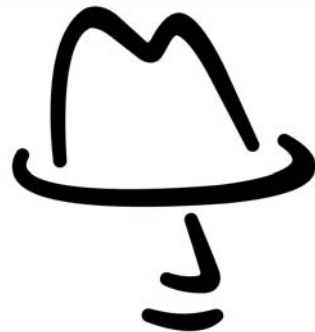


IKE

Agent based data analysis and knowledge extraction

Acklin, The Netherlands
www.acklin.nl
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Acklin
agent based solutions

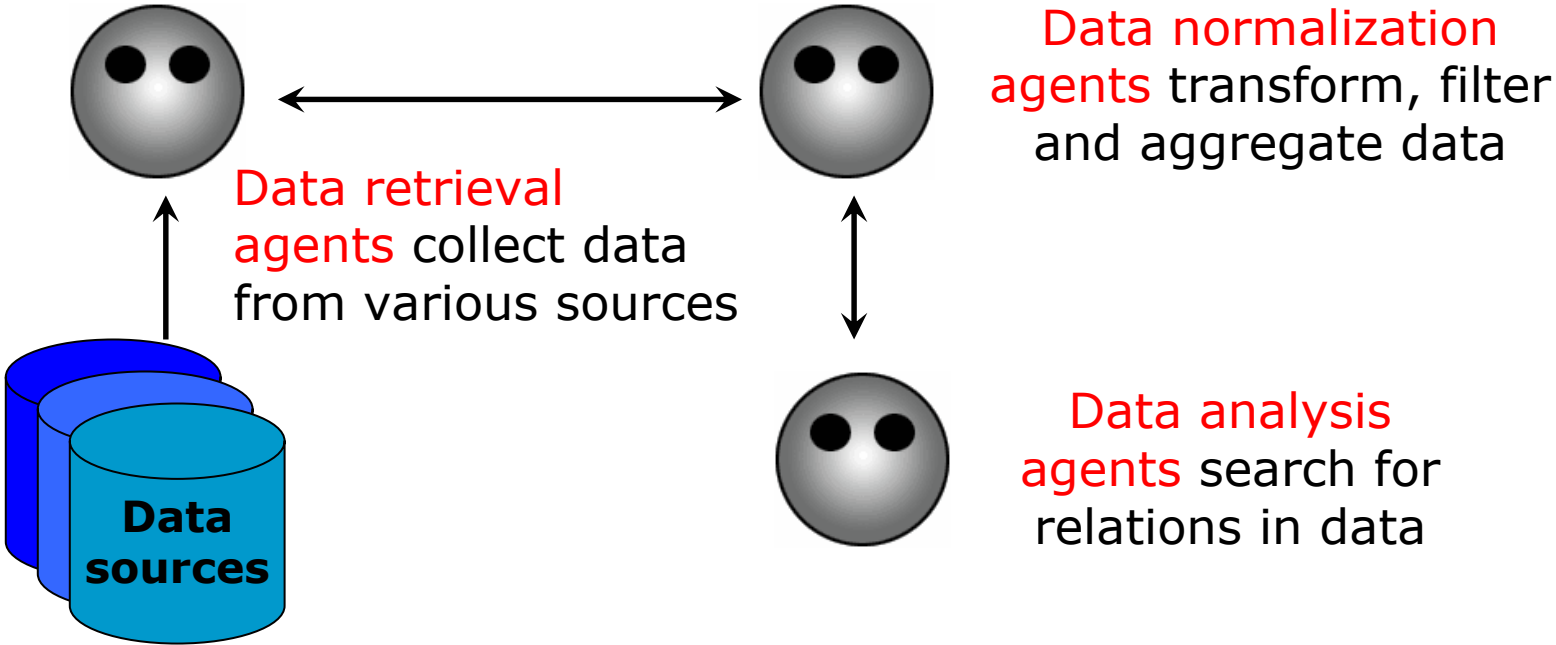
Introducing IKE

- Intelligent Knowledge Extraction (IKE) tool for datamining
- Gain insight in complex relations that are hidden in historical data
- Based on the analysis, predictions for new cases can be made



IKE Digital Architecture

IKE Presentation Layer



Example Case

- IKE is used by a large manufacturer of industrial pumps
- The company keeps track of all won and lost tenders
- IKE is used for finding key factors of successful tenders



Step 1

- Data retrieval agents gather historical tender data from databases
- User can select, filter and aggregate information for analysis



