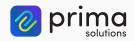


## Make the right decisions with Prima Analytics





## Turn your transactional data into actionable business insights and be a fully data-driven company

#### **Benefits of Prima Analytics**

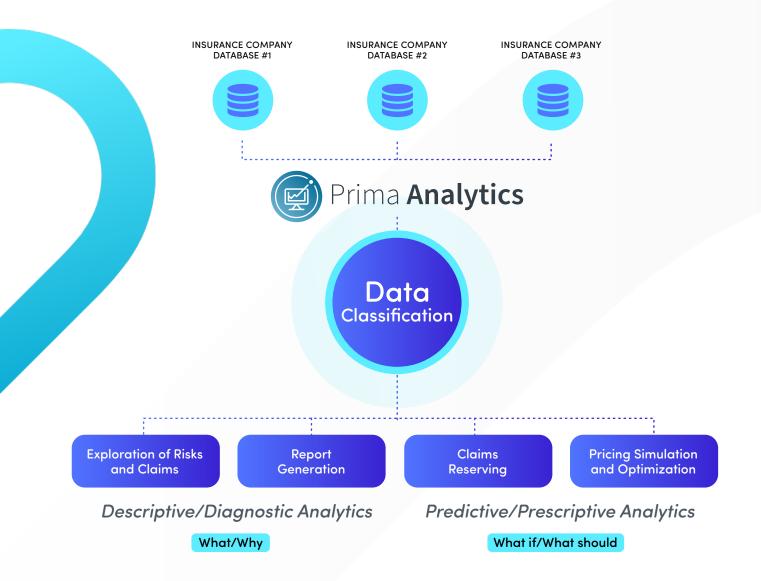
- Optimize the technical profitability of your insurance portfolios by:
  - Enhancing timely detection of profit and loss
  - Improving your accuracy, your underwriting rules, claims handling and reserving
  - Addressing fraud
  - Monitoring and anticipating current and future trends

- Object Sector Secto
  - Secured Cloud (SaaS) platform ensuring the latest features and seamless updates
  - Intuitive graphical user interface enabling easy usage of complex analytics features
- Simulate your business decisions and monitor your results
- Provide out-the-box insurance analytics to your organization, clients, partners and auditors

#### Suitable for Technical and Non–Technical Staff

- Business analysts
- Oata scientists
- Actuaries
- OW and claims managers
- → Management

We have been using Prima Analytics as a decisionmaking tool for many years. The feedback from our team members was immediately excellent. We have significantly improved the profitability of our activities and we had a return on investment in less than a year.



Prima Analytics allows the transformation of your transactional data into business decisions by using descriptive, diagnostic, predictive, and prescriptive insurance analytics. With our solution you become a real data-driven company.

#### Data Classification

- → Data cleansing
- ⇒ Data grouping and classification
- Data consolidation
- Data quality controls
- Over the second sec
- Possibility to export data corrections to core system

### Improve your competitive advantage & technical margin

#### Risks & Claims Explorer

- Portfolio segmentation
- Portfolio exploration using pre-calculated insurance KPIs:
  - Loss ratio
  - Frequency of claims
  - Burning cost
  - Average cost of claims
  - Exposure
  - Sum at risk
  - Earned premium
- Olaims analysis
- Profit and loss detection with or without claims capping
- Trends analysis with moving average
- Graphical exploration with drill-down and drag and drop features
- Dashboard creation and customization

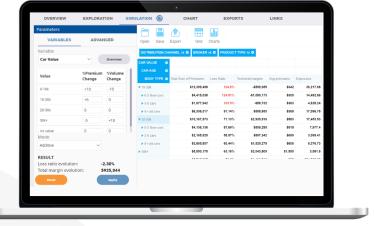
	C EXTRACTIONS		Portfolio : motor	Prima Analytics	DATA EXPLORER			
₽	-	DRATION SIMULATION TRENDS	CHART EXPORTS	LINKS	V C EXTRACTIONS	Portfolio : motor	LINKS	8
	Annul     Visualze by     Vears     Quarters		r3 + Ouarter 1 + Ouarter 2 + Ouarter 3		Distribution Denserol @		Receiving the second se	DISTRIE CHANNE - DISTRIE -
		-2014 Sus    Susgo    Sedan	-2015	Period				

Trend Analysis

# Get better insights, make a real impact with your data

#### **Report Generator**

- ➢ Possible fraud detection reports
- ⇒ Data quality reports
- ⇒ Lists creation and export at risk and claim level (drill down)



Simulation

#### **Pricing Simulation & Optimization**

- Obange in pricing simulation (what-if)
- O Simulation with volume elasticity
- → Multi-dimensional analysis (taking into account correlation between pricing factors)
- Profitability improvement with target loss ratio (linear regression on loss ratio)



