

# BaxTech's Case



Information Systems  
Architecture

June  
17,  
2025

Presented To

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# 1 Content Index

1	Content Index .....	2
1.	Company Overview – BaxTech .....	3
1.1	Introduction BaxTech .....	3
1.2	Mission Vision and values .....	3
1.3	Target Clients and markets .....	4
1.4	Key partnerships and competitive landscape .....	5
1.5	Financial Situation .....	6
1.6	Organizational Structure.....	7
2	The Organisation BaxTech – AS IS.....	9
2.1	Business Architecture .....	9
2.2	Process Architecture.....	11
2.3	Informational Architecture.....	15
2.4	Application Architecture.....	24
2.5	Informational Architecture.....	25
2.6	As-Is CRUD Matrix.....	27
3	The Organization - As Ought to Be .....	31
3.1	GAP characterization.....	31
3.2	Information Systems Opportunities (ISO).....	34
3.3	Organic Matrix of ISO.....	39
3.4	Identification of Target Applicational Systems .....	40
3.5	Grouping of ISOs and existing Application Systems .....	41
3.6	Target Application Systems Characterization .....	43
3.7	ISO Prioritization .....	50
3.8	McFarlan Matrix .....	52
3.9	To-Be Application Architecture.....	53
4	Conclusion.....	56
5	Note – Diagram Creation .....	57
6	References .....	58

# 1. Company Overview – BaxTech

## 1.1 Introduction BaxTech

BaxTech is a Brazilian IT consultancy company that was founded in 2016 by Marcos Bastos. It works in Latin America, especially in Brazil, Peru and Chile. It provides IT solutions, such as consulting, project management, application lifecycle services and integrating systems for clients. The company is quite small, with just over 50 employees, but it is still a big player in the regional IT market. BaxTech is legally structured as a limited partnership (“LTDA. ME”), a common model in Brazil for businesses with moderate revenue.

Its centralized operational model, with a single main office in Mogi das Cruzes, São Paulo, enables BAXTECH to manage clients and consultants remotely while minimizing fixed costs. This setup supports their lean and responsive approach to delivering IT services across borders. The company is owned and managed by its two founding officers, CEO Marcos Bastos and CFO Andreia Bastos, both of whom have decades of experience in IT and business leadership.

## 1.2 Mission Vision and values

BAXTECH’s mission is rooted in building meaningful client relationships through deep understanding and tailored solutions. Its vision is to become a reliable technology partner known for delivering fast, intelligent, and IT services at a lower price than their

competitors. BAXTECH strives to combine efficiency with innovation, positioning itself as a long-term ally for its customers.

These goals are supported by four core values:

- encouraging long-term trust
- respecting individual potential
- acting as an extension of the client's IT team
- and consistently delivering added value.

These principles guide the company's operations and reflect its ambition to stand out through both technical expertise and relational integrity.

### 1.3 Target Clients and markets

BAXTECH works with many different clients all over Latin America, especially in Brazil, Peru and Chile. Its clients range from medium-sized businesses to large multinational corporations. These companies work in many different industries, including consumer goods, retail, manufacturing and the public and private sectors.

The company works with its customers in the long term, offering IT and consulting services that are exactly what each client needs. BAXTECH has a lot of big clients, including BMW, BOSCH, Marisa, O Boticário, Astrazeneca, Honda and Johnson & Johnson. These companies show that BAXTECH is trusted and has a strong presence in the region.

## 1.4 Key partnerships and competitive landscape

To improve its service quality and technical capabilities, BAXTECH relies on strategic partnerships with global players such as SAP and Capgemini. These alliances allow the company to integrate leading technologies into client solutions, reduce maintenance costs, improve internal communication structures within client organizations and focus fully on their operational core business.

Supplier of BaxTech are the following:

Supplier	Service Provided	Notes
<b>99 Taxi</b>	Corporate services	Manages employee transportation and business mobility
<b>WorkForce</b>	Workforce cooperation	Cooperativa supporting BAXTECH staffing and human resources
<b>Rayes and Fagundes</b>	Legal services	Law firm responsible for legal affairs
<b>S&amp;N</b>	Business representation	Handles BAXTECH's external business representation

*Table 1: Suppliers of BaxTech*

BAXTECH operates in a fast-paced, constantly evolving, competitive environment. It differentiates primarily through more competitive pricing than its competitors, while also prioritizing high service quality, closer customer alignment, and operational efficiency enabled by its centralized structure. Its main competitors can be seen in the following Table:

Main Competitor	Notes
StarIT	Competes directly in the ERP consulting market, especially SAP
Seidor	One of the most recognized SAP providers in Brazil
Megawork	Competes with BaxTech in ERP deployment and support
SondaIT	A broader IT service company with ERP and infrastructure capabilities
Meta	Known for agile methodologies and digital business solutions

Table 2: Main Competitors of BaxTech

## 1.5 Financial Situation

BAXTECH's financial development over recent years reflects solid growth and stable operations. The cash flow statement for the final quarter of 2018 shows consistent monthly revenues of approximately R\$ 240,000 to R\$ 310,000, with major clients such as Lojas Marisa and Eldorado Brasil contributing significantly. Despite high personnel and operational costs, especially salaries paid via the WorkForce cooperative, the company maintained a positive cash balance throughout the period, closing the year with a margin of R\$ 94,464 and a cumulative monthly cash total exceeding R\$ 700,000.

The capital growth chart further underlines this positive trend: between 2017 and 2019, BAXTECH's capital expanded dramatically from under R\$ 250,000 to approximately R\$ 3.5 million. This trajectory highlights the company's ability to scale effectively and reinvest in its operations.

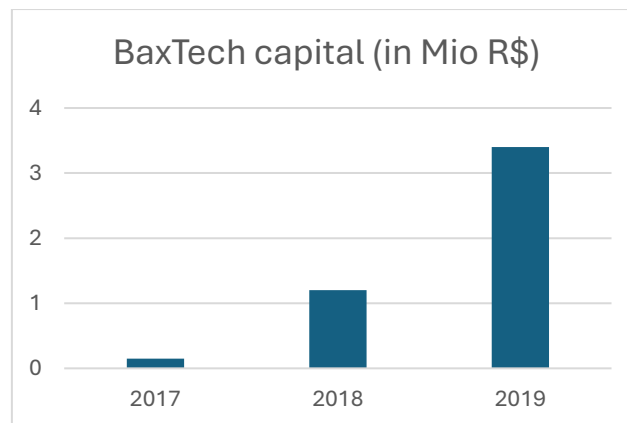


Figure 1: BaxTech Capital

## 1.6 Organizational Structure

The company is led by CEO Marcos Bastos, who oversees both operational and financial leadership through the COO and CFO, respectively. The COO (Beth Nobre) supervises the consultant department and marketing department, ensuring day-to-day execution and delivery. The CFO (Andreia Bastos) is responsible for finance and human resources (HR).

BAXTECH network of external providers (e.g., Rayes Fagundes for legal services, WorkForce for consultant staffing, 99 Taxi, and S&N) is managed by the procurement department under the watch of the COO. Partners and sponsors (Capgemini & SAP) are managed by the CEO directly.

The full organizational layout is illustrated in the following figure.

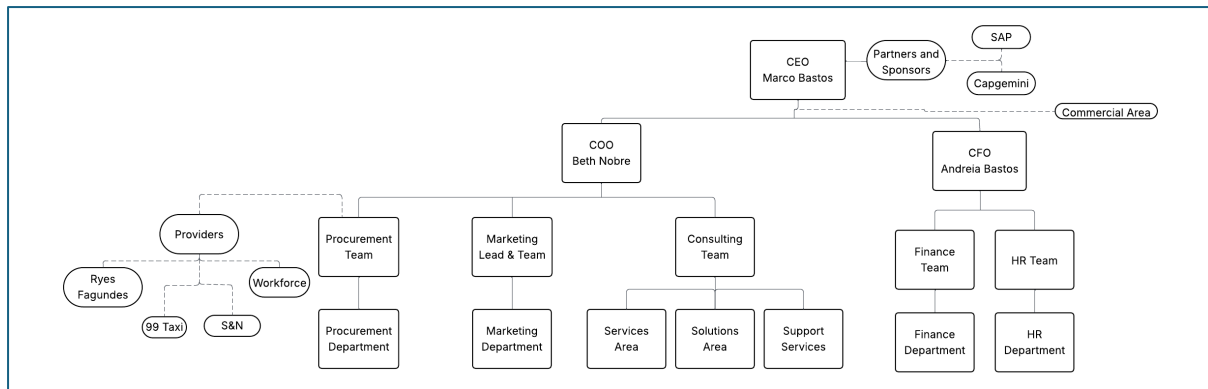


Figure 2: BaxTech organizational Structure

BAXTECH's workforce is a mix of centralised leadership from its Brazilian headquarters and a team of consultants working on-site at client locations across Latin America. The company is privately owned by its CEO and CFO, which means that they can make decisions quickly and easily. Each executive role has clearly defined responsibilities and high professional standards, ensuring depth of expertise. This structure is supported by a culture of collaboration, where people share knowledge and learn from each other.



## 2 The Organisation BaxTech – AS IS

### 2.1 Business Architecture

The business architecture describes the core structure of an organization in terms of its business capabilities, key stakeholders, organizational units, and the value they deliver. It links strategic goals with operational execution and serves as a foundation for understanding how the company functions(Santos Vitor, n.d.-c).

In this project, we identified and categorized ten central business capabilities at BaxTech, grouped into core, support, and management capabilities. Each capability was detailed using the MLEARN ISO-L1 and ISO-L2 methodology, and linked to relevant business services and actors. The business architecture provided the baseline for all subsequent architectural layers(Santos Vitor, n.d.-b).

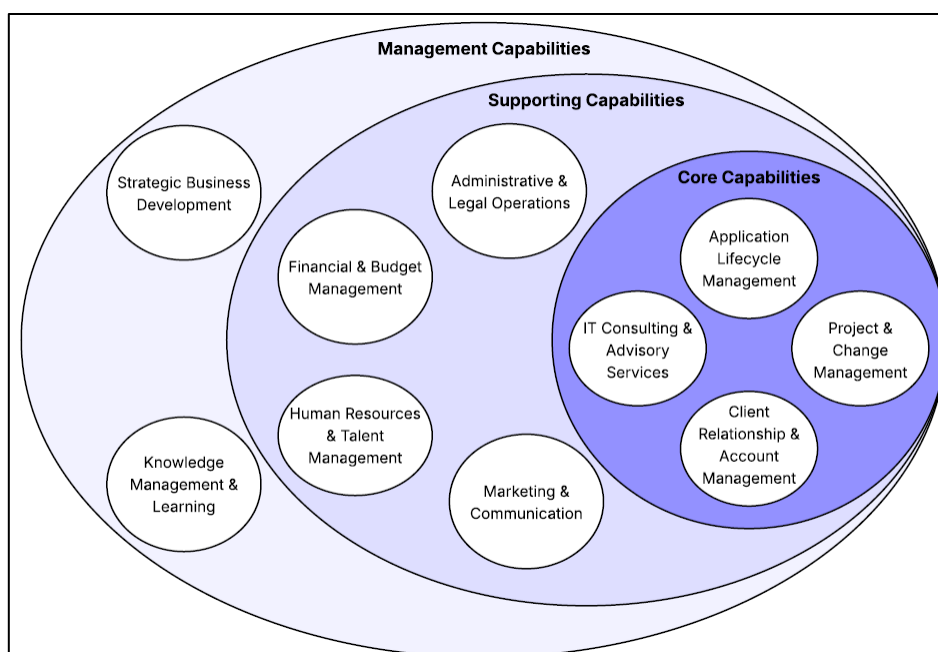


Figure 3: ISO-L1 Capabilities

To provide a clear and structured view of BaxTech's operations, we divided the business architecture into three main capability groups: Core Capabilities, which directly contribute to the company's value creation; Support Capabilities, which enable and maintain internal operations; and Management Capabilities, which ensure strategic alignment and organizational governance. This classification follows a widely used best practice in enterprise architecture and allows for better traceability across all architecture layers.

