



OceanOne Fraud Detection & Investigation

欺诈侦测和案件调查 解决方案

07.03.2011

申请欺诈一览

OceanOne 解决方案一览

申请欺诈: 案例分享









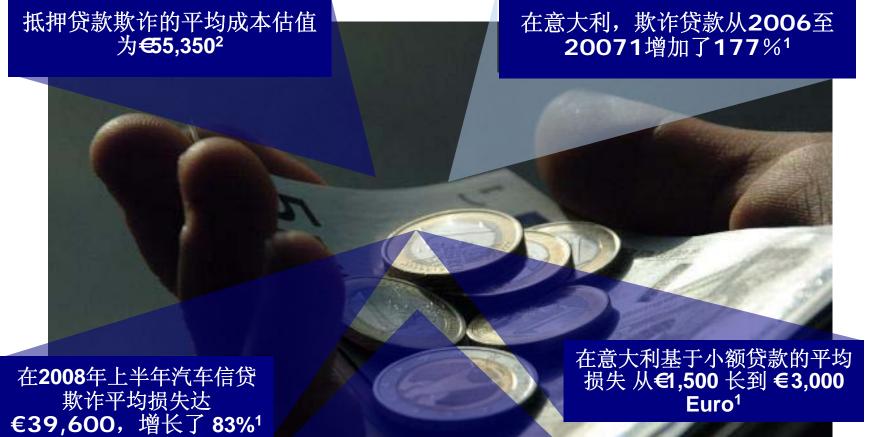
申请欺诈: 持续的威胁

- 申请欺诈导致的经济损失巨大,其破坏力远远大于渎职损失和破产损失
- 欺诈损失超过"正常"注销率损失的三倍以上
- 申请欺诈是一种高报酬 低风险的犯罪行为,是由犯罪团伙或个人 施行的非法猎取钱财的行为
- 申请欺诈对金融机构的盈利能力的形成了重要威胁









- 1. Based on CRIF's Eurisc data
- 2. According to the British Financial Services Authority
- 3. According to the UK Banking Times Magazine



在英国,申请欺诈从**2006** 年到**2007**年增长了**23**%³



- 对于个人申请欺诈的起诉是罕见的
- 征信局的参考是好的,但还不充分
- 更改个人资信是个比较可行的过程
- 这是一个有诱惑力的犯罪:
 - 低风险
 - 高回报
 - 容易施行
 - 被看做无受害人的犯罪行为
 - 许多机构仍然没有足够的防御
- 这些人很专业
- 这些人靠此"养家糊口"
- 这些人擅长做"大生意"







申请欺诈一览

OceanOne 解决方案一览

申请欺诈:案例分享









OceanOne 欺诈管理步骤

• 你处理或管理欺诈吗?

前置侦测

OceanOne在执行复杂、精密的规则策略中表现出强大的决策执行能 力,以便识别和暴露潜在的欺诈申请,从而增强申请流程不同阶段中的 欺诈评分能力。

■ 逆向调查 (CIS)

逆向调查提供必要的工具去管理和记录全部的调查,从而得出全面的、 系统的、无偏见的结论。

后续跟进 - 不断地评估和改进

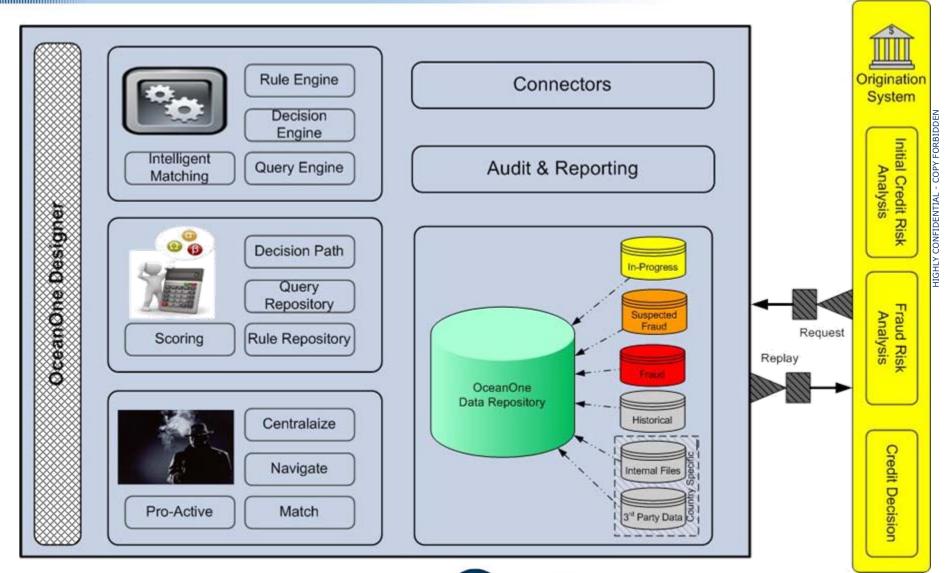
通过详细的内置报告制度进行持续、有效的系统化运作监测. 发现新的 欺诈趋势,更新反欺诈规则,迅速创造新的规则。







