# **«Vision»**

**System: Order Delivery (DLVR)**

Order delivery is an online system designed to receive, distribute and track orders for the delivery of goods from local stores and catering establishments to end customers.

The system includes a mobile application for couriers, an interface for dispatchers, as well as modules for interaction with suppliers and accounting.

The solution automates order processing, delivery control, execution accounting and payment calculation, reducing manual labor and increasing the efficiency of delivery.

1. **Introduction**

**The document is intended for:**

* Project customers
* Team of analysts
* Project team

**Purpose of the document:** to record the project goals, key business requirements and context of the system use. The document defines the boundaries of the order delivery system and serves as a basis for further detailing of the requirements.

**Scope of the document:**   
the document is intended for use by the project team: analysts, developers, testers, managers and customers - as a source of initial information when planning, analyzing, designing and implementing the system.

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1. **Sources of information**

**List of information sources:**

* Description of the business task from the customer «DLVR\_business\_problem\_description.docx»
* Report on the role-playing game «ex00\_DLVR\_rolegame.docx»
* Report on the brainstorming «ex01\_DLVR\_brainstorming.docx»
* Report on the seminar «ex02\_DLVR\_seminar.docx»

**List of abbreviations and glossary:**

* **DLVR**: Order Delivery System
* **MVP**: Minimum Viable Product
* **API**: Application Programming Interface

**List of interested parties:**

|  |  |  |
| --- | --- | --- |
| **Interested party:** | **Description:** | **Role in the system:** |
| Student company | They create a system and configure its operation | Organization of the system |
| IT staff | Full-time employees supporting the application | Regular application support |
| Couriers | Receive and fulfill orders | Courier |
| Dispatchers | Manage couriers | Dispatcher |
| Suppliers | Send orders through the system | Supplier |
| Administrator | Manages user access | Administrator |
| Accounting | Receives data on deliveries and payments | Accountant |
| Clients | Final recipients of goods | Client |
| Media | They shape the reputation in the media and influence the public perception of the system | Adjacent side |
| Competitors | They exert market pressure, set benchmarks for functionality, delivery speed and convenience | Adjacent side |

1. **Business requirements**

**Problems for which the system is created:**

* Orders from suppliers are received manually and through different channels (calls, messengers) - there is a high risk of losses and errors.
* Couriers receive tasks verbally or in messengers, which complicates planning and control.
* There is no delivery tracking system - customers do not know the status of the order, and suppliers are not sure whether it has been delivered.
* Settlements with couriers and suppliers are carried out manually, which causes errors and delays in accounting.
* There is no transparent picture of the efficiency of logistics and load distribution.
* There is no single application for couriers with the ability to book, route and mark completion.
* There is no single user management and access rights control system.

**Preconditions, environment, situation:**

* Suppliers (small shops and cafes) do not have their own delivery and IT infrastructure.
* Messengers and calls are used to transmit information, which leads to operator overload.
* Couriers work outside a single platform - the lack of a mobile application complicates planning and collecting analytics.
* All operations (order acceptance, delivery, marking, accounting) are performed manually, which limits scalability.
* The delivery market is actively growing in the post-lockdown conditions, and it is necessary to quickly occupy a niche before the arrival of large players.

**System capabilities:**

* Centralized entry of orders by the operator into a single IT system.
* Mobile application for couriers: viewing available orders, booking, route, delivery mark.
* Dispatcher interface with functions for monitoring, reassigning orders and monitoring execution.
* Integration with accounting: automatic transfer of data on orders and deliveries for settlements.
* Courier's personal account: delivery history, accruals, schedule.
* Administrator role: managing user rights, registering new participants.
* Reporting on key metrics: number of orders, delivery time, errors, cancellations, etc.

