

# An Order-Management System for a Medical Supplies Provider during Covid-19

**Abstract:** Lately, some business employees are being affected due to the pandemic and online sales are increasing as customers prefer to stay indoors. Brands need to have records of their sales and there are multiple sources that offer management of these orders. Unfortunately, there are a number of inadequacies to such approaches and can be very pricey to stay up-to-date and retain the trend. The greatest concern of all business managers is to take advantage of latest technology platforms to convert overall business schemes, productivity, and information accessibility. In this paper, we have written a report on the app “MyBusiness” we developed for order management system to deliver emergency medical supplies during COVID-19 pandemic. Our main objective was to acquire an integrated app using the cloud architecture of salesforce to be able to accelerate to every part of the system. The diligence of this report is to provide brief idea about the MyBusiness App we built. In this app we have five objects i.e. Customers, Orders, Items, Suppliers and Payment. Each object has been secured with Validation Rules, Workflow Rules, Time-Based Workflow and other protocols. Again, there is a role hierarchy for company where we have created profiles and assigned roles linked to these profiles to the users. Profiles are given authorizations correspondingly and are authenticated with Tab Level and Object Level Security.

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## Section 1

### **Introduction**

The COVID-19 outbreak has led to an intense and drastic shortage of essential medical supplies, such as protective mask, hand sanitizers, diagnostics, personal protective equipment, and other necessary supplies. Visualizing the urgency, X pharmaceutical ltd asked us to develop a suitable application by utilizing the Force.com cloud computing architecture. Likewise, we have developed an online Order-Management System “**MyBusiness**” for delivering emergency medical supplies during COVID-19

The system will include a collection of medical resources applicable for health professionals, health care managers, aged care providers and pathology providers. It will align inventories and orders across multiple channels, handle shipping schedules and order management. The users of the app are: CEO, CIO, Accounts Manager, Sales manager, Customer Relationship Officer and Supply Chain Manager.

### **Case Study & Use Cases**

Prior to this application, the organization used to control the workflow and documentation via a manual registry system. It was both time and energy consuming due to offline communication. In the light of this pandemic, a robust system like this will prove to be the most effective solution.

- Customers records will be registered in the system with their name, address, and phone number.
- A new item will be enlisted by providing the item name and price.
- New orders are going to be placed with the information of delivery type, quantity, item picked from a list, customer name, order placing date and contact information.
- Order quantity cannot be zero, order dates cannot be in the future and item prices cannot be less than 10.
- Along with the order, online payment will instigate upon checkout selection, which will prompt the user to specify payment type, date, corresponding order ID, currency and amount.
- The system will also have suppliers, whose records will be kept with their name, email, address and specify the item they are going to supply. Suppliers will supply globally obtained COVID-19 critical supplies that are currently facing limited market conditions.
- There will be an email alert sent to the Customer to inform them that their order has been placed.
- CEO will have full access to every object except creating orders and customers.
- Orders will be handled by the account manager and sales manager.

- Supply Chain manager will handle responsibilities regarding suppliers and items to monitor the supply chain process. This manager must have read, create, delete, edit access to all items and suppliers.
- Accounts manager must have full access to orders and payments including creation and deletion.
- Customer Relations Officer has full access to customers and can read their orders and payments.
- When an order has been placed with successful payment, a message will be sent to notify the accounts manager and an email will be sent to the customer.
- A reminder must be sent to the Accounts manager after 2 days after every order creation.

