red box highlights the 'Download invoice' button, which is associated with the '下載發票' (Download Invoice) button in the top right corner of the list view. The list view also includes buttons for 表單 (Form), 更新 (Update), 重設 (Reset), and 刪除 (Delete).

At the bottom right of the interface, there is a page navigation bar with the text: 每頁筆數: 15 | 1-15 / 972 | < < > >|.

Bill of Material (BOM) / Quotation

Generate BOM or Quotation

- A Bill of Materials (BOM) is a comprehensive list of items, parts, assemblies, and materials required to produce or manufacture a specific finished product. It serves as a blueprint for creating the product.
- A quotation, also known as a quote, is a fixed-price proposal provided to a customer. It outlines the cost of a product or service and cannot be modified once the customer agrees.

The screenshot shows a software interface for managing BOM and Quotation. On the left, there is a sidebar with buttons for '進銷庫存記錄', '歷史進銷查詢', '物料清單', 'BOM表' (highlighted in blue), '材料資料管理', '產品種類', and '廠商資料'. The main area has a title '• 基本資料' and two red boxes highlighting sections: '• Basic information' (covering project details like code, date, client info) and '• Header in the sheet' (covering material classification). A red arrow points from the 'Basic information' box to the client details section. Another red arrow points from the 'Header in the sheet' box to the materials classification table below. The table has columns for '產品種類' (Product Type) and contains entries for '變壓器' (Transformer), '電控材料' (Electrical Control Materials), and '工具' (Tools). The bottom right corner of the table shows '1~3 / 3'.

• Basic information

• Header in the sheet

Materials classification applied in the sheet

Bill of Material (BOM) / Quotation

Select type of sheet

Input field

Export Excel file

Click to insert data into sheet

報價單										物料清單													
客戶名稱：領先豐貿易有限公司										客戶名稱：領先豐貿易有限公司													
工程名稱：工程一										工程名稱：工程一													
連絡人：張雋弘										連絡人：張雋弘													
客戶電話：(886) 02 - 85223325										客戶電話：(886) 02 - 85223325													
客戶傳真：02 - 85223323										客戶傳真：02 - 85223323													
項次	名稱內容		規格		數量	單位	單價	複價	備註	小計	項次	名稱內容		規格		數量	單位	單價	複價	備註	小計		
1	變壓器(H型) 380.415.440V/110.220V(1A)TRS		380.415.440V/110.220V(1A)TRS		1	個	1,000	1,000		11,800	1	變壓器											
2	S-P35T接觸器		S-P35T接觸器		1	個	1,500	1,500		590	2	電控材料											
3	電焊機ARC-250CS 新展		ARC-250CS		1	個	3,000	3,000		12,390	3	工具											
4	八里-石門				1	趟	3,300	3,300			4	運費											
5	起重搬運				1	趟	3,000	3,000			5	其他費用											
合計											11,800	合計											11,800
營業稅5%											590	八里-石門											3,300
總計：壹萬貳仟參佰玖拾元整											12,390	起重搬運											3,000
1. 本報價單有效期限：15天。												經辦人：潘啟川											
2. 交貨期限：圖面確認後45天。												合計											11,800

Bill of Material (BOM) / Quotation

Data input reminders

- Only allow users to select materials with available inventory to avoid issues from insufficient stock.
- Provide inventory quantity alerts.
- Display an insufficient stock warning when the input quantity exceeds the material's inventory level.

Flexibility of data display and manipulation

- Real-time data synchronization in the form of instant data review and reduced errors.
- Instantly switch between BOM and Quotation form templates.
- Provide Excel export functionality for time-saving compilation.

Enhancement of managements

- **Financial management:** include budget management and cost control functionalities.
- **Production management:** plan the production process, including material requirements planning, production scheduling, and resource allocation.
- **Project management:** manage project schedules, resource allocation, and project costs.

Bill of Material (BOM) / Quotation

Provide search functionality

- Easily search BOM or Quotation by entering any search criteria.
- Ability to delete specified BOM or Quotation from the search results.
- Provide Excel export functionality.

