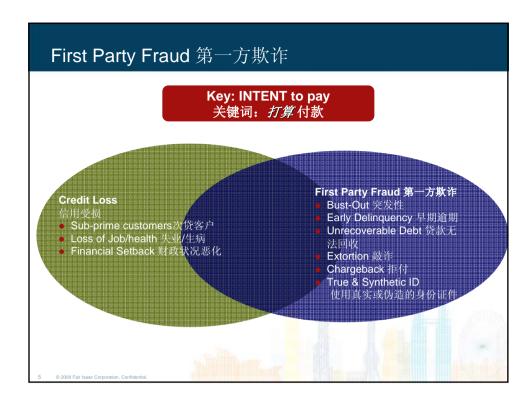




### Recognizing the Problem 认识第一方欺诈



#### What Kinds of First Party Fraud are There? 第一方欺诈有哪些种类? » Like many other fraud types, First Party Fraud has variants 像其他类型的欺诈行为一样,第 一方欺诈也有不同的变化形式 Organised » Except First Party Fraud comes in all flavors 所不同的是第一方欺 诈可能存在各种各样的形式 » Requiring coordinated strategies across the lifecycle and across Sleeper the organization 需要在整个生命 潜伏型 周期和机构内部协调策略 "肇事逃逸"型 » First Party is perpetrated by customers themselves, there is no victim involved. 受害方为第一 Opportunist 方,即客户本身,不涉及其他人 投机型 员



# The Elements of First-Party Fraud 第一方欺诈的要素

- » Definition:定义
  - » True or synthetic ID (no victim) 真实或篡改过的身份证明(无受害人)
  - » When a customer takes credit with no intention of repayment 客户申请贷款,但无意偿还贷款

#### Behaviors 行为

- Open accounts with no intention of paying on them 开立账户, 却无意偿还贷款
- Open accounts with true or false information 开户时可能使用真实或虚假的信息
- Boost credit limits artificially and through manipulation of behavior scores 提升信贷额度——人 为的结果。通过操纵行为评分而实现
- False claims of fraud 虚报欺诈
- Acct Tenure: Short term (12-18 mos.) vs. Long term (5-7 years) 账龄: 短期(12-18个月) VS. 长期(5-7年)

#### Manifestation 表现

- First payment defaults or very early defaults 第一次还款或早期还款发生拖欠
- Excessively over-limit 严重超出信贷额度
- Poor cure rates 不良贷款治愈率低下
- Unable to collect debt 无法回收贷款

# Where Is the Industry? 哪里存在第一方欺诈?



### The Macro View 宏观视角

- » Main factors 主要因素
  - » Economic 经济
    - » When times are good borrowing is easy. When times are bad defaulting is rife 经济平稳,贷款放松;经济低迷,违约盛行。
  - » Personal 个人
    - » Challenging times when extra cash is needed 困难时期,需要更多现金流
  - » Social 社会
    - » Credit Society, Buy Now Pay Never! 信贷社会,"今天消费,永不 还款!"
  - » Criminal 犯罪
    - » Easy to organize, Simple to facilitate, little risk, great payback 便于组织、易于成事, 风险很小, 回报很大
  - » Fraud Migration 欺诈转移
    - » Due to better controls stemming losses in other areas 在其他领域内,止损的管控措施较为得力
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- » Losses 损失
  - » FICO have seen as high has 100 basis points for credit card 费埃哲看到信用卡行业因此遭受的损失高达100个基点
    - » Where as 3<sup>rd</sup> Party is around 10-12 basis points average 而第三方 欺诈所带来的损失平均只有10-12 个基点
  - » About 10-20% of accounts in collections are really First Party Fraud 大约10-20%的催收账户为第一方欺诈
  - » FICO has seen a client with 65% of the debt value being First Party Fraud 费埃哲曾见过客户有65%的贷款价值 受到第一方欺诈的损害