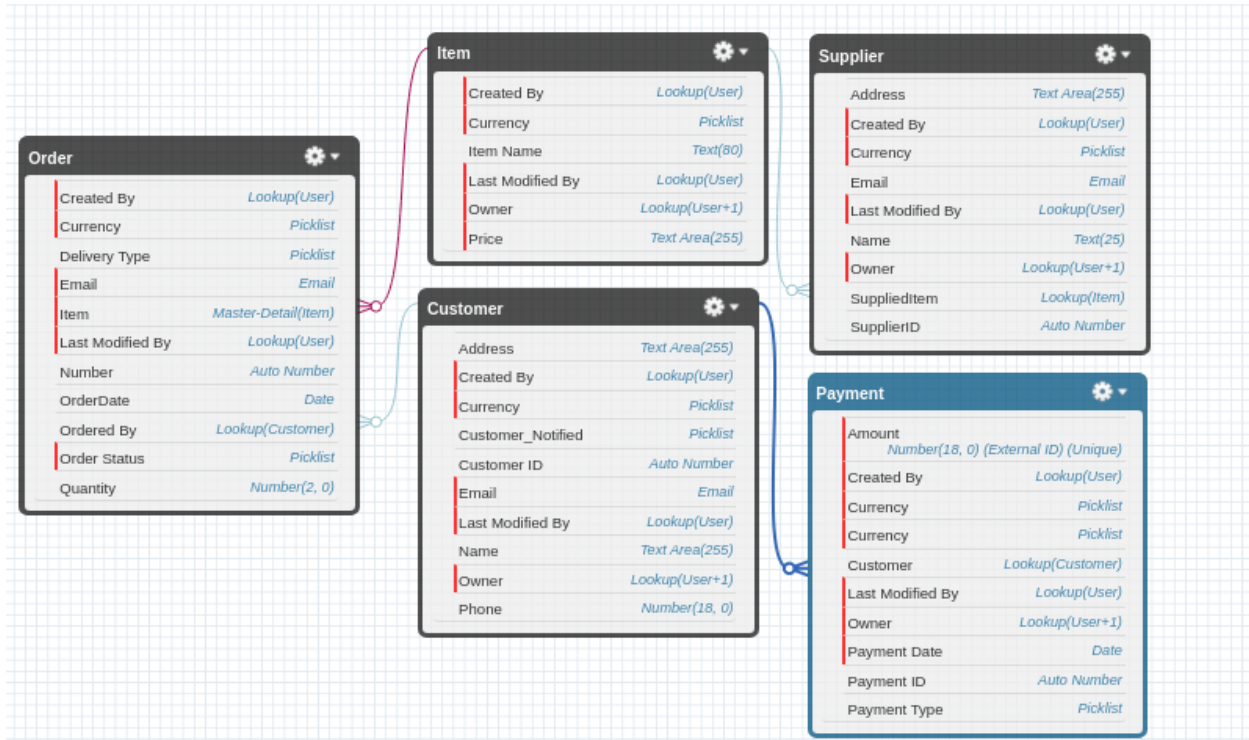
## **Background of Sales Force- The PAAS Platform**

In order to build apps that fits well exclusive in business requirements or its customers, organizations necessitate something that is adaptable, accessible and ascendable. Salesforce is one of Platform-as-a-service platform which has boosted many enterprises to change from a product support ideal to one where the consumer falls as fundamental key. Providing a reliable customer centric service proficiency to customers all over the world had been made easy-going by Salesforce. There are various reasons which made Salesforce the world's leading CRM; it is faster and feasible from anyplace with very up-to-date information which supports in building more discerning pronouncements, customer information and relations are in single place which aids to make it simpler in tracking and moving the deal quicker. As Salesforce being one of the inventive companies after CRM platform, employees can effortlessly access it over the Internet without any difficulty to buy infrastructure to set up or manage. It is extremely convenient to login and get to work with comprehensive approach to put customers at the center of everything we do. The main object of Salesforce is to satisfy users in the organization by providing ease of use. From sales and marketing to customer service as well as to make existing customer connection greater and to advance new customer relationship rapidly, it is highly effective to comprehend and enrich whole of these features of customer edge. In one hand, it instantaneously simplifies and automates business process and in other hand it is cheaper, easier, faster and better. Salesforce as Platform-as-a-service, lets a company's sales, marketing and support teams to work in sync and see important sales and consumer records in depth, delivering them up to create new customers and improved service to remaining ones.

## Section 2

### *(a) System Modelling*

a) Data Model for the PaaS Application: **MyBusiness**



**Figure:** The schema of the MyBusiness Application

This schema precisely presents the model for the MyBusiness application where it shows the five objects:

- **Order**
- **Item**
- **Customer**
- **Payment**
- **Supplier**

The diagram is achieved from the schema builder service and displays the fields of the object, the relationships among them and the data types of each field. E.g. Order-Item is a master detail relationship and Order-Payment is a lookup relationship. Inside the Order object, we have a data type of picklist inside the field “Delivery Type” and the field “Item” which is a required field.