OceanOne 架构

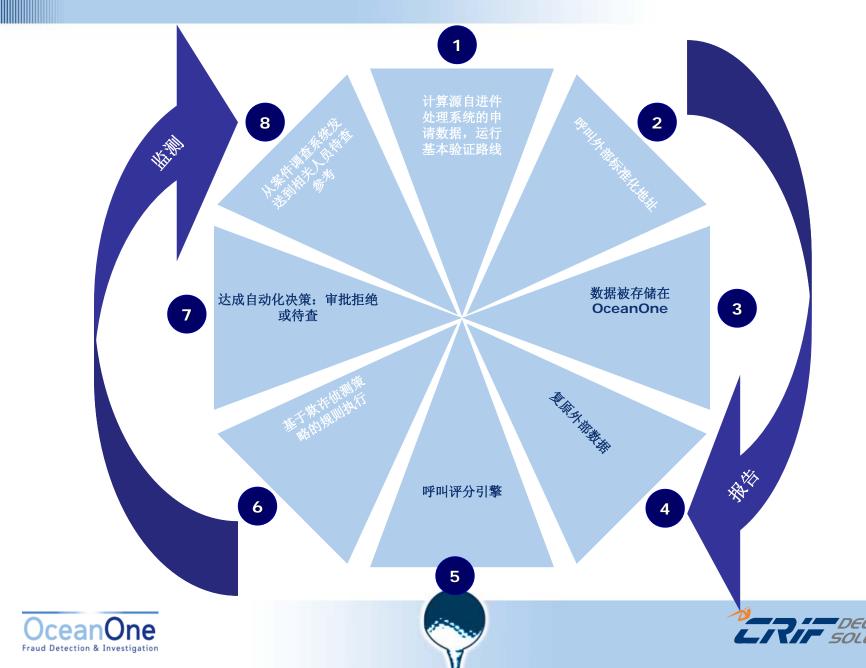








OceanOne 欺诈管理循环...



2008 Copyright - CRIF Decision Solutions S.p.A. All rights reserved HIGHLY CONFIDENTIAL - COPY FORBIDDEN

- OceanOne将要执行一个复杂的规则策略,以确认申请欺诈:
 - **申请本身验证** 在申请人的社会人口数据中检查不规则、矛盾的申请情况,比如: 距离、薪水、年龄、电话和邮政编码等。
 - 历史数据验证 针对 OceanOne内部数据库的数据审查申请, 比如:申请频率, 个人数据更新, 通用数据的使用 (诸如: 地址, 电话, 卡片号码), 欺诈申请数据库等。
 - 外部数据验证 OceanOne 最大程度地利用第三方数据,: 丰富的信用局的评分数据模型, 验证身份证,检测死者身份证的使用,社会保障等数据。