### What Are Banks Doing Today? 银行现在的表现如何?

- » Little to no FPF working definition, policy, strategies, processes 缺少或未曾制定有关第一方欺诈的定义、政策、策略或流程
- » FPF losses are not recognized and reported as fraud 第一方欺诈损失仍未被作为欺诈案例 进行识别和报告
  - » Treated same as other collection accounts 与其他催收账户同等对待
  - » Normal collection attempts ineffective 普通的催收措施
  - » Implications of reclassification of bad debt to fraud 重新分类,将坏账归入欺诈类别
- » Little or no proactive prevention or detection 很少或不曾提前进行主动的预防或识别
  - » As FPF cases age through collections process, the expense, write-off amount and reserve requirements increase 催收流程拖延了第一方欺诈案例的时间,导致花费、冲销金额和储备金要求激增
- » Few or no resources allocated to the biggest fraud problem first-party fraud 缺少或未分配资源来解决最大的欺诈问题——第一方欺诈
  - » All fraud resources allocated to the much smaller problem third party fraud 反欺诈资源全都用来解决第三方欺诈的问题,而第三方欺诈的影响却相对较小





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### **Best Practices**

最佳实践



### Enterprise First Party Fraud Framework 企业第一方欺诈框架

- » An enterprise framework should be implemented
  - to ensure: 实施企业框架应确保:
  - » Buy in across the organization 机 构统一行动
  - » Enterprise Accountability and Governance 企业问责与监管

Accountability Timely dissemination of 问责制 intelligence across the lifecycle and across products 针对整个生 命周期和所有产品的适时的信息 处理方式 交流 » Integrated Policies & Procedures 政策与流程一体化 » Integrated Controls, Treatment & Measurement 管控、处理和评估 手段一体化 » Interacting Systems & Data 系统 与数据的相互作用 Controls, Monitoring & Detection Analysis, Investigation & Prevention » Interacting appropriately skills people 拥有适当技能的人员间的 Reporting, Measurement & Planning以告 、评估 互动

重新评估

Re-Evaluation

# Formulating a Working Definition 制定可行的定义

- » Requires a 3 phase approach: 需分三步走:
- » Phase 1第一步
  - » Identify exposures across the lifecycle and across products 发现生命周期和产品中的欺诈风险
  - » Undertake root cause analysis on the collections population 对催收账户进行违约根源分析
  - » Determine a working definition for historic account segmentation 针对历史账户分组,制定可行定义
  - » Agree definition with Senior Management 与高级管理层商定定义内容
- » Phase 2 第二步
  - » Operationalize the definition on existing accounts 对现有账户应用该定义
  - » Deploy People, Process, Policy, Strategy, Systems & Data 部署人员、流程、政策、策略、系统与数据
- » Phase 3 第三步
  - » Refine definition for proactive, rather that retrospective 完善定义,旨在提前预防欺诈,而不是事后识别欺诈
  - » Implement monitoring and controls across the lifecycle 对整个生命周期进行监控
  - » Start with Originations and drive through the lifecycle 从申请授信开始,贯穿整个生命周期
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#### Definition Variables examples: 定义变量举例:

» Over limit 超出额度

身份

Identification

Intelligence

- » Cycles delinquent 周期逾期
- » Cure rates 治愈率
- » Gone aways 通信地址失效
- ▶ Returned mail 返回邮件
- Number of delinquent payments 逾期还款次数
- » Tenure of account 账龄
- Value of debt 债务价值

## FPF Steering Committee 第一方欺诈指导委员会

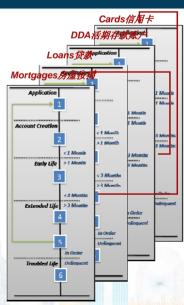
- » Accountability is the key and should be the governing principle 问责制是关键所在,应作为指导性原则
  - » Enforces organization design, policy and process 实施机构计划、政策和流程
- » Clear ownership is needed 明晰所有权
  - » Mitigating cross channel, cross product differences and driving holistic approach 缩小跨渠道和跨产品的差异,实施整体性方案
- » Stakeholder buy in 股东支持
  - » All lifecycle departments from Marketing to Recoveries, from Legal to Audit. 从市场部门到催收部门,从法律部门到审计部门,整个生命周期所涉及的部门都要参与进来
- » Senior Management backing 高级管理层支持
  - » Steering committee needs an executive sponsor and key management areas from across the bank 指导委员会需要执行负责人关键管理领域
- » Decide on an FPF Champion! 确定反第一方欺诈团队的 优胜者!



