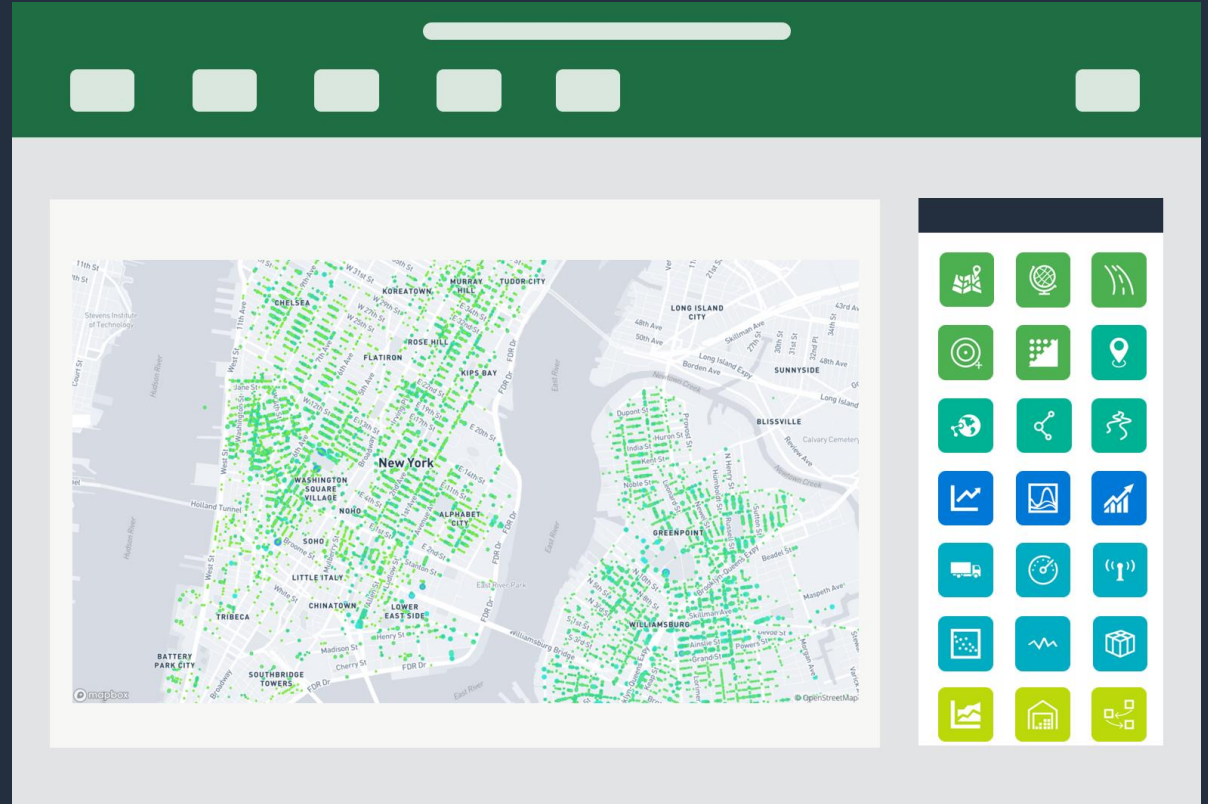
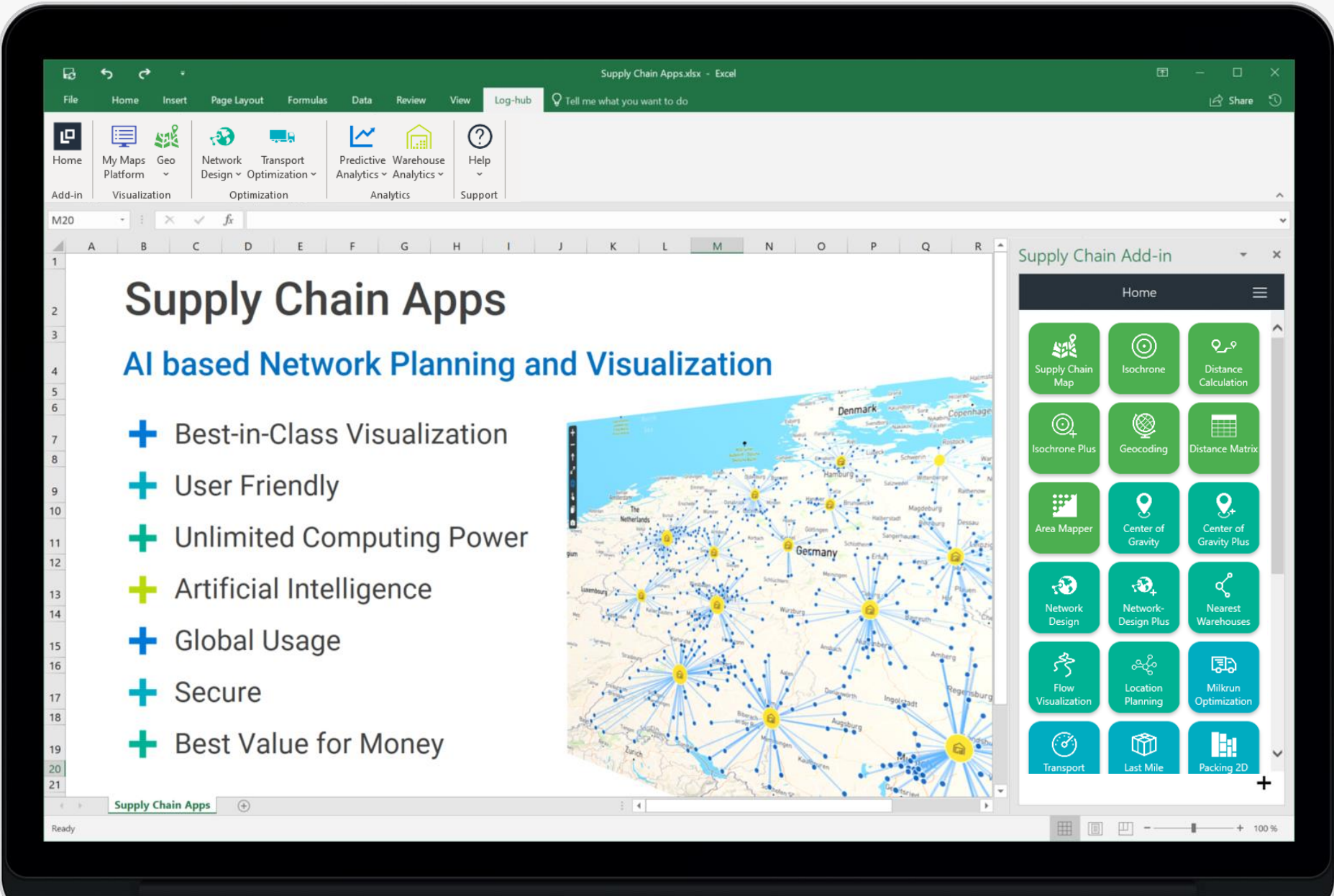




Supply Chain Apps

Empowering Supply Chain experts to transform Excel tables with intelligent apps into powerful insights.

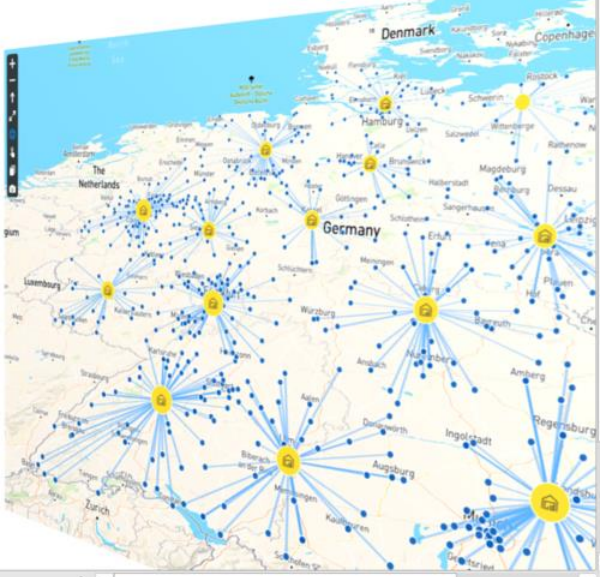




Supply Chain Apps

AI based Network Planning and Visualization

- + Best-in-Class Visualization
- + User Friendly
- + Unlimited Computing Power
- + Artificial Intelligence
- + Global Usage
- + Secure
- + Best Value for Money



Supply Chain Add-in

Home

- Supply Chain Map
- Isochrone
- Distance Calculation
- Isochrone Plus
- Geocoding
- Distance Matrix
- Area Mapper
- Center of Gravity
- Center of Gravity Plus
- Network Design
- Network-Design Plus
- Nearest Warehouses
- Flow Visualization
- Location Planning
- Milkrun Optimization
- Transport
- Last Mile
- Packing 2D



My Maps Platform

My Maps Platform is a powerful geospatial analysis platform to create, style, save and share maps.

The screenshot displays the 'My Maps' interface. On the left, a sidebar shows 'Workspaces' with options: '+ Create Workspace', 'My Workspace', 'Shared With Me', and 'Example Maps'. The main area shows a list of maps under 'Example Maps > Maps'.

Maps	Updated By	Updated At	Actions
01 Center of Gravity - Europe	kristina.stankovic@log-hub.com	1/26/21 12:34 PM	
02 Area Mapper - Spain	jelena.milicic@log-hub.com	1/27/21 1:14 PM	
03 Center of Gravity - Areas - US	kristina.stankovic@log-hub.com	1/27/21 10:31 AM	
04 Supply Chain Map Locations - Germany	kristina.stankovic@log-hub.com	1/26/21 1:17 PM	

Below the table is a map of Europe with numerous blue data points and orange center-of-gravity markers. The map includes labels for countries like Ireland, United Kingdom, France, Germany, and Italy, as well as cities like London, Paris, and Berlin.



App Portfolio



My Maps Platform



Supply Chain Map



Geocoding



Distance Calculation



Area Mapper



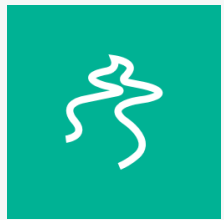
Isochrones



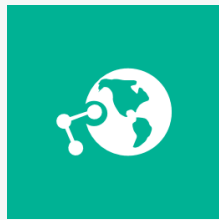
Center of Gravity



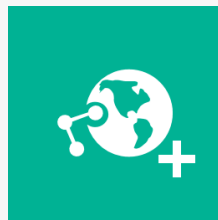
Center of Gravity Plus



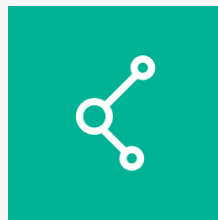
Flow Visualization



Network Design



Network Design Plus



Nearest Warehouses



Demand Forecasting



Forecast AI



Shipment Cost Simulation



Transport Optimization



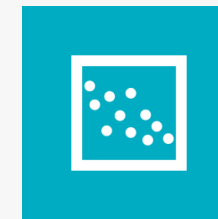
Milkrun Optimization



Last Mile



Live Tracking



Shipment Analyzer



Warehouse Modeler



Inventory Simulation



ABC Analysis



XYZ Analysis

Workflow

Intuitive Workflow

Step 1:

- *Generate Sample Template*
- *Understand Data Structure*
- *Connect own Data Tables*

Step 2:

- *Set App Specific Parameters*
- *Start Calculation*

Step 3:

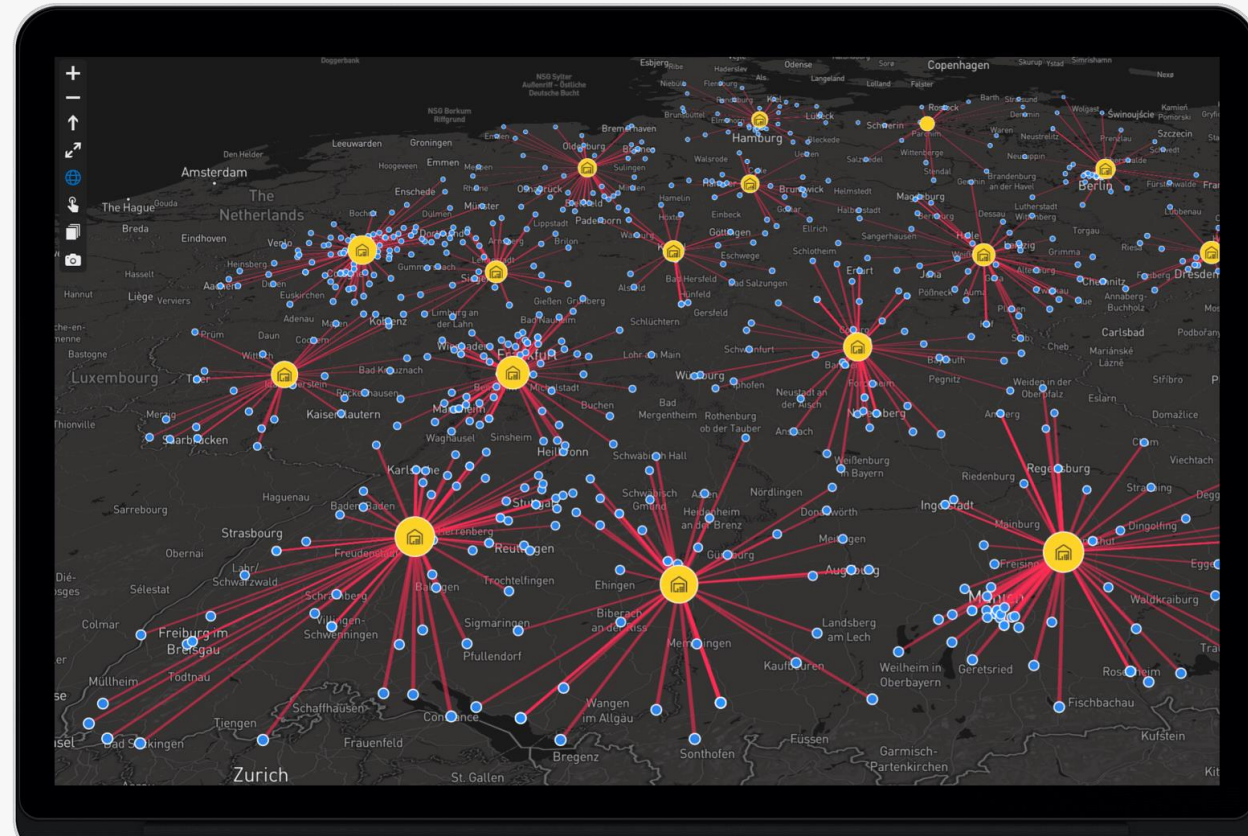
- *Select Result Columns*
- *Export Result Data Tables to Excel Sheet*