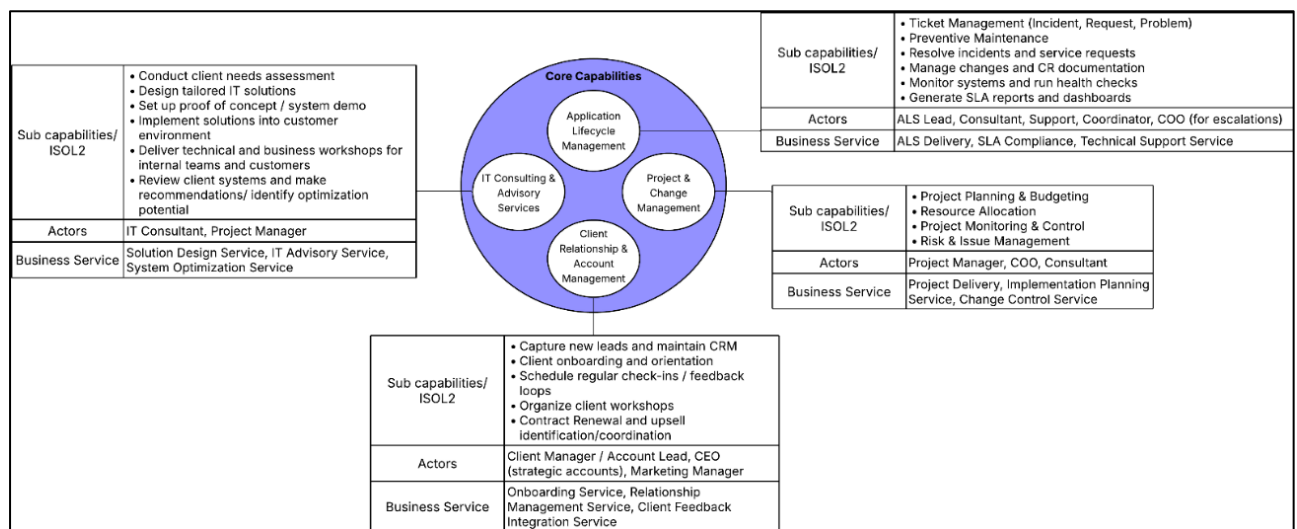


Figure 4: ISO-L 2 Breakdown of the main Capabilities

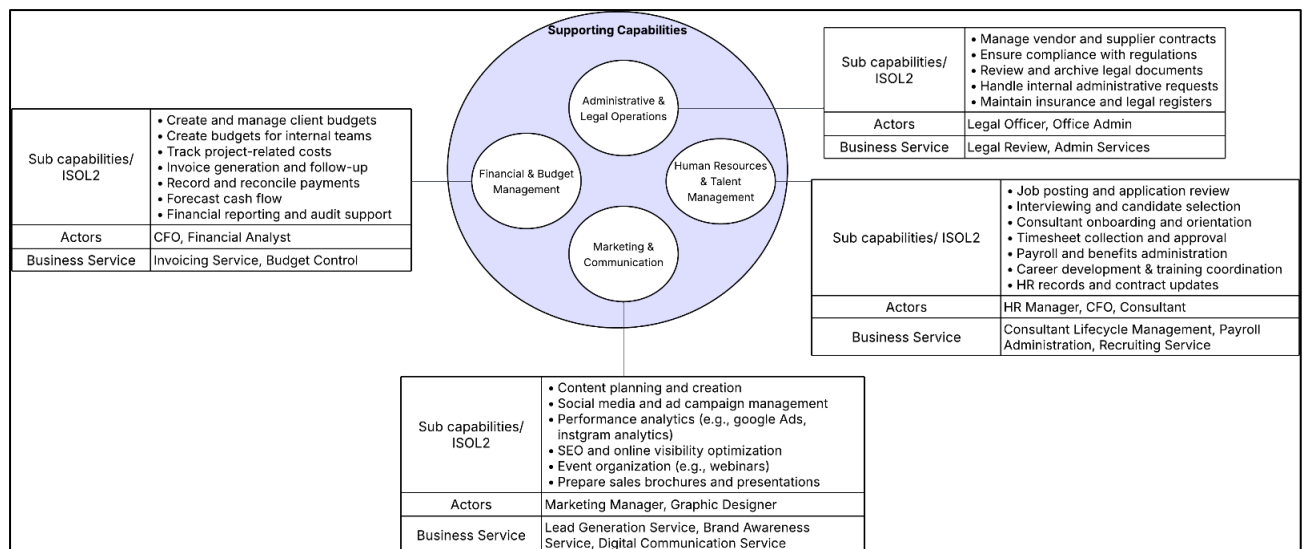


Figure 5: ISO-L 2 Breakdown of the supporting Capabilities

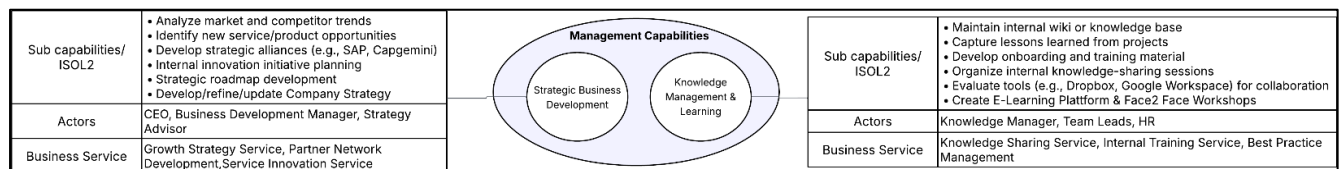


Figure 6: ISO-L 2 Breakdown of the Management Capabilities

## 2.2 Process Architecture

Process architecture outlines how business capabilities are operationalized through structured, repeatable activities. It includes the design and relationships of macro-processes and subprocesses, and is typically visualized using BPMN (Business Process Model and Notation)(Santos Vitor, n.d.-b).

For BaxTech, we derived five end-to-end macro processes from the defined business capabilities. Each macro process was translated into a BPMN diagram with swimlanes reflecting ISO-L1 actors, decision gateways, and key data flows. Emphasis was placed

on capturing the real operational flows, system interactions, and responsibilities across departments, based on the provided case study data.

The following diagram illustrates the main process of executing a project at BaxTech, starting from the acquisition of a lead. It shows how a lead progresses into a structured project, including steps for project planning, execution, billing, and final evaluation (lessons learned). The process highlights how various business units collaborate across the project lifecycle and reflects the practical integration of core, support, and management capabilities in BaxTech's operational environment.

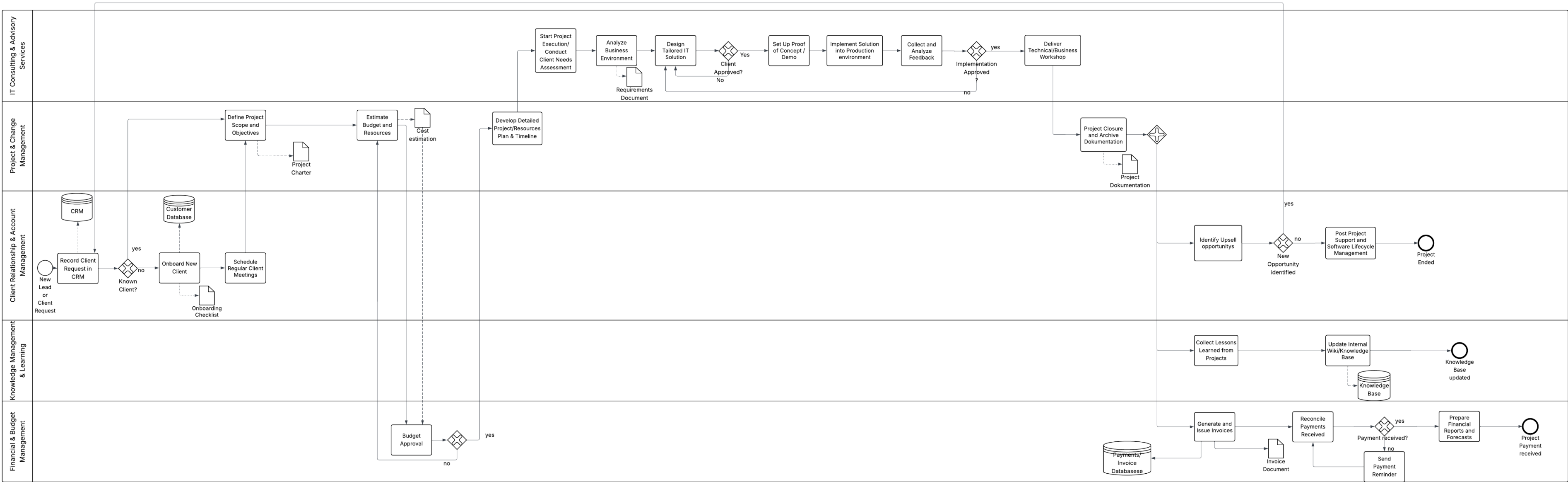


Figure 7: Main Project Execution Process

The diagram below shows the main processes that support and manage these. This image shows how different parts of the business, like Human Resources, IT Service and Finance, and management activities, such as Strategic Planning and Quality Assurance, work together at BaxTech. Each process is assigned to the person or team responsible for it, and includes all the relevant data flows and decision points. This makes things clear and complete.

