

FACULTY OF INFORMATICS  
MASARYK UNIVERSITY



**Process analysis**  
**Team project for PV207**

**Food delivery service - FoodPack**

**Team:**

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# 1 Organisation overview

FoodPack is a new Czech startup that wants to change the world of cooking and food preparation. FoodPack wants to offer its users the possibility of quick and carefree preparation of dishes without the need for lengthy and complicated purchase of ingredients. The offering consists of a continually expanding range of carefully crafted recipes and distributes all the necessary ingredients of the highest quality for food preparation to your home.

## 1.1 Vision

Our vision is to make sure that everyone cooks effectively, healthy and from fresh ingredients.

## 1.2 Mission

Our mission is to create and provide healthy food recipes to all people who want to eat healthy and to create a distribution network to quickly deliver packages of fresh and healthy ingredients for efficient cooking.

## 1.3 Goals and objectives

- Goal: Provide and distribute packages of fresh ingredients for home cooking of food according to our recipes.
  - Objective: Create and develop at least 3 top recipes of the month every month.
  - Objective: Ensure efficient and timely delivery.
  - Objective: Ensure storage of ingredients.
  - Objective: Ensure effective preparation of orders.
- Goal: Ensure the best local suppliers of all used and needed fresh ingredients.
  - Objective: Explore local market of suppliers and identify their offer of ingredients.
  - Objective: Verify the suitability and safety of ingredients offered from suppliers.
- Goal: Increase awareness about our company and its services.
  - Objective: Develop and integrate plausible advertising strategy.
  - Objective: Improve propagation via the internet, social networks and TV.
  - Objective: Plan and take part in food events.
- Goal: Expand to other countries.
  - Objective: Analyse market of other countries.
  - Objective: Establish new distribution centers in other countries.
  - Objective: Find new drivers for new distribution centers.

## 1.4 Measurement indicators

- Objective: Create and develop at least 3 top recipes of the month every month.
  - KPI: Daily counts of views, clicks, orders.
  - KRI: Total number of orders in the first two months.
- Objective: Ensure efficient and timely delivery.

- KPI: Order response speed.
  - KRI: Success rate of deliveries per month.
- Objective: Ensure storage of ingredients.
  - KPI:
  - KRI:
- Objective: Ensure effective preparation of orders.
  - KPI:
  - KRI:
- Objective: Explore local market of suppliers and identify their offer of ingredients.
  - KPI: Negotiated offers from suppliers.
  - KRI: Total successfully closed agreements with negotiated suppliers
- Objective: Verify the suitability and safety of ingredients offered from suppliers.
  - KPI:
  - KRI:
- Objective: Develop and integrate plausible advertising strategy.
  - KPI:
  - KRI:
- Objective: Improve propagation via the internet, social networks and TV.
  - KPI:
  - KRI:
- Objective: Plan and take part in food events.
  - KPI:
  - KRI:
- Objective: Analyse market of other countries.
  - KPI:
  - KRI:
- Objective: Establish new distribution centers in other countries.
  - KPI:
  - KRI:
- Objective: Find new drivers for new distribution centers.
  - KPI:
  - KRI:

## 1.5 Organisation structure

### 1.5.1 Roles and responsibilities

- **Chef** - Creates new recipes from proposed recipe ideas using specific ingredients. He is an external employee.
- **Editor** - Makes correction of recipes, adds description for recipes, prepares recipes for publishing on the web.
- **Photographer** - Takes photos of ingredients and prepared food, edits photos.
- **Logistics Manager** - Plans new routes for drivers and distribution centers, manages delivery of packages.
- **CEO** - Makes money, creates company strategy, planning, oversees and motivates employees.
- **Driver** - Safely and quickly delivers orders to customers.
- **Warehouse Worker** - Takes care of ingredients and items in distribution center warehouse, packs ingredients into packages when order comes, negotiates with suppliers.
- **Distribution Center Manager** - Makes sure shipped orders are delivered in the most effective way possible.
- **Procurement Officer** - Orders goods from external suppliers so that the warehouses are always stocked.
- **Order Manager** - Overlooks and is responsible for the order processing.