Step 4:

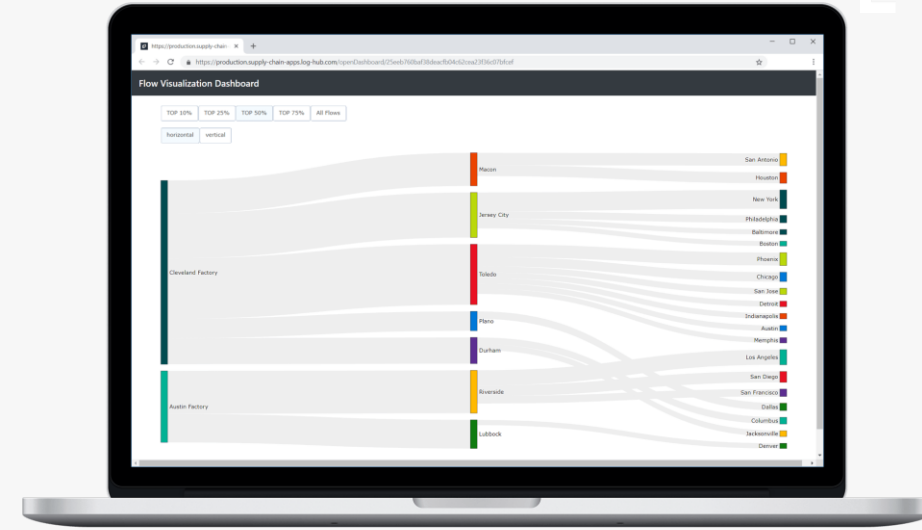
- *Result Visualization in Dashboard and Maps*
- *Ready for Presentation*

Name	Country	State	Zip	City	Street	Weight
Customer IN			143500	Batala		367
Customer IN			736135	Dinhata		67
Customer IN			345025	Phalsund		20
Customer IN			635111	Karimang		238
Customer IN			524001	Nellore		664
Customer IN			151200	Faridkot		633
Customer IN			517299	Vayalpad		8
Customer IN			854328	Jogbani		117
Customer IN			303108	Kot Putli		48
Customer IN			341512	Parvatsar		61
Customer IN			123200	Loharu		39
Customer IN			786110	Sisi Bargac		110
Customer IN			515401	Gooty		51
Customer IN			370001	Bhuj		373
Customer IN			225305	Fatehpur		156
Customer IN			322241	Karauli		123
Customer IN			502334	Tupran		39
Customer IN			518500	Nandyal		101
Customer IN			247554	Deoband		87
Customer IN			501400	Medchal		41
Customer IN			431400	Parbhani		33
Customer IN			305600	Nasirabad		58
Customer IN			496111	Gharghod		621
Customer IN			636001	Salem		1703
Customer IN			125001	Hisar		1444
Customer IN			752085	Gania		367
Customer IN			508001	Nalgonda		1426
Customer IN			518400	Nandikotk		52
Customer IN			533100	Rajahmun		270
Customer IN			209206	Ghatamp		9
Customer IN			453441	Mhow		86
Customer IN			520001	Vijayawad		862
Customer IN			523002	Ongole		190
Customer IN			801300	Ekangar Si		116
Customer IN			261141	Maholi		3
Customer IN			621802	Jayamkon		373
Customer IN			522439	Vijayapuri		11
Customer IN			203111	Khurja		45
Customer IN			143108	Atari		452
Customer IN			713300	Asanwal		30

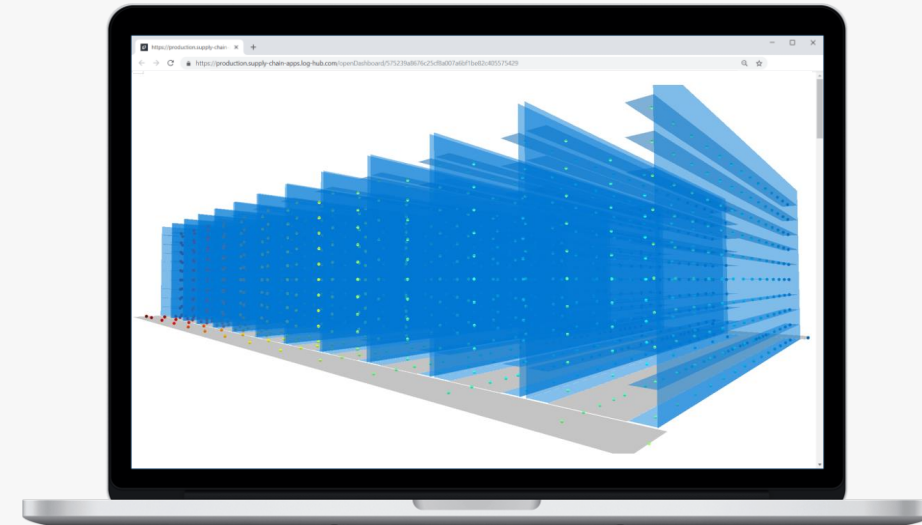
+ Best-in-Class Visualisation



Industry-Leading Supply Chain Maps

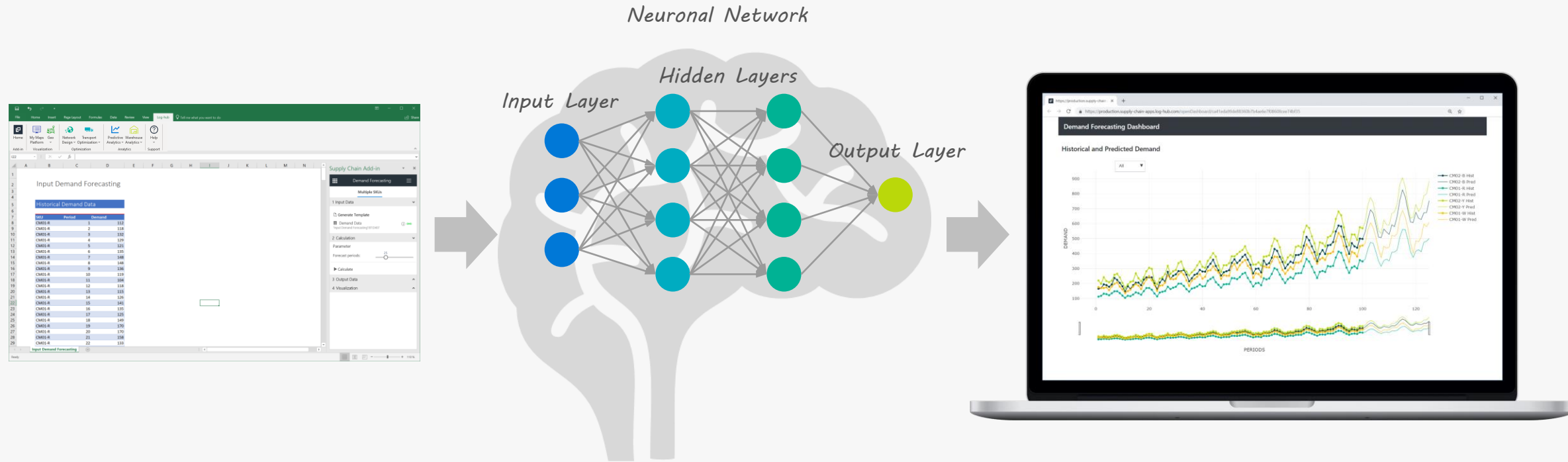


Impressive Visualization



Quick Access to Results

+ Artificial Intelligence



Sophisticated Technology • Artificial Intelligence • Based on Latest Research and Frameworks

