



SUPPLY CHAIN MANAGEMENT

**TRANSPORTATION
ACTIVITY PROFILING
AND DATA MINING**



- Shipment frequencies
- Cube-per-shipment distribution
- Weight-per-shipment distribution
- Value-per-shipment distribution
- Shipment classifications
- Origin-destination windows
- On-transit time requirements
- Mode and carrier availability and capacities
- Transportation rates

Multicommodity activity profile from the chemical Industry

T&D Profile	Unit of Measure	Commodities			TOTAL
		Feedstock	Intermediate	Polymers	
Shipment Value	\$'s per shipment	\$ 64,726	\$ 55,247	\$ 44,911	\$ 52,256
Order Value	\$'s per order	\$ 21,670	\$ 56,964	\$ 39,950	\$ 44,753
Shipments per Order	Shipments	\$ 0.33	\$ 1.03	\$ 0.89	\$ 0.86
Freight per Order	\$s	\$ 613	\$ 1,746	\$ 2,790	\$ 1,896
Freight per Shipment	\$s	\$ 1,831	\$ 1,693	\$ 3,136	\$ 2,214
Weight per Order	Tons per order	40	101	56	74
Weight per Shipment	Tons per shipment	118	98	62	87
Miles per Shipment	Miles	1118	352	724	538
Ton-Miles per Shipment	Ton-miles	333,430,396	700,831,839	569,911,228	1,656,240,498
Ton-Miles per Order	Ton-miles	111,630,742	722,606,699	506,968,093	1,418,425,240

International transportation activity profile international health and beauty aids

	Revenue \$000s	Freight \$000s	Weight 000 lbs.	Cases	Shipments	Freight/ Revenue
Japan	\$ 17,680	\$ 413	284	12,390	15	2.33%
Taiwan	\$ 8,295	\$ 104	232	9,210	17	1.25%
Hong Kong	\$ 1,375	\$ 16	42	1,670	9	1.17%
Australia	\$ 883	\$ 36	30	1,335	9	4.12%
New Zealand	\$ 395	\$ 11	11	511	6	2.81%
Malaysia	\$ 1	\$ 1	0	3	1	56.25%
Asia-Pacific	\$ 28,630	\$ 581	599	25,118	57	2.03%
Canada	\$ 1,234	\$ 45	49	2,756	8	3.61%
Mexico	\$ 226	\$ 8	10	344	3	3.65%
U.S.	\$ 16,705	\$ 446	-	-	-	2.67%
NAFTA	\$ 18,164	\$ 499	59	3,100	11	2.74%
Netherlands	\$ 1	\$ 4	13	366	2	387.50%
Europe	\$ 1	\$ 4	13	366	2	387.50%
Guatemala	\$ 2	\$ 2	3	105	1	108.33%
Latin America	\$ 2	\$ 2	3	105	1	108.33%
OVERALL	\$ 46,796	\$ 1,085	673	28,690	71	2.32%