### 1.5.2 Departments

- **Research & Development** - Prepares new recipes, recipe materials, manages chefs.
- **Testing department** - Performs feasibility check of chef's recipe. Feasibility check includes preparation testing, taste testing and cost/pricing calculation.
- **Marketing department** - Presents the company to the world, creates and manages marketing campaigns and creates customer reach.
- **Market research department** - Provides user feedback, trend analysis and estimates demand.
- **Logistic department** - Responsible for planning of routes, assigning routes to drivers and distribution centers, delivering of packages.
- **Human Resources department** - Finding and recruiting job applicants, and administering employee-benefit programs. Manages benefits, recruitment and firing of employees.
- **IT department** - Manages web, database, online shop and blogs and is in charge of company security, solves issues and errors concerning IT in company.
- **Packaging department** - Responsible for preparing packages, maintaining the ingredients and contents of warehouse, negotiation with suppliers.
- **Procurement** - Acquiring goods and services from an external sources.

## 2 Processes

- Find experienced chef. (Objective: Create and develop at least 3 top recipes of the month every month.)
- Create a new recipe. (Objective: Create and develop at least 3 top recipes of the month every month.)
- Preparation of recipe materials. (Objective: Create and develop at least 3 top recipes of the month every month.)
- Route planning. (Objective: Ensure efficient and timely delivery.)
- Find suppliers within a particular distribution center location. (Objective: Explore local market of suppliers and identify their offer of ingredients.)
- Order processing. (Objective: Ensure effective preparation of orders.)
- Customer support. (Objective: Ensure effective preparation of orders.)
- Marketing. (Objective: Improve propagation via the internet, social networks and TV.)
- Create statistics report for CEO and management. (Objective: Ensure efficient and timely delivery.)

## 2.1 Process "Preparation of recipe materials"

**Description** This process is situated after Research & Development with help of chef creates a recipe. It is needed to edit the recipe, add more description to it and create photos for the recipe. In the end all these parts will make it up to materials for recipe. After that recipe will be published if we already have needed ingredients. If not recipe will be stored without publishing and Research & Development will be notified for which recipe materials we are missing ingredients so that the ingredients could be achieved.

### Indicators

- **KPI:** Daily counts of views, clicks, orders. (At least 500 views, 150 clicks, 50 orders)
- **KRI:** Total number of orders in the first two months. (At least 3000 orders)

