LOGISTICAL SYSTEM PLANTOUR USING BY ROAD TRANSPORT
IN COMPANY

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Abstract: System Plantour Logistic, who following order, placing customer whether consumption spoil on route, temporal restriction, eventually car outfit at reference to concrete consumption spoil allow create plan distribution and costs of goods, inclusive costing.

Key words: logistical system, road transport, lorry pool, company of road transport, optimizovací algoritmus.

INTRODUCTION

Supported by personal computer system for planning and optimization road transport is nowadays base for executive and effective solution transport and sales activity politics every modern distribution company.

SECTION 2

System Plantour Logistic is reliable and economic alternative for question solution in the area of road optimization and planning as well as for companies with own lorry pool like this also for companies with transport add-on. Plantour Logistic forms decision for optimally planning roads and time. It is effective resource direction for achievement the most lucrative solution in the transport area. Optimalization transfer route, time and distances rationalize extent of utilization cars frame within the frame distribution operation and reduce total transport cost.

Next several ten, eventually one hundred order, isn't in power of dispatcher proposes optimally distribution routes with optimally removal cars. Problems solved competent experts in the world universities and results of their work are optimizing algorithms, which respect different sorts of distribution. Applications these optimizing algorithms come into being software solution, there will be bet useful helper near optimalization transport and falling transport costs. Below optimalization distribution understand method, which following asking order on transport concrete quantities goods, placing customer's, definition claims to transport, whether already temporal, eventually request into a kind of and type application car, prove create optimal plan distribution, cap fulfillment young and old request with minimal transport costs.

A lot of companies but proceed in different way. Primal decreasing costs on distribution see above all in putting servo system (GPS systems). Here with but eliminate only costs infliction lack of discipline personnel distributor. Much greater benefit brings following and control parameters optimally projection route.

One of the commercially most successful solutions verified already upwards of 15 yearly experiences, is from author shop-floor Deutsch company-CORBITCONNECT AG, which obtains with product-PLANTOUR LOGISTIC in-line branch dominance on the market optimizing and logistical information systems in Europe.

Assistance PLANTOUR LOGISTIC is complex software solution plicate from several together interconnected modulated. Basis is module...
PLANTOUR, cover effectively planning and optimization distributive process companies, module CARMANAGER is on message lorry pool and complex controlling distribution and module TRACKMANAGER with exploitation GPS technology provide for online following cars on routes, include scoring difference from planning parameters. Basis success of the system is besides of built-in optimizing algorithm also high-class vectorial digital map.

Today are integrate maps to the system of majority countries of EU (Germany, French, Austrian, Portugal, Poland and of course Czech and Slovak republic). Applications coordinate system is WGS84. Digital map SR includes highways, the first, second and third classes roads and more than 4200 places, urban sections and associates. 139 places are digitized in street level, there are virtually all residences above 5000 residents. Road system includes all cartage constraints and parameters needs for calculation forwarding routes. Roads unload from road sector, long generally 60 till 200m that are containing database how e.g. title, type interaction (e.g. road first classes, pedestrian zone), speed, constraints driving (e.g. absence of interaction interaction, tonnage, negotiable heigh), velocity coefficient transit.

Following addresses (addresses with number, title associate, streets) consumers are placed (located) in vectorial map. Bind of the consumer in map at the system call geo - ciphering. System has function automatic geo-ciphering consumers to digital map with possibility manual specification.

Module PLANTOUR serves for optimization in binding transfer requests disposable means of transport and to determine optimally distribution routes. Near optimization respects quite a number of restrictive requests - temporal windows consumer, loading time, unloading, weighted and volume removal. Results from processing is optimal layout of drive cars and their optimally removal.

Of the bankrupt's estate everyday jobs dispatcher is draught a plan routes for distribution for goods. First possible step is method FIXTOUR, which allows in digestedly textual and graphic form to illustrate poop about every usage route. Method provides database about going system transport planning. Preserve primal routes, only their between consumer optimizes. Results, acquired method FIXTOUR, serve as comparative base to determine effects applications another grades optimization.