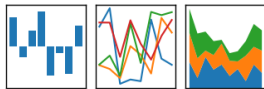
+ Industry leading data science stack



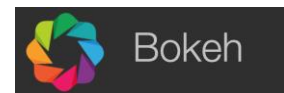
Analytics & Scientific Computing

pandas

$$y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$$



Visualization



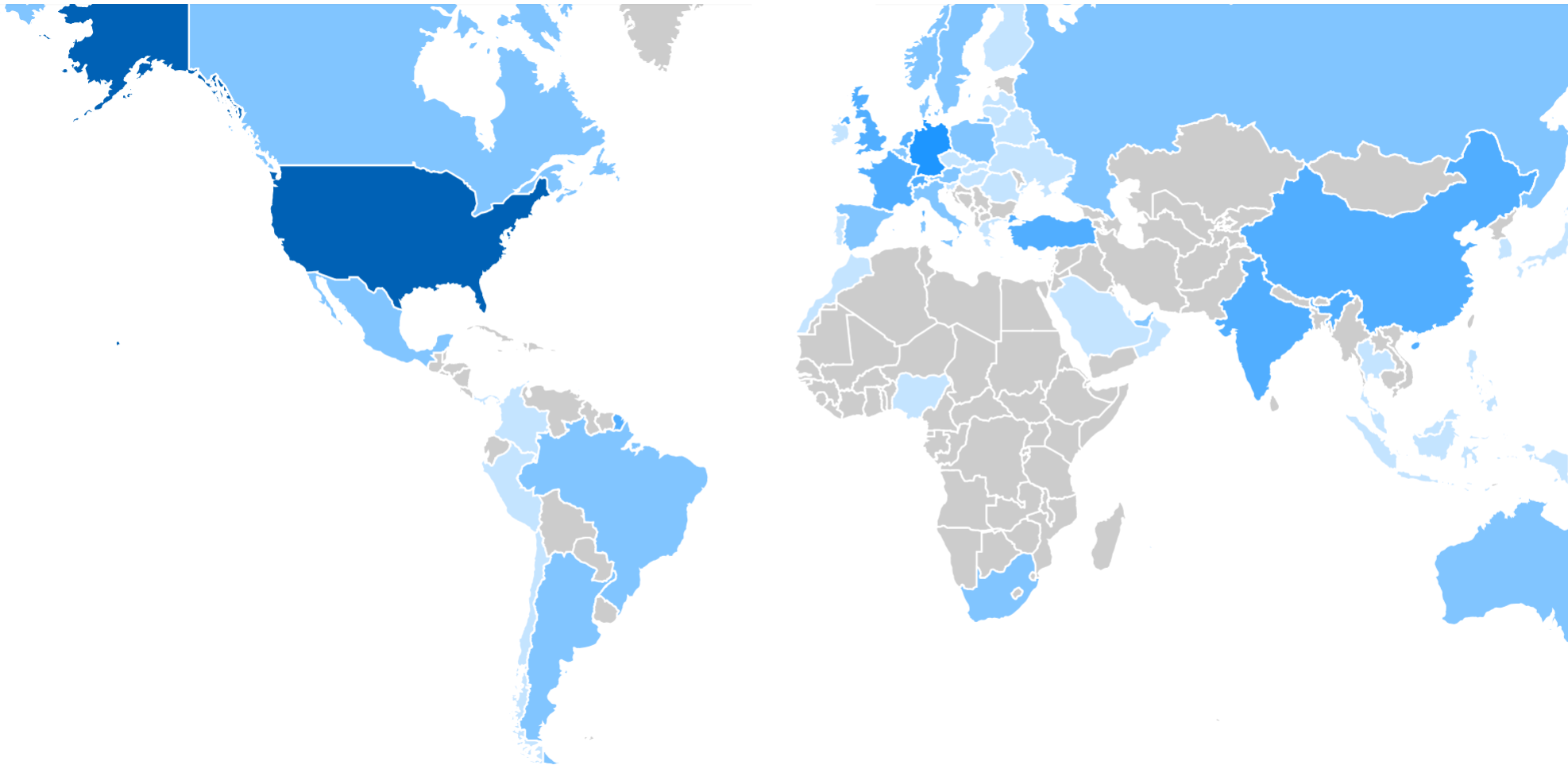
Mathematical Optimization



Machine Learning



+ Global Usage



> 10.000

Users in

86

Countries

>250

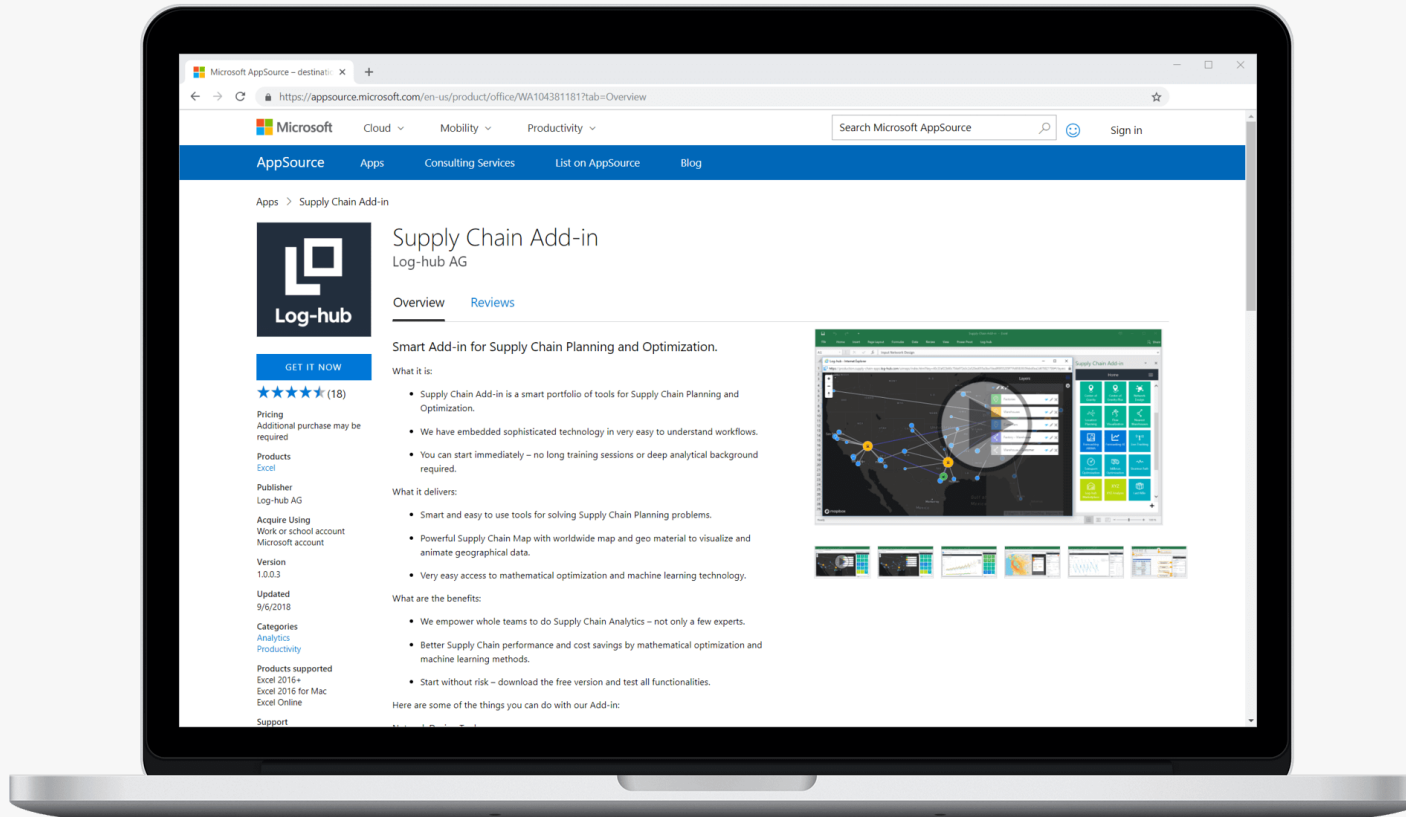
New Users per Month

30

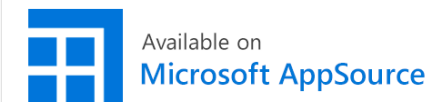
Partners Worldwide

Multilingual • Quick access • Easy installation • Start in less than 5 minutes

+ Secure

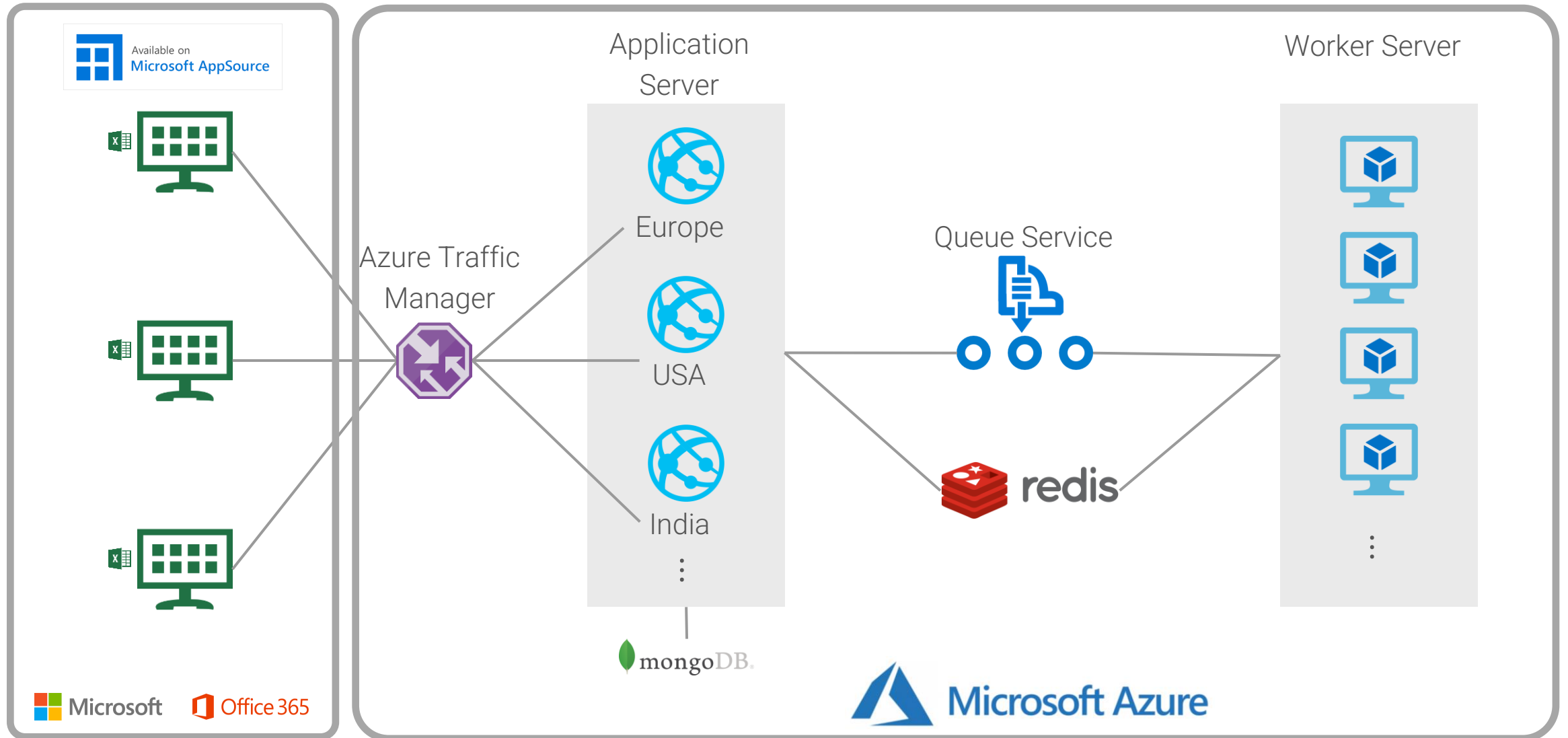


- + End-to-end Encryption
- + Hosting on Microsoft Azure
- + Hosted on Data Centers in Switzerland, Germany and Netherlands
- + Approved by Microsoft for Listing in the Official B-to-B store for Business Applications
- + Regular external pen tests



Listed in Microsoft AppSource • The Official Store for Business Applications from Microsoft

+ IT architecture based on Microsoft Azure / Office 365



References



PLANZER

MIGROS



+ Best Value for Money

Single User Licenses

MOST POPULAR

FREE

€0/month/user

- Use all apps for free (limited data entries allowed)
- Test how all apps handle large amounts of data with our pre-loaded sample data
- No time limitation on free trial

FREE FOREVER

PRO

€600/month/user

- All apps included
- Unlimited data entries (to max. capacity)
- Maintenance included, no release upgrade fees
- Email Support

MONTHLY CANCELLABLE

PRO

€500/month/user

- All apps included
- Unlimited data entries (to max. capacity)
- Maintenance included, no release upgrade fees
- Email Support

QUARTERLY CANCELLABLE

PRO

€400/month/user

- All apps included
- Unlimited data entries (to max. capacity)
- Maintenance included, no release upgrade fees
- Email Support

YEARLY CANCELLABLE



+ Best Value for Money

Corporate Subscriptions

EMPLOYEES < 5.000

€ **5.000**/month

- Unlimited number of seats
- All apps included
- Email Support
- All features of Pro subscription

YEARLY CANCELLABLE

EMPLOYEES < 10.000

€ **10.000**/month

- Unlimited number of seats
- All apps included
- Email Support
- All features of Pro subscription

YEARLY CANCELLABLE

EMPLOYEES < 100.000

€ **15.000**/month

- Unlimited number of seats
- All apps included
- Email Support
- All features of Pro subscription

YEARLY CANCELLABLE

EMPLOYEES > 100.000

€ **20.000**/month

- Unlimited number of seats
- All apps included
- Email Support
- All features of Pro subscription

YEARLY CANCELLABLE

Currently, 30 apps in 5 categories are available:

Supply Chain Visualization

Network Design

Forecasting

Transport Optimization

Warehouse Analytics



Standard App Portfolio



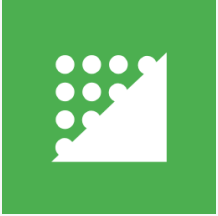
Supply Chain Map



Geocoding



Distance Calculation



Area Mapper



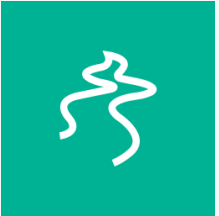
Isochrones



Center of Gravity



Center of Gravity Plus



Flow Visualization



Network Design



Network Design Plus



Nearest Warehouses



Demand Forecasting



Forecast AI



Shipment Cost Simulation



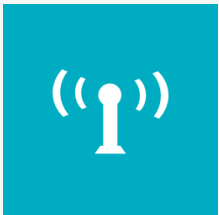
Transport Optimization



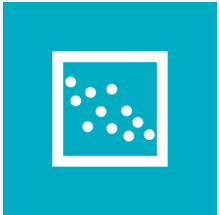
Milkrun Optimization



Last Mile



Live Tracking



Shipment Analyzer



Warehouse Modeler



Inventory Simulation



Schedule Visualization



ABC Analysis



XYZ Analysis



Center of Gravity



What it is

- The Center of Gravity App calculates the weighted centers of your customers.
- It is a great starting point for Supply Chain Analysis and Redesign.



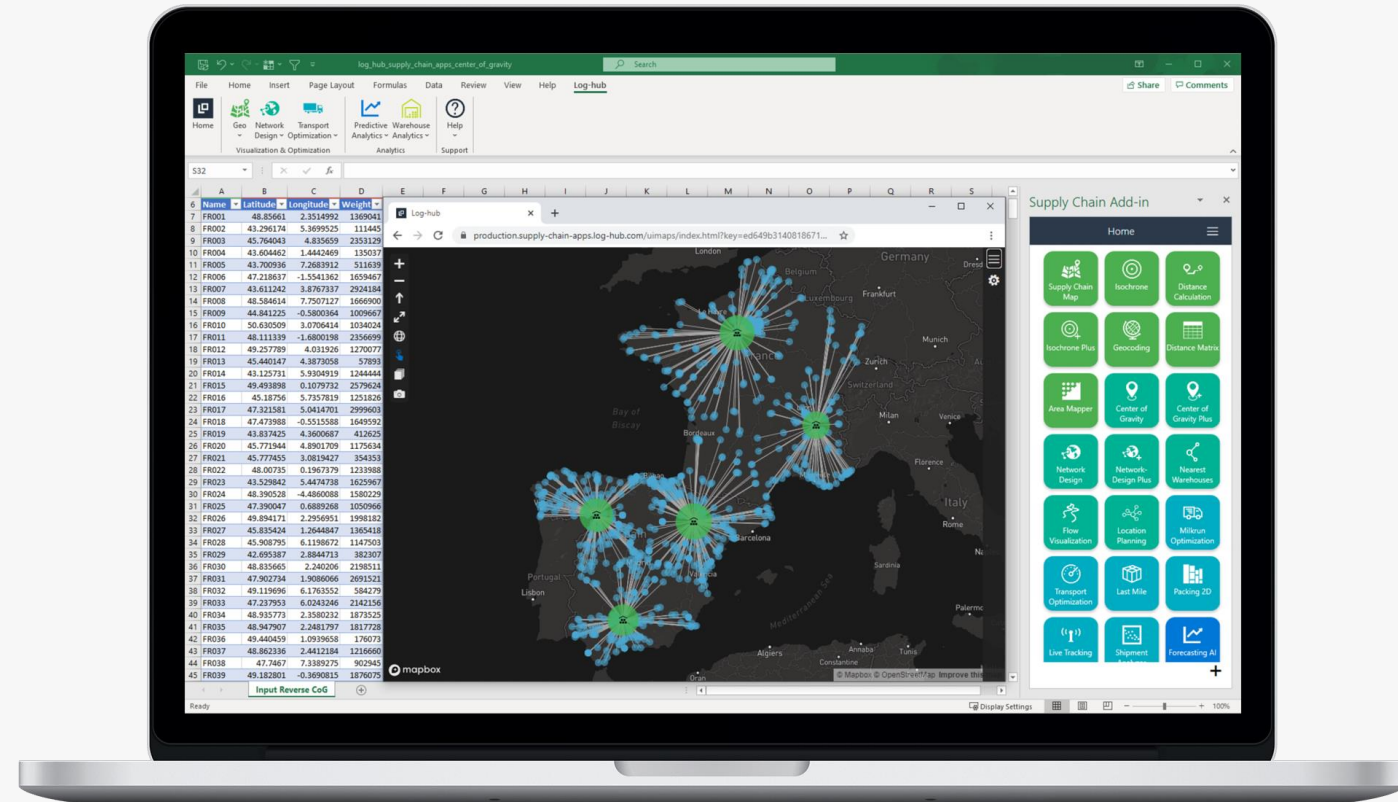
What it delivers

- Optimize Network Design for future demand changes.
- Simulate expansions in new markets and regions.
- Preconfigured dashboards for result interpretation and analysis.



What are the benefits

- Compare scenarios with a different number of centers and analyze the results based on important KPI's like total costs, average distance to a center etc.
- Impressive result visualizations on animated maps.





Network Design



What it is

- The Network Design App is a great tool for optimizing your end-to-end Supply Chain.
- It allows you to calculate the optimal number and locations of your warehouses.
- Determine to optimal product flows through your Supply Chain.



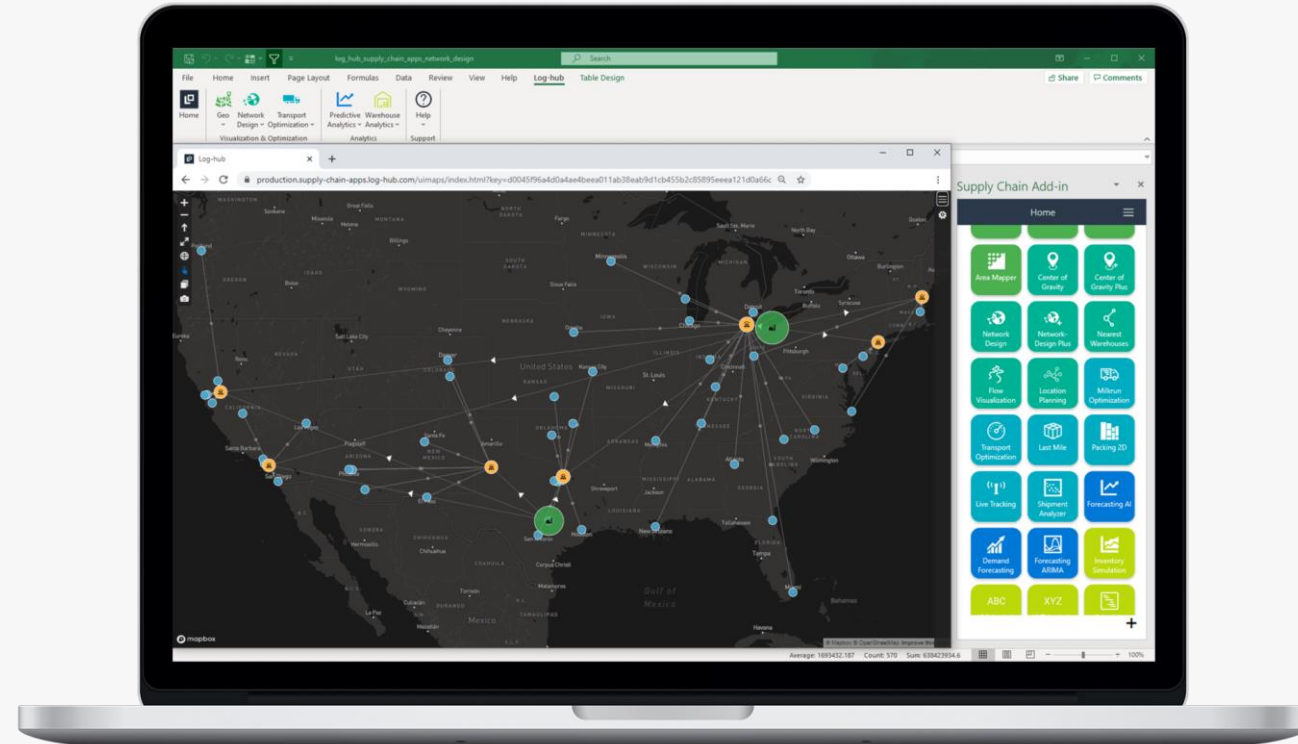
What it delivers

- Find the global optimum – regarding transport and warehouse costs, minimum and maximum warehouse capacities etc.
- Define service level requirements for each customer that have to be fulfilled.



