IT Vectura

Logistics of your processes

IT Vectura Logistics platform

Unified digital logistics space

Scalable solution for all types of businesses

Solution as a kit – **flexible adaptation** and tuning

Platform’s formats and deliverability: **Cloud** and **On-Premise**

Launch and implementation in **14 days**

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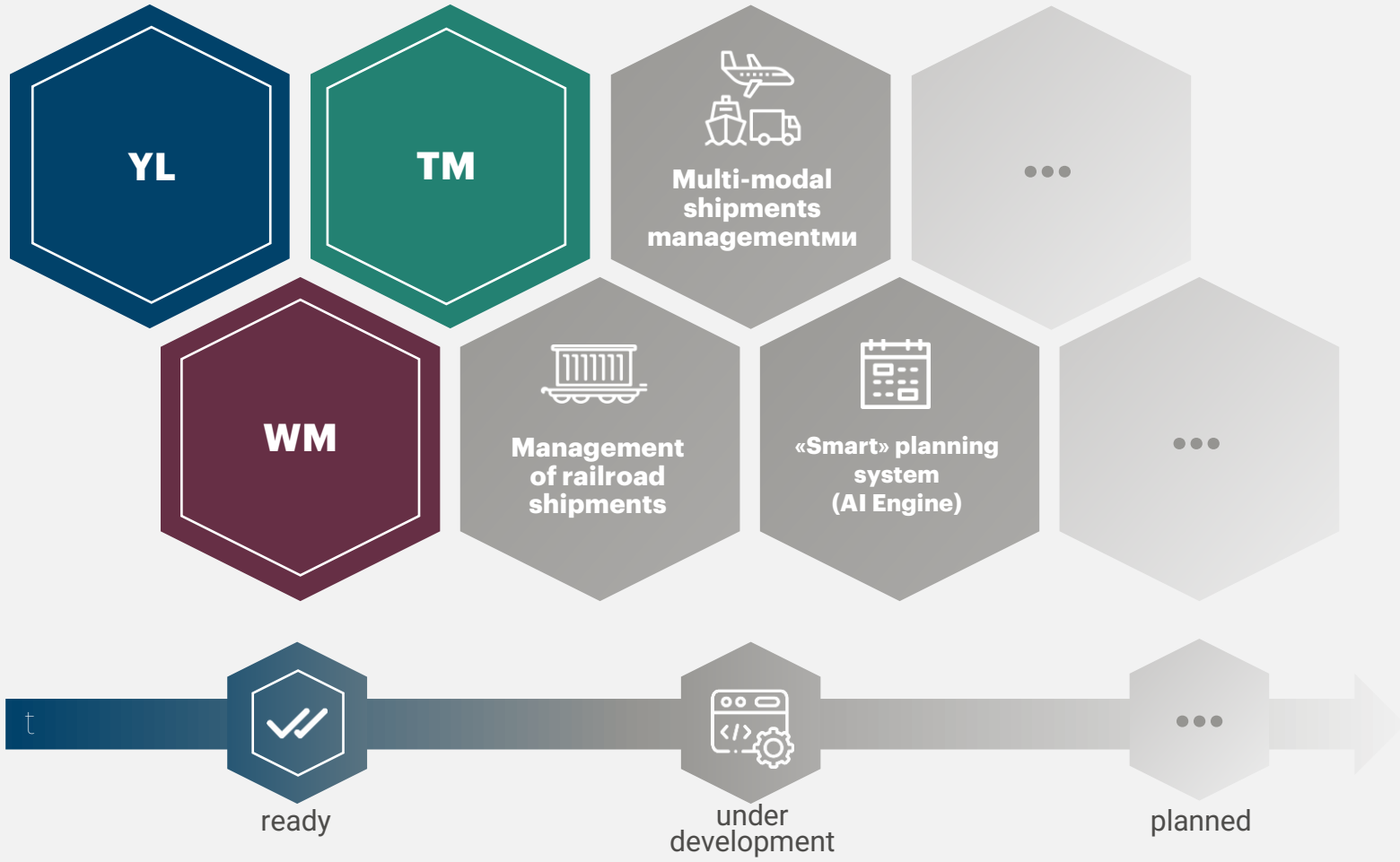
Logistics of your processes

IT Vectura general functionality



YL

- Gates loading planning
- Electronic queue management
- Control over transport movement
- Notifications for drivers and warehouse staff

TM

- «Smart» orders planning (applying of AI technologies)
- 24/7 monitoring of transportation execution
- Automatic calculation of transportation costs
- Operative and analytical reports

WM

- Goods acceptance and accounting
- Packaging and shipment
- Organization of efficient storage systems (applying of AI technologies)
- Reporting and control over warehouse processes