**(b) Work-Flow Diagram:**

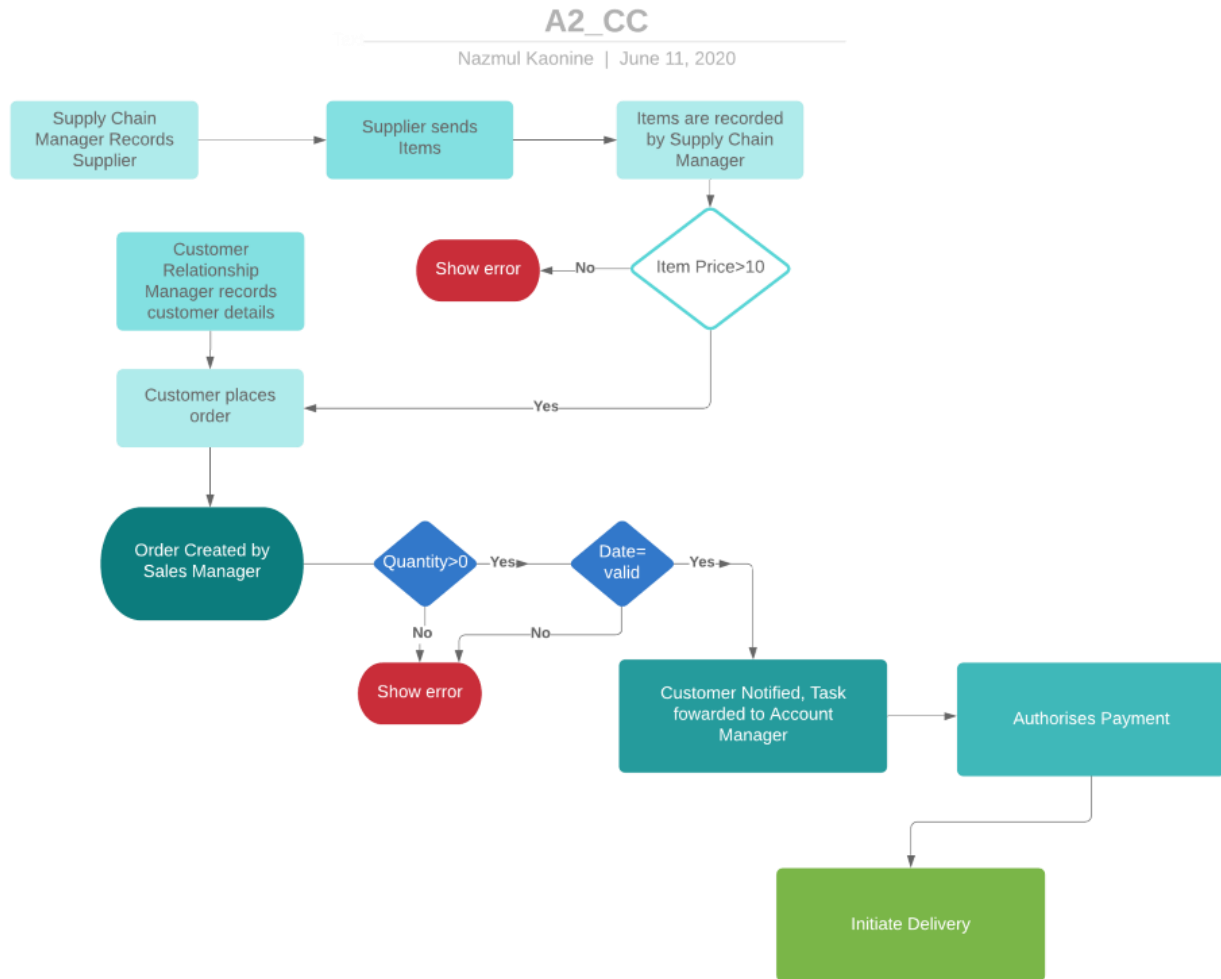


Figure: Work-flow diagram of the order management system

The entire Workflow of the Order Management Application, rules and critical employee tasks have been shown in the above diagram. The flow chart was made using Lucidchart ([www.lucidchart.com](http://www.lucidchart.com)).

## *(c) Profiles & Users*

### Sales Manager

Object-Level & Tab-Level Security:

Custom Object Permissions						
	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Customers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Items	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Orders	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Payments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The sales manager can modify and create all orders and payment object level tasks such as read/create/ edit/ delete. Closely related objects such as customers and items are only read-only.

Custom Tab Settings	
Customers	Default Off
Employees	Tab Hidden
Items	Default On
Orders	Default On
Payments	Default Off
Suppliers	Tab Hidden

The sales manager will have sales related tabs such as orders and items on top of his/her page. Lesser important tabs such as payments and customers will be available when the user chooses to view all tabs. Unrelated tabs such as supplier of the items and employee details are kept hidden.

### Accounts Manager

MyBusiness (MyBusiness)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------	-------------------------------------	-------------------------------------

The Accounts Manager has access to the MyBusiness App.

Custom Tab Settings	
Customers	Default On
Items	Default Off
Orders	Default On
Payments	Default On
Suppliers	Tab Hidden

This role has Payments, Orders and Customers as priority tabs. If needed, items can also be accessed but supplier info is kept hidden.

Custom Object Permissions						
	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Customers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Items	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Orders	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Payments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The role of the Accounts manager is to manage orders after checking payments. Therefore, the role must have access to all payment options, can read customer data to verify distinct customer, to read Items being ordered and the order details as well. The role does not require editing

current customer information or items and the deletion of orders. The deletion of orders is only to be handled by the Sales Manager.