The screenshot shows a search interface for BOM or Quotation. On the left, there is a search form with fields for '工程名稱' (Project Name) set to '工程一', and other optional fields like '編號' (Number), '客戶名稱' (Customer Name), '日期' (Date), '產品種類' (Product Type), and '產品名稱' (Product Name). Below the form are two buttons: '重設' (Reset) and '搜尋' (Search). A red box labeled 'Input keyword' points to the '工程名稱' field, and another red box labeled 'Search' points to the '搜尋' button. To the right, a search result table displays two entries. Each entry includes columns for '編號' (Number), '表單名稱' (Form Name), '統編' (Serial Number), '客戶名稱' (Customer Name), '工程名稱' (Project Name), 'Project code' (Project Code), and '日期' (Date). The first entry is '2024030901' with '物料清單' (Material List) as the form name. The second entry is '2024030902' with '報價單' (Quotation) as the form name. Red boxes highlight the 'Open search dialog' button at the top right of the search form, the 'View details' button in the header of the result table, and the '檢視' (View) button in the top right corner of the result table row. The bottom right of the search form shows '每頁筆數: 5' (Pages per page: 5) and '1-2 / 2'.

The screenshot shows a detailed view of a quotation. On the left, there is a search form identical to the one in the previous screenshot. On the right, the main area displays company information: '瑋安企業有限公司' (WIA Enterprise Co., Ltd.) at '新北市八里區賢一街129-1號' (No. 129-1, Xianyi Street, Banqiao District, New Taipei City). It also shows contact details: 'Tel : 02-8292-7060' and 'Fax : 02-8292-7201'. Below this is a section titled '報 價 單' (Quotation). It lists customer information: '客戶名稱：領先豐貿易有限公司' (Customer Name: Lixianfeng Trading Co., Ltd.) and project information: '工程名稱：工程一' (Project Name: Project One). The quotation table has columns for '項 次' (Item No.), '名 稱 內 容' (Description), '規 格' (Specification), '數 量' (Quantity), '單 價' (Unit Price), '複 價' (Total Price), '備 註' (Remarks), and '小 計' (Subtotal). The table contains ten items, with the last item being '起重搬運' (Crane Moving) and the total amount being '11,800'. A red box labeled 'Export Excel file' points to the '匯出檔案' (Export File) button in the top right of the search form. The bottom right of the search form shows '編號: 2024030902' and '日期: 113/03/10'.

List of materials

Inventory management

- Track and manage (CRUD) inventory levels and supplier information for materials.
- Provide convenient search functionality for users to quickly find the requested material data.
- By leveraging recorded material data, the company could compare quotes from different suppliers and identify materials with the most competitive prices.
- Efficiently compare whether suppliers have adjusted prices.

The screenshot displays two views of a material management application. On the left, a sidebar menu lists various functions: 進銷庫存記錄, 歷史進銷查詢, 物料清單 (highlighted in blue), BOM表, 材料資料管理, 產品種類, and 廠商資料. On the right, the main area shows a 'Material List' (物料清單) for 'Copper Pipe - 2-1/8" - 90 Degree Bend 2-1/8"'. A red box highlights the 'Materials tree menu' (物料樹狀菜單) on the left side of the main window, which is a hierarchical list of material categories and sub-categories. Another red box highlights the 'Search field' (Search field) at the top of the main window, where the search term '管材' (Piping) has been entered. The main table lists five entries for the specified material, with columns for Date, Purchase Item, Reference, Company Name, Unit Price, Quantity, Discount, Tax, and Remarks.

日期	進銷項	統編	公司名稱	單價	數量	折扣	複價	付款條件	稅金	Project code	備註
111/07/25	進項			\$213	20	0折	\$4,260	無	未稅		
111/07/25	進項			\$213	20	0折	\$4,260	無	未稅		
111/08/23	進項			\$213	10	0折	\$2,130	無	未稅		
111/12/26	進項			\$213	10	0折	\$2,130	無	未稅		
111/12/26	進項			\$213	10	0折	\$2,130	無	未稅		

Transaction record

Transaction management

- Create transaction records, including information on suppliers/customers, orders and payments/revenues.