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Logistics of your processes

IT Vectura YL general functions

Master data	Quotas	Processing request	Processing order	Execution tasks	Reports
Products/groups of products	Organization chart Directory for managing open period / carrier	Manual slots booking for loading/unloading	Directory for managing open period/carrier	Manual data input for transport's stage completion	Execution plan/fact
Business-partners	Warehouse capacity (m^3, SKU, units) directory	Creation with Excel (Base)	Record for loading/unloading slots	Statuses from checkpoints	Dispatcher operative monitoring tool
Transportation network (checkpoints, loading/unloading points)	Quotas directory for purchases / groups of purchases	Organization chart	Integration with ATI.SU freight exchange	Documents attaching	Monitor for loading/unloading slots booking
Schedule (loading/unloading time slots)	Automatic time calculation for loading/unloading of certain products / groups of products	Manual quoting	Excel/API transportation management systems	Parking space management	Data extraction to BI system for analytical reports
Organization chart		Automatic quoting	Automatic appointment for loading window	API with WMS system for tracking loading/unloading	
		Automatic slots booking for loading/unloading		API for weigh station	

Q1 2023

Q2 2023

Q3 2023

Q4 2023

MVP

YL1

YL2

YL3

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Logistics of your processes

IT Vectura TM general functions

Master data	Agreements	Demands	Planning	Execution	Calculations	Reporting	
Master data (location, transport,, business partners, organization chart)	Agreements	Manual input for transportations demands	Manual routes planning	Manual control over transportations executions	Manual costs calculation	Worklist of demands	Q1 2023
	Rates	Transportations demand input via Excel	Manual carrier selection	Print forms (Base)	Automatic costs calculation	Unified window for transportation planning	
Expanded master data (transportation zones, schedules, constant routes)	Automatic/manual determination for winner of the tender	API with external information systems for gathering demands	API for WMS/YL integration	API with location aggregators (Russian railways personal account, Marine traffic)	Reconciliation of transportation costs	Dispatcher monitors	Q2 2023
	API for integration with tender platforms	Logistics calculator	Automatic carrier selection	API with tracking systems (Omnicom, Vialon)	Costs distribution	Reports on completed hauls	
	Long-term tender for conclusion of contracts		API for integration with freight exchanges	Integration with ATI.SU freight exchange	Mutual settlements with carriers via personal account	Report on rates keeping	Q3 2023
			Interaction with carrier via personal account	Integration with geolocation services (Yandex, 2GIS)	Pre-claim activities	Charterer report	
			API for optimizer connection	Localization for railroads (integration with ETRAN system)		KPI of carriers/drivers	Q4 2023
			Automatic/incremental route planning	Fuel and lubricants accounting		Dara extraction to BI systems (reporting)	
			Transport loading planning	Mobile application for drivers			

MVP
TM1
TM2
TM3

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Logistics of your processes

IT Vectura WM general functions

Master data	Reception of materials	Inventory	Intra-warehouse premises	Materials release process	Reporting
Setting up warehouse topology	Formation of cargo spaces	Manual tasks issuing for taking inventory	Binding warehouse type to type of supply	Unification of shipments into waves	Acceptance and shipment monitor
Resource management	Manual determination of placement location	Taking inventory via DGT	Manual tasks creation for movement between the warehouse cells via DGT	Manual monitoring for materials issuing process and statuses changes	Warehouseman monitor
	Manual creation of warehouse tasks for placement	Automatic fixing of shortages and surpluses	API for transmitting transportation request to the external system	Manual prioritizing of tasks for issuing materials	Monitoring over order assembly
	Manual creation of print forms		Conducting warehouse reorganization	Parameters setup for forming warehouse orders	Gates loading monitor
	Expiration date accounting			Automatic creation of waves based on transport unit or schedule	Plan-fact analysis
	Integration with TM for transmitting events			Automatic determination of loading gates	Gathering statistics for operations, completed by all employees
	Automatic determination of placement location			Goods reservation strategy	
	Automatic calculation of placement route				
	Automatic placement tasks issuing to the data gathering terminal (DGT)				

Q2 2023

Q3 2023

Q4 2023

MVP

WM1,WM2

WM3

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Appendices

Yard Logistic

Yard management processes script

Incoming stream process

1

Incoming order

Incoming order forms in 1C, reconciles and transmitted to Yard Logistics

2

Incoming haul

Haul is formed automatically based on the incoming order and inherits all relevant attributes

3

Generation of tasks

Haul units are automatically formed based on the order, inheriting all relevant attributes

4

Booking of slots

In 1C booking of slots is done based on incoming order. Based on the latter, YL automatically books haul for the selected date and gate

5

Dispatcher monitor

Dispatcher operative monitor is a tool for tracking hauls in scope of key attributes