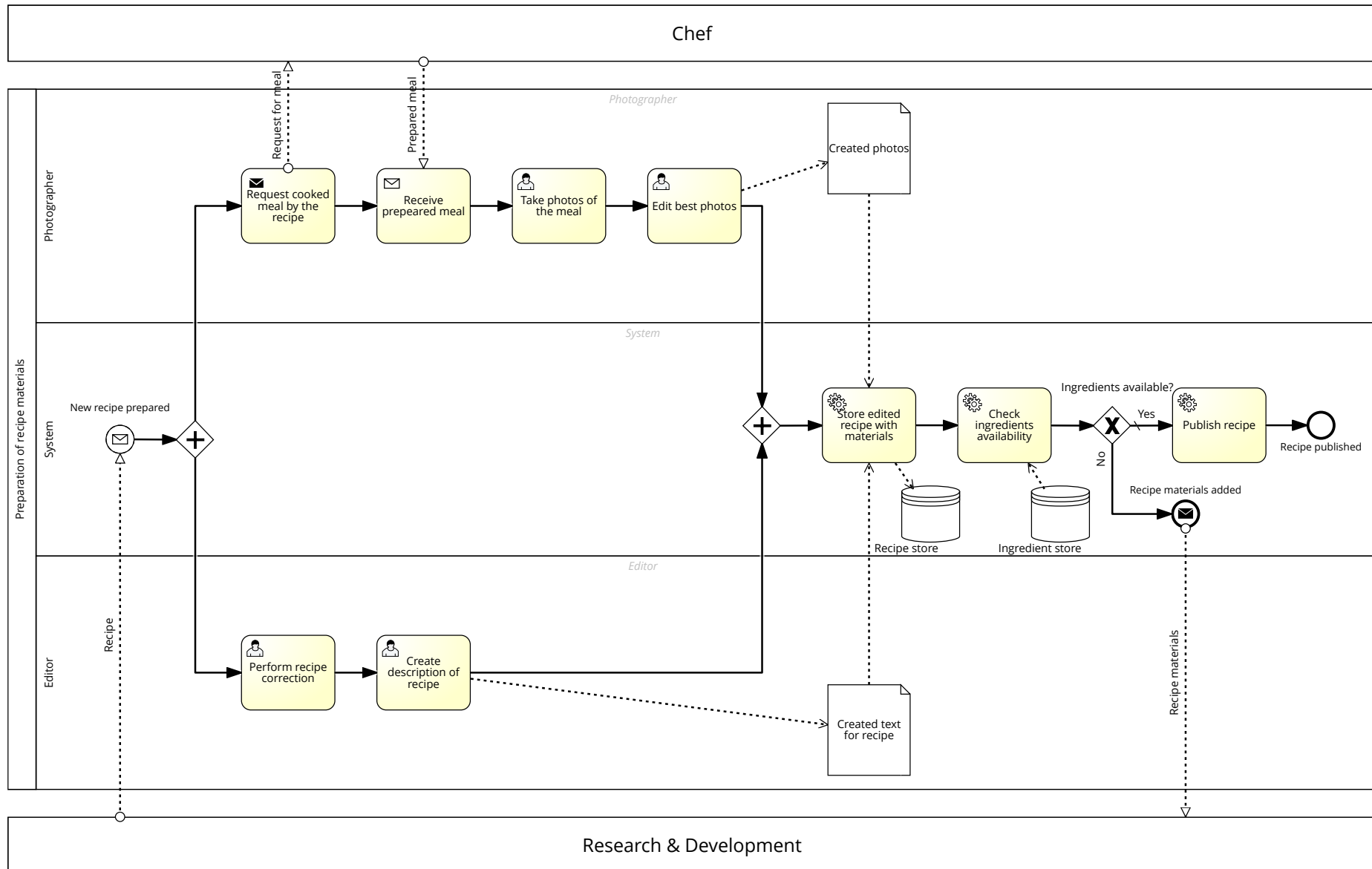
### Roles

- **Editor** - Performs correction of recipe received from Research & Development, creates description for it, send final text to system.
- **System** - Requests materials from Editor and Photographer, stores them into store, publishes recipe if ingredients are available, notices Research & Development if not.
- **Photographer** - Request and receives prepared meal from Chef, takes photo it, edits photos and sends final photos to system.
- **Chef** - Receives request for preparation of a meal, serves prepared meal to photographer.
- **Research & Development** - Requests materials for recipe and receives notification if final recipe can not be published.

### Data objects

- **Recipe store** - Storage for created and finalized recipes.
- **Ingredient store** - Storage for information about available ingredients.

# Preparation of recipe materials





## 2.2 Process "Find suppliers within a particular distribution center location"

**Description** This process is situated after manager of distribution center requests for searching suppliers. It is needed to look at which ingredients are requested for recipes. Then some worker has to check warehouse of distribution center which ingredients are missing a ask system to find suppliers for them. System will find supplier by using external searching module. If its response is too long then it's not working and we can't find any suppliers. Otherwise list of suitable suppliers will be received. The worker will have to negotiate with suppliers and then decide if negotiated prices are good for the company. After that manager is informed about negotiated suppliers if there are some. Otherwise he will be informed about reasons of failure.