Carrier activity profile

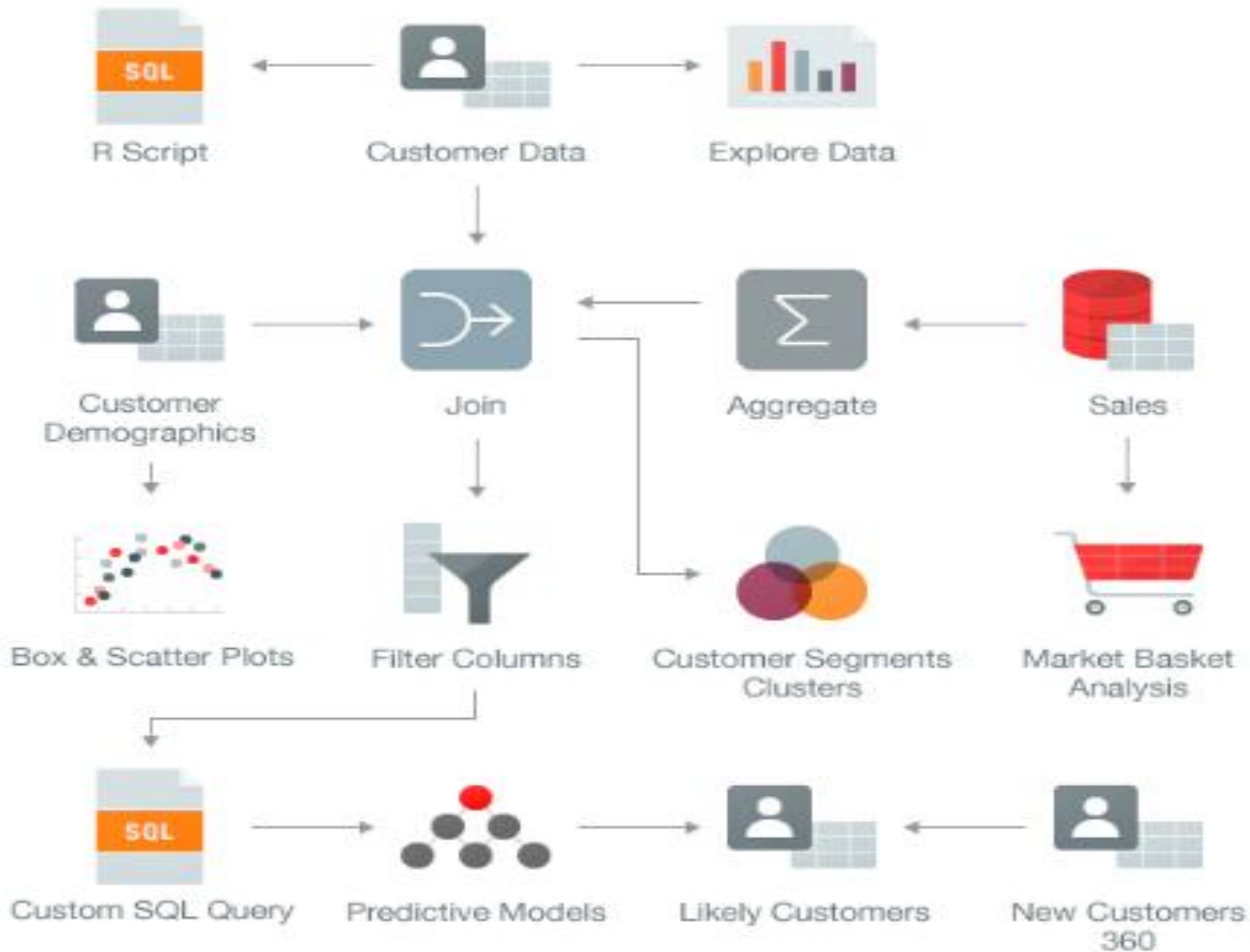
Number of Trips

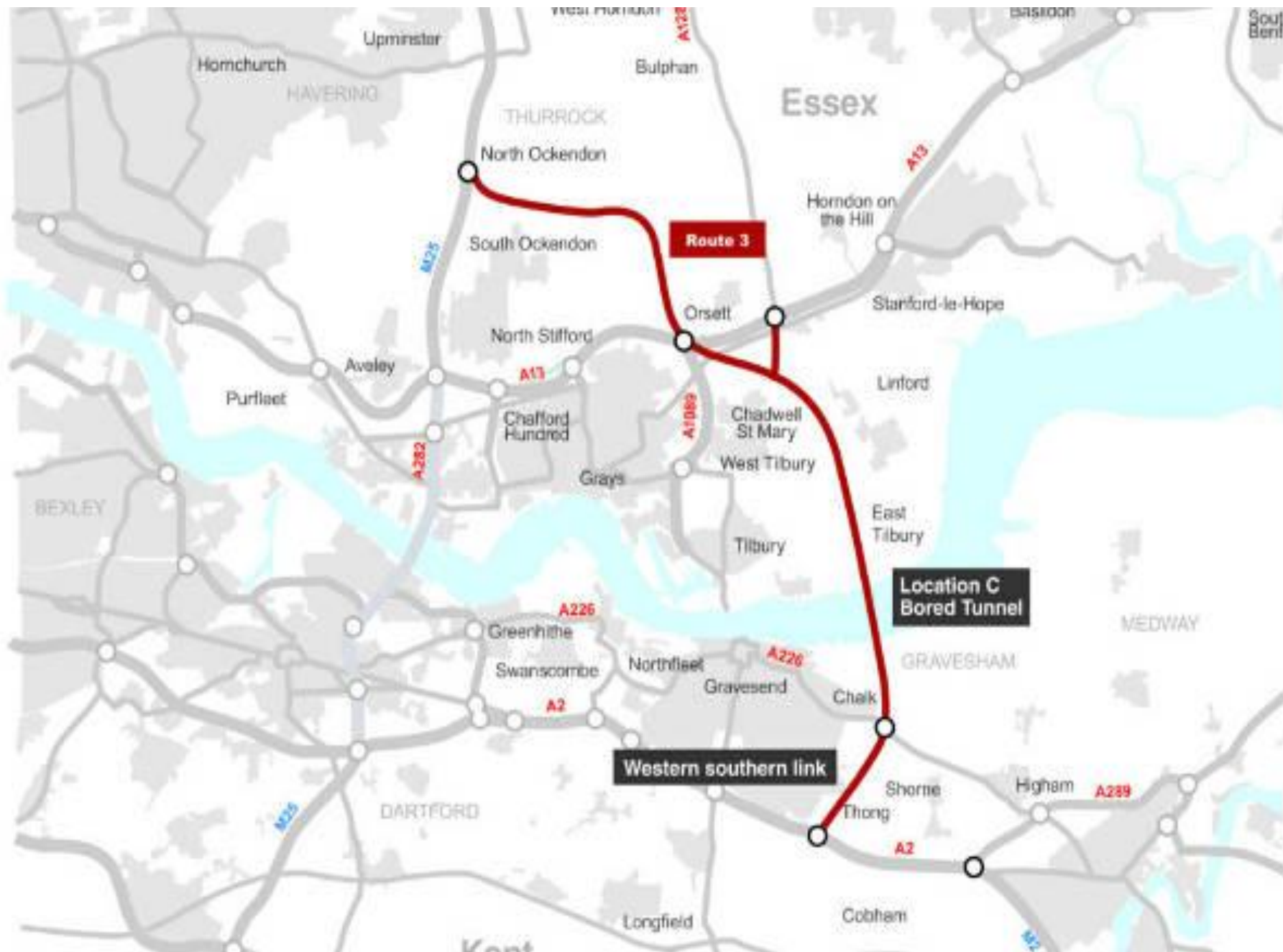
TYPE	<u>% of Carriers</u>	<u>% Trips</u>
A	21.7%	80.0%
B	30.4%	15.0%
C	47.8%	5.0%

Carrier Name	Number of Trips	%	Cumulative %	Class
Transp. Propio	7725	45.6%	45.6%	A
Transportista 6	2328	13.7%	59.3%	A
Transportista 2	2169	12.8%	72.1%	A
Transportista 11	683	4.0%	76.2%	A
Transportista 4	455	2.7%	78.8%	A
Transportista 8	453	2.7%	81.5%	B
Transportista 7	416	2.5%	84.0%	B
Transportista 16	341	2.0%	86.0%	B
Transportista 9	326	1.9%	87.9%	B
Transportista 24	317	1.9%	89.8%	B
Transportista 23	303	1.8%	91.6%	B
Transportista 13	298	1.8%	93.3%	B
Transportista 3	287	1.7%	95.0%	C
Transportista 17	235	1.4%	96.4%	C
Transportista 25	181	1.1%	97.5%	C
Transportista 12	141	0.8%	98.3%	C
Transportista 10	112	0.7%	99.0%	C
Transportista 28	78	0.5%	99.4%	C
Transportista 19	41	0.2%	99.7%	C
Transportista 26	20	0.1%	99.8%	C
Transportista 27	16	0.1%	99.9%	C
Transportista 20	12	0.1%	100.0%	C
Transportista 14	7	0.0%	100.0%	C

Carrier activity profile (cont)