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### Lifecycle & Product Exposure Assessment 生命周期与产品风险评估

- » To tackle the problem we need to know the extent of damage / exposure prevalent 要解决这 一问题,我们需要知道当前遭受损失或风险的程 度
- » Undertake a thorough review of the entire lifecycle for each product 为各种产品对整个生命 周期进行透彻的审查
- » Undertake analysis of where each product interacts with others 对产品的关联环节进行分析
  - » Identify Processes impacted 识别出受到影响的流程
- » Map out Consumer Process Flows 制定消费者 流程图
- » Develop Mitigation Processes 设计风险缓释流程
  - » Referrals to FPF Group 推荐给第一方欺诈团队
- » Re-evaluate regularly 定期进行重新审查
  - » New products, New Offers 新产品、新报价
- » FPF Sign off on Process Changes 第一方欺诈团队许可流程变更



## Creating a First Party Fraud Organization 创建第一方欺诈组织

- » Critical success factors include: 关键性的 成功要素包括:
  - » Securing executive buy-in 取得行政支持
  - » Ascertaining levels of resources needed 明确所需的资源水平
    - » 1st Party is a bigger problem than 3rd Party, however resources are often imbalanced between the two areas. 第一方欺诈比第三方欺诈的 影响更大,但两者间的资源配置往 往是失衡的
  - » Leveraging relationships, skills and experience across the lifecycle 在整个生命周期中,充分利用现有的关系、技能和经验
  - » Developing new or existing investigative approaches balanced with customer service 发展新的或现有的调查方法,平衡与客户服务的关系
  - » Looking at benefits or challenges of Centralized or Decentralized Approach 分析集中或分散型方案的优 缺点

CENTRAL集中		DECENTRAL分散	
PRO优点	CON缺点	PRO优点	CON鉄点
Drives Accountability 推动问责制发 展	Takes time to establish 创建耗时	Quicker to deploy, less restructure 可以较快部署 ,无需太多机	Confused Governance 管理混乱
		构重组	
Increases Communicatio n and Intel Sharing 沟通与信息共 享机会增多	Group approach may not have a home in Org 机构内可能没 有可供集中化 使用的场所	Almost Business as Usual 业务几乎不受 影响	Reinforces Silo approach 强化了孤立式 的做法
Centre of Excellence 精英中心	May require external groups help to employ 可能需要雇用 外部团队	More control on strategies and actions taken 强化对策略和 行动的控制	Incomplete solutions with limited savings 方案不够完备 ,节省的损失 较少

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# Building a Qualitative Definition 确立定性定义

- » Can be implemented straight away 可以立即实施
  - » And applied to the accounts that have been written off 并应用于已经注销的账户
  - » Then applied to accounts in collections 然后再应用于催收账户
- » Needs to be able to fit all product lines 需要能够适用于所有的产品线
- » Keep the list of variables simple 避免变量列表过于复杂
- » As an example some of the variables may include: 以下列举了可能包括的部分 变量.

Qualification Variable 条件变量	Threshold 准入门槛
Inconsistent Contact Details 联系方式不一致	
No payments made 从未还款	Example: in 3months 例如:3个月内
No Contact with customer 无客户联络记录	Example: in 4 months 例如: 4个月内
No customer Settlement agreed 无客户清算记录	Example : Since 3 Months Delinquent 例如: 3个月逾期
Return Mail From Address 邮件被返回	

## Building a Quantitative Definition确立定量定义

- » A more robust definition is needed to provide an accurate separation of FPF from Bad Debt 需要制定更加稳健可靠的定义来准确地区分第一方欺诈与抚债
- » Will also allow us to drill back through the lifecycle and detect hidden or suspicious FPF accounts.也使 我们可以发现生命周期中隐藏或可以的第一方欺诈 能户
- » Some variables will be applicable across all products, some will be product specific 有些变量可适用于所有产品,而有些变量则只适用于特定的产品。
  - » E.g., Amount Owed vs. Amount Over limit 例如: 欠款总额与超过信贷额度的金额
- » Variable could be used in isolation 变量可以独立使
  - » Eg No contact made in 3months Gone Away 例如: 3个月内无联络记录——通信地址失效
- » Variables can be used in conjunction 变量可以结合 使用
  - » No Contact made in 3 months and Account Tenure >1year 例如: 3个月内无联络记录和账龄>1年