### Indicators

- **KPI:** Negotiated offers from suppliers. (At least 1 per day)
- **KRI:** Total successfully closed agreements with negotiated suppliers. (At least 10 per month)

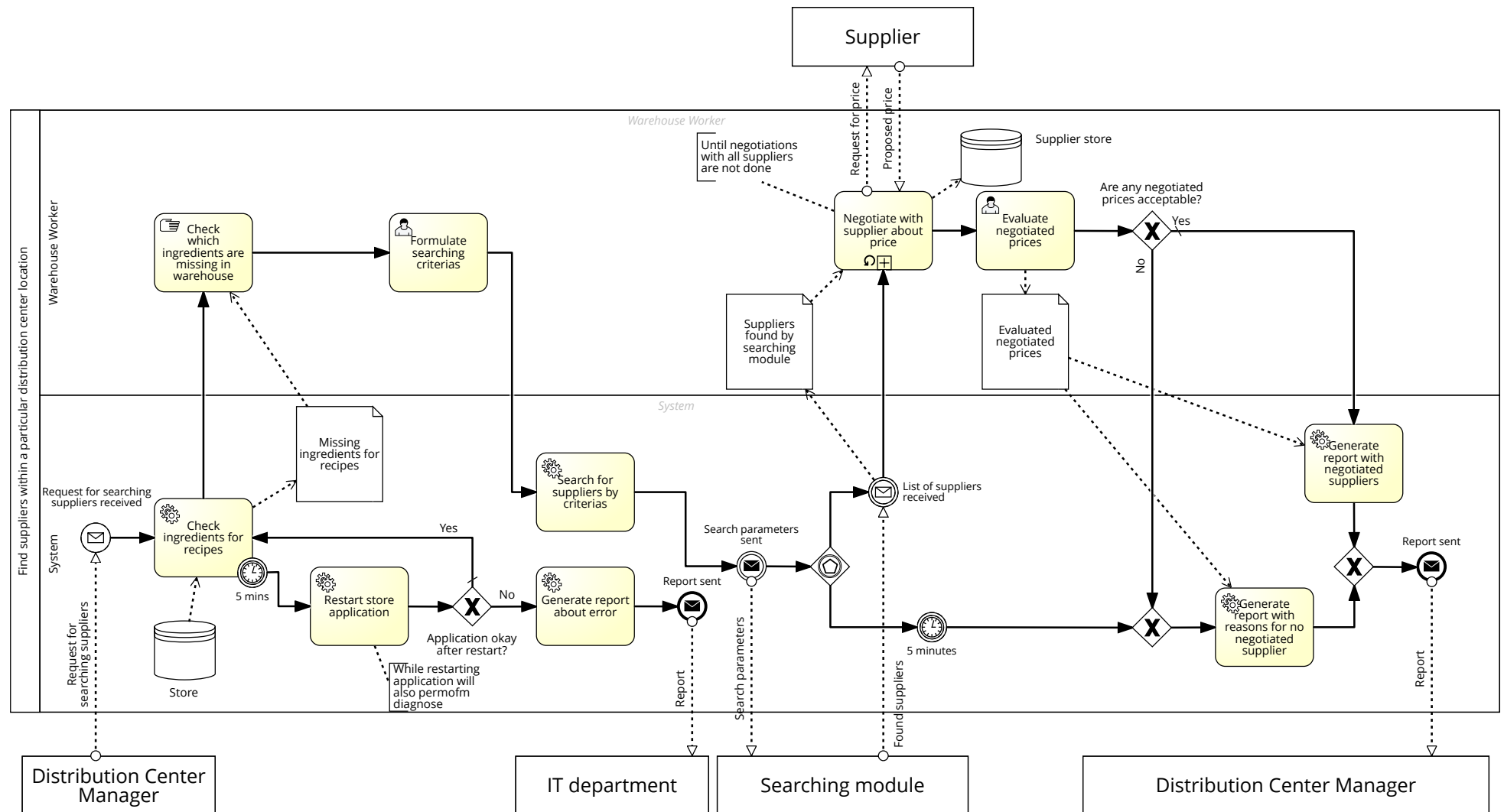
### Roles

- **Warehouse Worker** - Looks after warehouse and items in it, says what is missing to system, negotiates with suppliers and decides which prices are acceptable.
- **System** - Works with storage, checks for ingredients, communicates with searching module, generates report for manager.
- **Distribution Center Manager** - Starts process by request for searching of suppliers and gets notified about result.
- **IT department** - Gets notified if there are issues with store.
- **Searching module** - Searches for nearby suppliers based on criteria formulated by Warehouse Worker, provides suppliers suiting criteria to system.
- **Supplier** - Negotiates with Warehouse Worker about prices of ingredients.