OVERVIEW         EXPLOREATION         ©         SHULLTON         CHART         EXPORTS         LINKS           Composition         Compo
Coll         Date         Expert         Date         Description         Margement         Range         Last fails         Control         Rangement         Range         Control         Rangement         Rangement <t< th=""></t<>
CAT MULE         Y O           CAT MULE         Y O           CAT AVE, 0         Octor TITE:           DOOR TITE:         Octor TITE:
CASA ACE         O         Converting         Development         Range
BOCH 1715 0         Octowers Mayor         Desmand         Marger         Loss Rule         Rule S(Hal)         Rule S(Ha)         Rule S(Ha)         Rul
Voits         4448.879         65.089         634         6328         1915         3.25         3.75         4.455         4.455           > 50 Jancent         4456.42         679         562         516         527         3.865         5.675         4.675           > 50 cm         4456.42         679         504         1016         527         3.875         5.075         4.675           > 51 ofticm         4015.71         7.754         627         5029         1015         3.095         3.045         5.075         4.075           v 1025c         4015.8019         5049         1016         3.095         3.045         5.075         4.075           v 1025c         4015.8019         5049         1015         2.075         2.075         4.075         4.075           v 1025c         413.0019         1.029         1019         1025         2.075         3.075         4.085           > 50 Proces         413.0019         1.042         1029         1029         2.075         2.075         4.075         4.075           > 50 Proces         413.0019         1.042         1029         1029         2.075         2.075         2.075         2.075         2.075<
b 02 /mor case         448.402         578         502         518         1215         1285         5485         4.075           b 36 core         448.404         1344         504         1075         1385         5.075         4.075           b 56 core         448.404         1344         502         1155         3.255         3.895         4.075         4.075           v 50.20         41.398.47         7.74         527         52.07         4.075         4.075           v 50.20         41.398.47         5.02         1085         2.075         2.075         4.075           v 50.20         41.398.47         5.02         1026         2.075         2.075         4.075           v 50.20         41.398.47         10.40         1027         1.085         2.075         4.075         4.075           v 50.20         41.348.47         10.40         1027         1.085         2.075         4.075         4.075           v 50.20m         41.348.47         10.42         1027         1.085         2.075         4.075         4.075
> 36 cms         440.40         1.440         6344         6355         110%         3.20%         3.89%         6.51%         4.33%           > 54 origin         440.40         7.74         827         8280         110%         3.49%         8.49%         4.47%         4.67%           * 60.20x         41.20%.513         8421         8429         110%         2.07%         2.41%         3.49%         4.42%           * 60.20x         41.30%.514         1442         1429         109%         120%         2.41%         3.49%         4.42%           * 50.20x         41.63%.514         1443         1427         109%         2.49%         3.19%         4.49%           * 50.50x         44.63%.11         1443         1437         110%         2.29%         2.41%         3.49%         4.49%           * 3.5 cms         4405.710         4.423         1642         110%         2.29%         2.41%         3.49%         4.49%
Addition         4410.011         7.754         6276         6220         1195         2.195         1495         4.475         4.075           v SSAs         4413.019         94214         6220         6189         1115         2.175         2.475         3.075         4.285           v SSAs         4413.0411         6448         6397         6380         1115         2.075         2.475         3.075         4.285           v SSAs         4413.0411         6449         6397         5380         1125         1185         2.495         2.075         4.055           v SSAs         443.0411         6449         6497         1005         2.2495         2.075         4.055
v 10.20         4538.010         84.218         533         539         1115         2.075         2.415         4.035         4.035           λ 0.2 (mod)         44.34.001         14.463         1407         1405         1.805         1.805         2.405         4.05           λ 3.5 does         44.01.010         14.02         1407         1075         1.805         2.405         4.05
> 62 Norvers         41,38,981         14,483         E37         536         1375         2,495         3,195         -0,85           > 35 cm         -463,710         4,635         534         6375         1105         2,495         3,195         -0,85
▶3.5 cars 4165,710 4.628 6342 6375 110% 2.38% 2.61% 3.4% 4.23%
▶ 5+ old cars \$201,878 17,097 \$348 \$338 97% 2.41% 2.32% 3.02% 0.08%
▼20.50k \$2,935,916 17,454 \$583 \$414 71% 2% 1.42% 1.85% 0.58%
▶ 0.2 New cars \$509,285 7,577 \$518 \$455 \$6% 1,77% 1,85% 2,02% 0,22%

Rate Adjustments

#### **Claims Reserving**

- Reserving calculation with triangulation (chain ladder, London chain...)
- Stochastic reserving methods
- IBNR estimation
- Audit track