Some Example Variables 部分变量举例			
Over Limit	Cycles Delinquent		
超出额度	周期逾期		
Tenure of Account	NSF Payments		
账龄	最低额度还款		
Loan Amount	Value of Debt		
贷款金额	债务价值		
No Contact	Credit Amount		
无联络记录	贷款金额		
Address Change	Returned Mail		
地址变更	返回邮件		
Amount Owed	Missing Payments		
欠款总额	遗漏还款		

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# Refining & Trending 定义完善与趋势预测

- » Once FPF and Bad Debt separation is complete, and existing customers have been assessed, the definition can be refined to account for the originations stage. 当区分了第一方欺诈和坏债、对现有客户完成评估后,可以继续完善定义,以便在申请授信阶段起到指导作用
- » Additional variables can now be considered from other data sources for either: 可以考虑增加其他数据源的变量进行:
  - » Definition refinement 定义的完善
  - » Fraud Trending 或欺诈趋势的预测
- » An extensive list will be able to ensure accurate intelligence is kept 详细的列表可以确保信息的准确性
  - » This will be needed for link analysis purposes 这是出于关联分析的考虑

Some Example Variables 部分变量举例				
Product Type	Geography			
产品种类	地域			
Branch ID	Bankruptcy Indicators			
分行ID	破产标识			
Net Burden Ratio	Risk Scores			
净负债率	风险评分			
Types of Purchases	Use of Credit			
购买类型	占用信贷额度			
Application Channel	Loan Value			
申请渠道	债务价值			
Dealer	Broker			
经销商	代理方			



# Example Cards Based Cure Rate Analysis 信用卡账户治愈率分析举例

### Analyse All The Accounts That Went Into Collections 分析所有的催收账户

Pounds Overlimit 超出信贷额度	Number of Accounts in Collections 催收账户数	Number of Accounts Written Off 核销账户数	Cure Rates 治愈率
\$100	10,000	200	98%
\$200	5,000	150	97%
\$300	2,000	100	95%
\$400	500	75	85%
\$500	200	40	80%
\$600	100	22	78%



So, the definition should be any write-offs with an overlimit of \$400 or an 85% cure rate.
In addition, add any other criteria that meet the cure rate.
因此,应定义为超出信贷额度\$400或治愈率为85%的所有核销账户。
另外,还需增加符合该治愈率条件的其他标准。

60% 50%

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### Policy & Regulatory Considerations 政策与监管分析

- » Policies will be impacted by many differing regulatory impacts on how First Party Fraud can
  - be treated across the lifecycle and across different products 整个生命周期内有关不同产品的第一方欺诈的处理方式会受到不同监管手段的作用,继而对政策发生影响
  - » Ombudsmen, Consumer Credit Acts etc. 监察专员法案、消费者信贷法案等
- » Actions and treatments can vary significantly based on: 所采取的行动和处理方式可能视以下情况的不同而明显不同:
  - » What you know 信息已知
  - » What you suspect 猜测得出
- » Some actions, like blocks / refusals can be immediate, with little notification 阻截或拒绝等属于即时性动作,几乎不做通知
- » Some actions require customers to be notified with a time limit before action 某些动作需要在行动前的一段时间内通知客户
- » Banks need to re-examine current customer contracts to ensure First Party Fraud treatments can be initiated 银行需要重新审查现有客户的联络方式,以确保能够对第一方欺诈进行处理