### Customer Relations officer

Preserving a positive customer relationship across the platform is integral to the success of business and its financial outcome. Customer Relationship Officer is assigned the profile Customer-Relationship and will play the role of maintaining Customer Relationship. There is one user assigned to it and the top priority is to handle customer data by reading and editing it when necessary. The user can also read order and payment data to verify with customers in the application but will be restricted to access suppliers tab.

Customers	Default On	Payments	Default On
Items	Default Off	Suppliers	Default Off
Orders	Default On		

Custom Object Permissions

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Customers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Items	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Orders	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Home Chatter Accounts Contacts Reports Dashboards Customers Orders Payments +

Create New...

All

Clone | Create New View

New Customer

Change Owner

Action	Customer ID
<input type="checkbox"/> Edit   Del	Muht
<input type="checkbox"/> Edit   Del	PS

Recent Items

Simon Wichmann

Recycle Bin

### Supply Chain Manager

Supply Chain and Logistics manager will be directly reporting to CEO of the company. The Tab Level Security and Object level Security for this role has been defined as in the screenshots below. This role has been assigned to the profile MyBusiness Employee.

**Tab Level Security:** This user is granted permission to see only Items, Orders and Suppliers Tab. Payments and Customers Tab will be hidden.

Custom Tab Settings

Customers	Tab Hidden	Payments	Tab Hidden
Items	Default On	Suppliers	Default On
Orders	Default On		

**Object Level Security:** User assigned to this profile have full permission on Items and Suppliers. They cannot generate new orders but can make specific changes like read, edit and delete.



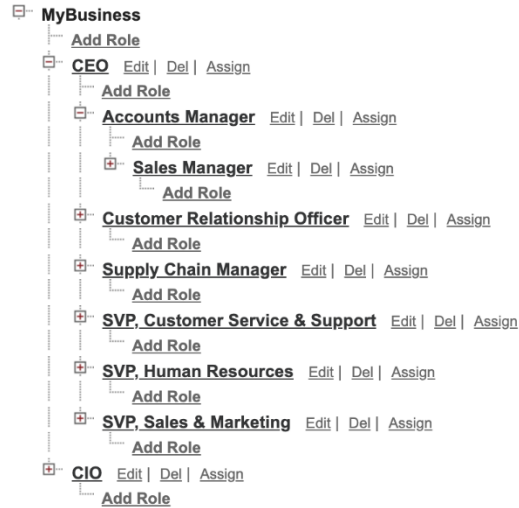


## ***Role-Hierarchy:***

Our company's app has following role hierarchy. CEO and CIO both remain on top and has no one to report. Accounts manager, Customer Relationship Officer and Supply Chain Manager directly report to CEO. Account manager has sales manager reporting him.

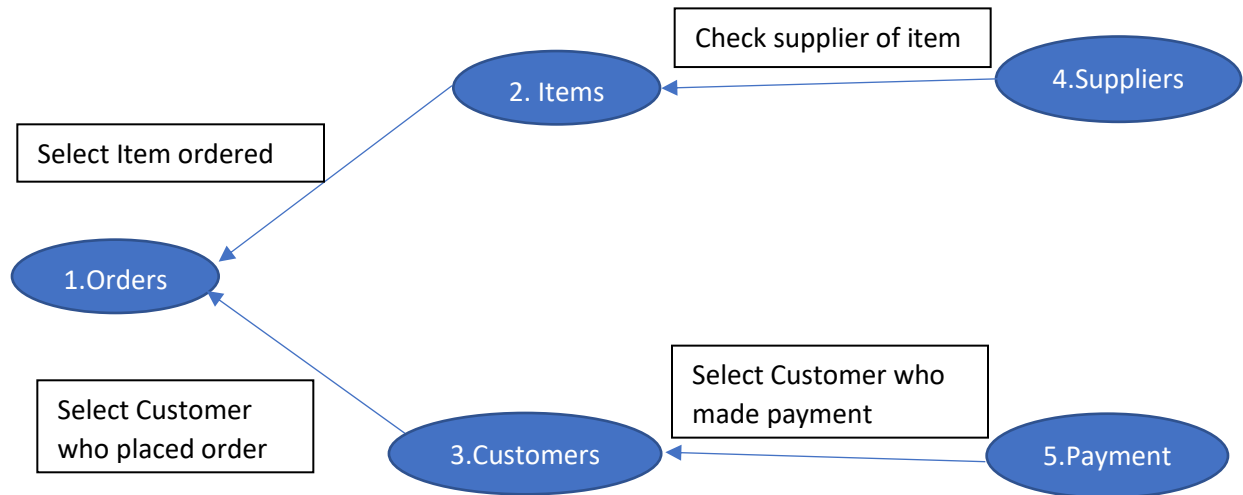
### **Your Organization's Role Hierarchy**

[Collapse All](#) [Expand All](#)



Role hierarchy affects access to records to the organization's users. Since the objects above have been ticked as grant access using hierarchies, the system automatically grants access to all data to the role above the record owner. Accounts manager is directly below the CEO so CEO inherits access. Same rule applies for the Accounts manager and the sales manager. CEO and CIO are in the same level in the hierarchy where CIO handles other departments.