What are the benefits

- Run network design studies by your own and simulate the effects of future demand changes on your Network Design.
- Solve complex models through processing power from the cloud.



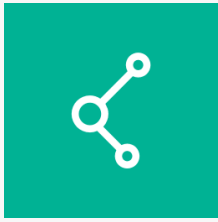
Factories



Warehouses



Customers



Nearest Warehouses



What it is

- The Nearest Warehouses App is a great tool to find the nearest warehouses for your customers.
- Specify for how many warehouses per customer you are searching or what is the maximum allowed distance.



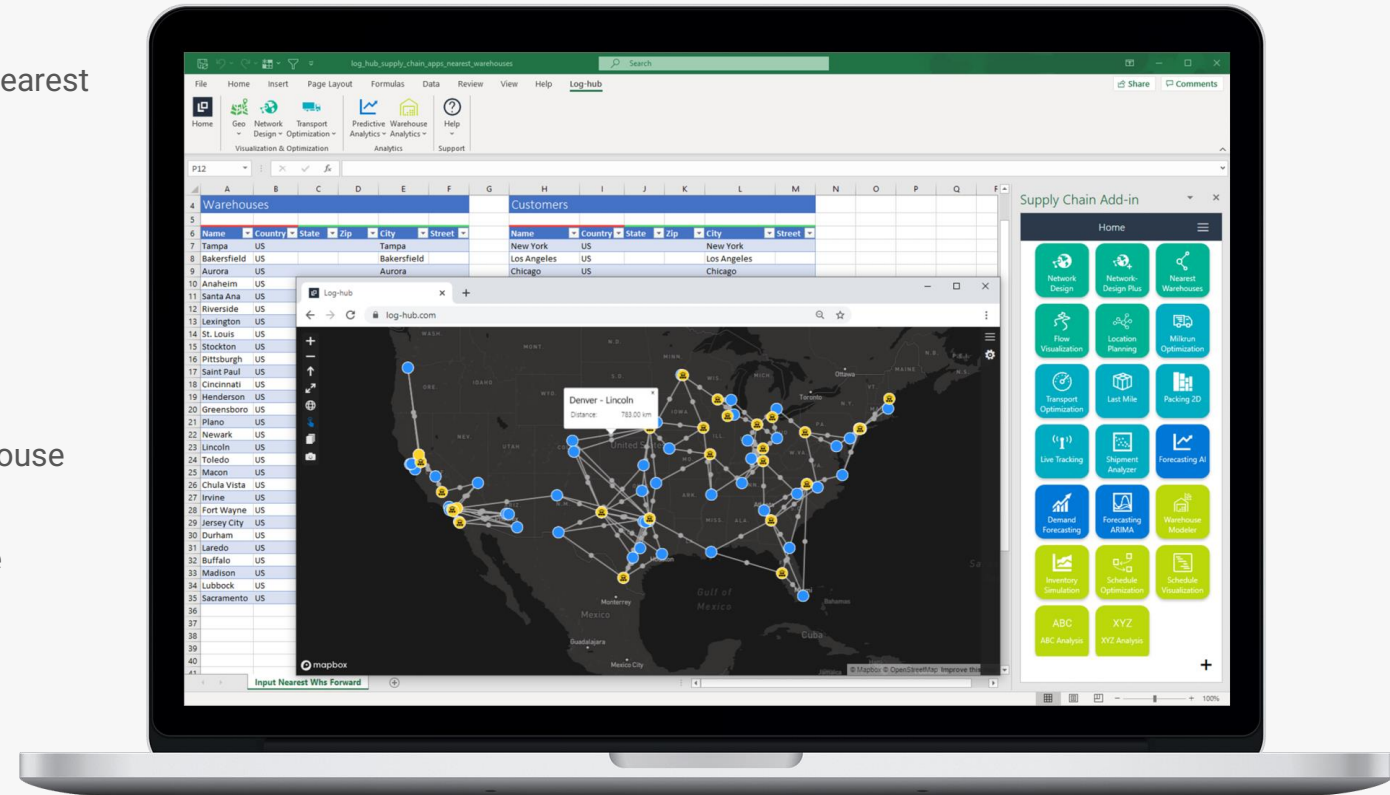
What it delivers

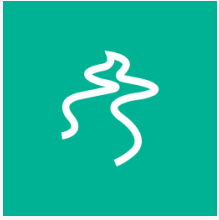
- Great starting point in Network Design Optimization.
- Smart and easy to use app for optimizing customer-warehouse assignment.
- You can use the results as input in further apps (e.g. Route Optimization)



What are the benefits

- Identify inefficiencies and improve customer-warehouse assignment.
- Realize costs savings and improve service quality.
- Create professional maps for result visualization with just one click.





Flow Visualization



What it is

- The Flow Visualization App is a great tool for creating Sankey diagrams.
- Sankey diagrams are used to visualize flows from one set of sources to another set of targets.



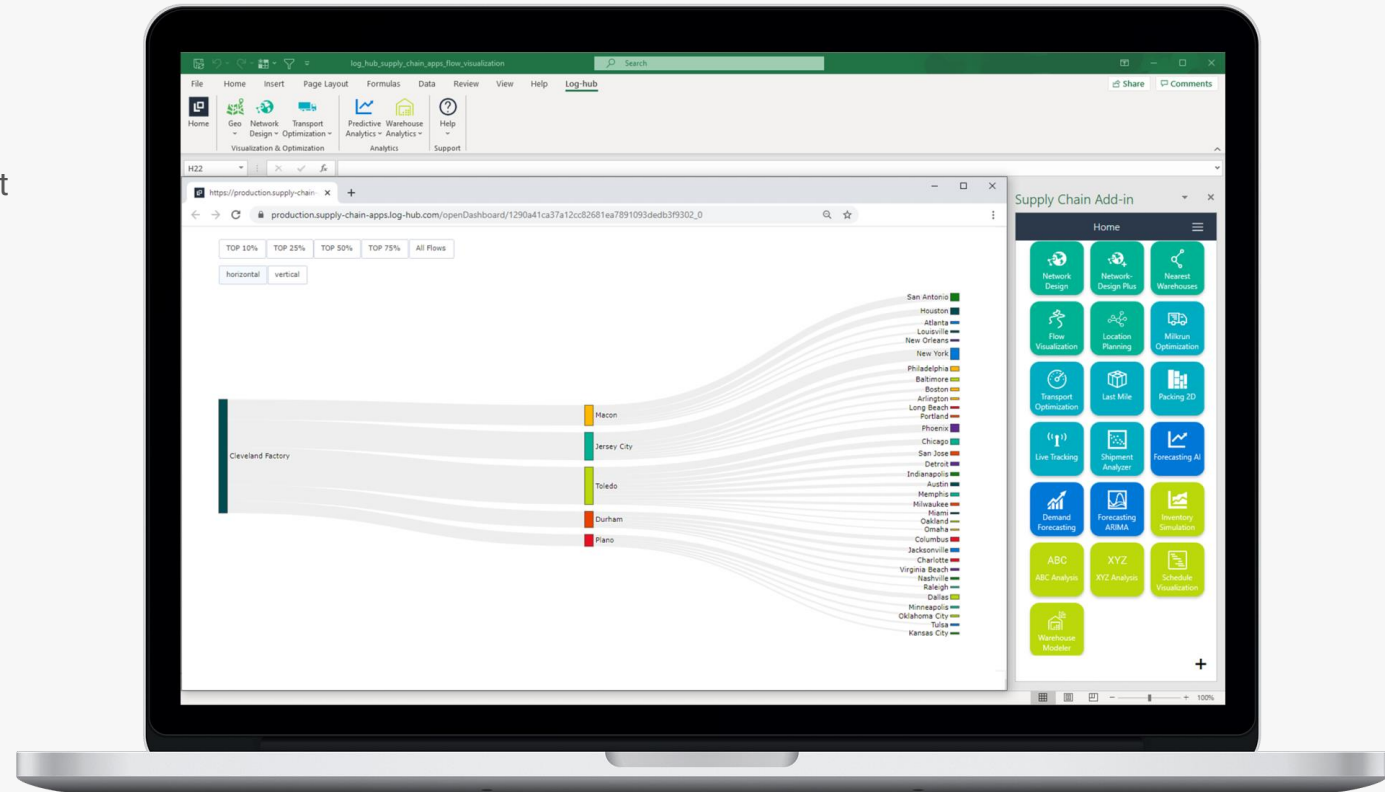
What it delivers

- Get full visibility about your in- and outbound flows.
- Visualize your in-house production flows and detect optimization potentials.
- Better and faster understanding of you Supply Chain flows.



What are the benefits

- Create sankey diagrams based on Excel data within a few seconds – no time intensive changes in other applications needed
- Impress your customers or colleagues through professional looking sankey diagrams.
- Communicate your analysis results faster and easier.





Supply Chain Map



What it is

- Supply Chain Map is a great tool to visualize and animate tabular Excel data on a map within a matter of seconds.
- Visualize your locations, relations and areas with easy-to-use templates.



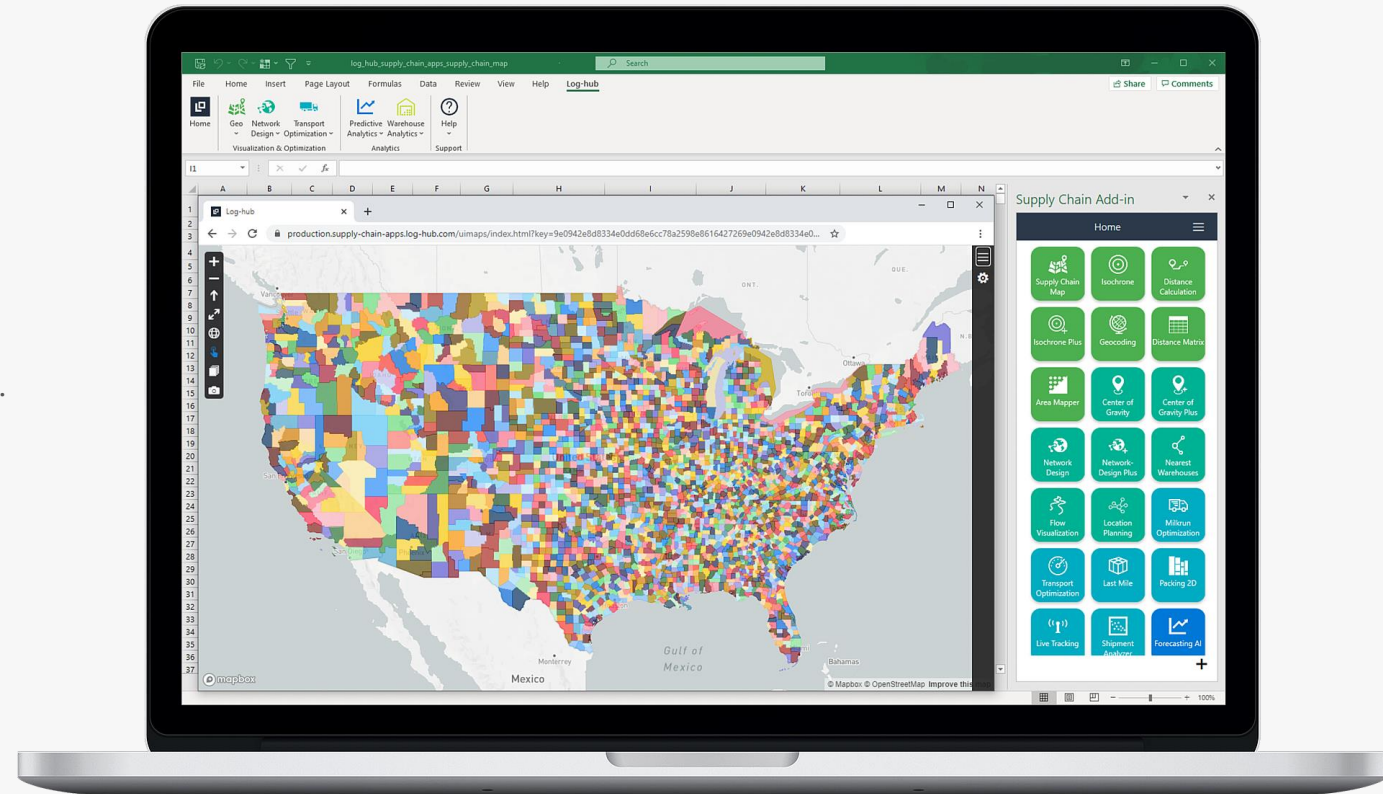
What it delivers

- Profit from worldwide map and geo material on street level.
- Customize map settings like colors, icons or transparency etc. according to your wishes.



What are the benefits

- Increase your planning efficiency – bring tabular data to live with only a few clicks in Excel.
- Identify hidden inefficiencies and optimization potentials through visualization.
- Impress your customers and colleagues with professional looking maps.





Geocoding



What it is

- Tool to translate addresses in coordinates or vice versa quickly and easily.
- Visualize and validate geocoding results with one click on Supply Chain Map and dashboards.