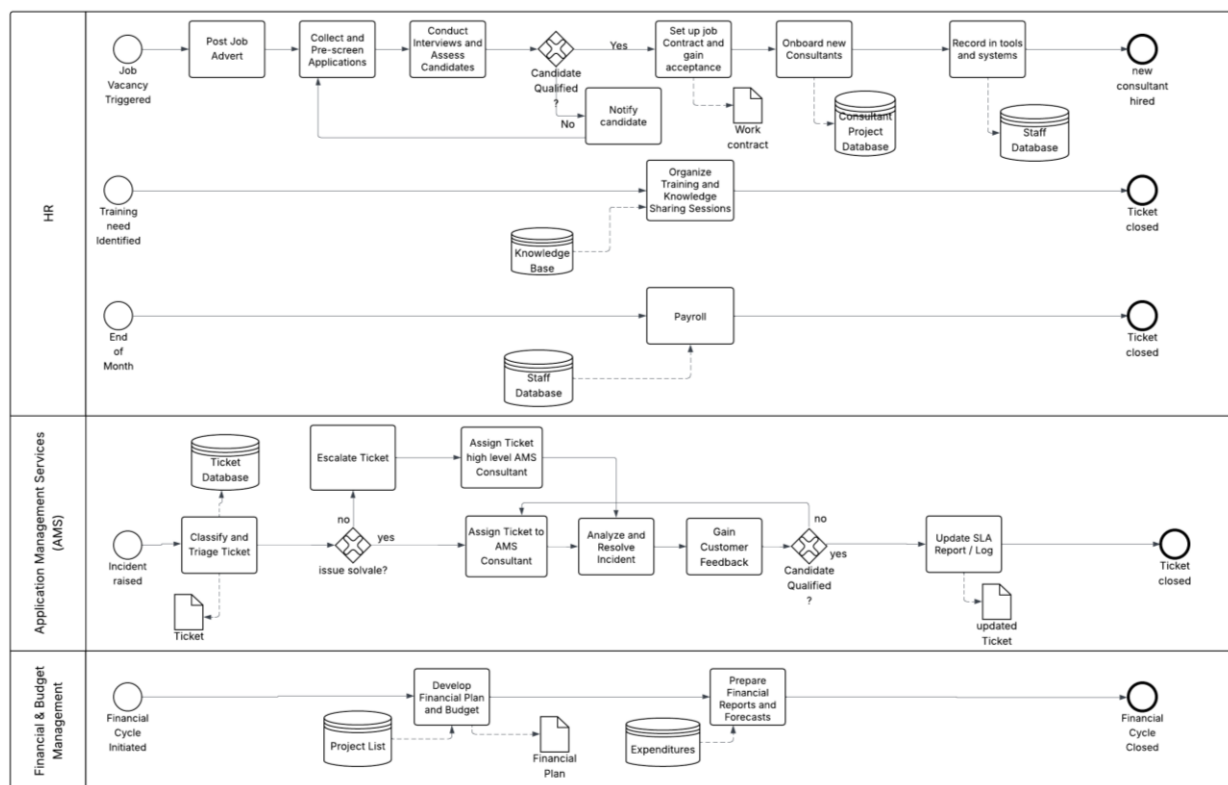


Figure 8: Process Diagram Part 1

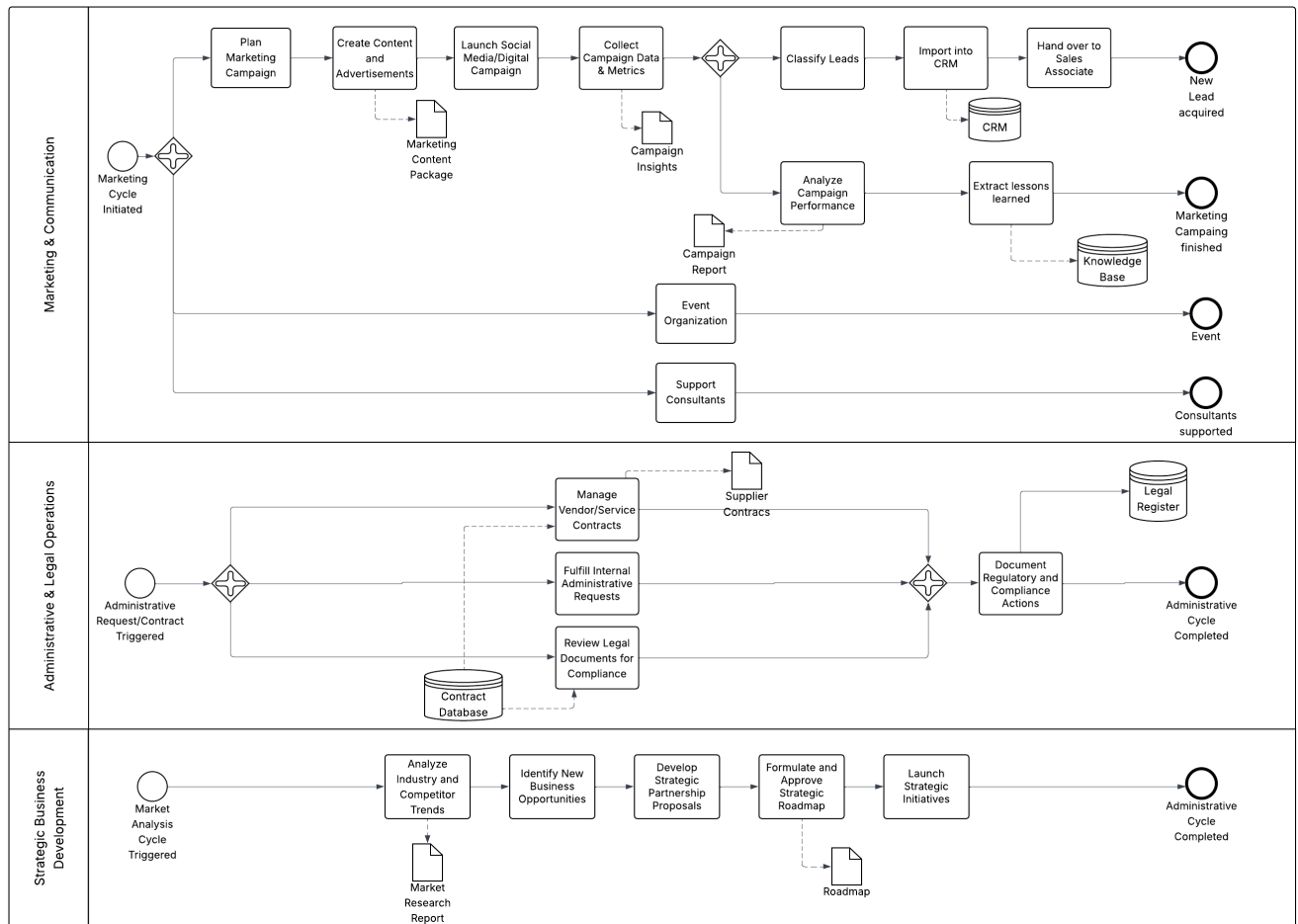


Figure 9: Process Diagram Part 2

## 2.3 Informational Architecture

Informational architecture defines the structure, relationships, and governance of data within an organization. It identifies key informational entities (e.g., Customer, Project, Ticket), their attributes, and how they are used or maintained in different systems and processes (Santos Vitor, n.d.-b).

Based on the BaxTech case study, we modeled 14 key informational entities including Customer, Employee, Project, Ticket, and Payment. Each entity was described in terms of attributes, breakdowns, and relationships. Additionally, we created a conceptual data

model outlining the interdependencies between these entities, forming a consistent and integrated view of BaxTech's information ecosystem.

<b>Name</b>	Customer	
<b>ID</b>	CUSTOMER	
<b>Description</b>	Information about BaxTech clients	
<b>Breakdown</b>	Key Accounts, SMEs, Public Sector	
<b>Attributes</b>	Name	CUSTOMER_ID
	Description	Unique identifier for each customer
	Name	CUSTOMER_TYPE
	Description	Customer classification (e.g., Key Account)
	Name	CUSTOMER_NAME
	Description	Full name or company name
	Name	CUSTOMER_POC
	Description	Main point of contact
	Name	CUSTOMER_ADDRESS
	Description	Billing and delivery addresses
	Name	CUSTOMER_EMAIL
	Description	Email of contact person
	Name	CUSTOMER_SEGMENT
	Description	Segment for marketing and sales use

Table 3 – Entity 'Customer'

<b>Name</b>	Project	
<b>ID</b>	PROJECT	
<b>Description</b>	Information about internal and customer-facing projects	
<b>Breakdown</b>	Customer projects, internal improvement projects	
<b>Attributes</b>	Name	PROJECT_ID
	Description	Unique project identifier
	Name	PROJECT_NAME
	Description	Name of the project
	Name	PROJECT_SCOPE
	Description	Objectives and scope
	Name	PROJECT_STATUS
	Description	Current status (e.g., Planning, Execution, Completed)
	Name	START_DATE
	Description	Start date
	Name	END_DATE
	Description	Planned or actual completion date



	Name	ASSIGNED_TEAM
	Description	Team responsible for execution

Table 4 – Entity ‘Project’

<b>Name</b>	Ticket	
<b>ID</b>	TICKET	
<b>Description</b>	Tracks incidents, requests, and change management operations	
<b>Breakdown</b>	Divided by Incident, Service Request, Change Request	
<b>Attributes</b>	Name	TICKET_ID
	Description	Unique identifier for ticket
	Name	TICKET_TYPE
	Description	Type (incident, request, etc.)
	Name	TICKET_STATUS
	Description	Current status (e.g., Open, In Progress, Resolved)
	Name	CREATED_DATE
	Description	Date of submission
	Name	ASSIGNED_TO
	Description	Consultant or support agent assigned
	Name	CLIENT_ID
	Description	Customer linked to the ticket
	Name	TICKET_PRIORITY
	Description	Priority level (e.g., Low, Critical)

Table 5 – Entity ‘Ticket’

<b>Name</b>	Invoice	
<b>ID</b>	INVOICE	
<b>Description</b>	Information about issued and received invoices	
<b>Breakdown</b>	Customer invoices, Vendor invoices, Partner Invoices	
<b>Attributes</b>	Name	INVOICE_ID
	Description	Unique invoice number
	Name	INVOICE_DATE
	Description	Date invoice was issued
	Name	INVOICE_STATUS
	Description	Paid, pending, overdue
	Name	CUSTOMER_ID
	Description	Linked customer
	Name	AMOUNT
	Description	Total amount billed
	Name	DUE_DATE
	Description	Due date for payment
	Name	PAYMENT_DATE
	Description	Actual payment received date

Table 6 – Entity ‘Invoice’

<b>Name</b>	Payment	
<b>ID</b>	PAYMENT	
<b>Description</b>	Contains data about financial transactions received from customers (inbound) or sent to vendors (outbound)	
<b>Breakdown</b>	Customer Payments (Accounts Receivable), Vendor Payments (Accounts Payable)	
<b>Attributes</b>	Name	PAYMENT_ID
	Description	Unique ID of each payment transaction
	Name	INVOICE_ID
	Description	Reference to the related invoice
	Name	PAYMENT_DATE
	Description	Date the payment was received or made
	Name	AMOUNT
	Description	Exact amount of the transaction
	Name	PAYER
	Description	Name or ID of the customer or vendor
	Name	METHOD
	Description	Method of payment (e.g., bank transfer, credit card, PayPal)
	Name	PAYMENT_DATE
	Description	Actual payment received date

Table 7 – Entity ‘Customer Payments’

<b>Name</b>	Employee	
<b>ID</b>	EMPLOYEE	
<b>Description</b>	Personal and HR-related information of internal staff	
<b>Breakdown</b>	By department and role and work contract (Fulltime, Parttime, Freelance)	
<b>Attributes</b>	Name	EMPLOYEE_ID
	Description	Unique employee identifier
	Name	EMPLOYEE_NAME
	Description	Full name
	Name	DEPARTMENT
	Description	Department (e.g., Marketing, IT Consulting)
	Name	CONTRACT_TYPE
	Description	Type of contract e.g. part time, full time, freelance
	Name	ROLE
	Description	Position or title
	Name	HIRE_DATE
	Description	Start date