Cube Movement				
	TYPE	<u>% of Carriers</u>	<u>% Trips</u>	
	A	17.4%	80.0%	
	B	34.8%	15.0%	
	C	47.8%	5.0%	
Carrier Name	Cubic Meters	%	Cumulative %	Class
Transp. Propio	140,013.2	39.5%	39.5%	A
Transportista 6	66,841.4	18.8%	58.3%	A
Transportista 2	54,512.6	15.4%	73.7%	A
Transportista 11	13,260.4	3.7%	77.4%	A
Transportista 7	11,066.5	3.1%	80.6%	B
Transportista 9	9,935.5	2.8%	83.4%	B
Transportista 13	8,400.1	2.4%	85.7%	B
Transportista 17	8,232.7	2.3%	88.1%	B
Transportista 8	7,335.0	2.1%	90.1%	B
Transportista 4	6,444.8	1.8%	91.9%	B
Transportista 24	5,076.4	1.4%	93.4%	B
Transportista 16	4,900.3	1.4%	94.8%	B
Transportista 23	4,716.6	1.3%	96.1%	C
Transportista 3	4,343.7	1.2%	97.3%	C
Transportista 25	2,798.2	0.8%	98.1%	C
Transportista 12	2,467.8	0.7%	98.8%	C
Transportista 10	1,913.7	0.5%	99.3%	C
Transportista 28	1,232.7	0.3%	99.7%	C
Transportista 26	333.8	0.1%	99.8%	C
Transportista 20	234.5	0.1%	99.8%	C
Transportista 19	229.5	0.1%	99.9%	C
Transportista 27	216.0	0.1%	100.0%	C
Transportista 14	129.0	0.0%	100.0%	C





Data Logger Systems

Building your Data Logging System



A Data Logger

RFCTemp2000A

Wireless Thermocouple
Temperature Data Logger

MadgeTech Software

MadgeTech 4 Software

Free Standard Software available or Secure
Software available for purchase

Transceiver & USB Cable

RFC1000 Wireless Transceiver
With USB Cable & Power Adapter

Advantages and Disadvantages

	Rail	Road	Water	Air	Pipeline
Price	Low	High	Very low	Very high	Very low
Speed	Slow	Fast	Very slow	Very fast	slow
Door	Sometimes	yes	sometimes	no	sometimes
Reliability	Medium	Medium	Low	Very high	Very high
Packaging needs	High	Medium	High	Low	Nil
Risk of loss and damage	High	Medium	Medium	Low	Very low
Flexibility	Low	High	Low	Very low	Very low
Environmental impact	Low	High	Low	Medium	Low