The following step is primary optimization SINGLETOUR, which well-preserved original of the number of routes optimizes order consumers on route. This method provides first sight to possible economies, which are given reach only following optimization advice vie individual consumers.

Closing phase is optimization method FREETOUR. System at the following tribal datum about consumers, order prepare for expedition, disposable lorry pool, with complying claims to distribution (e.g. temporal windows vie) forms through the medium method free optimization distribution plan. Free optimization provide minimize distribution costs generation only route, cap delivery order consumers in the required time and by selection only disposable cars.

Dispatcher is able to daily create several variant plans, through the medium various parameter adjustment optimization, with using simulation future state (What if?), eventually create plan through the medium combination tribal routes and routes calculation free optimization. In this manner draught a distribution plan is able to operative interfere and real distribution realize by only the best from these. Every plan includes information about all costs, eventually load in detailed division on single routes. Planning costs on distribution should be analyzed from various point of view - general, canned, variable, personal, costs on distribution centre, costs on carrier, costs on consumer... Routes contain complex temporal and kilometric time table stopping place at consumers. Besides of itinerary dispatcher has access to graphic portrayal planning routes and removal lorry pool. Scenes are in digestedly textual or graphic form. Module CARMANAGER is analytical tool to support management lorry pool and on complex analysis distribution costs. Compare planning and real data and in choices period prove calculate costs on consumer. Module TRACKAMANAGER allow with integration servo control and planning system, following and speedy scoring freightage cycle. It approve proactive warn dispatcher omnibus derogated from planning parameters routes, e.g. on stop car outside residence consumer, on rise in temperature in freightage space. Putting modules does not depend on the manufacturer, let us say from supplier mobile GPS ones.

Essential for solution still alternating requests in the area of logistician is Plantour Logistic strategic industrial software into the future.
CONCLUSION

Information system Plantour is supporting tool for professional planning and optimization, destined for duty, point forwarder’s and distributive companies. Plantour is universal application, which flexibly modifies every company and internal process. Optimization forwarding routes, time and distances rationalize extent of utilization of transfer operation and it brings possibility cut-down straight transport costs in the space of 15-20%. One of the reasons, why these planning and optimizing systems were not till now on Slovak market, is inaccessibleness suitable digital map foundation of the Czech and Slovak republic. Today there exist those kinds of digital charted records in quality which is necessary for planning and optimization transport.

Not only for carrier whether for distributive businesses, but virtually for every company, which distribute to their products (IF already own transporters or external transporters), mean transport costs of high account item budget. Nowadays there is few company in CR and SR, that utilize for realization one’s transfer performance some integrated software system, that would be oriented to region planning and optimization transport. System Plantour Logistic follows orders, placing customer whether consumption place on route, temporal restriction, connection outfit car at reference to concrete consumption place allow create plan distribution and landing goods, inclusive calculate costs.

REFERENCES:

ИЗПОЛЗВАНЕ НА ЛОГИСТИЧНАТА СИСТЕМА „PLANTOUR” В КОМПАНИЯ ЗА АВТОМОБИЛЕН ТРАНСПОРТ

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СЛОВАКИЯ

Резюме: Системата „Plantour Logistic“, която се съобразява с наредежданията на клиента, така, че консумацията е изгодна за маршрута, съобразени са временните ограничения, възможностите оборудване на колата по отношение на конкретната консумация и позволява да се създават планово разпределение и остойностяване на стоките.

Ключови думи: логистична система, автомобилен транспорт, автобаза за камиони, компания за автомобилен транспорт.

СЪОБЩЕНИЕ ОТ ПРЕЗДАВАЩИЯТА СИСТЕМА „PLANTOUR” В КОМПАНИЯ ЗА АВТОМОБИЛЕН ТРАНСПОРТ

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