進銷庫存記錄

報價單編號
2024030902

發票基本資料

時間 113/03/14	發票種類 二聯式統一發票
發票號 ex000001	期年 2000
期數 3-4	

重設 下一頁

進銷庫存記錄

歷史進銷查詢

物料清單

BOM表

材料資料管理

產品種類

廠商資料

進銷庫存記錄

發票基本資料

時間 113/03/14	發票種類 三聯式統一發票
發票號 xa000001	統編 41164033
公司名稱 中國青年救國團新北市土城國民運動中心	期年 2024
期數 1-2	

重設 繼續

進銷庫存記錄

歷史進銷查詢

物料清單

BOM表

材料資料管理

產品種類

廠商資料

進銷庫存記錄

發票基本資料

產品種類
電子零件

產品材質
電動閥

產品名稱
電動閥PEI-0622

型號
電動頭JS-03H*110V單相**加手輪

數量
2

單價
\$ 1250

Project code
00001

備註(選填)

進項

發票細項

每頁筆數: 5 1-5 / 5

返回 送出

2. Input sales data

Inventory management

- Based on purchase or sales records, automatically increase or decrease the inventory levels.

Transaction history

Transaction management

- Manage transaction details, including the ability to query or delete past orders and payment information.
- Offer a wide range of search criteria, such as time range, accounting period, transaction type, invoice number and project code.
- Using the project code as a search parameter allows for rapid retrieval of project-specific expenses and revenues to provide real-time visibility into the company's business operations.

Filter by time period Filter by accounting period

選項	交易類型	年份	月份	公司名稱	發票號	日期	統編	銷售額	稅金	總額	發票種類	備註
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/10/19	[REDACTED]	\$15,475	\$774	\$16,249	三聯式統一發票	
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/09/16	[REDACTED]	\$53,980	\$2,699	\$56,679	三聯式統一發票	
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/08/19	[REDACTED]	\$31,167	\$1,574	\$32,741	三聯式統一發票	
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/10/31	[REDACTED]	\$3,912	\$196	\$4,108	收銀機統一發票	
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/09/27	[REDACTED]	\$5,060	\$253	\$5,313	三聯式統一發票	
合計												
\$109,594 \$5,496 \$115,090												

Search field

選項	交易類型	年份	月份	公司名稱	發票號	日期	統編	銷售額	稅金	總額	發票種類	備註
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/10/19	[REDACTED]	\$15,475	\$774	\$16,249	三聯式統一發票	
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/09/16	[REDACTED]	\$53,980	\$2,699	\$56,679	三聯式統一發票	
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/08/19	[REDACTED]	\$31,167	\$1,574	\$32,741	三聯式統一發票	
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/10/31	[REDACTED]	\$3,912	\$196	\$4,108	收銀機統一發票	
□	進項	2022	09-10	[REDACTED]	[REDACTED]	111/09/27	[REDACTED]	\$5,060	\$253	\$5,313	三聯式統一發票	
合計												
\$109,594 \$5,496 \$115,090												

Transaction history

Transaction management

- Users can manage (CRUD) detailed information for each order.
- Track all items within each order, including the project code they are associated with.
- Allow managers to access this data anytime and make informed decisions.

歷史進銷查詢

The screenshot shows a table of purchase invoices. The columns include: 進銷項 (Purchase Type), 期年 (Year), 期數 (Period), 公司名稱 (Company Name), 發票號 (Invoice No.), 時間 (Time), 統編 (Serial No.), 賣額 (Sales Amount), 稅金 (Tax), 總額 (Total Amount), 發票種類 (Invoice Type), and 備註 (Remarks). The 'Invoice Details' button is highlighted with a red box and an arrow points from it to the bottom section of the interface.

進銷項	期年	期數	公司名稱	發票號	時間	統編	賣額	稅金	總額	發票種類	備註
進項	2022	09-10	[REDACTED]	111/10/19	[REDACTED]	\$15,475	\$774	\$16,249	三聯式統一發票		
進項	2022	09-10	[REDACTED]	111/09/16	[REDACTED]	\$53,980	\$2,699	\$56,679	三聯式統一發票		
進項	2022	09-10	[REDACTED]	111/08/19	[REDACTED]	\$31,167	\$1,574	\$32,741	三聯式統一發票		
進項	2022	09-10	[REDACTED]	111/10/31	[REDACTED]	\$3,912	\$196	\$4,108	收銀機統一發票		
進項	2022	09-10	[REDACTED]	111/09/27	[REDACTED]	\$5,060	\$253	\$5,313	三聯式統一發票		
合計						\$109,594	\$5,496	\$115,090			

歷史進銷查詢

發票號 : DU39334456

The screenshot shows the details of a specific invoice. The table has columns: 產品種類 (Product Type), 產品名稱 (Product Name), 型號 (Model), 數量 (Quantity), 單價 (Unit Price), 複價 (Total Price), and Project code. The 'Invoice Details' table is highlighted with a red box and an arrow points from it to the bottom section of the interface.