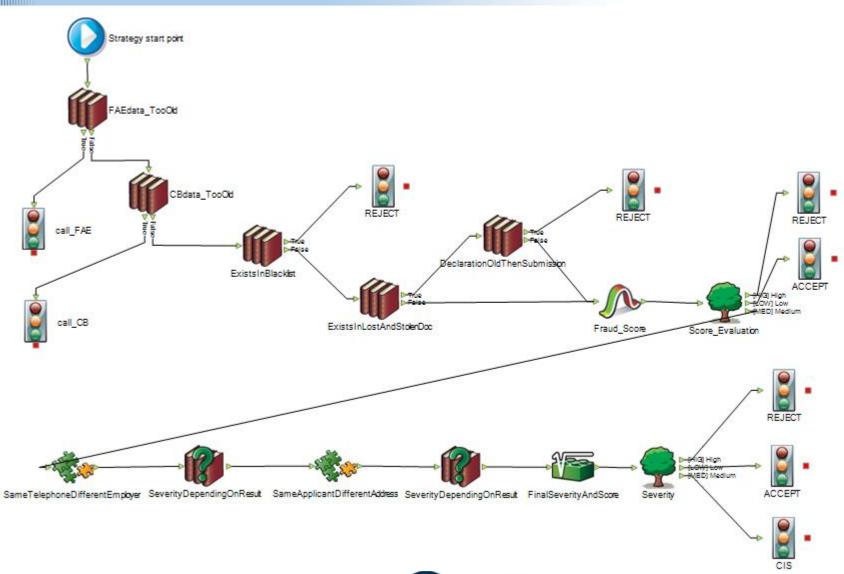
- 在主要的自动化进程末尾, OceanOne将达成一个明智的决定是否:
 - 自动<u>接受</u>申请 低欺诈概率的申请将被 *OceanOne推荐自动审批通过*
 - 自动<u>拒绝</u>申请 高欺诈概率的申请将被 *OceanOne推荐自动决绝*
 - 人工<u>待查</u>申请 在评分和严重程度范围的申请 有待进一步的反欺诈分析调查, 并将转交案件调查 系统 (CIS)







反欺诈策略 - 例子









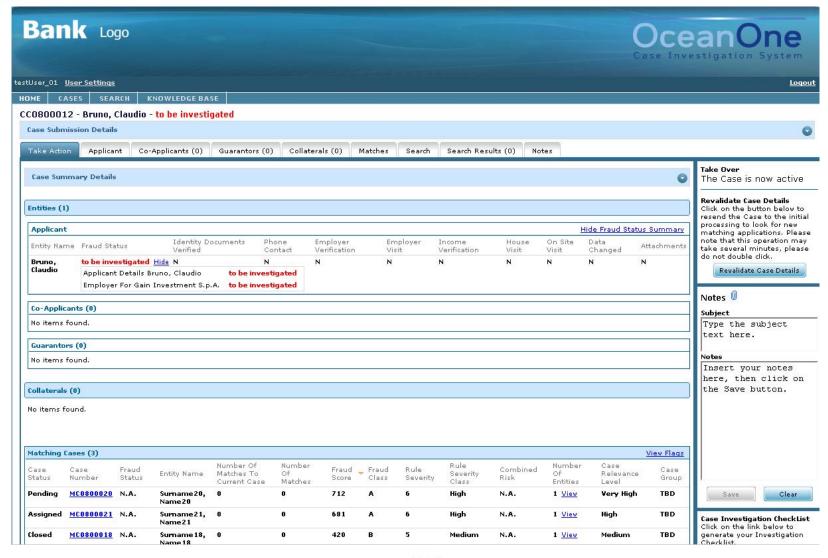
案件调查系统 (CIS)

- 案件管理系统通过对案件的欺诈舞弊的概率的深入分析,以支持所有 调查方面的反欺诈分析
- 案件管理系统的主要益处:
 - 对所有收集的数据进行集中表达和分析
 - 提交匹配计划和调查结果, 使得用户能够对更多的细节、标签和不规则的案件侦测 本身调查, 并对比历史申请情况。
 - 使得欺诈调查人员能够在申请数据范围内指导
 - 对不同的案件进行实时匹配
 - 动态案件序列 管理优先次序和工作量
 - 人工调查
 - 维护用于审计目的的主要执行操作日志、用户级记录
 - 产生显示效率和绩效的报告
 - 本地化用户界面















Single Scroll CASE B Clear Window	ed Scroll
i	







Bank Logo

OceanOne
Case Investigation System

test_1 <u>User Settings</u>

Connection Time: 00:05:16 <u>Logout</u>

HOME | CASES | SEARCH | KNOWLEDGE BASE | MATCHES |

CASES

■ Caselists

User Specific Caselists

__ Dead Letter (6)

_ All In Progress (5)

_ All Skipped Cases (5)

_ All Pending More Than 2 Days (42)