6

Entrance through checkpoint

Automatic task closure for transport entry based on camera, registering transport tags

7

Driver's self-check-in

After entrance, drives registers in the special form

8

Notifications for driver

Notifications are automatically formed for driver to move to the gates for unloading

9

Transport unloading process

WMS registers data on unloading beginning and ending. Based on this information, YL automatically closes relevant tasks

10

Exit through checkpoint process

Automatic task closing of transport exiting based on camera, registering transport tags

11

Execution plan/fact

Tool for analyzing planned and actual indicators on warehouse performance on chosen period of time

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Logistics of your processes

Yard Logistic

Yard management processes script

Outgoing stream process

1. **ATI.SU integration based on slots**

   Data on available slots for transport loading is sent to ATI.SU

2. **ATI.SU integration on hauls**

   By completion of tender, transport order is sent to Yard Logistics

3. **Tasks generation**

   Haul tasks are automatically formed for determined type of haul

4. **Slots booking**

   Based on ATI.SU planning, Yard Logistics automatically books loading slot for transport, selected by the carrier

5. **Incoming order**

   Incoming order is created in 1C„ reconciled and sent to Yard Logistics afterwards

6. **Orders planning for transport**

   WMS plans waves, data on the latter is automatically transmitted to YL

7. **Dispatcher monitor**

   Operative dispatcher monitor is the tool for tracking hauls in scope of key attributes

8. **Entrance through checkpoint**

   Automatic task closure for transport entry based on camera, registering transport tags

9. **Driver's self-check-in**

   After entrance, drives registers in the special form

10. **Notifications for driver**

    Notifications are automatically formed for driver to move to the gates for unloading

11. **Transport unloading process**

    WMS registers data on unloading beginning and ending. Based on this information, YL automatically closes relevant tasks

12. **Exit through checkpoint process**

    Automatic task closing of transport exiting based on camera, registering transport tags

13. **Execution plan/fact**

    Tool for analyzing planned and actual indicators on warehouse performance on chosen period of time

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Transportation Management

Transport logistics processes script

Base scenario

1

Generation of request

Based on client's demand, manual generation of request for long-term planning in the system

2

Order creation

For further work, manual order creation is done for short-term planning

3

Work with haul units

Based on the order, haul units are formed, inheriting all necessary attributes

4

Haul planning

Manual haul planning is done by forwarder transportation control panel, based on number of hauls and available resources

5

Work in dispatcher monitor

Operative dispatcher monitor is the tool for tracking hauls in scope of key attributes

6

Closing of the haul

Completion of event is done by the dispatcher monitor, haul is considered as closed

7

Calculation of haul

System calculates costs and income from the transportation

8

Creation of settlement documents

Settlement between forwarders and clients is done by creation of settlement document

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Warehouse Management

Warehouse management processes script

Incoming stream process

1

Creation of the incoming order

Procurement specialist creates in WM an incoming order for receiving goods to the warehouse

2

Transport unloading

By arriving of transport, specialist draws up unloading of goods to the warehouse

3

Registering goods reception

During reception of goods system automatically fixes arrival of groups of goods, identifies it, barcodes and fixes data on goods

4

Determining cell for placement

By acceptance of goods, WM atomically determines zone for placing depending on the pre-set sequence and warehouse structure

5

Moving goods to storage zone

WM determines operations sequence, required for moving goods to the storage zone and reserves selected cell/zone

6

Processing of returns

WM support returns processing in context of previously placed orders or cargo space

7

Internal processes management

WM automatically determines operations sequence for execution in the storage zone

- Defective goods detection
In case defects are found in the received goods, goods are received by the defective goods cell. After that, system creates tasks for placement such goods into the inspection cell

- Inventory
The following inventory types are provided by WM : planned, operative, local

- Replenishment of selection cells
WM supports required number of goods in the selection cells

- Goods movement between cells and zones
Movement of goods can by initiated by the warehouseman/assembler using DGT or suggested by WM for optimizing storage and placement

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Warehouse Management

Yard management process script

Outgoing stream process

1

Forming a shipment order

Specialist forms shipment order from the warehouse using WM

2

Waves management

Using WM, specialist plans shipment waves for groups of goods in the warehouse

3

Selection of goods, determination of cells

By planning waves,, WM determines storage cells and sequence of operations for orders completion

4

Completion of order

At the order completion stage, system will suggests and displays optimal selection route via DGT

5

Goods packing

Type of packaging is automatically distributed for goods shipment, which should be completed by employee

6

Goods loading and release

System automatically generates tasks for loading based on set algorithms and sends data to the employee to the DGT

7

Dispatcher monitor

Dispatcher operative monitor is a tool for tracking hauls in scope of key attributes

8

Writing-off management

WM supports goods writing-off process

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