Application

1

Account Creation

2

<1 Month

Early Life >1 Month

3

<3 Muniths

Extended Life >3 Months

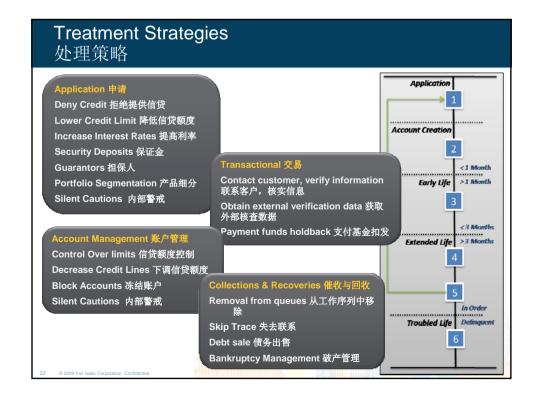
In Order

Troubled Life Delinquent

6

## Overall Treatment Strategies 第一方欺诈的全面处理策略

- » Firstly when considering policies around treatment strategies the propensity for FPF needs to be considered
  - 首先,在分析处理策略的相关政策时,需要考虑第一方欺诈的倾向特征
  - » Eg. High, Med, Low 如: 高、中、低
- » Also determine what "markers" need to be implemented across systems 同时确定在系统中如何对其进行"标记"
- » Determine the appropriate options for 确定适当的处理类型:
  - » Block Decision Matrices 阻截决策矩阵
  - » Referral Decision Matrices 推荐决策矩阵
  - » Suspect Marker Matrices 可疑标记矩阵
- » These need to be built out across the lifecycle 这些策略需要在整个生命周期内进行部署



# Prevention Opportunities 预防第一方欺诈的时机

» The prevention opportunities are limited to key points

预防欺诈的时机主要局限于几个关键时点

- » These opportunities often only fall into: 预防欺诈的时机通常出现在以下环节:
  - » New Account Originations 新账户申请授信
  - » Requests for new lines of Credit or new services 申请新的信贷产品或服务
  - » Changes to existing account data 变更现有账户数据
  - » Transaction / Charge Disputes 交易/收费纠纷
  - » Real time transaction Decisioning 实时交易决策
- » Main focus to limit credit exposure to linked decisioning across the lifecycle

主要关注点是确保信贷处于生命周期关联决策的可控范围内

Application

1

Account Creation

2

<1 Month

Early Life >1 Month

3

<3 Months

Extended Life >3 Months

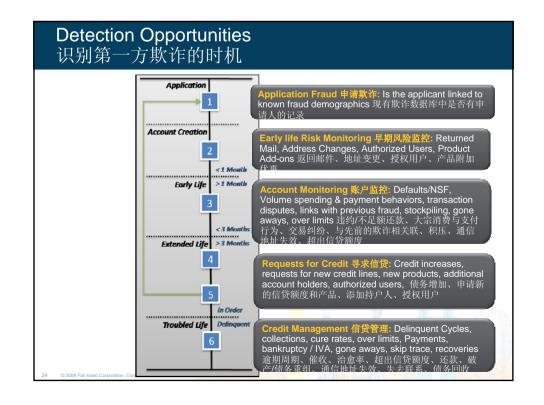
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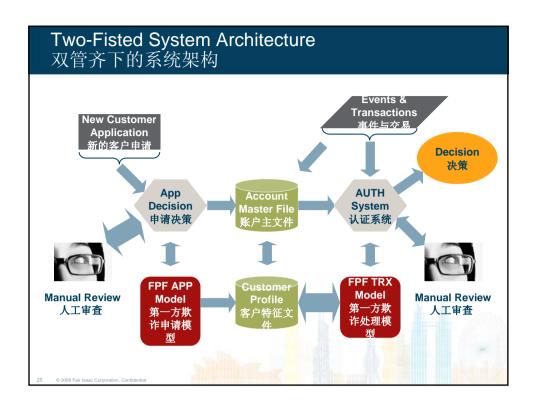
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In Order

Troubled Life Delinquent

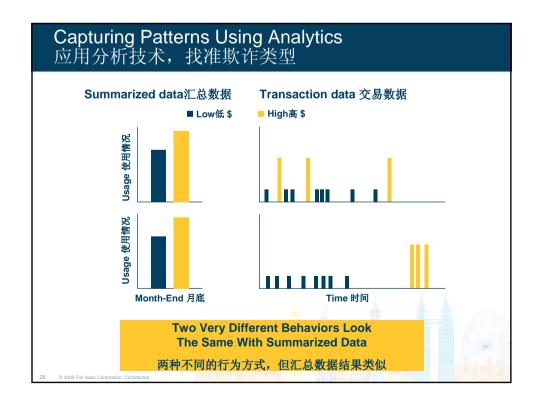
6







### Predictive Event & Transaction Data预测事件与交易数据 FPF Second Punch 打击第一方欺诈——第二击 Purchases 购买 Category 类别 Amount 金额 Date/time 日期/时间 Type 种类 Payments 支付 Amount 金额 Date 日期 Method 方式 Minimum due 到期应付最低金额 Transfers 交易 Destination Acct 目的账户 Amount 金额 Date/time 日期/时间 Type 种类 Non-monetary 其它非货币 Credit line increase request 上调信贷额度 Contact info change 联络信息变更 Return mail 返回邮件 Disputes 纠纷