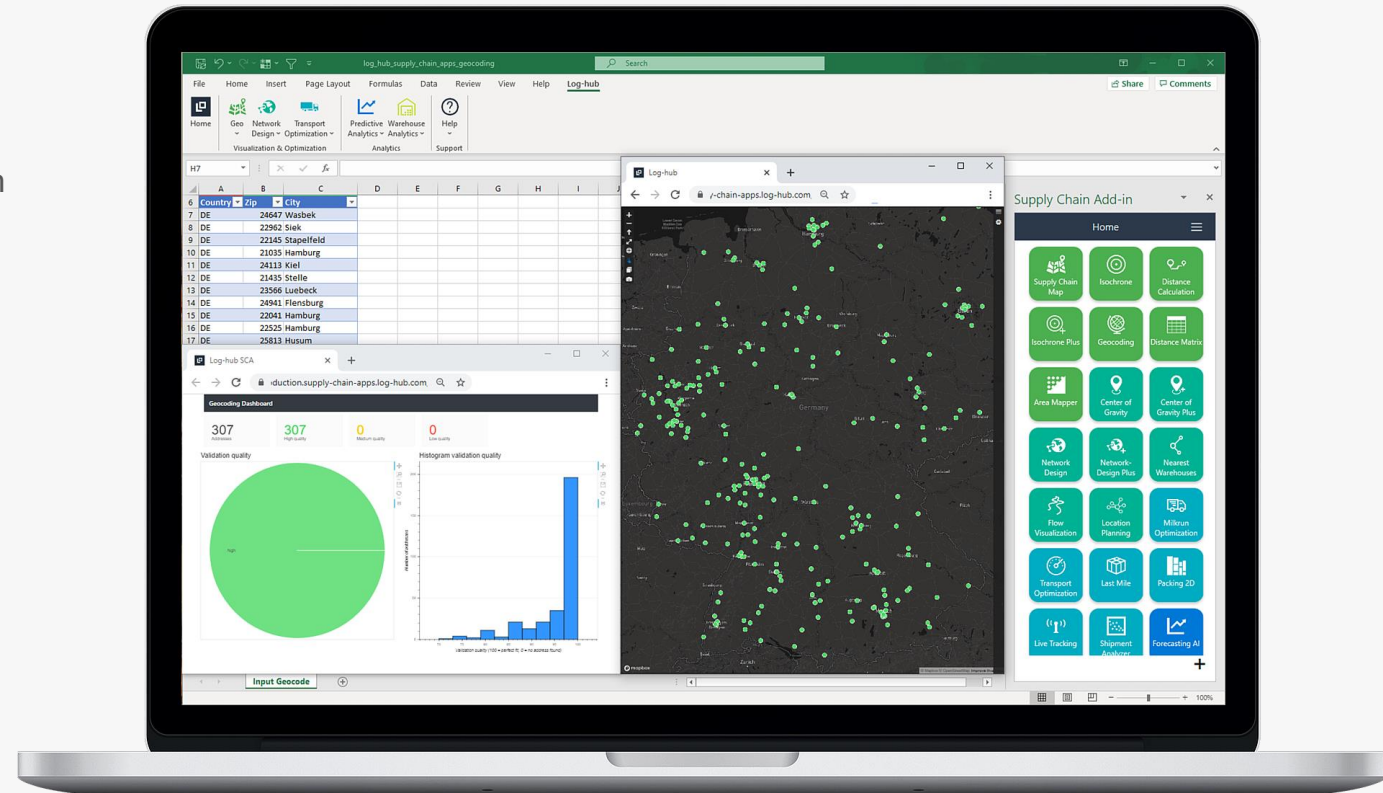
What it delivers

- High performance geocoding engine directly in Excel – no local installation needed.
- Very detailed geo-material worldwide.
- Street and even house number level available for many regions in the world.



What are the benefits

- Useful tool for every Supply Chain Planner to do standard geocoding task more efficiently.
- Save time and money through higher employee productivity.
- High geocoding quality is the basis for each successful planning project.





Distance Calculation



What it is

- Tool to calculate distances on street level worldwide.
- Visualize and validate results with one click on Supply Chain Map and dashboards.



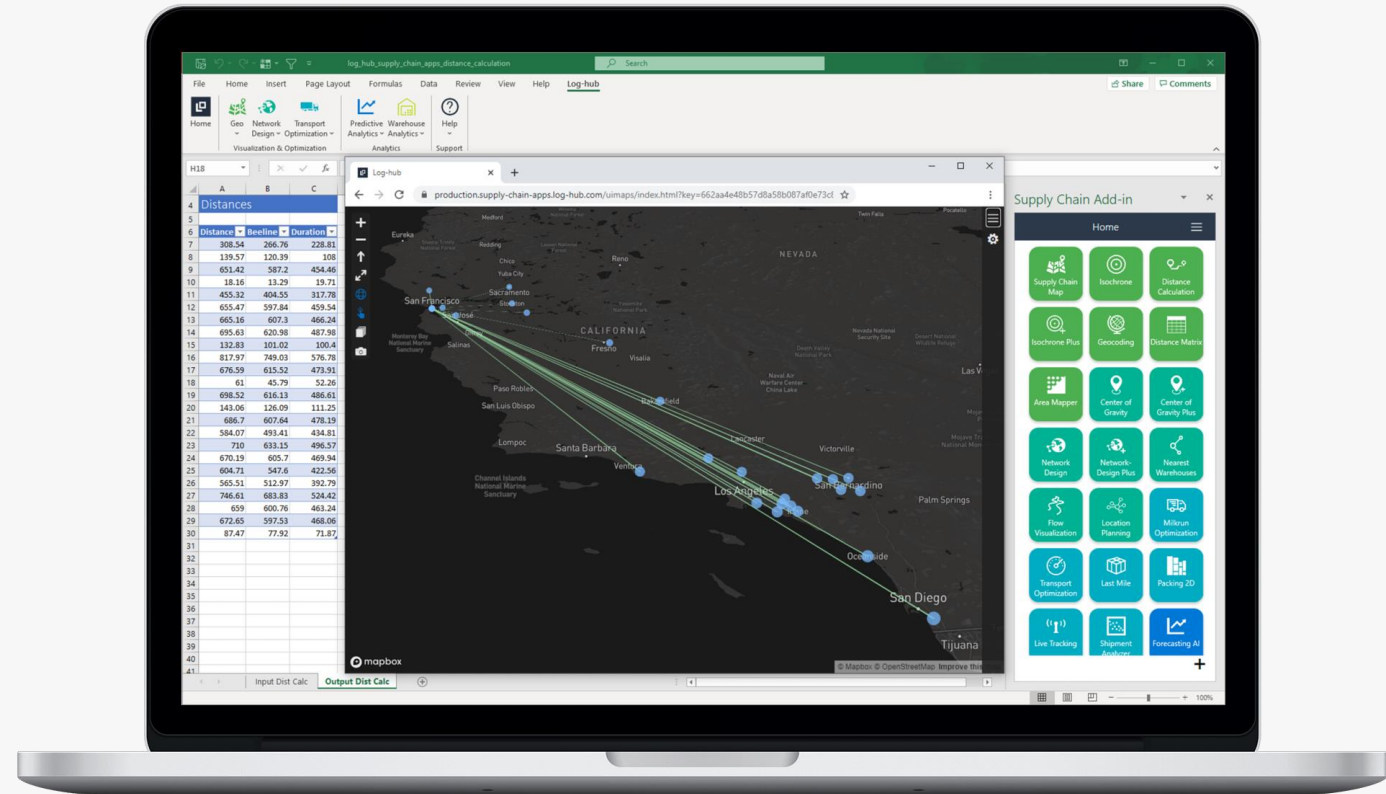
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- Street and even house number level available for many regions in the world.



What are the benefits

- Useful tool for every Supply Chain Planner to do standard distance calculation tasks more efficiently.
- Save time and money through higher employee productivity.





Area Mapper



What it is

- The Area Mapper is a great tool for mapping your customer locations with your sales areas.
- It helps you to determine which customer is in which sales area and calculates useful statistics to better understand customer distribution.



What it delivers

- Get full visibility about your sales areas on interactive maps and dashboards.
- Get new insights about your customer distribution and learn how much revenue you make in which sales area.



What are the benefits

- Save time and money through automizing standard tasks.
- Analyze your sales area on a regular basis to monitor and identify demand changes.
- Impress your customers or colleagues through professional looking maps and dashboards.





Isochrones



What it is

- The Isochrone App is a great tool to determine and visualize the areas that can be reached within a certain amount of travel time from a starting location.
- Choose between four different travel modes (car, truck, bicycling, walking) for calculating the travel time.



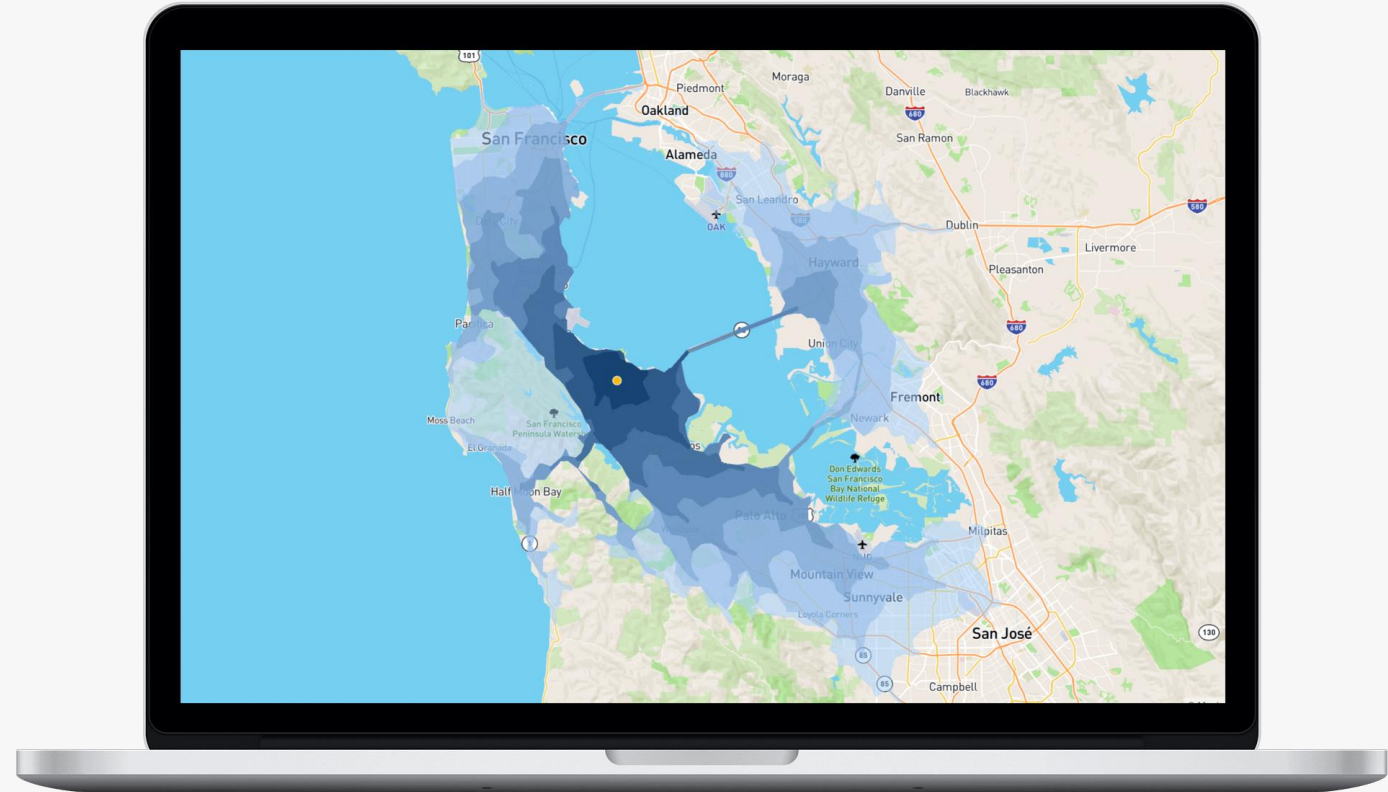
What it delivers

- Profit from detailed map and distance material all over the world.
- Calculate detailed isochrones for truck, car, bicycling and walking modes worldwide.



What are the benefits

- Analyze which customers can be reached from your shops or distribution centers in a certain amount of time.
- Make better decisions where to locate your shops or distribution centers.
- Impress customers or colleagues through professional looking maps.





Demand Forecasting



What it is

- The Demand Forecasting App is a great tool to predict future demand for multiple SKUs based on historical time series data.
- We train machine learning algorithms based on historical data to extract patterns and trends – no deep analytical background required.



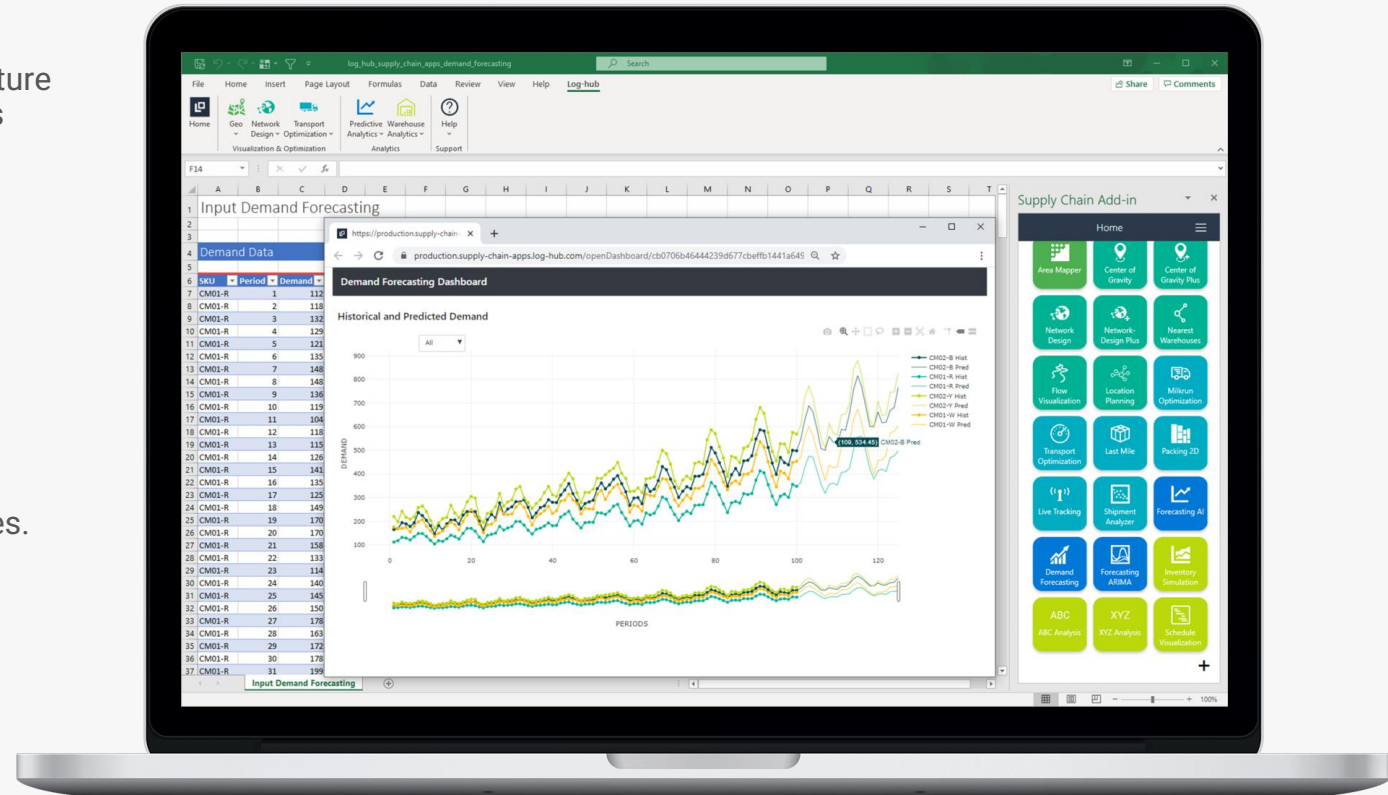
What it delivers

- Easy access to sophisticated forecasting technology.
- Higher accuracy than with traditional forecasting techniques.
- Integration of domain specific know-how and external data sources (weather, promotions etc.) in customized apps possible.