General Caselists

All Skipped Cases

	Case Number	Customer Type	Entity Name	Number Of Entities	Submission Date	Fraud - Score	Fraud Class	Rule Severity	Combined Risk	Last Skip - Date	Last Skip - Analyst Name	Last Skip - Analyst Surname	Last Update	Open Case	View Details
	MO003	PP	Rossi, Fillipo	2	20/04/2009 00:00:00	976.0000	А	ME	HIG	27/04/2009 15:07:40	Name_User_01	Surname_User_01		0	0
)	CL003	pp	De Luca, Enzo	1	19/04/2009 00:00:00	972.0000	AB	LO	HIG	27/04/2009 16:50:38	Name_User_07	Surname User_07		0	0
	CL001	PP	Rizzo, Carmela	1	19/04/2009 00:00:00	788.0000	AA	HI	HIG	27/04/2009 16:56:41	Name_User_01	Surname_User_01		0	0
	ABC013	PP	Moretti, Piero	1	24/04/2009 00:00:00	565.0000	С	HI	HIG	24/04/2009 14:46:10	Name_User_04	Surname User_04		0	0
	MO005	PP	Badini, Mario	2	24/04/2009 00:00:00	349,0000	вв	ME	LOW	27/04/2009 16:55:52	Name_User_01	Surname_User_01		0	0

OceanOne Application Fraud Identification System version [1.0] 2008 Copyrights - CRIF DECISION SOLUTIONS S.p.A. All rights reserved





- 报表系统允许在OceanOne上展示一个完整的反欺诈管理操作和统计分析
- 通过报表系统,反欺诈管理人员将能够计算、浏览、打印和存储这些报表
- 报表类型有:
 - 系统效率
 - 分析效率
 - 工作报告
 - 案例分析报告
 - 状态变化报告
 - 结果报告
 - 回收报告
 - 资金节省报告









User: manager@bank_name.net Report Generated: Friday, July 4th 2008 @ 15:19:27



System Efficiency Report

Duration of Report: starting date $\underline{01.06.2008}$ end date $\underline{30.06.2008}$ Number of Days: $\underline{21}$

	Minimum	Maximum	Average	Daily	Weekly	Monthly
Application Processing Time	15 sec	360 sec	112 sec			
Cases Diverted to CIS	240	380	262	300	2000	7000
Rules Checked Per Application	6	32	22			
Percentage of Matches Vs. Rules				7%	5.2%	
Number of Processed Applications	6,100	9,320	8,450	7,800	38,700	185,900
System Down Time	31 sec	22 min	12 min			44 min
System Ideal Time	31 sec	62 min	31 min	12 min	42 min	210 min
CIS processing time	12 sec	4 min	140 sec			

Comments

- Application processing time: the time that an application is processed on the Main Automatic Process (MAP), including basic validation, internal data retrieval, scoring and rules processing. Time includes ideal time within OceanOne, excluding errors that oblige rejecting the application back to the APS.
- Cases diverted to CIS: including all cases diverted within the specified time frame.
- Rules checked per application: specify the total number of rules that processed applications where matched against.
- Percentage of matches Vs. rules: specify the number of triggered rules compared with the total number of rules being checked within OceanOne.
- Number of processed applications: the total number of applications processed within OceanOne during the specified time frame.
- System down time: specifying the total time in witch OceanOne was not operative due to any reason (maintenance, failure, power cut etc). refer only to working days and predefined working hours.
- System ideal time: specifying the total time when the system was not used to process applications due to other reasons then technical failure. Demonstrate the added potential of the system.
- CIS processing time: refers to time takes to the system to upload data, generate interview question mine for data etc. This time stipulation excludes any investigation time that is user dependent.

The sections "Minimum", "maximum" and "Average" refer to the peek and average levels relevant to the chosen time frame.

The sections "Daily", "weekly" and "Monthly" refer to the total amount/number encountered in the specific term during the chosen time frame.

Copyrights 2008 Crif Decision Solutions, all rights reserved

Save Report

Export Report









User: manager@bank_name.net Report Generated: Friday, July 4th 2008 @ 15:17:11



Analyst Efficiency Report

Duration of Report: starting date <u>01.06.2008</u> end date <u>31.06.2008</u> Number of Business Days: 21

			Clos	ed Ca	ses			Closing	Average	Calla Mada	Case Duration		Open Cases	
	Total	Clear	%	Fraud	%	SF	%	Rate	Sessions	Calls Made	P95	Max	P95	Max
User 011	185	50	27%	63	34%	72	39%	1 / 2.7	4.5	224	180	210	8.4	13
User 012	192	43	22%	91	48%	58	20%	1 / 3.465	6.2	593	135	473	7.8	9
User 013	197	58	30%	83	42%	56	28%	1 / 2.396	3.4	347	173	251	10.6	14
User 014	173	46	27%	62	36%	65	37%	1 / 2.76	7.3	230	97	311	6.3	8
User 015	198	49	25%	57	29%	92	46%	1 / 3.04	2.1	637	89	149	8	22
User 016	189	56	30%	40	21%	93	49%	1 / 2.375	5.7	284	194	284	8.4	11
Total	1134	302	27%	396	35%	436	38%	1 / 2.755	4.9	2,315		1	å	