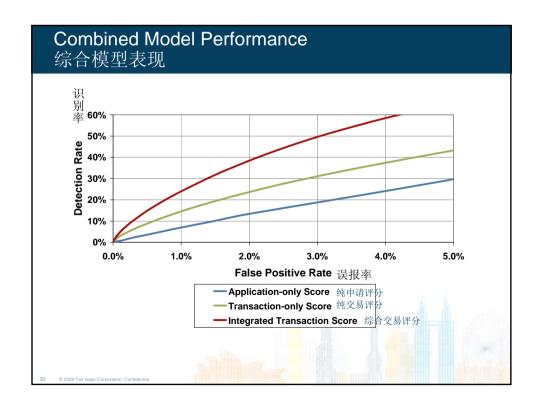


## Account Holder Profile 持户人特征档案



### A cardholder profile includes: 持户人特征档案包括

- » First stage application model output 第一阶段申请模型输出结果
- » Time-based variables illustrating user behavior over time (e.g. average number of transactions per week) 显示用户长期内行为特征的时间型变量(如:每周平均交易数)
- Numeric variables indicating volumes.
   (e.g total spend last day) 显示数量的数字变量(如:前一天的总消费额)
- Purchase data (type of goods purchased) 购物数据(购买产品的种 类)
- Ratios and Rates (combinations of inputs to optimize information value, e.g. fraction of cash transactions) 比率与比例(提升信息价值的综合数据,如:现金交易比例)



### Success Story: Large Multi-National Bank 成功案例: 大型跨国银行 » Ranking among the top ten financial service organizations worldwide and top 5 in Europe 世界前十大金融服务机构之一、欧洲前五大银行之 Client Challenges Fair Isaac Solution Results 成果 客户面临的挑战 费埃哲的解决方案 » First Party Fraud losses Application scorecard + transaction neural network First Party Fraud models 申请评分卡+交易神经网络第一方欺诈模定 Case Management System with proper prioritization 案例管理系统 恰当的优先排序 reduced to 40bp in 3 years 第 一方欺诈损失在三年内减少了 40个bp » False-positive rates cut by a third 误报率降低三分之一 120.0 80.0 60.0



## Incorporating FPF Indicators into Originations & Account Management Strategies

申请授信与账户管理策略中整合第一方欺诈指标

#### Application 申请

- Deny credit 拒绝提供信贷
- Lower credit limits 降低信贷额度
  - Portfolio Segmentation 产品细分

#### Transaction 交易

- Contact Customer Verify contact info 联系客户——核查信息
- Obtain Additional Information (3rd party sources) 获取其他信息(第三方资源)
- Payment Funds holdback 支付基金扣发

#### Account Management 账户管理

- Over limit strategy 超出信贷额度的策略
- Credit line increase/decrease 信贷额度上调/下调
  - Block account 冻结账户

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## Connected Decisions Bring Value 关联决策实现增值

关联决策实现增值				
1.	Enhanced rule management and scoring in Collections 改善了催收中的规则管理与评分结果	<u>Value价值</u> \$7M <u>*</u>		
2.	Identify First Party Fraud in originations and early in the lifecycle 实现申请和生命周期早期对第一方欺诈的甄别	\$6M		
3.	Easily extend the use of external data in collections 促进外部数据在催收中的使用	\$4M		
4.	Identify First Party Fraud among collection cases 识别催收案例中的第一方欺诈账户	\$2.4M		
5.	Improve account management with integration of transaction based scores 整合交易型评分,改善账户管理	\$2.3M		
6.	Improve collections through assessing the impact of operational negation 评估操作否定的影响,提升催收效率	\$1.6M		
7.	Improve agency assignment in collections 改善催收外包任务分配结果	\$1.1M		
8.	Improve early account management and cross- <mark>se</mark> ll 改善早期账户管理和交叉销售结果	\$827K		
9.	Improved on-going strategy management 完善现行策略管理			
*1 Year Benefit based on: client portfolio of 2mm accounts with average balance of \$2k and industry standard bad debt and  interest income rates: 根据200万账户、平均余额为2000美元的客户数据和行业标准坏账率和利率得出的一年收益数据				