What are the benefits

- Improved forecasting accuracy by machine learning techniques.
- Cost savings through better resource utilization and avoiding over-capacities.





Forecasting AI



What it is

- Our Forecasting AI Apps are great starting points for predicting future values based on machine learning technology.
- We train algorithms based on historical data to extract patterns and trends – no deep analytical background required.



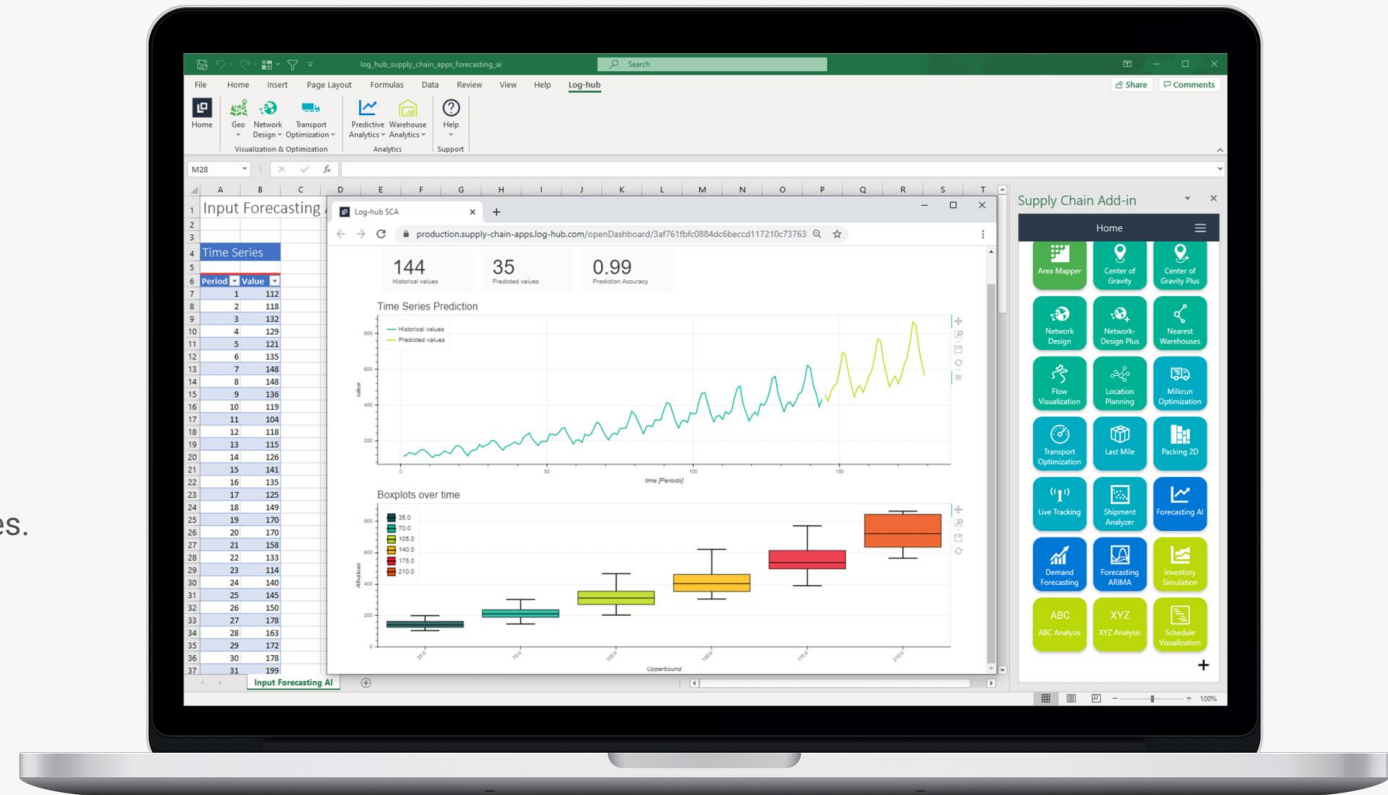
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- Integration of domain specific know-how and external data sources (weather, promotions etc.) in customized apps possible.



What are the benefits

- Improved forecasting accuracy by machine learning techniques.
- Cost savings through better resource utilization and avoiding over-capacities.





Live Tracking



What it is

- The Live Tracking App is a great tool to track all your assets in real time.
- Simply connect IOS, Android or other GPS devices to the Log-hub Live Tracking App.



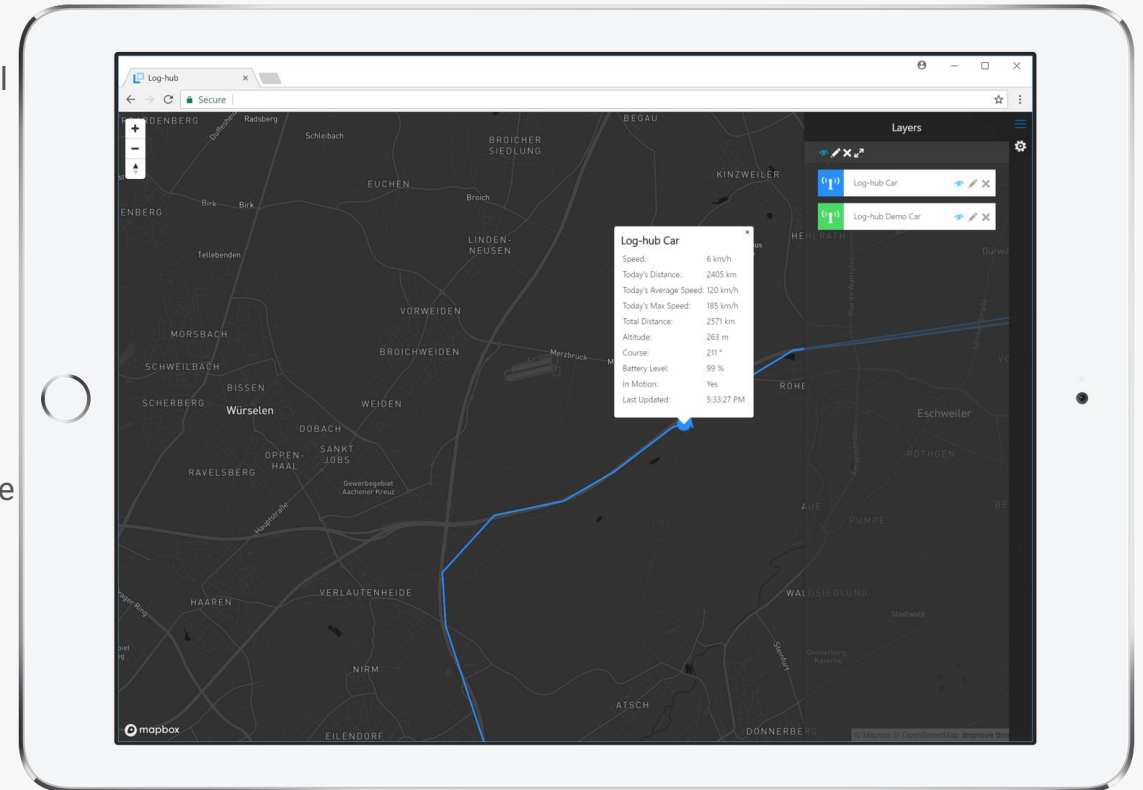
What it delivers

- Very easy to use and fast to implement real time tracking solution.
- Start without involving additional IT resources – no special hardware required.



What are the benefits

- Always know where your assets are. Optimize operational crews based on real time data.
- No more guesswork. Know when the driver arrives and leaves.
- Real time visibility for all your partners. Share live maps with your customers and vendors. Have full control about your data.





Transport Optimization



What it is

- The Transport Optimization App is a great tool to assign shipments to available vehicles in an optimal way.
- Very powerful optimization engine to optimize fleet utilization and regard many operative constraints.



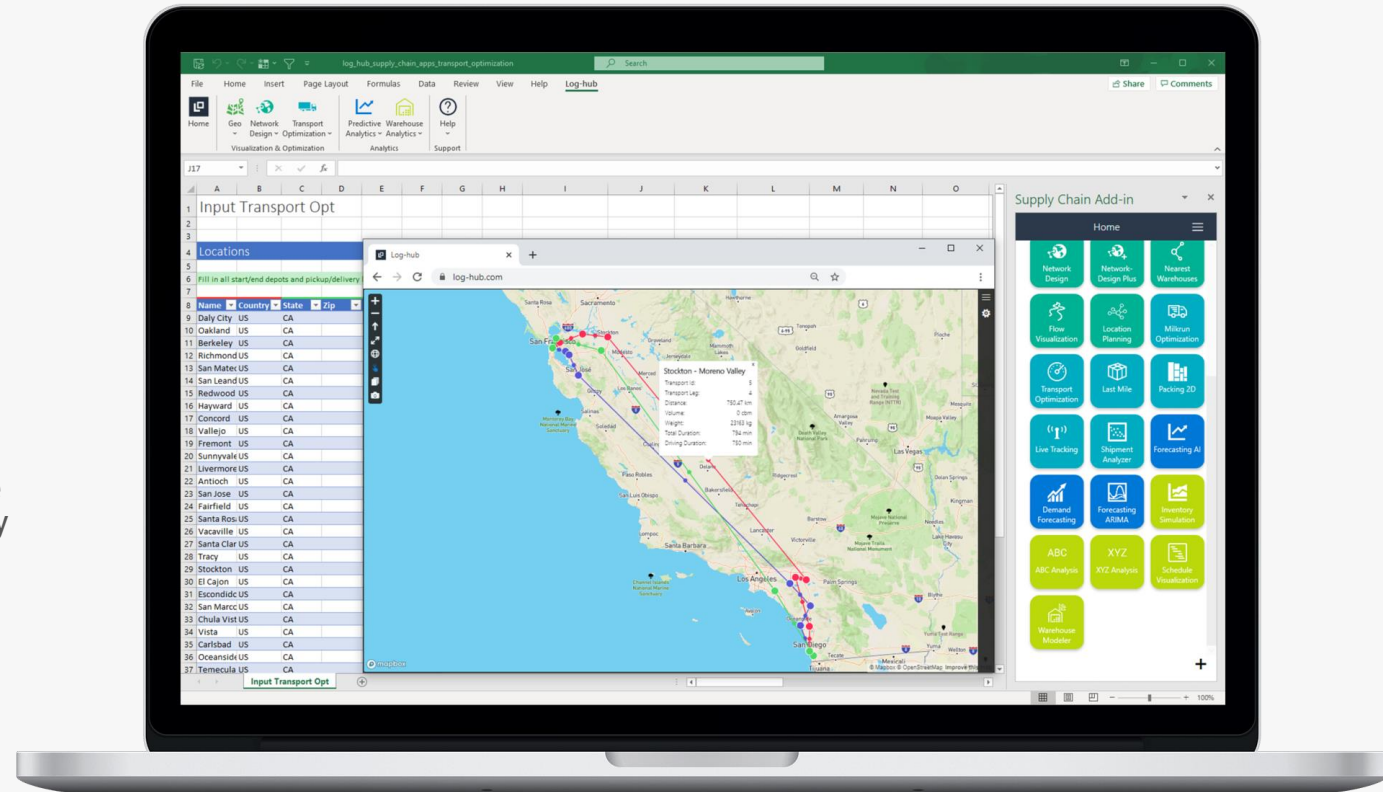
What it delivers

- Optimal fulfillment plan for a given number of orders.
- Detailed modeling capabilities like pickup and delivery time windows for shipments, detailed vehicle costs and capacity profiles etc.



What are the benefits

- Save costs and time through optimal fleet utilization.
- Simulate demand changes and make best decisions regarding your transport plans.
- Decide if it makes sense to fulfill shipments by your own vehicles or by external service providers.





Shipment Cost Simulation



What it is

- The Shipment Cost Simulator App is a great tool to calculate standard and generic rate model for validating scenarios on a transactional basis.
- Generic cost rate engine works in all pan-European countries.