### (d) System Screens & Diagrams



**Fig: How 5 objects are working together**

## 1. Object: Orders

### Object & Fields:

Standard Fields					Standard Fields Help ?	
Action	Field Label	Field Name	Data Type	Controlling Field	Indexed	
	Created By	CreatedBy	Lookup(User)			
	Last Modified By	LastModifiedBy	Lookup(User)			
Edit	Order Number	Name	Auto Number		✓	

Custom Fields & Relationships							Custom Fields & Relationships Help ?	
		New	Field Dependencies					
Action	Field Label	API Name	Data Type	Indexed	Controlling Field	Modified By		
Edit   Del   Replace	Delivery Type	Delivery_Type__c	Picklist			Nazmul Kaonine, 23/5/2020, 10:04 pm		
Edit   Del	Item	Items__c	Master-Detail(Item)	✓		Nazmul Kaonine, 28/5/2020, 12:21 pm		
Edit   Del	Order Date	OrderDate__c	Date			Nazmul Kaonine, 28/5/2020, 1:58 pm		
Edit   Del	Ordered By	Ordered_By__c	Lookup(Customer)	✓		Nazmul Kaonine, 31/5/2020, 10:53 am		
Edit   Del	Quantity	Quantity__c	Number(2, 0)			Nazmul Kaonine, 23/5/2020, 10:12 pm		
Deleted Fields (7)								

### Key Fields:

**Order Number:** The unique identifier for each order made by a customer which is a standard field with auto number data type.

**Delivery Type:** This is a picklist of Express or Standard deliveries.

**Order Date:** A date field corresponding to the date the order was made.

**Quantity:** A number field that will only support up to 99 units being ordered.

### Relationships:

**Order-Item:** This is a master-detail relationship. Inside the orders interface, the item field can be opened to choose the item being ordered from a picklist. Thus, item is the master object and order is the detail object as without items, there can be no orders made.

**Order-Customer:** This is a lookup relationship denoted by the field 'Orderedby'. Inside the orders interface, a customer name can be selected.

### Validation Rules:

**Quantity\_NOT\_zero:** This rule simply validates that the quantity of items ordered cannot be 0.

`Quantity__c = 0`

**Date\_NOT\_future:** The order creation date cannot be in future so; it raises an error.

`OrderDate__c > TODAY()`

## 2. Object: Items

### Object & Fields:

Standard Fields						Standard Fields Help ?	
Action	Field Label	Field Name	Data Type	Controlling Field	Indexed		
	Created By	CreatedBy	Lookup(User)				
<a href="#">Edit</a>	<a href="#">Item Name</a>	Name	Text(80)		✓		
	Last Modified By	LastModifiedBy	Lookup(User)				
<a href="#">Edit</a>	<a href="#">Owner</a>	Owner	Lookup(User,Group)		✓		

Custom Fields & Relationships							Custom Fields & Relationships Help ?	
		New	Field Dependencies					
Action	Field Label	API Name	Data Type	Indexed	Controlling Field	Modified By		
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Price</a>	Price__c	Text Area(255)			Nazmul Kaonine, 28/5/2020, 2:11 pm		

### Key Fields:

**Item Name:** The unique identifier for each item that is a text field.

**Price:** This is a text area field containing the price of the item.

### Validation Rules:

**Price\_GREATERTHAN\_10:** This rule ensures that the price of every item is greater than \$10.

## Security

### Organization-wide default:

Item	Public Read Only	Public Read Only	✓
Order	Controlled by Parent	Controlled by Parent	

The Item object being the parent object, controls order. The item object has the most restricted user: Customer Relationship Officer who may need to read the records and view the item price but has no need to modify it. Therefore, Public Read Only is used. Also, access has been granted using hierarchies.

## Email Notification:

Dear {!Customer\_\_c.Name\_\_c},

Thank you for submitting your order to us online. Order #{!OrderItem.OrderItemNumber}"has been created and a {!Organization.Name} authorised Delivery Partner will hand over the product to you in the next 5 working days.