Projection method	Period 1	Period 2	Period 3	Tell fector	
Average	1.2008	1.0136	1.0030	1,0010	
Geometric Average	1.2007	1.0136	1.0030	1.0010	
London Cham	1.2005	1.0136	1.0030	1.0010	
Maximum	1.2133	1.0156	1.0030	1.0013	
Median	1.2072	1.0136	1.0030	1.0009	
Minimum	1.1820	1.0116	1.0030	1.0008	
Standard Chain Ladder	1.2005	1.0136	1.0030	1.0010	
Weighted Chain Ladder Settlement patterr		1.0136	1.0030	1,0010	
		1.0136 Period 2	1.0000 Period 3	1,6010 Period 4	Tail
Settlement patterr					
Settlement patterr	Period 1	Period 2	Period 3	Period 4	0.10
Settlement pattern Projection method Average	Period 1 81.83%	Period 2 16.43%	Period 3	Period 4	0.10
Settlement pattern Projection method Average Geometric Average	Period 1 81.83% 01.84%	Period 2 16.435 16.435	Period 3 1.345 1.345	Period 4 0.00%	0.10 0.10 0.10
Settlement pattern Projection method Average Cosmetric Average London Chan	Period 1 81.83% 01.84% 81.85%	Period 2 16.435 16.435 16.435	Period 3 1.34% 1.34% 1.34%	Period 4 0.00% 0.00% 0.00%	<b>Tail</b> 0.10 <sup>4</sup> 0.11 <sup>4</sup> 0.11 <sup>4</sup> 0.11 <sup>4</sup> 0.11 <sup>4</sup>
Settlement pattern Projection method Average Geometric Average London Chan Masemum	Period 1 81.83% 81.85% 81.85% 80.85%	Period 2 16.435 16.435 16.435 16.435 17.235	Peried 3 1.34% 1.34% 1.34% 1.34% 1.34%	Period A 0.03% 0.03\% 0.0	0.101 0.101 0.101 0.131 0.091
Settlement pattern Projection method Antrage Coconstructionary London Chan Meternum Meternum	Period 1 81.83% 81.85% 81.85% 81.85% 81.85% 81.41%	Period 2 16.435 16.435 16.435 17.235 16.805	Peried 3 1.34% 1.34% 1.34% 1.34% 1.54% 1.34%	Period 4 0.39% 0.39% 0.38% 0.38% 0.38%	0.101 0.101 0.101 0.101

Reserving Methods: Results Summary

# Improving the profitability of your insurance portfolios has never been easier

#### **Technical Architecture**

 Solution with technically innovative and scientifically sophisticated components based on the most recent mathematical models

#### Multiple cloud-based architecture

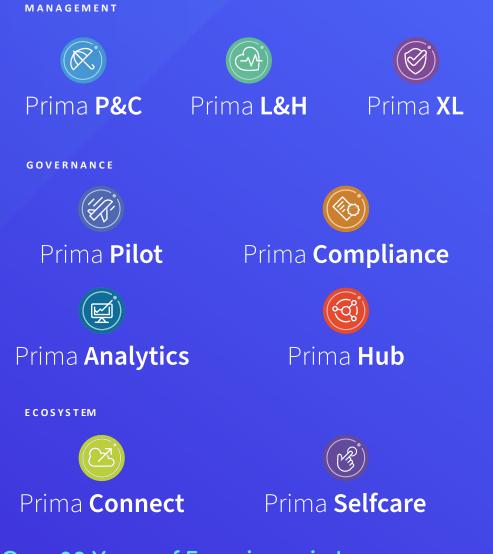
- Securely hosted by the world's largest data center providers (AWS - Amazon, AZURE - Microsoft)
- Accessible using an internet browser, no local installation or hardware is required
- Managed and monitored by Prima Solutions
- With choice of geographic location

- State of the art big data architecture leveraging :
  - Cassandra distributed database
  - Spark distributed computation engine
  - Angular web page framework



#### A unique Cloud-based Software Suite for Insurance Innovation

- ⇒ Scalable and configurable
- Govering all the business processes of the insurance sector
- O Adapted to all sizes of structures or portfolios



Over 20 Years of Experience in Insurance, Reinsurance and Regulatory Compliance

Global insurtech group and key player in insurance in Europe, North America, and Asia-Pacific, Prima Solutions designs software for insurance and reinsurance professionals, covering all business processes in the life insurance, health insurance (for groups and individuals), non-life insurance, and reinsurance sectors. The group serves more than 300 customers and works with a global network of partners. We help insurance companies go digital more quickly through our highly configurable, modular, and cloud-based all-web software suite.

#### contact@prima-solutions.com

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