### Data objects

- **Store** - Storage for ingredients and recipes.
- **Supplier store** - Storage for suppliers who negotiated with Warehouse Worker.

# Find suppliers within a particular distribution center location



## 2.3 Process "Find experienced chef"

**Description** Process starts with request for new chef from research and development (RD) department. Management writes offer of working conditions and requirements for chef's experience and education. Human resources (HR) department creates and publish job advert. If no one responds within one week, management adjust job requirements as necessary and HR department updates and publish job advert. When some chef sends job application to HR department, HR department checks if requirements are met. Then HR department sends an assignment to write recipes from prescribed ingredients to chef. If chef does not respond within 3 days, his application is rejected. If chef sends recipes, HR department checks if requirements are met and pass recipes to management. Management checks quality of recipes. If quality of recipes is sufficient, management set salary limit for chef. Then HR department negotiate salary with chef. Chef is accepted if he accepts offered salary within the limit. RD department is informed.

### Indicators

- **KPI:** Total number of written recipes per week. (At least 3)
- **KRI:** Total number of accepted recipes per month. (At least 6)

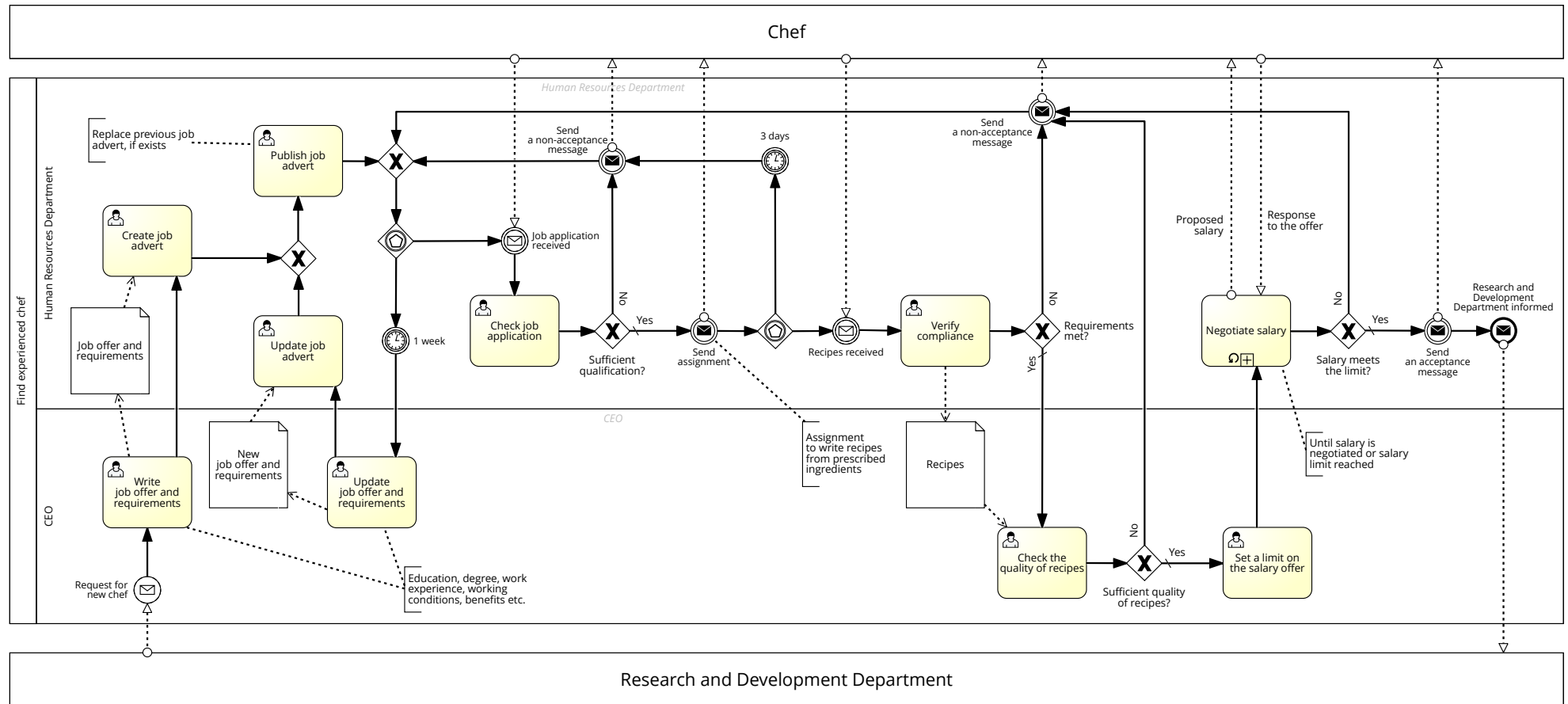
### Roles

- **CEO** - Writes and updates job requirements. Checks quality of recipes and sets limit on the salary offer.
- **Human Resources Department** - Creates, updates and publish job advert. Checks job application from chef. Sends assignment to chef and verify compliance. Negotiate salary with chef.
- **Research & Development Department** - Requests new chef.
- **Chef** - Applies for job and creates recipes from prescribed ingredients.

### Data objects

- **Job offer and requirements** - Education and experience requirements for a new cook.
- **New job offer and requirements** - Updated education and experience requirements for a new cook.
- **Recipes** - Verified recipes.

# Find experienced chef



## 2.4 Process "Route planning"

**Description** Process is situated after choosing and approval of new distribution center by CEO. At first logistics manager has to decide if enough drivers are available for new distribution center. Then he has to plan routes for distribution center. After planning of routes, he needs to assign routes and drivers to distribution centers. CEO has to approve new changes of distribution centers, drivers and routes. New data are saved and drivers are notified about their assigned distribution centers and about routes assigned to these distribution centers.

### Indicators

- **KPI:** Daily count of orders delivered on time. (At least 90%)
- **KRI:** Total number of orders delivered on time. (At least 95%)