	Name	STATUS
	Description	Active, on leave, terminated
	Name	EMAIL
	Description	Internal email address

Table 8 – Entity ‘Employee’

<b>Name</b>	Knowledge Article	
<b>ID</b>	KNOWLEDGE_ITEM	
<b>Description</b>	Internal documentation and knowledge items	
<b>Breakdown</b>	Internal wikis, best practices, onboarding docs	
<b>Attributes</b>	Name	DOC_ID
	Description	Unique ID of the article
	Name	TITLE
	Description	Title of the document
	Name	AUTHOR
	Description	Who created or owns the doc
	Name	LAST_UPDATED
	Description	Date of last update
	Name	RELATED_PROJECT_ID
	Description	Linked project (if applicable)
	Name	ACCESS_LEVEL
	Description	Who can access (e.g., HR only, Company-wide)
	Name	EMAIL
	Description	Internal email address

Table 9 – Entity ‘Knowledge Article’

<b>Name</b>	Contract	
<b>ID</b>	CONTRACT	
<b>Description</b>	Details of legal agreements with clients, suppliers, or partners	
<b>Breakdown</b>	Customer contracts, Vendor contracts, NDAs, SLA’s, employee contract	
<b>Attributes</b>	Name	CONTRACT_ID
	Description	Unique identifier for the contract
	Name	PARTY_NAME
	Description	Name of the client, vendor, or partner
	Name	CONTRACT_TYPE
	Description	Type (e.g., service agreement, license)
	Name	EFFECTIVE_DATE
	Description	Start date of contract
	Name	EXPIRY_DATE
	Description	Contract end date

	Name	STATUS
	Description	Active, expired, under negotiation
	Name	RELATED_PROJECT_ID
	Description	Link to related project (if applicable)

Table 9 – Entity ‘Contract’

<b>Name</b>	Campaign	
<b>ID</b>	CAMPAIGN	
<b>Description</b>	Information about marketing and lead-generation campaigns	
<b>Breakdown</b>	Email, social media, webinar, event	
<b>Attributes</b>	Name	CAMPAIGN_ID
	Description	Unique campaign identifier
	Name	CAMPAIGN_NAME
	Description	Name of the Campaign
	Name	CHANNEL
	Description	Channel (e.g., LinkedIn, Email, Web)
	Name	TARGET_AUDIENCE
	Description	Campaign start date
	Name	END_DATE
	Description	End date
	Name	PERFORMANCE_METRICS
	Description	KPIs such as impressions, CTR

Table 11 – Entity ‘Campaign’

<b>Name</b>	Training Session	
<b>ID</b>	TRAINING	
<b>Description</b>	Workshops and sessions for onboarding, knowledge sharing, upskilling	
<b>Breakdown</b>	Internal onboarding, client enablement, upskilling	
<b>Attributes</b>	Name	SESSION_ID
	Description	Unique session ID
	Name	TOPIC
	Description	Topic of the session
	Name	ORGANIZER
	Description	HR or team lead who arranged it
	Name	PARTICIPANTS
	Description	List of employees or clients
	Name	DATE
	Description	Scheduled or completed date
	Name	FEEDBACK_SCORE
	Description	Optional rating after session

Table 12 – Entity ‘Training Session’

<b>Name</b>	Strategic Initiative	
<b>ID</b>	STRATEGIC_INITIATIVE	
<b>Description</b>	Long-term goals and high-level programs aimed at improving BaxTech's performance, capabilities, or offerings	
<b>Breakdown</b>	Capability uplift, Digitalization program, Market expansion, Internal restructuring	
<b>Attributes</b>	Name	INITIATIVE_ID
	Description	Unique identifier of the initiative
	Name	TITLE
	Description	Short description of the initiative (e.g. "Improve Onboarding Process")
	Name	START_DATE
	Description	Planned kickoff date
	Name	TARGET_DATE
	Description	Goal deadline or expected result timeline
	Name	OWNER
	Description	Business unit or executive sponsor
	Name	STATUS
	Description	Planned / In Progress / Completed
	Name	OBJECTIVES
	Description	Strategic goals or KPIs to be met
	Name	RELATED_PROJECTS
	Description	Links to concrete projects delivering initiative outcomes

Table 13 – Entity 'Strategic Initiative'

<b>Name</b>	Lead	
<b>ID</b>	LEAD	
<b>Description</b>	Early-stage contact or prospect who may convert into a customer	
<b>Breakdown</b>	Marketing lead, Sales-qualified lead, Partner lead	
<b>Attributes</b>	Name	LEAD_ID
	Description	Unique identifier of the lead
	Name	LEAD_NAME
	Description	Name of contact or company
	Name	SOURCE
	Description	Origin of the lead (e.g. Campaign, Event, Referral)
	Name	CREATED_DATE
	Description	Date lead entered the system
	Name	LEAD_STATUS
	Description	Business unit or executive sponsor
	Name	LEAD_STATUS
	Description	New / Contacted / Qualified / Converted / Lost
	Name	ASSIGNED_TO

	Description	Sales or marketing team member
	Name	EMAIL
	Description	Contact email address
	Name	PHONE
	Description	Optional contact number

Table 14 – Entity ‘Lead’

<b>Name</b>	Financial Plan	
<b>ID</b>	FIN_PLAN	
<b>Description</b>	Documented projection of financial performance, including budgets, forecasts, and cost planning.	
<b>Breakdown</b>	Budget plan, cost forecast, revenue projection, cash flow analysis	
<b>Attributes</b>	Name	PLAN_ID
	Description	Unique identifier of the plan
	Name	PLAN_NAME
	Description	Title of the plan (e.g., "Q3 Revenue Forecast")
	Name	CREATED_DATE
	Description	Date the financial plan was created
	Name	PERIOD_COVERED
	Description	Time range the financial plan covers (e.g., Jan–Dec 2024)
	Name	CREATED_BY
	Description	Person or system responsible for creating the plan
	Name	STATUS
	Description	Current state of the plan (e.g., Draft / Approved / Rejected)
	Name	TOTAL_REVENUE
	Description	Estimated total revenue in the defined period
	Name	TOTAL_COSTS
	Description	Estimated total costs in the defined period
	Name	PROFIT_MARGIN
	Description	Expected profit calculated as Revenue minus Costs

Table 15 – Entity ‘Financial Plan’

<b>Name</b>	Job Posting
<b>ID</b>	JOB_POSTING
<b>Description</b>	A listing that announces an open position within the company, outlining key job details.

<b>Breakdown</b>	Internal Posting, External Job Listing, Internship, Temporary Contract	
<b>Attributes</b>	Name	JOB_ID
	Description	Unique identifier for the job posting
	Name	TITLE
	Description	Job title being offered (e.g., "IT Consultant")
	Name	DEPARTMENT
	Description	Department offering the position (e.g., "Solutions Area")
	Name	LOCATION
	Description	Office location or remote status of the job
	Name	EMPLOYMENT_TYPE
	Description	Type of employment (e.g., Full-time, Part-time, Internship)
	Name	POSTED_DATE
	Description	Date when the job was published
	Name	DEADLINE
	Description	Final date by which applications can be submitted
	Name	RESPONSIBLE_PERSON
	Description	HR or department contact for this position
	Name	STATUS
	Description	Current status of the job (e.g., Open / Closed / On Hold)
	Name	CANDIDATES
	Description	List of all Applied candidates

Table 16 – Entity ‘Job Posting’

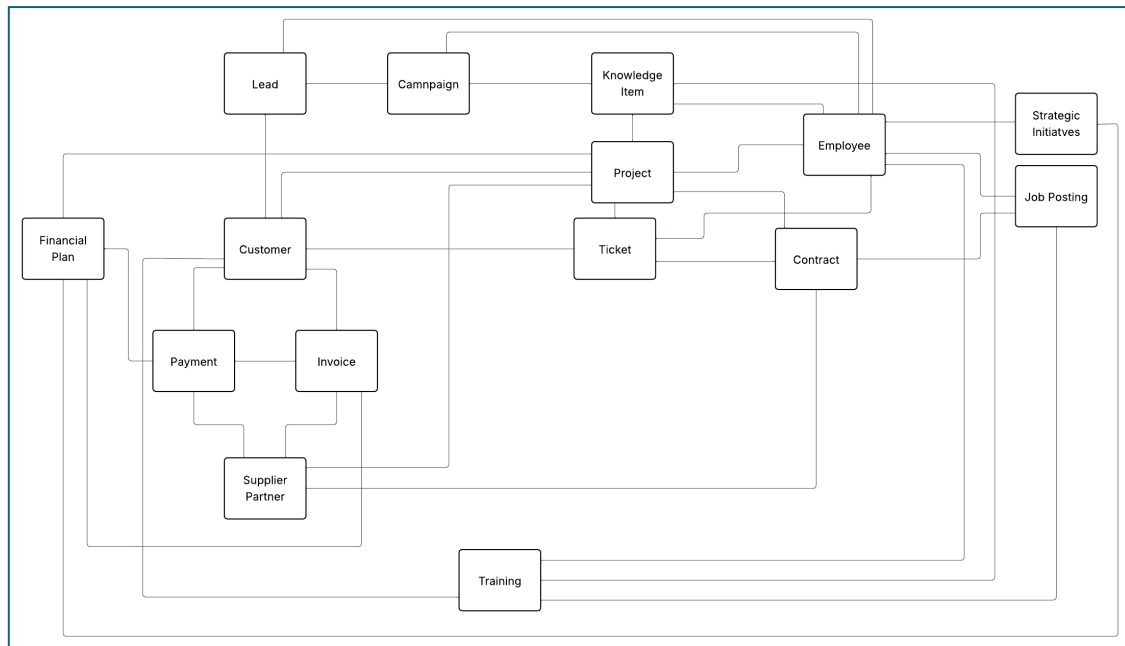


Figure 10: Ontology for the informational entities of BaxTech

## 2.4 Application Architecture

The application architecture maps the software systems in use to core and support business capabilities and data entities. It helps identify redundancies, integration needs, and opportunities for standardization or improvement (Santos Vitor, n.d.-b).

The BaxTech application landscape was reconstructed based on the documented application portfolio and plausible assumptions about additional tools that are likely in use, particularly in areas not explicitly covered in the case study. Applications were grouped according to the 10 previously defined business capabilities. Core tools such as MS Dynamics 365, Outlook, Excel, and specialized solutions like GLPI were mapped to their respective functional domains. In red, you can see the applications assumed, especially those related to ERP functionalities that BaxTech may be using to support processes like finance, procurement, and HR. Integration points between key tools were



identified to map essential data flows and system interactions. However, the current level of integration at Baxtech appears limited and reveals significant potential for improvement.