Thank you,

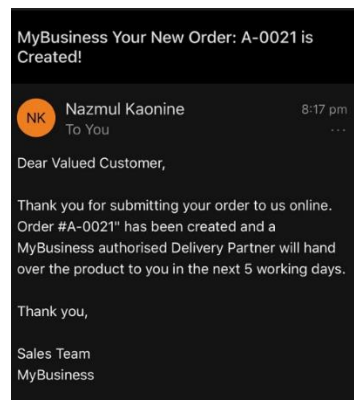
Sales Team  
{!Organization.Name}

The sample Email Template to the customer for Order Creation.

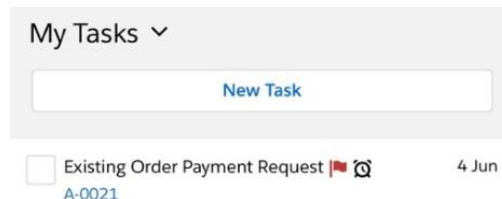
## Workflow Rules:

Type	Description
Task	<a href="#">Existing Order Payment Request</a>
Email Alert	<a href="#">Your Order has been created!</a>
Field Update	<a href="#">Status Field Update</a>

**Step 1:** Whenever an order is created and the Order Status criteria is “New”, these rules updates the Order Status field from New to Existing.



**Step 2:** An Email confirmation is sent to the Customer’s Email.



**Step 3:** A task is created for the Account Manager to authorize the order for delivery.

## Time-based Workflow:

🕒 2 Days After Rule Trigger Date	
Type	Description
Email Alert	<a href="#">24 hours left to authorise payment request</a>

After 2 days have passed, the account manager will receive a reminder for payment authorization and to initiate delivery within the next 24 hours.

**Existing Order Payment Request**  
 Due Date: 4/6/2020  
 Reminder Time: 4/6/2020, 8:00 am  
 Related To:

<input type="checkbox"/>	Type	Subject	Reminder
<input type="checkbox"/>		<a href="#">Existing Order Payment Request</a>	4 hours overdue

## 3. Object: Customers

Customers are the main stakeholder of the system and will be placing order for the necessary medical supplies.

Standard Fields			
Action	Field Label	Field Name	Data Type
	<a href="#">Created By</a>	CreatedBy	Lookup(User)
<a href="#">Edit</a>	<a href="#">Currency</a>	CurrencyIsoCode	Picklist
<a href="#">Edit</a>	<a href="#">Customer ID</a>	Name	Auto Number
	<a href="#">Last Modified By</a>	LastModifiedBy	Lookup(User)
<a href="#">Edit</a>	<a href="#">Owner</a>	Owner	Lookup(User, Group)

Custom Fields & Relationships					
		<input type="button" value="New"/> <input type="button" value="Field Dependencies"/>			
Action	Field Label	API Name	Data Type	Indexed	Controlling Field
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Address</a>	Address__c	Text Area(255)		
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Email</a>	Email__c	Email		
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Name</a>	Name__c	Text Area(255)		
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Phone</a>	Phone__c	Number(18, 0)		
<a href="#">Deleted Fields (3)</a>					

### Standard and Custom fields:

**Customer ID:** Every time a new customer is registered, an unique will be generated automatically and assigned to that user

**Name:** Customers will have to provide a valid name. The field type is Test area with maximum capacity 255 letters.

**Email address:** Customers will have to provide their valid email address for communication. The field is defined as an Email Data type which will always check if the format is acceptable or not.

**Mailing address:** Authentic mailing address for delivering the products. This is also type Text Area(255)

**Phone number:** Customers will also give their phone number to be contacted when needed. The data type is Number to check if it's acceptable or not.

### Customer Tab View

Customer Edit  
New Customer

Customer Edit [Save] [Save & New] [Cancel]

Information

Customer\_Name [Text Field]

Address [Text Field]

Phone [Text Field]

Currency [AUD - Australian Dollar v]

Email [Text Field]

[Save] [Save & New] [Cancel]

### Validation Rules:

Customer Edit  
New Customer

Customer Edit [Save] [Save & New] [Cancel]

Error: Invalid Data.  
Review all error messages below to correct your data.  
Name cannot contain any numbers or special characters

Information

Name [123Noshin]

Address [Glenfield]

Phone [679350720]

Currency [AUD - Australian Dollar v]

Email [noshin@gmail.com]

[Save] [Save & New] [Cancel]

**Valid Name:** Customers name can not contain any special characters or numerical value. Only letters between a-z, A-Z is acceptable.

### **Email Notification**

Customer object has a notification system. There is a custom field **customer\_notified** which has a default value of “No” set in the system. There will be an email notification sent to the customers email address to inform them of the authorization success.

## Email Notification template:

Dear {!Customer\_\_c.Name\_\_c},

Thank you for choosing us! You're now a registered member of the MyBusiness family. We hope our small effort can ease your access to medical supplies.

Please take a look at the items we are selling.