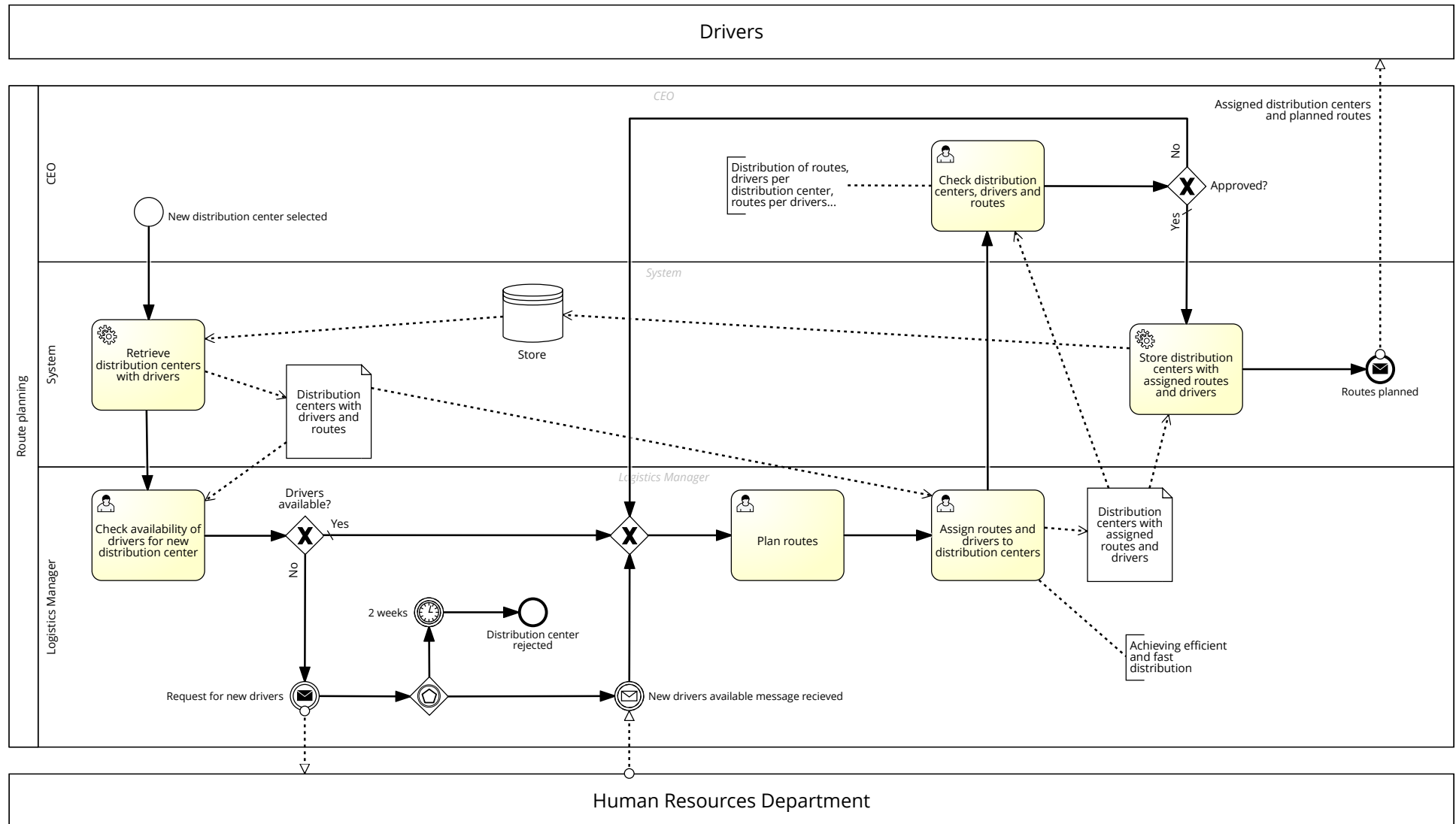
### Roles

- **CEO** - Checks the distribution of drivers and routes.
- **System** - Works with storage, sends assignment to drivers
- **Logistics Manager** - Plans routes, assigns routes and drivers to distribution centers, requests new drivers.
- **Human Resources Department** - Gets new drivers if needed.
- **Driver** - Receives info about assigned routes and distribution center.

### Data objects

- **Store** - Storage for distribution centers with assigned routes and drivers.
- **Distribution centers with drivers and routes** - All distribution centers with assigned routes and drivers before planning.
- **Distribution centers with assigned routes and drivers** - All distribution centers with assigned routes and drivers after planning.

# Route planning



## 2.5 Process "Create statistical report for CEO"

**Description** CEO can request statistical report from all managers. System provides statistical data for all managers and the prepare report. System processes all these reports and unify them into one report for CEO. Report is sent to CEO.

### Indicators

- **KPI:** Average time to complete an order in warehouse. (Maximum 1 hour)
- **KRI:** Total number of orders. (At least 2000 orders)