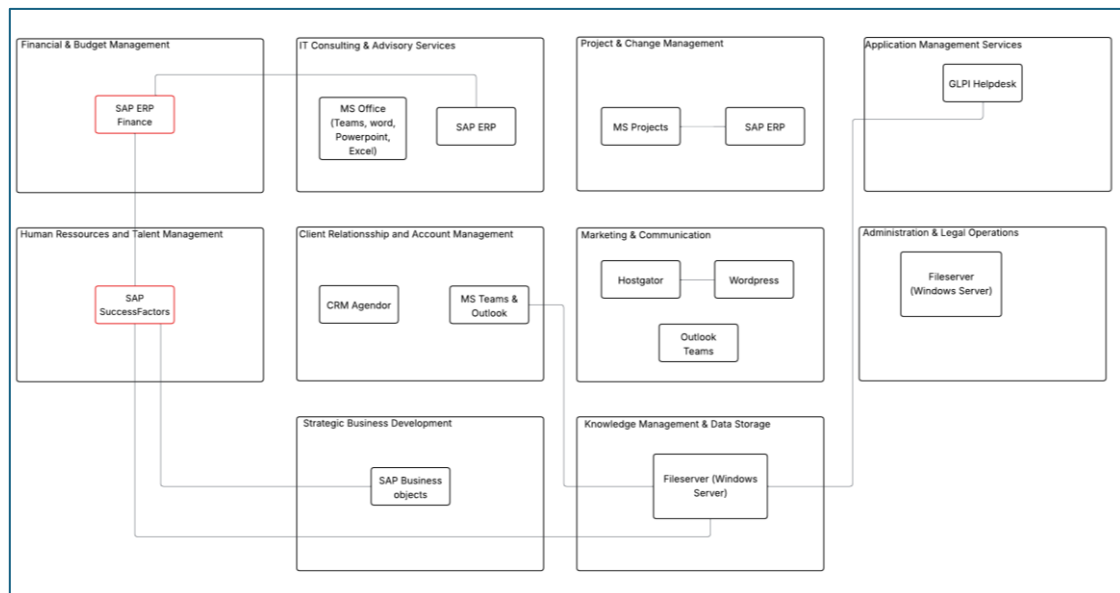


Figure 11: BaxTech Application Architecture

## 2.5 Informational Architecture

The Technological architecture describes the foundational IT infrastructure that enables the deployment, access, and operation of the organization's applications and data. It defines the hardware, cloud services, platforms, access structures, and integration mechanisms that support the application landscape and information flows defined earlier (Santos Vitor, n.d.-b).

BAXTECH's current technology architecture is built on a centralized infrastructure supported by a mix of on-premises and cloud-based technologies to enable their consulting services.

When it comes to operating systems, the organization utilizes Microsoft Windows across employee workstations and Windows Server in its central office infrastructure. Two Windows Servers are responsible for file storage and internal application hosting. The SAP ERP and SAP Business Objects systems are both hosted on one server, while another manages file storage.

Cloud services and tools to help you work together are based in Microsoft 365 (also called Office 365), as well as on the clients of the respected employees. These tools include real-time editing tools (Word/Excel/Powerpoint), and team communication (Teams). This helps remote consultants in Brazil, Chile, and Peru work more productively.

The network infrastructure is protected by internal routers and firewalls, which control who can access what data and prevent outside access. Consultants working remotely can get into the company's internal network safely using special internet connections called VPN tunnels. This lets them get to the most important systems and applications. To support BAXTECH's website, it's hosted on HostGator, with content management handled via WordPress. You can edit basic content and upload media, but it doesn't work with CRM or analytics.

The GLPI HelpDesk is a cloud application that manages support tickets, inventory, and technical documentation through a web-based interface.

The main enterprise system is SAP ERP, which integrates HR, finance, and logistics. It doesn't currently have automated interfaces with the CRM (Agendor) or HelpDesk (GLPI), so there is manual reconciliation and process gaps.

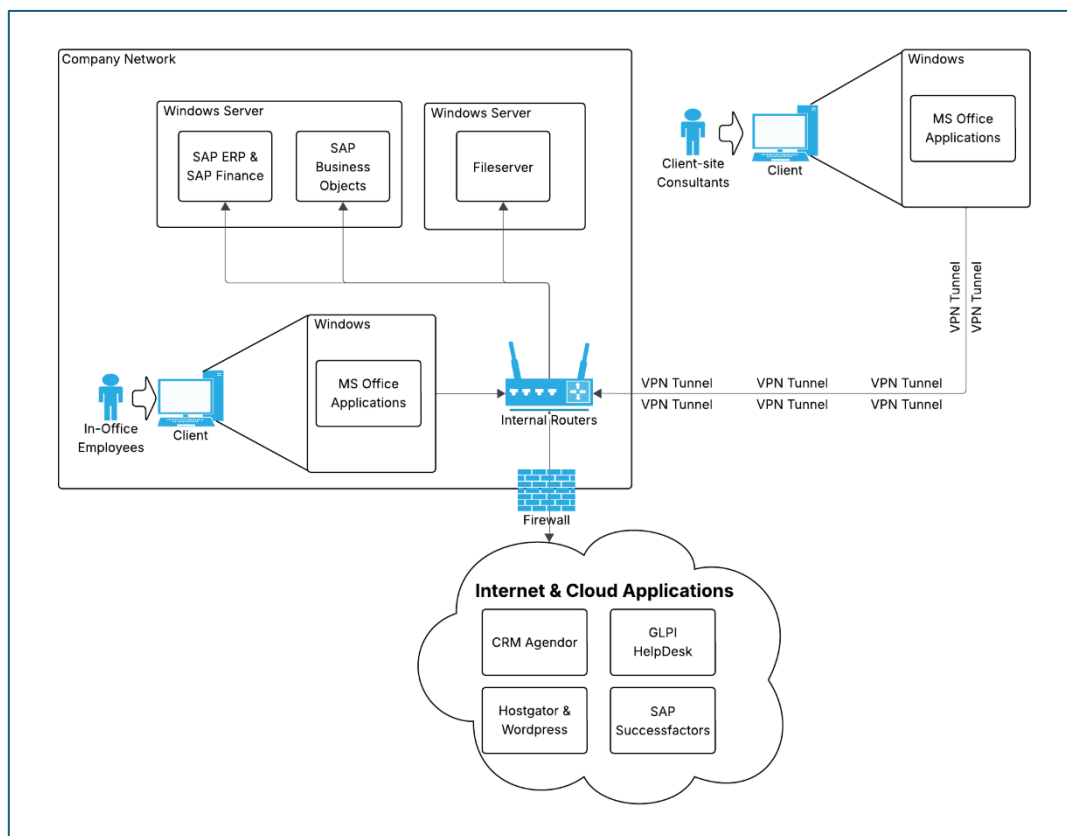


Figure 12: High level Information Architecture

## 2.6 As-Is CRUD Matrix

Using the thorough architectural analysis conducted in previous sub-chapters of the report, particularly the process architecture, informational architecture and applicational architecture, we are now able to create an As-Is “CRUD” (Create, Read, Update and Delete) Matrix for BAXTECH. This diagram showcases the interactions of business processes and informational entities in the current systems architecture,

specifically, what actions a business process performs on a given informational entity.

This CRUD Matrix lays the basis of our further work in the report, helping us identify gaps in information needs not properly addressed. For readability purposes, the CRUD Matrix is split into two separate pages:

AS-IS CRUD Matrix (1/2)	Lead	Customer	Employee	Ticket	Job Posting	Project	Contract	Knowledge Item	Training Session	Strategic initiative	Campaign	Invoice	Payment	Supplier Partner	Financial Plan
Record Client Request in CRM	RU	RU		CU											
Onboard New Client		CU	R			CR	CR								
Schedule Regular Client Meetings		R	RU	C		R									
Define Project Scope and Objectives		R		RU		CU		R							
Estimate Budget and Resources			R			CU	R	R							
Develop Detailed Project Plan and Timeline			RU	C		U									
Budget Approval		R				U	RU								
Start Project Execution			R	C		RU									
Conduct Client Needs Assessment		R		CR		RU	R	CRU							
Analyze Business Environment		R						CU		C					
Design Tailored IT Solution		R		C		U		CR							
Set up Proof of Concept Demo		R		CU		R			C						
Implement Solution into Project Environment			R	CU		U									
Collect and Analyze Feedback		R		RU				C							
Deliver Technical and Business Workshop		R	R					R	C						
Project Closure and Archive Documentation				U		U	R	CU							
Identify Upsell Opportunities	C	R													
Post Project Support and Software Lifecycle Management			R	CRUD		R	R	CRU							
Collect Learned Lessons from Projects		R				R		CRU							
Update Internal Wiki/Knowledge Base								CU							
Generate and Issue Invoices		R				R	R					C			
Reconcile Payments Received		R										R	CR		
Send Payment Reminder		R										R	R		
Prepare Financial Reports and Forecasts		R					R					R	R		
Develop Financial Plan															C

**Application Systems:**

Financial and Budget Management
HR and Talent Management
IT Consulting and Advisory Services
Client Relationships and Account Management
Strategic Business Development
Project and Change Management
Marketing and Communications
Knowledge Management and Data Storage
IT Support and Asset Management
Administration and Legal Operations

AS-IS CRUD Matrix (2/2)	Lead	Customer	Employee	Ticket	Job Posting	Project	Contract	Knowledge Item	Training Session	Strategic Initiative	Campaign	Invoice	Payment	Supplier Partner	Financial Plan
Post Job Advert					C										
Collect and Pre-Screen Applications					U										
Conduct Interviews and Assess Candidates					RU										
Notify Candidate					R										
Set up Job Contract and gain Acceptance					U		C								
Record in Tools and Systems			C												
Onboard New Consultants							R	R							
Organize Training and Knowledge Sharing Sessions								R	C						
Payroll			R			R	R						C		R
Classify and Triage Ticket				RU											
Escalate Ticket			R	RU											
Assign Ticket to High Level AMS Consultant			R	U											
Assign Ticket to AMS Consultant			R	U											
Analyze and Resolve Incident				U											
Gather Customer Feedback		R						CU							
Update SLA Report / Log								CU							
Plan Marketing Campaign								R			CR				
Create Content and Advertisements											RU				
Collect Campaign Data and Metrics											U				
Analyze Campaign Performance											R				
Extract Lessons Learned								CU			R				
Classify Leads								R		RU					
Import into CRM	C														
Hand over to Sales Associates	R		R												
Event Organization	R	R	R							RU	R				
Support Consultants			R			R				R					
Manage Vendor/Service Contracts							CRUD							R	
Fulfill Internal Administrative Requests			R	RU		R	R			R			R		R
Review Legal Documents for Compliance							RU								
Document Regulatory and Compliance Actions							R	CU							
Analyze Industry and Competitor Trends								CRU							
Identify New Business Opportunities								R		C					
Develop Strategic Partnership Proposal										RU				R	
Formulate and Approve Strategic Roadmap										RU				C	
Launch Strategic Initiatives										RU				U	

Application Systems:

Financial and Budget Management
HR and Talent Management
IT Consulting and Advisory Services
Client Relationships and Account Management
Strategic Business Development
Project and Change Management
Marketing and Communications
Knowledge Management and Data Storage
IT Support and Asset Management
Administration and Legal Operations

Table 17 – CRUD Matrix

### 3 The Organization - As Ought to Be

#### 3.1 GAP characterization

In this next component, we are going to characterize the gaps between the current state (“As-Is”) of the organization’s information systems and its desired future state (“To-Be”).