PART TRUCK LOADS



OVERSIZED CARGOES



FULL TRUCK LOADS



HIGH-VALUE CARGOES

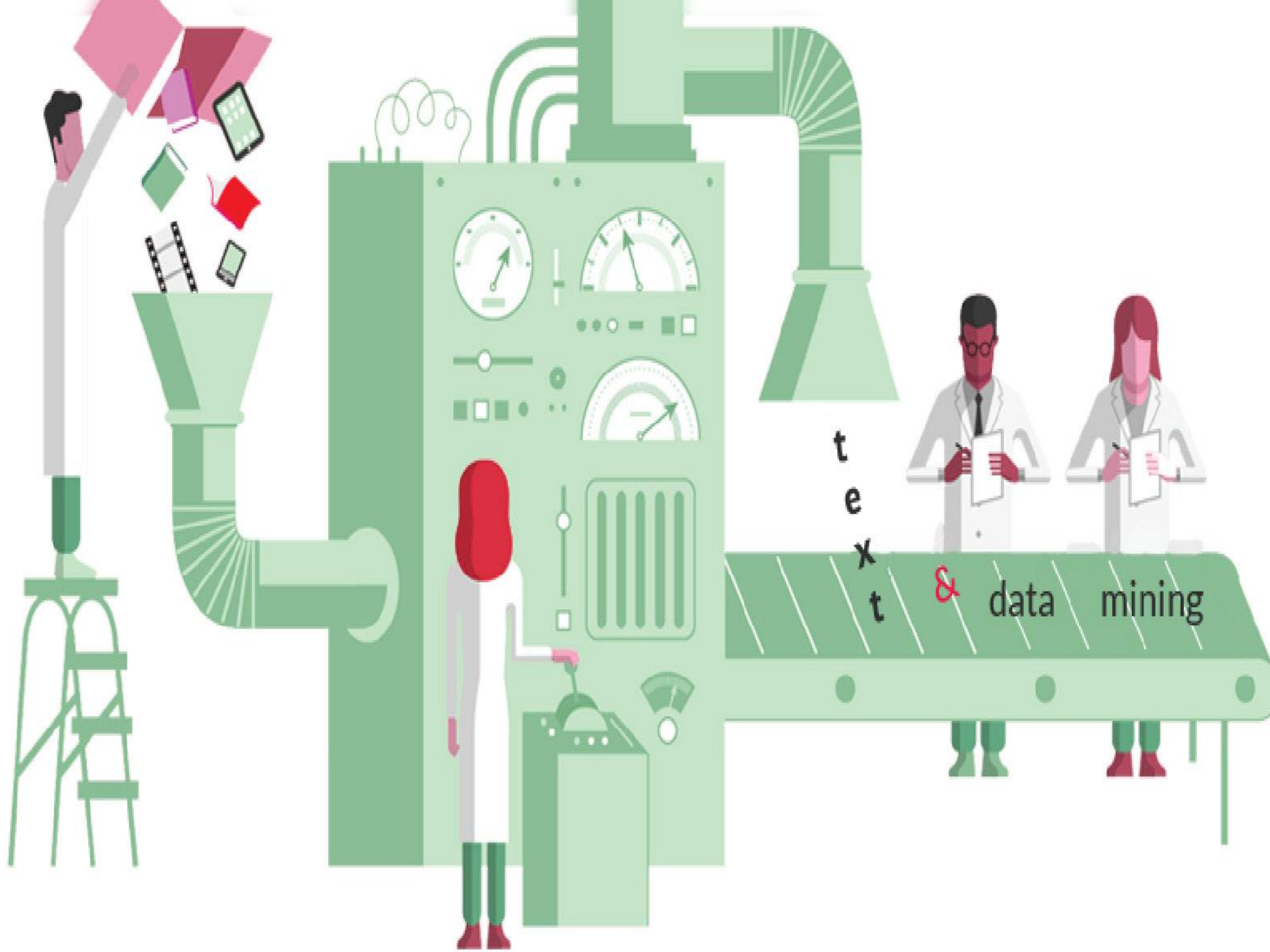


ADR

HAZARDOUS CARGOES

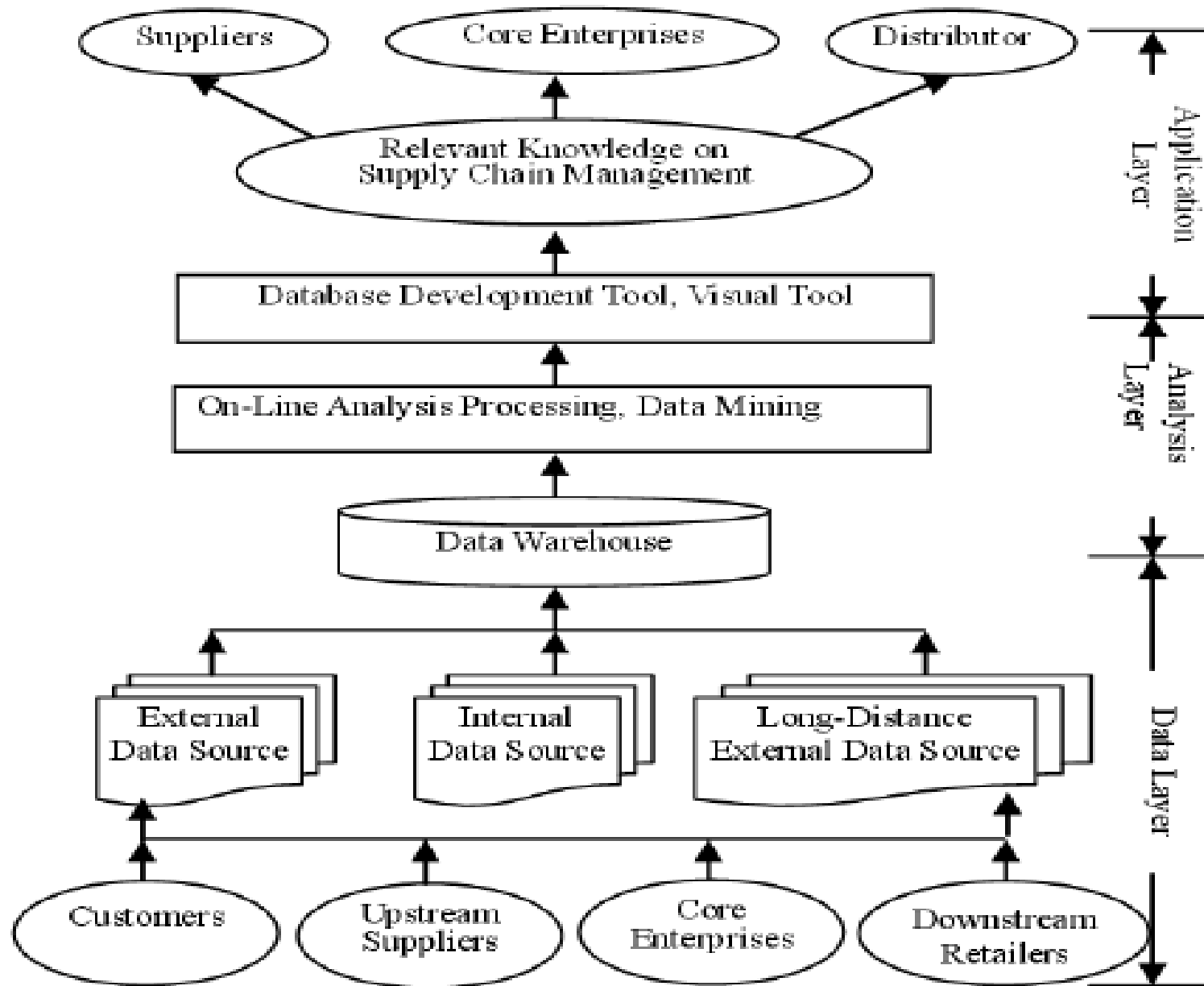


PROJECT TRANSPORTATIONS



t
e
x
t
&
d
a
t
a
m
i
n
i
n
g

Structure of Supply Chain management based on Data Mining





1 step

- Data preparation

2 step

- Data mining

3 step

- Application of data mining results

6939937510	1885752724	5982534904	6602408003	0484501653	8284681382	6554878189
582074944	8912279381	2875546873	8150193511	4658043886	6868386894	3129784821
5923078164	8301194912	1159562863	2533824300	2723771178	271115991	6829889487
0628620899	9833673362	8823537875	3558764024	9111111111	8539251157	2265880485
8628034825	4406366430	9375195778	7496475263			7964014270
3421170879	8602139498	1857780532	9141992726			4775551323
8214808651	6395224737	1712268066	0426992279			7964145152
5282306647	1907021798	1300192787	6782354781			3746234364
0938446095	6094370277	6611195909	6360093411			428584447
5058223172	0539217176	3141701999	2164121911			626586782
5359408128	2931767523		4586315011			651141354
4811174502	8467481111		2851829711			357395231
8410270193	7669011111		0674981111			342716610
8521105539	0071111111		9458111111			113586536
6486229489	4111111111		9956111111			1129524
5493038196	3111111111		0791111111			1111111
4428810975	2111111111		7551111111			1111111
6659334461	1111111111		4911111111			1111111
2847564823	0111111111		9611111111			1111111
3786783165	9111111111		6511111111			1111111
2712019091	8111111111		8181111111			1111111
4564856692	7111111111		5561111111			1111111
3460348610	6111111111		0742611111			1111111
4543261111	5111111111		2786251111			1111111
1321111111	4111111111	8890750983	181841757	9485764078	5225499548	0643021845
2129021111	3111111111	8375463744	4672090977	9512994683	6672782398	3199048481
18640348181	2111111111	4717719255	7727938000	8835259570	6456596116	0053706146
5981362977	1111111111					



THE END

mukhamkam@gmail.com