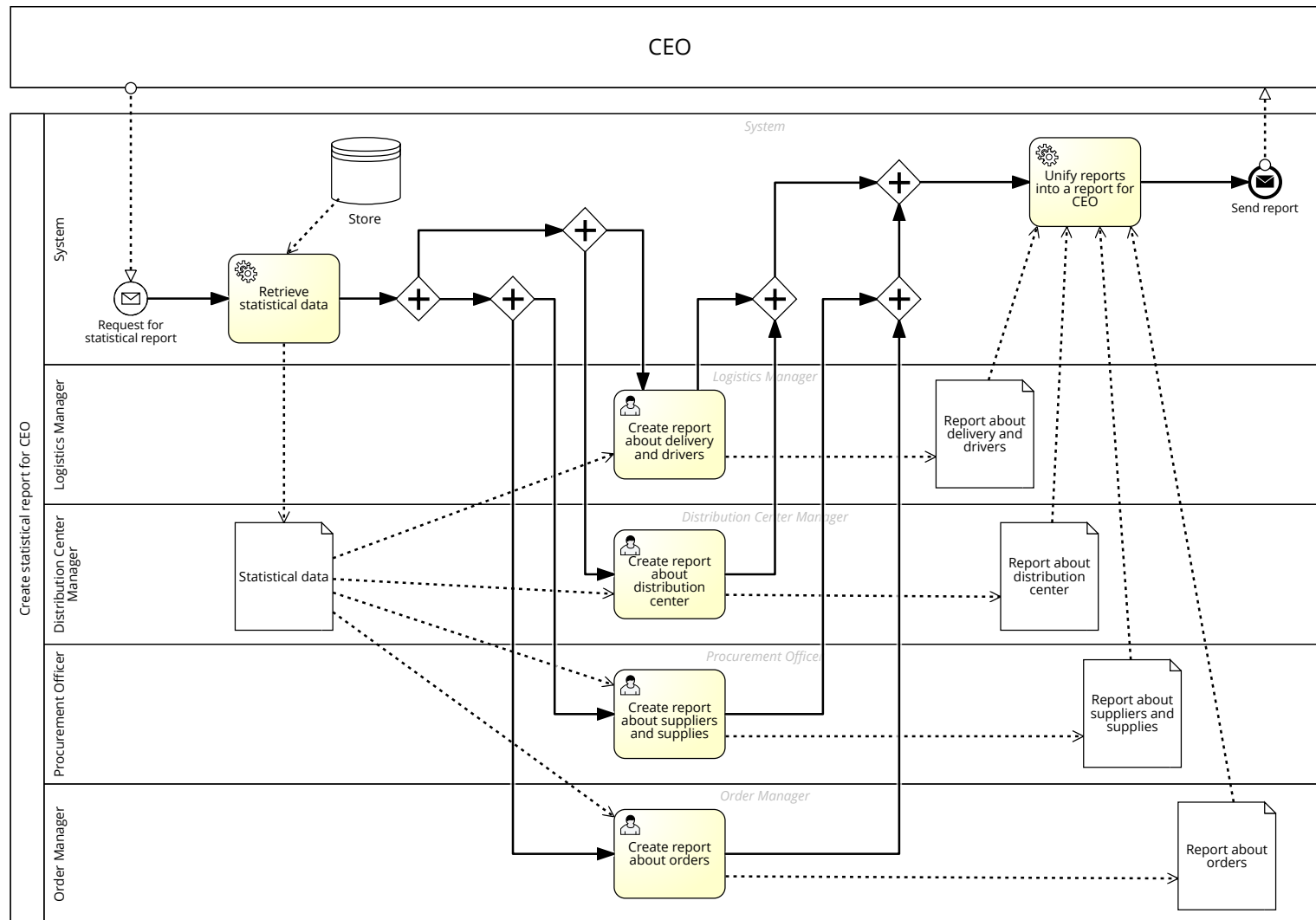
### Roles

- **CEO** - Requests and receives report.
- **System** - Retrieves statistical data for managers and processes reports.
- **Logistics Manager** - Creates report.
- **Distribution Center Manager** - Creates report.
- **Procurement Officer** - Creates report.
- **Order Manager** - Creates report.

### Data objects

- **Store** - Storage for statistical data.
- **Statistical data** - All statistical data over a period of time.
- **Report** - Created report by manager.

# Create statistical report for CEO





## 3 Implementation

[text]

### 3.1 Used platform and software

[text]

### 3.2 Implemented services

[text]

1. Service name

- text

### 3.3 Implemented processes

1. Process name

- text

### 3.4 Screenshots

[3-5 important screenshots from testing of the implementation]

## 4 Teamwork and tasks

### 4.1 Tadeáš Pavlík (Teamleader)

- task 1

### 4.2 Jiří Čechák (Business analyst)

- task 1

### 4.3 Tomáš Došlík (Process analyst)

- task 1

### 4.4 Václav Stehlík (BPM/SOA developer)

- task 1