By using the CRUD (Create, Read, Update, Delete) matrix, we identified business needs that are not adequately supported by the existing applications – where there is inefficiency, duplication, or missing functionality. This matrix supports the GAP analysis by evaluating each business process and detect which information needs are underserved by the current system architecture - leading to the identification of Information System Opportunities (ISOs) that form the foundation for the future architecture of BAXTECH (Santos Vitor, n.d.-d).

The identified gaps are categorized into five types:

1. **Gap by Non-Coverage** – There is no system currently supporting this Gap.
2. **Gap by Partial Coverage** – Support exists but it is incomplete or inconsistent.
3. **Non-Integration Gap** – Processes are covered by different systems but lack integration, causing inefficiencies or duplication.
4. **Gap by Innovation** – Opportunities to introduce new technologies that do not currently exist but would bring strategic advantages.
5. **Gap by Process Improvement** – Areas where support exists but could be optimized.

Additionally, each of these gaps will be rated across four levels, considering the percentage that the current Information system covers each business need:

- **Insufficient (0 % - 50 %)**

- **Sufficient (50 % - 70 %)**
- **Good (70 % - 90 %)**
- **Very Good (90 % - 100%)**

This classification measures the time & cost efficiency, the capacity, and quality of every business process. This evaluation reflects the severity or opportunity of the gap and allows us to check the urgency and impact of each ISO, ensuring that the future architecture for BAXTECH is efficient.

Macro Processes	Current Coverage	Gap type	Gap description	Classification
Client Relationships and Account Management	Agendor	Gap by Partial Coverage	Basic Client Profile Data; Lack of integration with other systems; Limited reporting capability; Disconnection between financial, and feedback data	Sufficient
Project and Change Management	Manual / SAP	Gap by Process Improvement	Assignment of Consultants: Manual process; Lack of consultant profiles; No real-time availability tracking; No project performance evaluation	Sufficient
IT Support and Asset Management	GLPI	Non - Integration Gap	Helpdesk and Ticketing System are isolated from CRM and Contract History; Fragmented Customer Interface and Support Experience	Insufficient
Website Management	WordPress / Hostgator	Gap by Process Improvement	No interactive components or integration of self-service capabilities	Sufficient
Financial and Budget Management	SAP	Gap by Innovation	Lack of Advanced Analytics and Business Intelligence tooling beyond Basic Financial Reporting	Insufficient
Project and Change Management	Microsoft Office 365 / MS Projects	Gap by Partial Coverage	Project Lifecycle Management: No advanced dedicated tooling to track project phases, risks, deliverables	Insufficient



<b>Client Relationship and Account Management</b>	Agendor	Gap by Partial Coverage	Contract lifecycle management: Basic data storage capabilities, no defined approval workflows, no integration with ERP or Helpdesk	<b>Insufficient</b>
<b>IT Consulting and Advisory Services</b>	/	Gap by Non - Coverage	Feedback Analytics and NPS: No systemic capability for collecting and analyzing customer feedback	<b>Insufficient</b>
<b>HR and Talent Management</b>	Manual / Fragmented	Gap by Non - Coverage	No central knowledge hub: fragmented knowledge items; limited capability to search and retrieve information	<b>Insufficient</b>

Table 18 – Gap Characterization

The GAP characterization reveals that while BAXTECH has functional systems in place for several core operations, there are significant limitations in areas such as project lifecycle tracking, recruitment lifecycle management, consultant assignment, contract management, and client feedback analysis.

Many of these gaps result not from the absence of systems, but from a lack of integration, insufficient system scalability, or underutilization of existing tools. These weaknesses impact decision-making, operational efficiency, and client satisfaction.

By analysing these flaws, it's possible to identify the multiple Information Systems Opportunities (ISO) to improve the alignment between BAXTECH business processes and the information systems that support them.

### 3.2 Information Systems Opportunities (ISO)

In this section, we identify some Information Systems Opportunities (ISO), i.e., identify areas where the implementation or improvement of information systems can significantly enhance BAXTECH's operational efficiency, strategic alignment, and decision-making capabilities.

These opportunities emerge from the previous analysis of the GAP characterization between the current (As-Is) and desired (To-Be) states of the organization's information systems.

- **ISO 1 – Centralized Client Management (CRM)**

**Origin:** Gap by Partial Coverage

**Description:** Establishing a unified system to manage all client records and communications in one place. It will serve as a central repository for customer data, such as contact details, projects history and feedback records ensuring full visibility of client interactions, improving reporting capabilities for sales, campaign effectiveness and client feedback. By integrating the CRM with other systems, it is possible to reduce data fragmentation and streamline workflows across departments, allowing more informed decisions and proactive client relationship strategies.

- **ISO 2 – Consultant Allocation Solution and Availability Tracker**

**Origin:** Gap by Process Improvement

**Description:** Implementing a solution to manage consultant profiles, availability, and workload in real time will enable efficient resource planning, a transparent performance evaluation for each consultant or project, and more conscience distribution of consultants among different projects. Centralizing consultant information, including technical skills, certifications, project history, location, availability, and performance metrics will enable project managers to quickly identify the most suitable consultants for specific projects and enhance transparency in planning and delivery, improving client satisfaction and internal productivity.

- **ISO 3 - Unified Helpdesk and CRM**

**Origin:** Non-Integration Gap

**Description:** Integrating Helpdesk tooling with CRM and contract management would improve client experience and centralize support activities. This integration would enhance response efficiency, enable more effective tracking and resolution of issues, and consolidate all client interactions, including service history and contractual obligations, into a single, accessible view. This ensures a more personalised customer service and alignment between ongoing projects and organisation's overall strategy.

- **ISO 4 – Content Management System for Website**

**Origin:** Gap by Process Improvement

**Description:** Implementing a new content management solution with more interactive components would strength BAXTECH's digital presence, improve client experience, and align the organization with modern client expectations. The re-imagination of the website with interactive features and self-service capabilities will transform it into a dynamic digital touchpoint that improves client engagement and operational efficiency, reducing manual communication dependency (email or phone) and provides clients with greater autonomy.

- **ISO 5 – Central Knowledge Management Hub**

**Origin:** Gap by Partial Coverage

**Description:** At the moment, BAXTECH operates without a centrally managed knowledge hub, which means that knowledge items such as minutes from meetings, architecture diagrams or RFC (Request for Comment) documents are scattered among either cloud-based or local drives. This strongly limits employees' ability to efficiently search for and retrieve information about clients as well as past or ongoing projects. A central knowledge hub will not only solve these issues, but also enable the company to conduct its business in a more efficient and scalable manner.

- **ISO 6 – Advanced Financial Analytics**

**Origin:** Gap by Innovation

**Description:** The current financial system lacks advanced analytics capabilities.

The integration of a modern dashboarding and predictive analytics solution into the existing ERP enables a proactive financial planning approach and allows for greater financial transparency, and control. Using machines to learn algorithms makes it quicker and easier to make important decisions. This is because they can predict how much money will be made and lost, and spot financial risks as they happen. Key performance indicators (KPIs) like cash flow trends and profitability metrics can be added and viewed in dynamic dashboards. This helps to expand operations and stay competitive.

- **ISO 7 – Project Lifecycle Management Tool**

**Origin:** Gap by Partial Coverage

**Description:** By implementing a centralized project lifecycle management solution, it's possible to centrally manage project-related information, e.g. task assignments, milestones, deliverables, deadlines. This improves project control, leads to a stronger sense of accountability, and enhances resource allocation, and overall planning. This ISO provides stakeholders with project progress up to date, increasing transparency and enabling possibly needed interventions in time.

- **ISO 8 – Digital Contract Lifecycle Management System**

**Origin:** Gap by Partial Coverage

**Description:** BAXTECH manages contracts in Agendor, which does not comply with the operational needs of the business for a Contract Lifecycle Management. There are important features such as approval workflows, renewal alerts, secure digital signatures, and integration with financial or legal systems that this system does not support. This limits how well it can be used and how much it can handle. Using a digital system to manage contracts can help to reduce errors and delays, and make sure that all the obligations of the contracts are met. This is because the system can send reminders (especially about renewals), store all the contracts in one place, and can be used with the computer systems that are already in place (such as CRM or ERP). In short, it will make sure you can do everything quickly and easily.

- **ISO 9 – Client Feedback Collection and Analytics**

**Origin:** Gap by Non-Coverage

**Description:** Feedback is very important for understanding how happy customers are, finding ways to get better, and making sure that services match what customers expect. A client feedback system that collects and analyses feedback automatically would provide insights into client satisfaction and common issues. It would also help the company measure project and consultant performance. Analysing feedback helps us to work out what changes we should make next. It also helps us to keep making our services better and makes clients think more highly of BAXTECH as a partner.

- **ISO 10 – Centralized HR and Talent Management**

**Origin:** Gap by Non-Coverage

**Description:** BAXTECH's current architecture lacks a unified system that allows for recruitment lifecycle management, automated tracking and management of candidate data, and a smooth onboarding experience for new joiners. Implementing a centralized HR and Talent Management solution will provide candidates and new employees with better experience and make the recruitment and onboarding processes more efficient, scalable and less error prone.

### 3.3 Organic Matrix of ISO

The matrix below provides a structured mapping between the proposed Information Systems Opportunities (ISOs) and the departments that will interact with or benefit from each system. It helps visualize how each ISO aligns with the BAXTECH's internal functions, highlighting the transformation in specific organization areas.

	Procurement	Marketing	Consulting team	Support Services	Financial Dept.	HR Dept.	Commercial
<b>ISO 1 – Centralized Client Management (CRM)</b>		X	X	X	X		X
<b>ISO 2 – Consultant Allocation Solution and Availability Tracker</b>			X	X		X	
<b>ISO 3 - Unified Helpdesk and CRM</b>			X	X	X		X
<b>ISO 4 – Interactive Frontend System for Website</b>		X		X			X
<b>ISO 5 – Central Knowledge Management Hub</b>		X	X	X	X	X	
<b>ISO 6 – Advanced Financial Analytics</b>					X		
<b>ISO 7 – Project Lifecycle Management Tool</b>	X	X	X	X	X	X	X
<b>ISO 8 – Digital Contact Lifecycle Management System</b>	X		X		X		X
<b>ISO 9 – Client Feedback Collection and Analytics</b>		X	X				X
<b>ISO 10 – Centralized HR and Talent Management</b>			X			X	

Table 19 – Organic Matrix of ISO

### 3.4 Identification of Target Application Systems

This section identifies the target applicational systems proposed to support each Information Systems Opportunities (ISOs) previously defined. These are the technological solutions to address the current gaps or process inefficiencies. This mapping establishes BAXTECH's future information systems architecture.