Comments:

- This report list all users registered in the system and marked as active.
- Closed cases refer to the total number of cases that where closed within the specified time frame, segregated according to the case fraud status given by the user.
- Closing rate is the percentage of cases closed compared to the number of open cases assigned to the user, during the specified time frame.
- Percentile is used to demonstrate the number of occurrences that are found within the 95% range, intended to reduce peek impact on report outcome.
- Number of Sessions referees to the number of work sessions required to reach a final decision in a case, every time the user activate the case is considered as 1 session.

Copyrights 2008 Crif Decision Solutions, all rights reserved

Save Report

Export Report









User: manager@bank_name.net Report Generated: Thursday, May 15th 2008 @ 13:23:14



Cases by Analyst Report

 $Duration \ of \ Report: \ starting \ date \ \underline{09.05.2008} \ end \ date \ \underline{14.05.2008} \ Number \ of \ working \ Days: \underline{4}$

Analyst Name: <u>Analyst Demo</u> Employee No : <u>AD00001</u>

Open Cases	Case Opening	Assigned Date	Days since	Number of sessions	Group Average	Days Since last	Group Average	Calls Made	Group Average	Authentication interview	Case Entities	Case Group
ABC78596526	09/05/08	09/05/08	6	7	4	0	n.a.	6	n.a.	No.	6	No.
YUI88569554	09/05/08	09/05/08	6	3	6	0	n.a.	1	n.a.	No.	1	No.
TYR99885555	09/05/08	09/05/08	6	4	6	0	n.a.	3	n.a.	No.	2	No.
ERT98754211	12/05/08	12/05/08	3	2	4	0	n.a.	0	n.a.	No.	3	No.
BHU75315978	12/05/08	13/05/08	0	2	5	0	n.a.	4	n.a.	No.	2	No.
WEP73498652	13/05/08	13/05/08	0	1	7	0	n.a.	2	n.a.	No.	1	No.
PLK54976613	13/05/08	13/05/08	0	1	7	0	n.a.	3	n.a.	No.	1	No.

Closed Cases	Time to	Number of	Case	Calls	Authentication	Case	Fraud	Seg	mentati	on
Closed Cases	close	sessions Group Made inter		interview	Disposition	Status	Fraud	S.F.	Clear	
ABS54896526	6	8	No	3	No	Approved	S.F.	0	5	27
QWI88567431	2	3	No	1	No	Decline	Fraud	12	7	17
QSR99889874	4	4	No	3	No	Approved	Clear	0	0	5

Copyrights 2008 Crif Decision Solutions, all rights reserved

Save Report

Export Report







2008 Copyright - CRIF Decision Solutions S.p.A. All rights reserved HIGHLY CONFIDENTIAL - COPY FORBIDDEN

Banks Logo here

User: manager@bank_name.net Report Generated: Friday, May 2nd 2008 @ 17:15:47



Money Saved Report

Duration of Report: starting date 01.04.2008 end date 30.04.2008 Number of Days: 22

	Fraudulent	Amount	SFD	Amount	Total Savings
Application referred to CIS	12	648,879	20	948,316	1,597,195
Automatically Declined			37	1,234,112	1,234,112
			Total Savin	gs to Term:	2,831,307