Ike

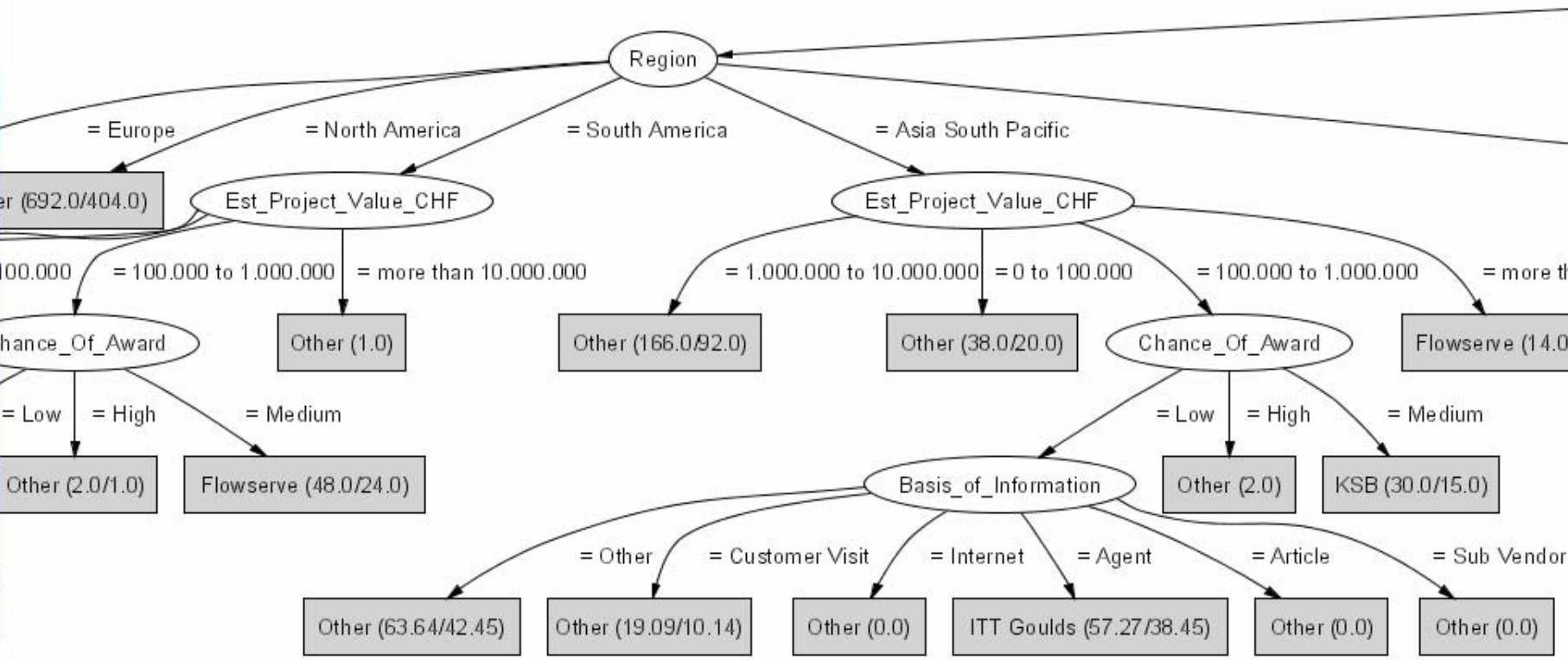
Project Edit Analysis Help

DBFields	Analysis Fields	Labels	Values
Segment_Manager	Alliance D	Sulzer	Allweiler
Site_Customer	Basis_of_Information D	DB Union	Arai
SubRegion_Customer	Chance_Of_Award D	Flowserve	Canadian Pump Company
SubRegion_Installation	Est_Project_Value_CHF C	ITT Goulds	Ebara
Target_Project	Reason_Won D	ABS	Gabionetta
Tendering_Engineer	Region D	Alstom	Hyundai
Tendering_Office	Winner D	KSB	IDP
tbProjects_TSS_Tender		Weir	Johnstom Pumps
tbProjects_UNID		Other	Kirloskar
When_by			Niigata Worthington
Who_by			not known
Winner			Nuovo Pignone
ID			Others
Parent_Note_ID			Others; see comments
tbBidItems_DateLastModified			Peerless / SPP
Application			Ruhr Pumpen
BidItemComment			see comments
Bid_Item_Number			Shin Nippon
Bid_Project_ID			Sundyne
Bid_Project_Name			Thompson Kelly & Lewis
Bid_Project_Owner			Torishima
Bid_Project_Status			
Bid_Sales_Engineer			
Bid_Tendering_Engineer			
Bid_Who_By			
Item_Price			
tbBidItems_CCY			
Delivery			



Step 2

- A classification agent generates a decision tree
- The tree shows relations between characteristics of a tender and the winning company



Pan: Shift+Left Mouse Zoom: Shift+Right Mouse

OK

Step 3

- Use decision tree to run “what if” scenario’s
- Predict winning company for new tenders, under specific conditions

Ike Project Edit Analysis Help

Alignment: Alliance Multiselect

Basis_of_Information: Agent Multiselect

Chance_Of_Award: Low Multiselect

Est_Project_Value_CHF: 0 to 100.000 Multiselect

Reason_Won: price Multiselect

Region:

- Asia South Pacific
- Europe
- North America
- South America
- Other

 Multiselect

Winner	Asia South P...	Europe	North America	South America	Other
Alstom	0.00	0.00	0.00	0.00	0.00
Flowserve	0.61	0.12	0.14	0.00	0.00
Sulzer	0.25	0.76	0.82	1.00	1.00
ABS	0.00	0.00	0.00	0.00	0.00
ITT Goulds	0.00	0.01	0.00	0.00	0.00
KSB	0.00	0.03	0.00	0.00	0.00
DB Union	0.03	0.00	0.00	0.00	0.00
Other	0.08	0.08	0.05	0.00	0.00
Weir	0.03	0.00	0.00	0.00	0.00

Predict Export

User defines a case by entering characteristics of a new tender

Ike Project Edit Analysis Help

Alliance Alliance Multiselect

Basis_of_Information Agent Multiselect

Chance_Of_Award Low Multiselect

Winner	Asia South P...	Europe	North America	South America	Other
Alstom	0.00	0.00	0.00	0.00	0.00
Flowserve	0.61	0.12	0.14	0.00	0.00
Sulzer	0.25	0.76	0.82	1.00	1.00
ABS	0.00	0.00	0.00	0.00	0.00
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Other	0.08	0.08	0.05	0.00	0.00
Weir	0.03	0.00	0.00	0.00	0.00

Est_Project_Value

Reason_Won

Region

**Result:
Sulzer will win the
tender if the customer
is in North America or
Europe**

Predict Export