Information System Opportunity	Application System
ISO 1 – Centralized Client Management (CRM)	Customer Relationship Management (CRM) System
ISO 2 – Consultant Allocation Solution and Availability Tracker	Project and Resource Management System
ISO 3 - Unified Helpdesk and CRM	Integrated Helpdesk and CRM System
ISO 4 – Content Management System for Website	Web Content Management and Service Portal System
ISO 5 – Central Knowledge Management Hub	Knowledge Management System (KMS)
ISO 6 – Advanced Financial Analytics	Business Intelligence and Financial Analytics System
ISO 7 – Project Lifecycle Management Tool	Project and Resource Management System
ISO 8 – Digital Contact Lifecycle Management System	Contract Lifecycle Management (CLM) System
ISO 9 – Client Feedback Collection and Analytics	Experience Management System
ISO 10 – Centralized HR and Talent Management	Human Capital Management (HCM) System

*Table 20 - Identification of Target Application Systems*

### 3.5 Grouping of ISOs and existing Application Systems

The following segment presents a structured grouping of the Information Systems Opportunities and the existing applications systems with the objective of determine which solutions can be addressed through new integrations, which systems require the

development or purchasing of new application, and which systems will need entirely new tools (Santos Vitor, n.d.-d).

This analysis aims to clarify the next steps – whether optimizing existing systems such as SAP, Agendor, or GLPI, or acquiring new platforms to tackle information needs.

The table below summarizes this alignment:

ISO	Application System	Action
ISO 1 – Centralized Client Management (CRM)	Customer Relationship Management (CRM) System	Improve Existing App
ISO 2 – Consultant Allocation Solution and Availability Tracker	Project and Resource Management System	Develop or Purchase New App
ISO 3 - Unified Helpdesk and CRM	Helpdesk Support and Ticketing System; Customer Relationship Management (CRM) System	Develop New Integrations
ISO 4 – Content Management System for Website	Web Content Management and Service Portal System	Improve Existing App
ISO 5 – Central Knowledge Management Hub	Knowledge Management System (KMS)	Develop or Purchase New App
ISO 6 – Advanced Financial Analytics	Finance, Analytics and Enterprise Resource Planning (ERP) System	Develop or Purchase New App
ISO 7 – Project Lifecycle Management Tool	Project and Resource Management System	Develop or Purchase New App
ISO 8 – Digital Contact Lifecycle Management System	Contract Lifecycle Management (CLM) System	Develop or Purchase New App

ISO 9 – Client Feedback Collection and Analytics	Experience Management System	Develop or Purchase New App
ISO 10 – Centralized HR and Talent Management	Human Capital Management (HCM) System	Improve Existing App

*Table 21 – ISO and Existing Ass*

### 3.6 Target Application Systems Characterization

The following paragraphs provide a more detailed overview of target application systems and describe in detail their functionality and interactivity with each other. It should be noted that while classification of application systems in the as-is architecture was performed in a way that is congruent with the company’s macro processes, the to-be applicational architecture and target application systems characterization are organized in a way that is more aligned and coherent with the functionality of the application systems. We believe this represents an improvement over the status quo due to the involvement of these application systems in multiple of the company’s macro processes.

#### **AS1: Customer Relationship Management (CRM) System**

- **Macro Processes:** Client Relationships and Account Management, Strategic Business Development, Marketing and Communications
- **Scope and Functionality:** Centralized single-source-of-truth for customer data and platform for tracking customer interactions and monitoring sales pipeline

holistically. Supports lead management, customer segmentation, automated workflows and lays the foundation for reporting and analytics.

- **Critical Requirements:** Enables users to have a 360-degrees view of customers including their ongoing engagements, up-to-date and trustworthy data, integration with other customer-facing systems.
- **Integrations with other Application Systems:** Helpdesk Support and Ticketing System; Finance, Analytics and Enterprise Resource Planning (ERP) System; Experience Management System; Contract Lifecycle Management (CLM) System

## **AS2: Finance, Analytics and Enterprise Resource Planning (ERP) System**

- **Macro Processes:** Financial and Budget Management, Strategic Business Development, Administration and Legal Operations
- **Scope and Functionality:** Broad suite of tools used for enterprise resource planning (ERP), company financial management and reporting, financial planning and analysis (FP&A), financial forecasting, data visualization and business intelligence. Supports company steering from a financial point of view, as well as analytics capabilities empowering data-driven decision making across the entire firm.
- **Critical Requirements:** Beyond basic financial reporting, must allow forecasting, resource planning, business intelligence and support strategic business development processes and initiatives.

- **Integrations with other Application Systems:** Project and Resource Management System; Human Capital Management (HCM) System; Contract Lifecycle Management (CLM) System; Customer Relationship Management (CRM) System

### **AS3: Project and Resource Management System**

- **Macro Processes:** Project and Change Management, IT Consulting and Advisory Services, Human Resources and Talent Management
- **Scope and Functionality:** This system functions as the main project management hub of the company and includes a detailed ability to manage and allocate resources to projects. Given the project-based nature of IT Consulting, this is a critical competence to have, and simple Gantt-chart software is insufficient.
- **Critical Requirements:** Elaborate ability to plan projects and track their progress, as well as management and allocation of resources.
- **Integrations with other Application Systems:** Finance, Analytics and Enterprise Resource Planning (ERP) System; Helpdesk Support and Ticketing System

### **AS4: Helpdesk Support and Ticketing System**

- **Macro Processes:** Application Management Services, IT Consulting and Advisory Services, Project and Change Management
- **Scope and Functionality:** The Helpdesk and Ticketing System is the company's main way to keep track of smaller deliverables (work packages) both for internal processes but also customer engagements and support.
- **Critical Requirements:** Aside from commoditized ticketing functionality, this system needs integration with other systems, most critically, the Customer Relationship Management (CRM) System.
- **Integrations with other Application Systems:** Customer Relationship Management (CRM) System; Project and Resource Management System; Web Content Management and Service Portal System

#### **AS5: Web Content Management and Service Portal System**

- **Macro Processes:** Marketing and Communications, Client Relationships and Account Management, Application Management Services
- **Scope and Functionality:** Includes both external-facing digital presence and internal client-related processes. A centralized platform for publishing content, and a digital touchpoint and portal for clients to interact with their engaged consultants.

- **Critical Requirements:** Should include interactive components and allow clients to self-service their requests using a secure integration to help desk tooling. Should also function as a brand-consistent marketing channel.
- **Integrations with other Application Systems:** Customer Relationship Management (CRM) System; Helpdesk Support and Ticketing System

#### **AS6: Knowledge Management System (KMS)**

- **Macro Processes:** Project and Change Management, IT Consulting and Advisory Services, Knowledge Management and Data Storage, HR and Talent Management, IT Support and Asset Management, Marketing and Communications, Strategic Business Development
- **Scope and Functionality:** Central and unified knowledge repository for the entire company, containing critical tacit knowledge regarding customer engagements, technology and internal processes.
- **Critical Requirements:** Should allow interlinking documents in a similar way to an “internal Wikipedia” and provide advanced functionality for information search and retrieval.
- **Integrations with other Application Systems:** Project and Resource Management System; Helpdesk Support and Ticketing System

#### **AS7: Contract Lifecycle Management (CLM) System**

- **Macro Processes:** Client Relationships and Account Management, Administration and Legal Operations, Financial and Budget Management
- **Scope and Functionality:** Covers end-to-end contract lifecycle management from initial agreement to termination and provides a central repository for managing and tracking contracts with suppliers, customers, and other stakeholders in a compliant manner.
- **Critical Requirements:** Should include customized contractual templates and enforce regulatory standards and legal policies.
- **Integrations with other Application Systems:** Customer Relationship Management (CRM) System; Finance, Analytics and Enterprise Resource Planning (ERP) System

#### **AS8: Experience Management System**

- **Macro Processes:** Client Relationships and Account Management System, IT Consulting and Advisory Services
- **Scope and Functionality:** Allows for automated and streamlined customer feedback collection and analytics (e.g. using Net Promoter Score metric).
- **Critical Requirements:** Should include capabilities to automatically request and collect customer feedback, analyze the data to compute satisfaction metrics, identify recurring issues and be well-integrated with the Customer Relationship Management (CRM) System.



- **Integrations with other Application Systems:** Customer Relationship Management (CRM) System

#### **AS9: Human Capital Management (HCM) System**

- **Macro Processes:** HR and Talent Management, Administration and Legal Operations
- **Scope and Functionality:** Beyond traditional HR functions such as payroll and employee management, provides rich tooling for managing recruitment pipelines and job posting and candidate lifecycle management, as well as structured capabilities for onboarding new employees.
- **Critical Requirements:** Beyond administrative capabilities with the scope of existing employees, this solution should provide a rich tooling for employee and resource management at every step of the “pipeline”, from posting a job advertisement to offboarding employees leaving the firm.
- **Integrations with other Application Systems:** Finance, Analytics and Enterprise Resource Planning (ERP) System

#### **AS10: Internal Administration, Data Storage and Communications System**

- **Macro Processes:** All macro processes are supported by this application system
- **Scope and Functionality:** This application system represents the internal platform of the company and is utilized by every single employee. It encompasses

not only the desktop environment of every single computer, but also shared company drives stored in the cloud and vital communications applications such as email, videoconferencing, calendars and others. Should be integrated with the CRM for easy scheduling of customer calls.

- **Critical Requirements:** Beyond the functional requirements described above, this application system is by far the most critical in terms of uptime and availability. If this system fails, no employee will be able to use any of the other systems, at least not on company-authorized hardware. There are also severe security implications if this system malfunctions, especially given the remote-friendly setup of the company.
- **Integrations with other Application Systems:** Customer Relationship Management (CRM) System

### 3.7 ISO Prioritization

As a next step in the process, we prioritize the Information Systems Opportunities (ISOs) determined previously according to the Action Priority Matrix (Santos Vitor, n.d.-e). This classification method has the two dimensions Impact and Effort as well as the following four quadrants:

- **Quick Wins:** High Impact, Low Effort
- **Major Projects:** High Impact, High Effort
- **Fill-Ins:** Low Impact, Low Effort

- **Thankless Tasks: Low Impact, High Effort**

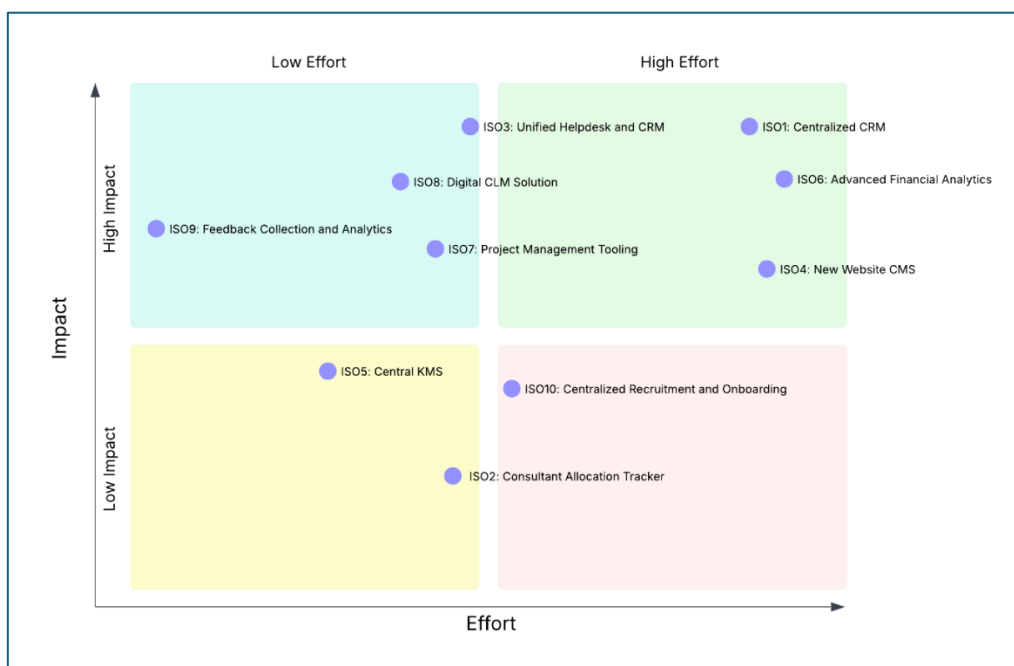


Figure 13: Action Priority Matrix

From this classification of the ISOs follows prioritization according to three separate levels in the form of a table. This allows us as enterprise architects but also the company to prioritize the highest-ROI initiatives and pick up some quick wins along the way.