Thank you!

Regards,  
Customer Relationship Team  
MyBusiness

**Email Template** [Send Test and Verify Merge Fields](#)

**Subject** | Congratulation! You're now a authorized customer of MyBusiness application

**Plain Text Preview**

Dear {!Customer\_\_c.Name\_\_c},

Thank you for choosing us! You're now a registered member of the MyBusiness family. We hope our small effort can ease your access to medical supplies.

Please take a look at the items we are selling.

Thank you!

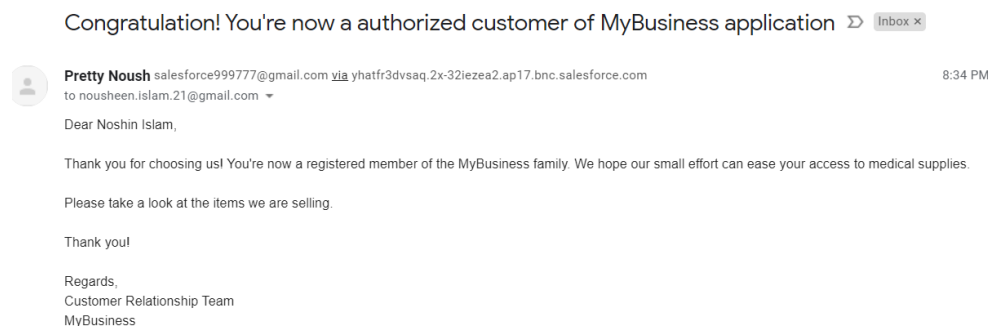
Regards,  
Customer Relationship Team  
MyBusiness

## Workflow Rule: Customer Authorization Confirmation

Workflow Actions		<a href="#">Edit</a>
Immediate Workflow Actions		
Type	Description	
Email Alert	<a href="#">Customer Authorization for MyBusiness</a>	
Field Update	<a href="#">Update Customer Notified</a>	
Time-Dependent Workflow Actions		<a href="#">See an example</a>

**Step 1:** When a new customer is created, the **customer\_notified** field is set to “No” and by activating the workflow rule **Customer Authorization Confirmation**, there will be some tasks triggered by rule.

**Step 2:** An email alert will be sent to the customer’s email address confirming their registration process.



**Step 3:** Customer\_Notified field will be updated to “Yes”

Customer  
C-0001

[« Back to List: Workflow Rules](#)

**Customer Detail** Edit Delete Clone

Customer ID	C-0001
Name	Noshin Islam
Address	1 Salisbury Avenue
Phone	1,909,099
Email	<a href="mailto:nousheen.islam.21@gmail.com">nousheen.islam.21@gmail.com</a>
Customer_Notified	Yes
Created By	<a href="#">Pretty Noush</a> , 8/6/2020, 8:34 pm

Edit Delete Clone

## 4. Object: Supplier

Suppliers are the stakeholders in the system who will keep the economy growth by providing medical supplies in the inventory system.

Standard Fields					
Action	Field Label	Field Name	Data Type		
	Created By	CreatedBy	Lookup(User)		
<a href="#">Edit</a>	Currency	CurrencyIsoCode	Picklist		
	Last Modified By	LastModifiedBy	Lookup(User)		
<a href="#">Edit</a>	Owner	Owner	Lookup(User,Group)		
<a href="#">Edit</a>	SupplierID	Name	Auto Number		

Custom Fields & Relationships <span>New</span> <span>Field Dependencies</span>					
Action	Field Label	API Name	Data Type	Indexed	Controlling Field
<a href="#">Edit</a>   <a href="#">Del</a>	Address	Address__c	Text Area(255)		
<a href="#">Edit</a>   <a href="#">Del</a>	Email	Email__c	Email		
<a href="#">Edit</a>   <a href="#">Del</a>	Name	Name__c	Text(25)		
<a href="#">Edit</a>   <a href="#">Del</a>	SuppliedItem	SuppliedItem__c	Lookup(Item)	<input checked="" type="checkbox"/>	
Deleted Fields (1)					

### Standard and Custom fields:

**SupplierID:** Every time a new supplier is registered, a unique ID will be generated automatically and assigned to that user

**Name:** Suppliers will have to provide a valid name. The field type is Text area with maximum capacity 255 letters.

**Email address:** Suppliers will have to provide their valid email address for communication. The field is defined as an Email Data type which will always check if the format is acceptable or not.

**Mailing address:** Authentic mailing address for delivering the products. This is also type Text Area(255)



**Phone number:** Suppliers will also give their phone number to be contacted when needed. The data type is Number to check if it is acceptable or not.


**SuppliedItem:** Suppliers will have a lookup relationship with Item and thus they will have an option to choose the item they are going to provide.