**Business goals of the system (business requirements):**

* Organize a centralized and scalable delivery service for small and medium businesses.
* Reduce operating costs through automation and eliminating manual labor.
* Reduce average delivery time and improve service quality.
* Increase the customer and partner base by becoming a convenient tool for suppliers.
* Ensure transparent accounting and settlements, speed up financial flows and reduce the number of errors.
* Collect data on the system's operation for further optimization and scaling.
* Provide customers with the ability to track the status of their delivery in a format convenient for the customer.
* Ensure highly accurate delivery time forecasts.
* Ensure delivery flexibility based on customer needs.
* Ensure transparency and accuracy in calculating delivery costs.
* Ensure the ability to change delivery parameters after placing an order.
* Increase customer awareness of the delivery process.

**4. Project boundaries**

**Description of boundaries:**

The DLVR system covers the processes associated with:

* receiving orders from suppliers;
* managing logistics and order delivery;
* interacting with couriers via a mobile application;
* monitoring delivery execution;
* transferring data to the accounting department;
* accounting for users and managing their access rights.

The system does not cover:

* working with payments from clients
* internal processes of restaurants/stores
* working with external services
* tax reporting
* working with banks

**Main roles in the system and their functions:**

| **Role** | **Input flow**  **(across the boundary) :** | **Output flow**  **(across the boundary):** | **System boundary**  **(within the system):** | **Outside the system**  **(not within the system):** |
| --- | --- | --- | --- | --- |
| **Client** | 1. Places an order;  2. Confirmation of order delivery;  3. Online payment for the order;  4. Report on possible problems related to the system;  5. Details for automatic write-off;  6. Request in case of problems with delivery;  7. Request to cancel the order; | 1. Order status data;  2. Order cost data;  3. Order and courier location data;  4. Data on updated system documentation;  5. Payment request;  6. Request for confirmation of order delivery; | Interacting with the application via the interface | Transfer of funds, interaction with the bank |
| **Administrator** | 1. Filling in information about the courier;  2. Granting access rights;  3. Blocking the user;  4. Reports on the operation of the system;  5. Report on possible problems associated with the system;  6. Resolving a conflict situation; | 1. General information about the system operation;  2. Information about updated documentation for the system;  3. Information about system users;  4. Incoming requests in case of problems; | Management via admin interface | Monitoring external systems, handling external incidents |
| **Dispatcher** | 1. Assigns a responsible person (courier) to the order;  2. Reassigns the responsible person;  3. Records cancelled orders and generates a report on them;  4. Reports on possible problems associated with the system;  5. Reassigns to the administrator / solves the problem;  6. Records the cancellation of the order. | 1. Order information;  2. Incoming request from the client;  3. Data on updated documentation for the system; | Interaction with the planning system | - |
| **Courier** | 1. Order reservation;  2. Mark of order receipt from the supplier;  3. Mark of order delivery;  4. Courier location while en route;  5. Report of possible problems related to the system;  6. Details;  7. Balance request; | 1. Booking confirmation;  2. Available orders details;  3. Balance details;  4. Updated system documentation details;  5. General order details, customer number, address, etc. | Receiving tasks via mobile application | Contact with customers during delivery |
| **Developers** | 1. Ready-made instructions for reorganization (of something in the system);  2. Requests for work done;  3. Information on current rates and commissions; | 1. Reports on system operation/finances/feedback/general statistics; 2. Data on updated documentation for the system; | Working with reports and improvements | Interacting with external services for improvements |
| **IT staff** | 1. Update documentation;  2. System updates;  3. Response to request; | 1. Information about existing errors and vulnerabilities from system users;  2. Feedback on the update;  3. Request for work done; | Interaction with infrastructure and systems | Working with external hosting, third-party services |
| **Supplier** | 1. Order information;  2. New order;  3. Confirmation of order delivery to the courier;  4. Payment details; | 1. Information about the order status/completion;  2. Information about the crediting of funds to the balance;  3. Information about updated documentation for the system; | Interaction with the order adding system | External contracts, logistics and shipments |
| **Accountant** | 1. Calculation of couriers;  2. Calculation of suppliers;  3. Report on request of student team / regulator; | 1. Data on completed orders;  2. Request for reporting;  3. Data on updated system documentation;  4. Information on current rates and commissions;  5. Information on current details of couriers/suppliers; | Working with the accounting and reporting system | Transfers of funds, tax reporting, interaction with banks |