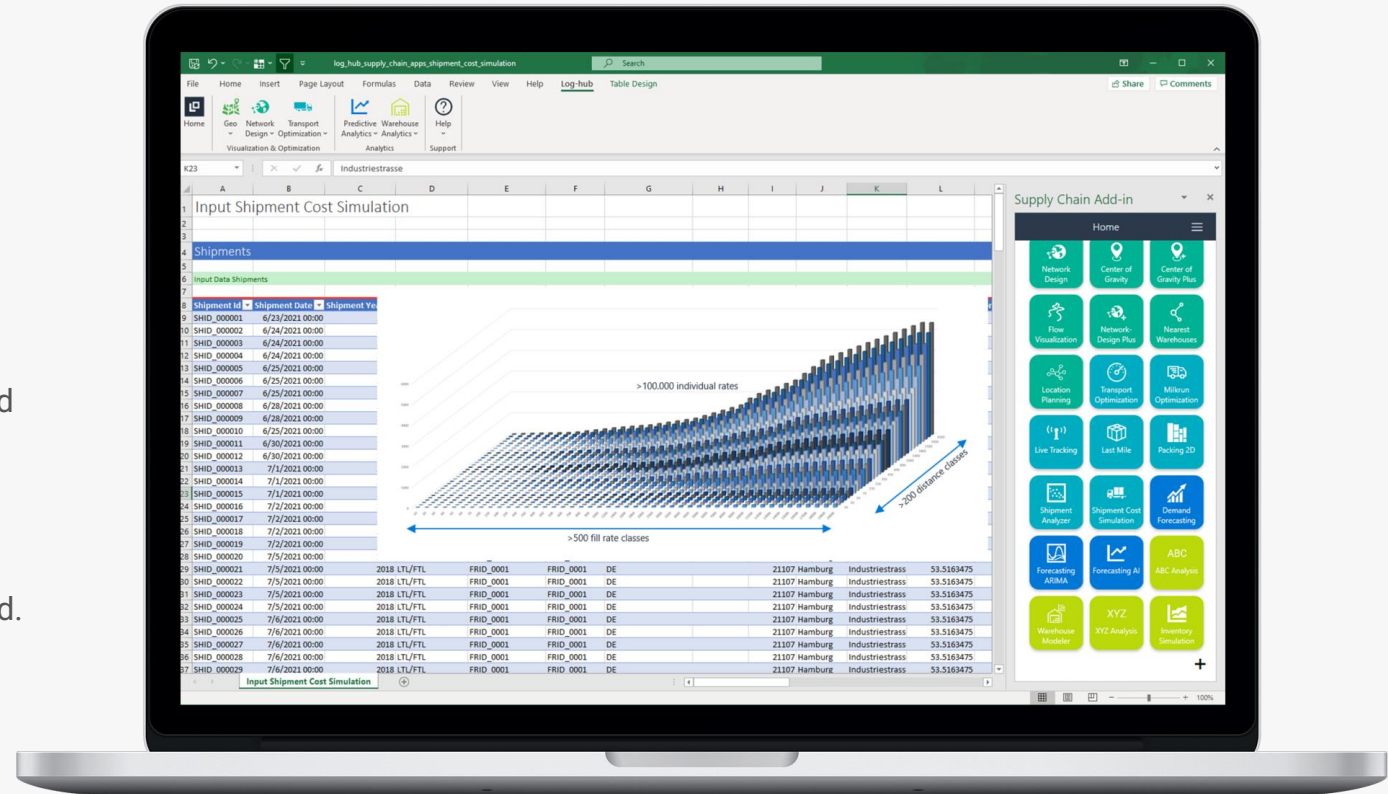
What it delivers

- The base rate contains more than 250 distance classes and more than 500 fill rate classes.
- Every shipment can be adjusted according to your today's level of as/is costs.
- Taxable or chargeable rates will be automatically calculated. Surcharges can be formalised individually.



What are the benefits

- Validate every future scenario based on generic pan-European overland rates.
- Simulate costs changes for different scenarios and make best decisions regarding your network design.





Milkrun Optimization



What it is

- The Milkrun Optimization App is a great tool to calculate cost-optimal routes for inbound and outbound shipments.
- Distribute your pickup and delivery orders with minimal costs and fulfill all service constraints.



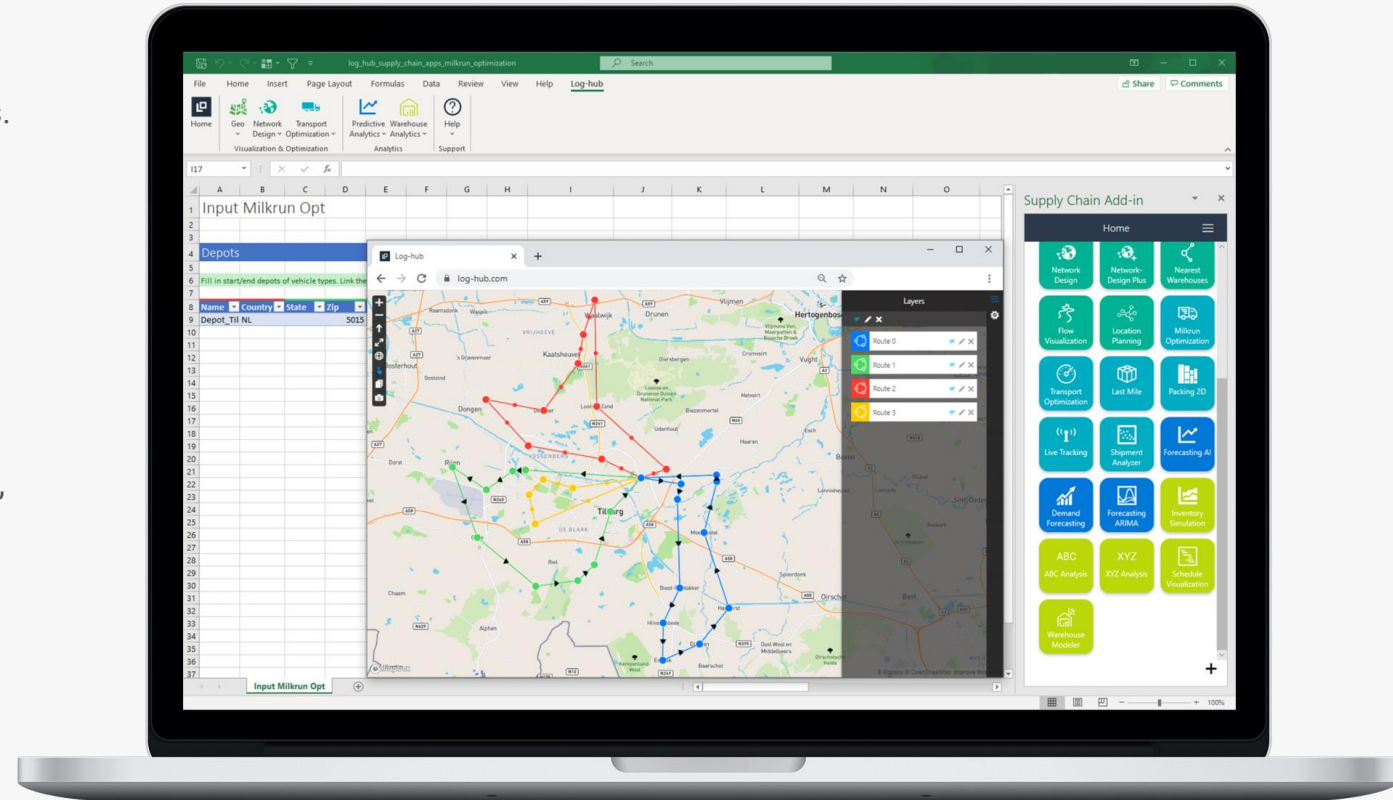
What it delivers

- Optimal fulfillment plan for all customers.
- Detailed modeling capabilities like customer time windows, detailed vehicle costs and capacity profiles etc.



What are the benefits

- Save costs and time through an optimal route plan.
- Decide if it makes sense to fulfill shipments by your own vehicles or by external service providers.





Last Mile



What it is

- The Shortest App is a great tool to optimize the sequence of your route stops.
- Sequence optimization is done based on real street distances.



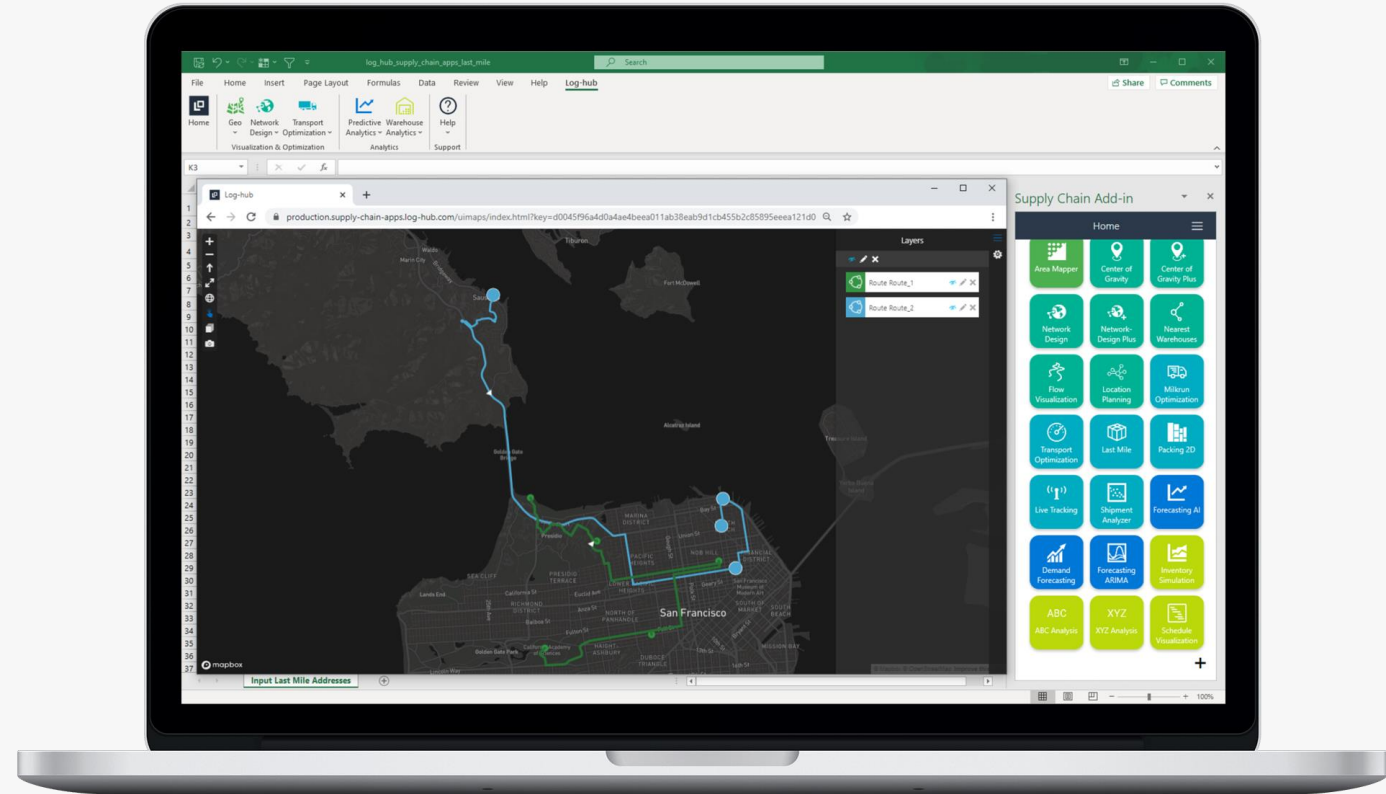
What it delivers

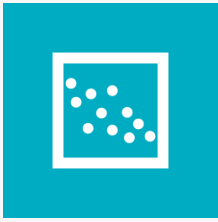
- Get optimized routes with detailed stop information.
- Get impressive animated map visualizations on street level.



What are the benefits

- Profit from a route optimization directly in Excel.
- Optimize truck routes based on data in your Excel sheet within a few seconds – no time intensive changes in other applications needed.





Shipment Analyzer



What it is

- The Shipment Analyzer App is a great tool for analyzing the structure of your shipments based on weight, volume and distance.
- In addition, the shipment distribution will be analyzed over time and category.



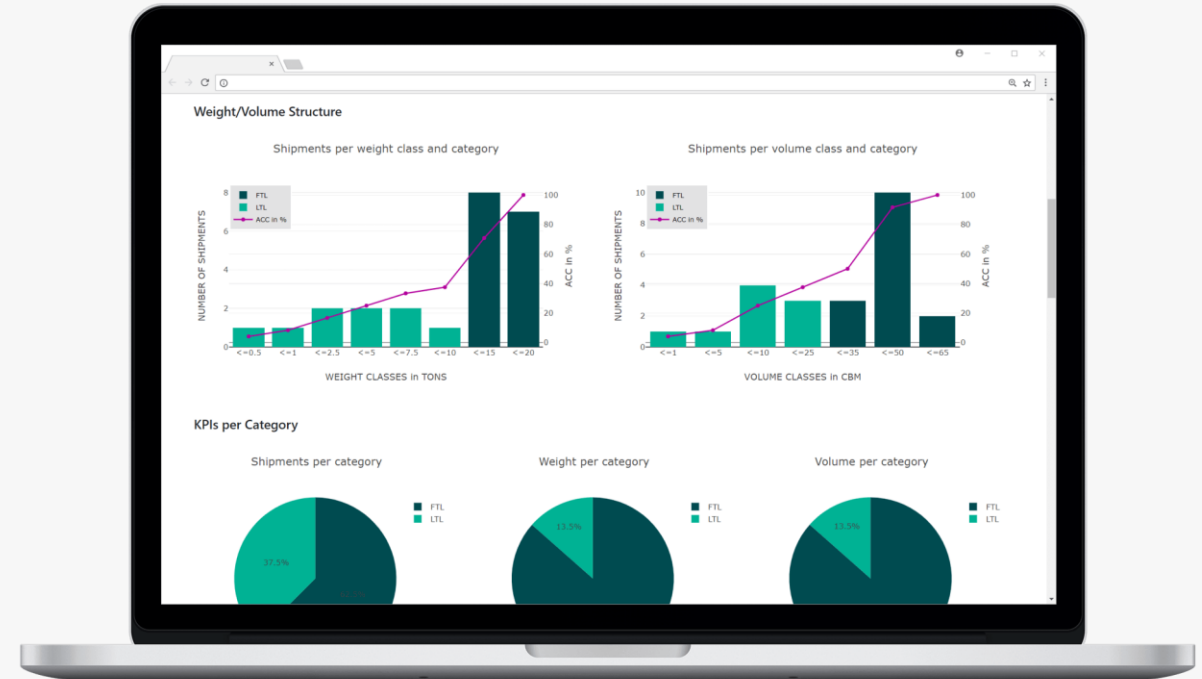
What it delivers

- Detect the weight/volume and distance regions where you have the most shipments.
- Gain new insights about the shipment distribution over time and detect patterns.



What are the benefits

- Save time and money through automation of standard tasks.
- Analyze your shipment data on a regular basis to monitor and identify changes.
- Impress your customers or colleagues through professional looking maps and charts.





Warehouse Modeler



What it is

- The Warehouse Modeler is a tool to model the layout of your warehouse. Based on this model, lots of warehouse optimization problems can be solved.
- Define lines, rack types and the line connectivity to get a precise model of the reality.