產品種類	產品名稱	型號	數量	單價	複價	Project code
[REDACTED]	[REDACTED]	[REDACTED]	2	\$25	\$50	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	1	\$230	\$230	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	1	\$940	\$940	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	1	\$320	\$320	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	2	\$320	\$640	[REDACTED]
合計				\$2,755	\$15,475	

Invoice details

Transaction history

Financial management

- Offer the ability to export financial data and automatically categorize it based on invoice types, specified amounts and so on, to meet the format requirements of accounting firms and save on labor costs.
- When there is a need to track the generation of specific reports and related data, it becomes easy to trace back to the corresponding records in the system.

歷史進銷查詢

Export Excel file

A	B	C	D	E	F	G	H	I	J	K
1 業主	項目	發票號碼	日期mmdd	稅別/項目	統編	銷售額	稅額	總額	種類	備註
2		DU39334456	111/10/19	三聯式統一發票		15,475	774	16,249		
3		du39334084	111/09/16	三聯式統一發票		53,980	2,699	56,679		
4		BS39294866	111/08/19	三聯式統一發票		31,167	1,574	32,741		
5		DU37110252	111/09/22	三聯式統一發票		25,690	1,285	26,975		
6		DU42443010	111/09/01	三聯式統一發票		10,500	525	11,025		
7		DU52443039	111/10/01	三聯式統一發票		10,500	525	11,025		
8		DU28390359	111/09/22	三聯式統一發票		11,204	560	11,764		
9		DV11049154	111/09/29	三聯式統一發票		12,630	632	13,262		
10		DU28390313	111/10/19	三聯式統一發票		120,600	6,030	126,630		
11		FL09140231	111/09/16	電子發票		10,368	518	10,886	住宿費	
12		DU32093254	111/09/15	三聯式統一發票		300,000	15,000	315,000		
13		BS03913791	111/08/19	三聯式統一發票		14,274	714	14,988		
14		BS39034443	111/08/31	三聯式統一發票		44,000	2,200	46,200	1.5HR 16T爬山	
15		DU11408192	111/09/02	三聯式統一發票		24,250	1,213	25,463		
16		EZ43493627	111/09/20	電子發票		47,760	2,388	50,148		
17		EV85762794	111/09/12	電子發票		28,000	700	28,700		
18		EX51924546	111/09/20	電子發票		30,000	1,500	31,500		
19		DU39098834	111/09/30	三聯式統一發票		19,500	1,650	21,150	9/5 2HR 16T 加班	
20		DV21156424	111/09/30	收銀機統一發票		23,900	1,195	25,095	上等17:00~18:06	
21		DU40430457	111/09/08	三聯式統一發票		25,000	1,250	26,250	楊梅裕成路17號 機台*5組合定位	
22		BS50072165	111/08/25	三聯式統一發票		183,913	9,196	193,109		
23		BS51644655	111/08/23	三聯式統一發票		12,800	640	13,440		
24		BS51644525	111/08/12	三聯式統一發票		223,560	11,178	234,738		
25		DU33315950	111/09/29	三聯式統一發票		137,725	6,889	144,614		
26		DU53256798	111/09/25	三聯式統一發票		57,215	2,874	60,089		
27		DU40430523	111/10/13	三聯式統一發票		15,000	750	15,750	楊梅體育園區 空調箱定位	
28		EX51925008	111/10/19	電子發票		10,800	540	11,340		
29		DU35657809	111/10/27	三聯式統一發票		12,952	648	13,600	圖號：K5-22A301A	
30		DU33317573	111/10/14	三聯式統一發票		39,930	1,997	41,927		
31		DU32093271	111/10/31	三聯式統一發票		940,000	47,000	987,000	康橋二期熱泵工程	
32		DU35940256	111/09/10	三聯式統一發票		84,857	4,243	89,100		
33		DU35940206	111/10/10	三聯式統一發票		84,857	4,243	89,100		
34	合計					2,662,407	133,130	2,795,537		
35										

進貨發票稅額500元以上 進貨發票稅額500元以下 其他費用-稅額500元以下 交通費 銷貨發票 營業稅估算 + | < > |