Information Systems Opportunity	Target Application System	Priority Level
ISO 1 – Centralized Client Management (CRM)	Customer Relationship Management (CRM) System	1
ISO 3 - Unified Helpdesk and CRM	Helpdesk Support and Ticketing System; Customer Relationship Management (CRM) System	1
ISO 6 – Advanced Financial Analytics	Finance, Analytics and Enterprise Resource Planning (ERP) System	1
ISO 8 – Digital Contact Lifecycle Management System	Contract Lifecycle Management (CLM) System	1
ISO 4 – Content Management System for Website	Web Content Management and Service Portal System	2
ISO 7 – Project Lifecycle Management Tool	Project and Resource Management System	2

ISO 9 – Client Feedback Collection and Analytics	Experience Management System	2
ISO 5 – Central Knowledge Management Hub	Knowledge Management System (KMS)	2
ISO 2 – Consultant Allocation Solution and Availability Tracker	Project and Resource Management System	3
ISO 10 – Centralized HR and Talent Management	Human Capital Management (HCM) System	3

Table 22 - 22 - ISO Priority Levels

### 3.8 McFarlan Matrix

Given the above classification of ISOs in terms of their priority with regards to effort and impact, it is time to view the proposed initiatives through a more strategic lens. In this next section of the report, we will utilize the McFarlan IT Portfolio matrix to classify Application Systems (AS) according to the following categories (Santos Vitor, n.d.-a):

- **High Potential:** Investments in IS that may be important for future success
- **Strategic:** Investments in IS that are critical to sustaining future strategy
- **Key Operational:** Investments in IS that the organization currently depends on for success
- **Support:** Investments in IS that are valuable but not critical to success

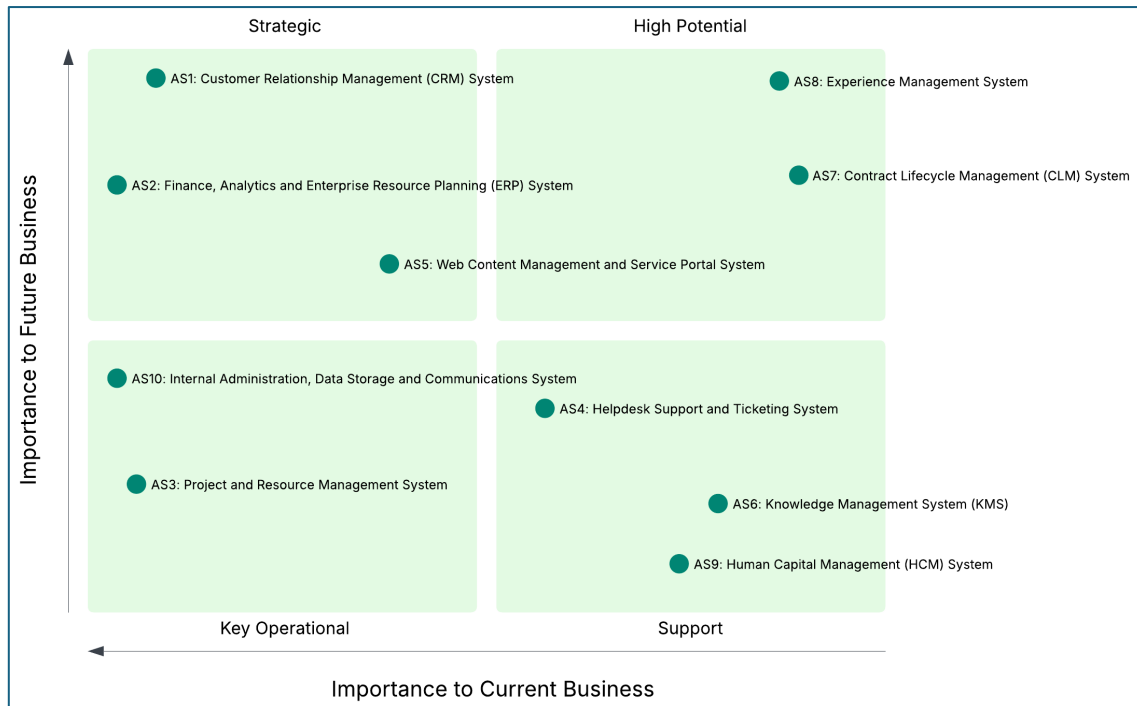


Figure 14: McFarlan Matrix for Application Systems

### 3.9 To-Be Application Architecture

Taking into consideration the analysis of the company including the As-Is Information Systems Architecture we have conducted, we propose a new Application Architecture as per our findings.

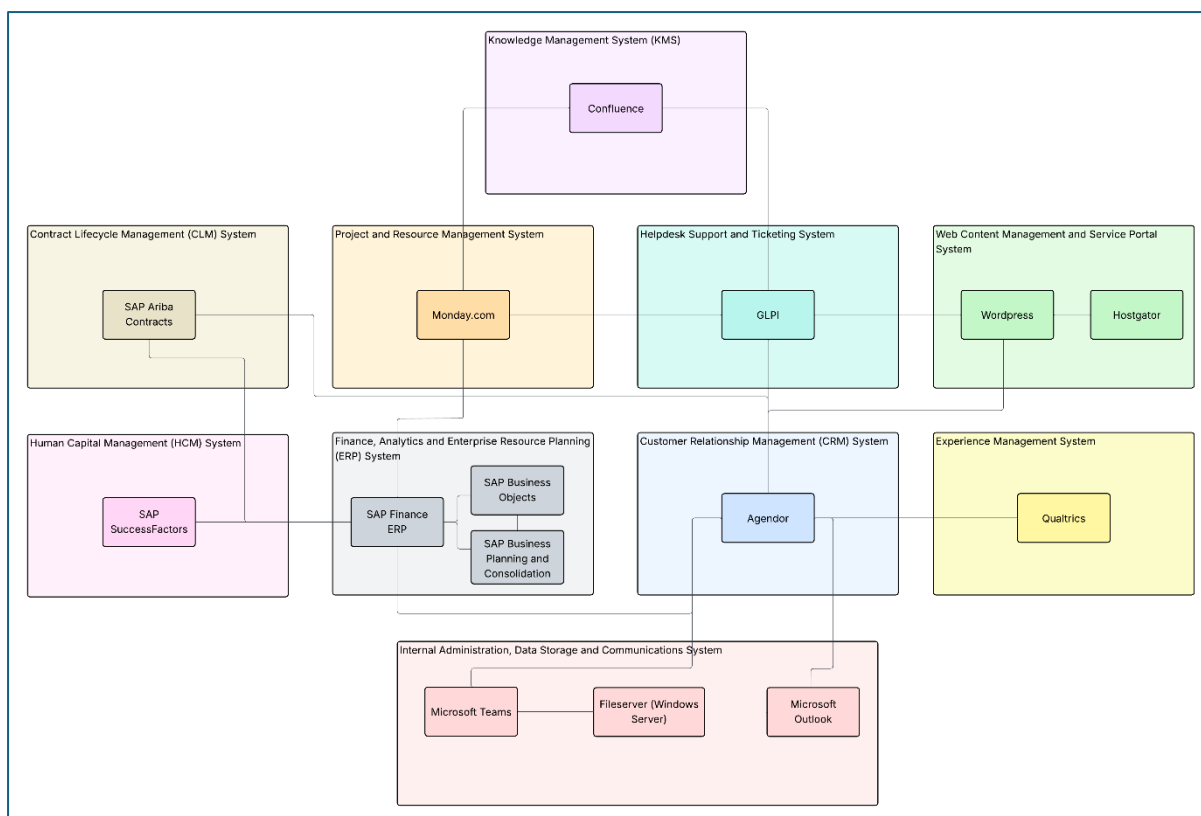


Figure 15: To-Be Application Architecture

As mentioned before, it should be noted that the different application systems were renamed and applications were partly regrouped in an effort to align better with their functionality and reflect their use across many of the different macro processes (these relationships are described in more detail in the Target Application Systems Characterization section above).

Aside from this important distinction, when compared to the As-Is Application Architecture, this new To-Be Application Architecture shows several other key changes that are worth discussing in more detail:

- The **Finance, Analytics and Enterprise Resource Planning (ERP) System** now also includes the SAP Business Planning and Consolidation software to allow for more strategic planning and financial forecasting (SAP, 2025). Analytics capabilities utilizing SAP Business Objects are now also integrated into this system, which is an improvement over their previously isolated position under Strategic Business Development.
- The **Project and Resource Management System** is based on the market-leading project management tool Monday.com. This introduction of a new vendor is justified by its integrated resource management and allocation capabilities (monday.com, 2025) which the previous solution using Microsoft Project lacked.
- Going beyond isolated Word and Excel documents on a Windows Fileserver, the company's new **Knowledge Management System** using the industry-leading KMS software Confluence (Atlassian, 2024) allows for better organization of internal knowledge content, creation of knowledge graphs using hyperlinks and strong information search and retrieval capabilities.
- In order to facilitate automated feedback collection and analytics, this architecture also introduces the **Experience Management** Tool Qualtrics, an industry leader. This tool is well-integrated with the CRM and allows the company to get better insights into their clients' satisfaction at scale.

## 4 Conclusion

Through a detailed analysis of BAXTECH 's existing information systems architecture, we identified critical limitations, inefficiencies, and fragmented business processes. By mapping the "As-Is" we were able to formulate a detailed "To-Be" model aimed at transforming the company 's digital environment into a more integrated and efficient structure.

The identification of operational and technical gaps in the current systems architecture served as the starting point for defining a set of strategic information systems opportunities (ISOs). Each ISO was developed to target specific deficiencies uncovered during the analysis such as fragmentation in client data, lack of system integration, limited project oversight, or the absence of advanced analytics. The proposed improvements aim to significantly strengthen departments' collaboration, operational transparency, data accuracy, and better tracking of projects and employees' performance. The importance of reducing complexity and aligning systems with business goals provides the tools to boost client satisfaction and scale operations.

Ultimately, the new information systems architecture is designed to empower BAXTECH people, enabling higher operations efficiency, deeper client insight and long-term growth.



## 5 Note – Diagram Creation

All diagrams presented in this project were created using the free online modeling tool

**Lucidchart** ([www.lucidchart.com](http://www.lucidchart.com)).

The complete set of diagrams can be accessed via the following link:

[Lucidchart Project Workspace](#)

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