Total Since Installation:	12,128,681
Total Since Installation:	12,128,681

Copyrights 2008 Crif Decision Solutions, all rights reserved

Save Report

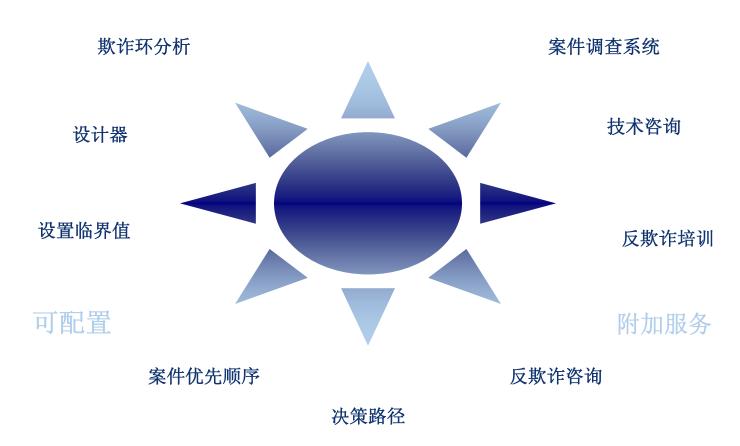
Export Report







功能 & 灵活性









- 欺诈评分-拟侦测不同数据元素之间的良好关系,以便预测申请欺 诈风险概率
- 触发指标 允许用户基于触发指标对案件进行优先级排序
- **规则驱动-**精密和复杂的规则驱动,对申请过程逆向演练,对历史数据的应用和增值数据逆向演练
- 欺诈环分析 最大限度利用你的数据,深入你的数据库分析,侦测其他被忽视的相关数据,突出可能的提示和共同的数据元素供你的机构使用。
- 获取所有在OceanOne数据仓库的有关内部数据以便未来做匹配及 长远的分析
- 详细的欺诈标签, 使得分析范围精细到一个申请过程







- 满足各个用户特殊需求的设计, 计算并处理
- 一个集成平台 管理各种类型的申请和提供给客户的多种金融产品
- 处理不同金融产品的能力 基于特殊产品规则策略和临界值的每个申请的及 时预警
- 容易更新和控制系统参数,规则匹配,案件参考临界值,案件优先次序,人工或自动化地案件选择
- 多语言支持
- OceanOne 可以被集成外挂到其他程序 (例如申请程序,评分程序)







- 对联合调查的案件群自动化分类
- 使用优先级和动态案件序列以便最大限度地利用资源
- 控制和缩减关联的第三方调查的费用
- 申请系统集成
 - 申请程序和OceanOne之间应用对应用处理(A2A)
 - 批处理或在线处理
 - 在申请拒绝之前基于任何理由的反欺诈分析数据抓取







s S.p.A. All rights reserved DEN

OceanOne 关键优势

- 老一代全面的申请欺诈和调查解决方案
- 在申请步骤的难得的解决方案
- 基于欺诈评分和规则的联合使用
- 集中处理申请欺诈各方面的评估 , 适合各种信贷产品
- 有好的设计界面
- 客制化案件优先次序
- 欺诈分析环
- 新一代数据导向的案件调查系统(CIS)







申请欺诈一览

OceanOne 解决方案一览

申请欺诈: 案例分享

















案例分享: Assumptions

- 典型的中等规模银行:
 - 应用产品: 账户开户, 信用卡, 零售贷款, 透支, 抵押贷款
 - 容量:每年20万笔申请
 - ▶ 欺诈分析人员: 4
 - 人力资源成本: €45,000 (每个分析人员/年)
- 欺诈的比例:申请的5% (通常区间在 5%-10%)
- 中等的反欺诈水平:申请的3%(对极端欺诈识别能达到35%以上)
- 平均的损失价值:
 - 账户开户: €3,000
 - 信用卡: €3,000 €10,000
 - 零售贷款: €5,000
 - 抵押贷款: €55,000 €200,000







2008 Copyright - CRIF Decision Solutions S.p.A. All rights reserved HIGHLY CONFIDENTIAL - COPY FORBIDDEN

200,000 申请/年	5% of年申 请数	200,000 * 5% = 10,000
	每天	10,000 / 220 ≈ 45
欺诈申请的中途截止	3% of 年欺 诈数	10,000 * 3% = 300

欺诈分析直接成本

每年的节省成本



每年

€45,000 * 4 = €180,000

At $\in 3,000$ $\in 3,000$ * 300 = 900,000







案例分享:结论









OceanOne: 关键的业务收益

- 最大化利用信息,丰富所收集和存储的反欺诈数据数据的数量和质量
- 提高收益
- 增加好的申请的通过率
- 降低申请欺诈带来的损失
- 快速适应不断变化的欺诈变化
- 改进运作效率









- 超过10年的反欺诈预防和侦测经验
- 科锐富每18个月进行广泛的欺诈调查、诈骗趋势分析和测量
- 科锐富在市场活动的传播、决策、分析的数据管理方面拥有丰富的经验,
- 科锐富已完成实施欧美和俄罗斯等多个国家的项目,为我们的客户提供开发了数百个系统。
- 科锐富达到了软件开发和维护的成熟度的CMMI3的认证,这是一个科锐富高品质产品和服务的证明
- 致力成为防欺诈解决方案市场创新和发展的领导者
- 坚信CRIF能实现您的想法







领先一步,步步领先...