**Relationships:**

**Supplier-Item:** Supplier and Item object will have a lookup relationship. Inside the Supplier interface, a supplier can select the items they can provide.

### Supplier Tab View

Supplier Edit

New Supplier

Supplier Edit

Save

Save & New

Cancel


Information

Name

Email

Address

SuppliedItem



Currency

AUD - Australian Dollar

## Security

**Organization wide default:**

Organization-Wide Defaults			<a href="#">Edit</a>	<a href="#">Organization-Wide Defaults Help</a>
Object	Default Internal Access	Default External Access	Grant Access Using Hierarchies	
Supplier	Public Read/Write	Public Read/Write	✓	

The suppliers object has the most restricted users as customers, who will not be seeing any records regarding suppliers, whereas supply chain manager, CEO needs to see the records and edit it when needed. The Organization Wide Default access of Suppliers object has been set to public read/write only. The access has been further modified using profiles and role hierarchy.

## 5. Object: Payment

**Object and fields:**

[illegible]

## **Key Fields:**

**Payment Type:** This is a picklist field which defines the method of payment such as bank transfer, Credit pay, Master Card etc.

**Payment Date:** This field is required to process to finalize the order and will be a record for future reference to keep track of.

**Amount:** This field will show the total amount that needs to be paid.

**Currency:** Another picklist to choose the currency to process payment if the customer is outside Australia.

## **Relationship**

**Payment-Customer:** This is a look-up relationship. Before confirming the payment, customers can look-up for the customer name to proceed with the payment.

## **Validation Rules**

Validation rules applied for Payment Date as in the screen shots Fig. Rule 1 and Fig. Rule 2 below. The process of payment of is immediate after a customer choose items and places order. Before finalizing the order and process delivery, all the dues need to be clear as well the order ID should match otherwise it will prompt an error message “Payment Unsuccessful”.

The screenshot shows a web form titled "Payment Edit" with a "New Payment" button. The form contains several fields: "Payment Type" (set to "Bank Transfer"), "Payment Date" (set to "12/6/2020"), "Currency" (set to "June"), "Amount", and "Customer". A date picker is open for the "Payment Date" field, showing a calendar for June 2020. An error message is displayed at the top of the form: "Error: Invalid Data. Review all error messages below to correct your data. Payment Unsuccessful". The form also includes "Save", "Save & New", and "Cancel" buttons.

*Fig. Payment Unsuccessful*

## Section 3

### **Contribution**

As a group, we organized face-to-face team meetings early even during these troublesome times by maintaining social distancing. During this time, the idea of the app was selected and built thereby. Therefore, the group has equally contributed to each aspect of the assignment. We initially divided the objects between each other e.g. Nazmul made “Orders, Items”, Noshin made “Customers, Suppliers” and Pretty made “Payments” and helped design the role hierarchy. Other aspects were added to each of the object such as tabs, security, profiles, roles, workflow rules and alerts. Whenever faced with a problem, we have discussed amongst each other and came up with a solution in an efficient manner. In this way, we have all learned from each other and therefore all three of us have knowledge about every element of the app. The groupwork was smooth and organized and all team members were contributing to their utmost potential to make the project stand up.

**All members in the group has contributed equally.**

Nazmul Kaonine

Noshin Islam




### **Conclusion and Future Implications**

Platform-as-a-Service is an innovative model of cloud computing, instigated to propose easy-going, low cost and nimble application development. This paper outlines the business aspect, trends and evolution of Platform-as-a-Service technology and the fundamental objective is to highlight these practices and recommend better development. Overall, our understanding with the foundational PaaS was extremely constructive and resembled on our project. Nevertheless, according to our experience, the application still has several approaches to go before a complete deployable version can be accomplished. Like few other renowned companies created new markets through web browser, PaaS advises a quicker, more cost-effective prototype for application development and distribution. Here, in our case, order management is not just about processing the orders, but the main goal is to satisfy our clients with assimilating the techniques that influence the experience of post-purchase and making that obtainable and comprehensible to all the shareholders in a distinct combined platform. This has all been soothed with PaaS that is inspiring a new era of mass improvement and business dexterity.

The future implications of this application can be the addition of more objects such as a HR system that will manage employee data that will be using the application. Other additions can be a

recruitment system where employee applications can be received. More profiles such as HR manager, CTO can be added with security implemented on their particular use case. Workflow rule for every item added can be sent as advertisements to customers as an email alert. Also, more time-based workflows can be added e.g. to notify the Customer Relationship Officer to get in touch with a customer who has made a large order. The security can also be enhanced by implementing IP ranges to initiate local access. In addition to this, an approval system can be created for employee discounts that may need multiple employee approvals before being granted.

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