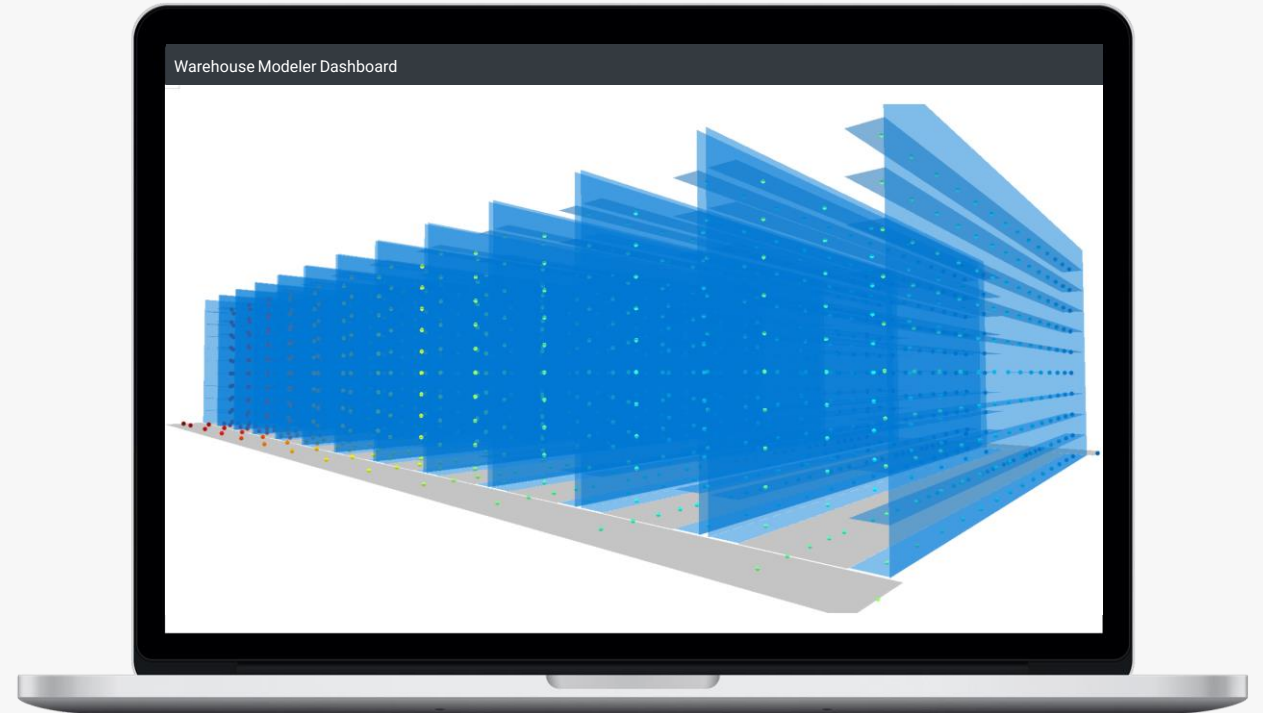
What it delivers

- Calculate distance and time matrices for different vehicle types from in- and outgoing goods department to all slots.
- No-risk way to test warehouse layout changes in a safe environment.



What are the benefits

- Visualize your warehouse layout in 3D
- Develop, verify, and share of models of your warehouse layout
- Optimize layouts, resource allocations, and operational strategies.





Inventory Simulation



What it is

- The Inventory Simulation App is a great tool to simulate different inventory policies.
- Define demand, lead time, initial inventory and set the parameter ranges you want to simulate for your product/SKU.



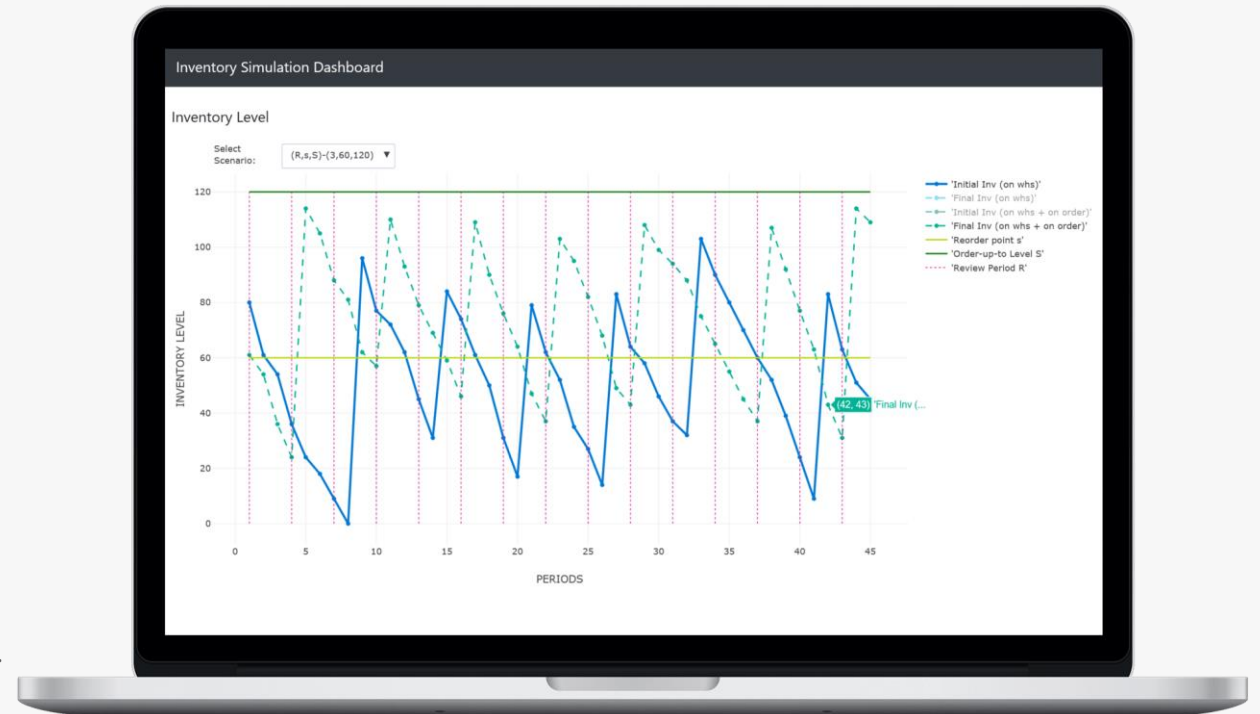
What it delivers

- Determine the optimal inventory policy through simulation in multiple what-if scenarios in terms of service levels achieved.
- No-risk way to test inventory policy changes in a safe environment.



What are the benefits

- Save money through avoiding too much inventory or stock-outs.
- Meet customer service expectations through tuning inventory parameters.
- Interactive dashboard to analyze and share results with colleagues and customers.





ABC/XYZ Analysis



What it is

- ABC analysis is an inventory categorization method which consists in dividing items into three categories, A, B and C: A being the most valuable items, C being the least valuable ones. This method aims to draw managers' attention on the critical few (A-items) and not on the trivial many (C-items).
- The XYZ analysis is a way to classify inventory items according to variability of their demand.



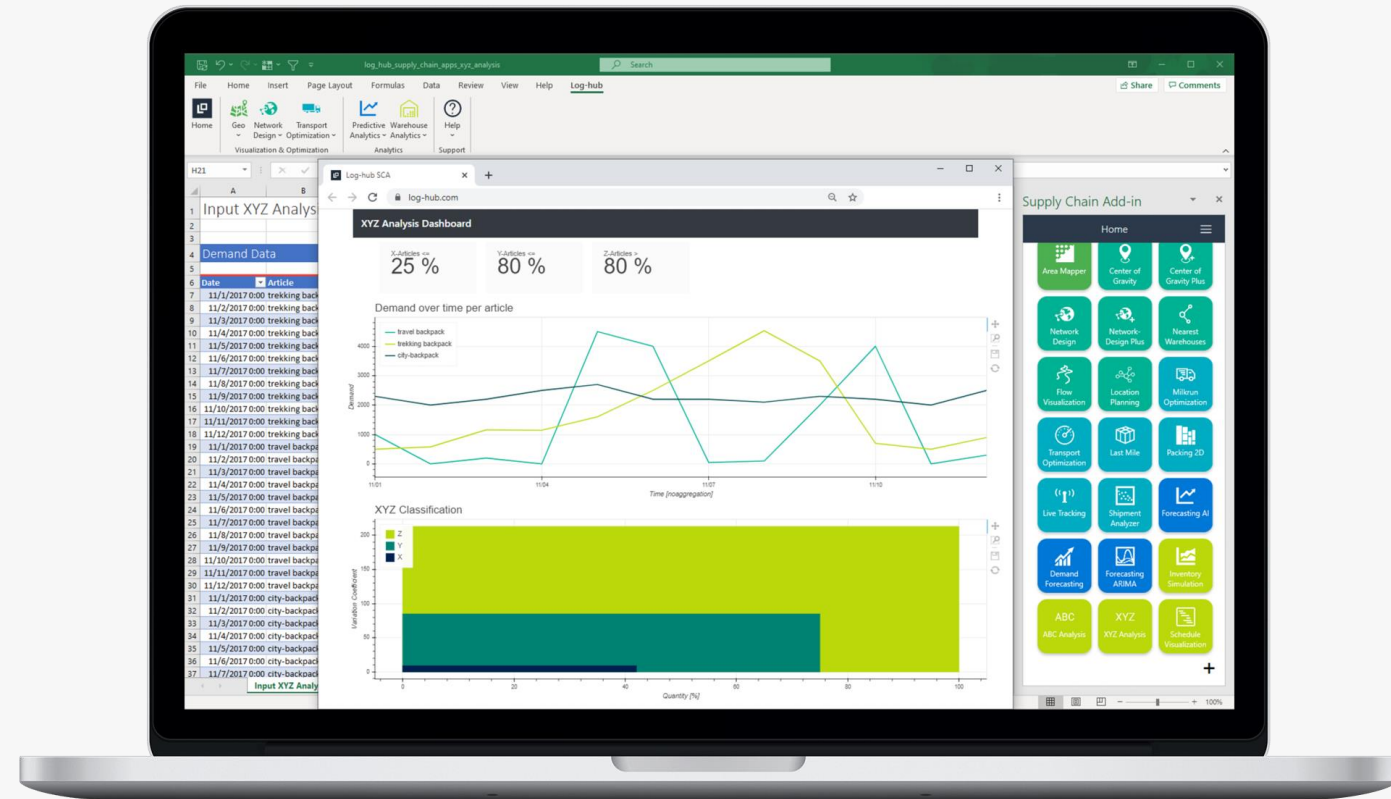
What it delivers

- Standard templates and visualizations for ABC and XYZ Analysis



What are the benefits

- Focus on interpreting the results instead of spending time with standard analysis tasks.





Schedule Visualization



What it is

- The Schedule Visualization App is a great tool for creating Gantt charts in Excel.
- Gantt charts can be used to visualize project or working plans.
- The main focus is to visualize in which order tasks have to be processed to fulfill a job.



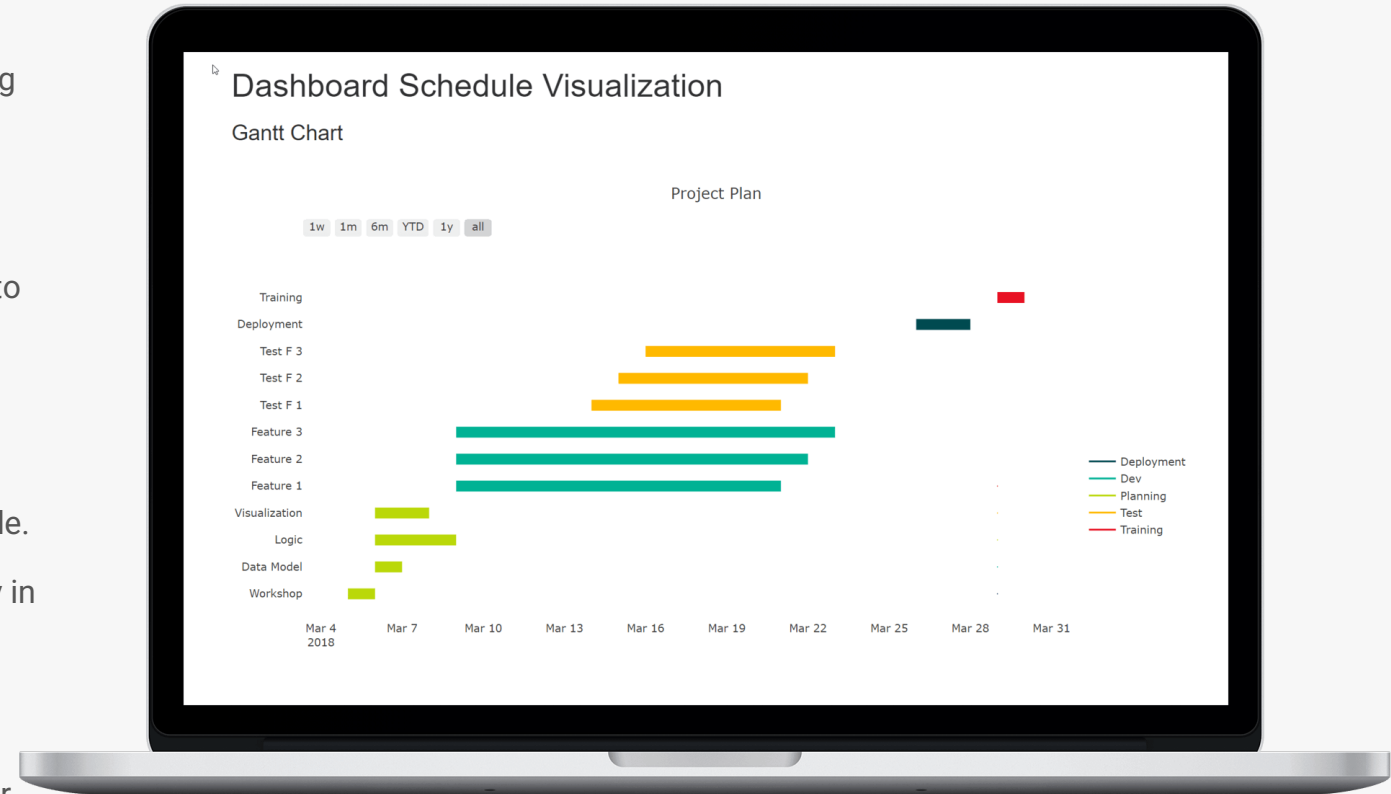
What it delivers

- Describe your tasks with start and end date including the person or resource that is responsible for it in an Excel table.
- Create an interactive Gantt chart with just one click directly in your Excel environment.



What are the benefits

- Create professional sankey diagrams based on data in your Excel sheet within a few seconds - no time intensive changes in other applications needed.
- Impress your colleagues through professional diagrams.





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