Machine Learning e Data Science no Serasa Experian DataLab

Renato Vicente Chief Scientist no LatAm Experian DataLab Professor Associado na Universidade de São Paulo Ago/2019

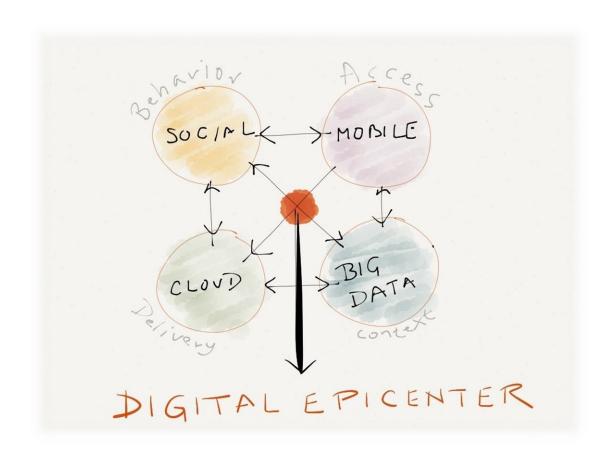


Contexto



Infosfera

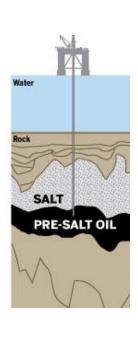
Tecnologias de rede multiplicam novas fontes de dados em ritmo exponencial. Cada usuário se tornou um produtor de informação.





Dilúvio de Dados

A produção de dados supera em muito nossa capacidade de armazenamento. Supera ainda mais nossa capacidade de análise. A informação que deixamos de analisar forma um présal de dados.



análise

Ciência de Dados

A Ciência de Dados é a prática que permite a industrialização do processo de extração de valor do pré-sal dos dados.



Coleta de dados



Pré-processamento



Machine Learning



Visualização dos resultados

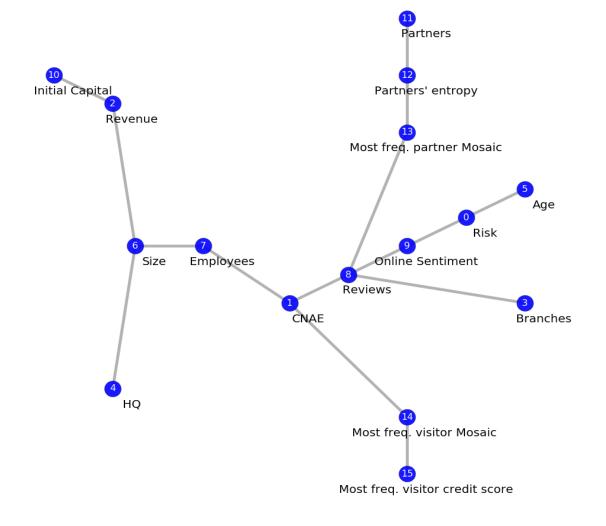
Questões-chave em Ciência de Dados



Relevance

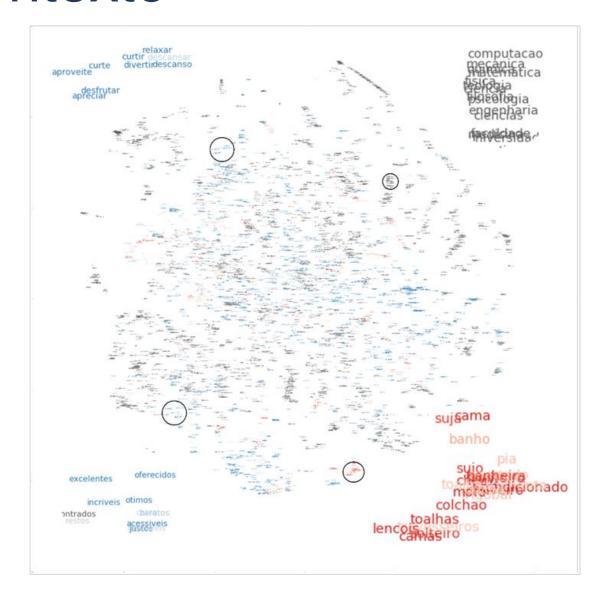






Contexto





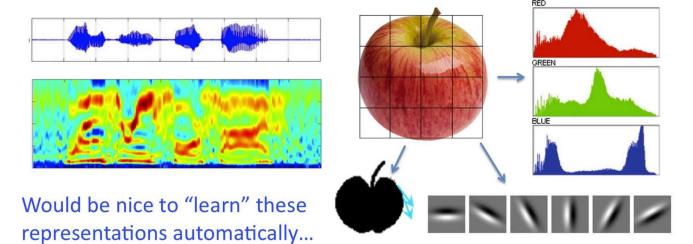




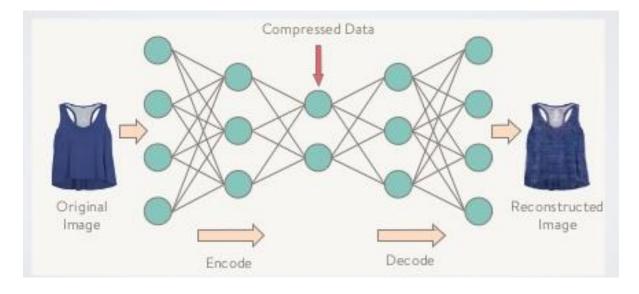


Representação



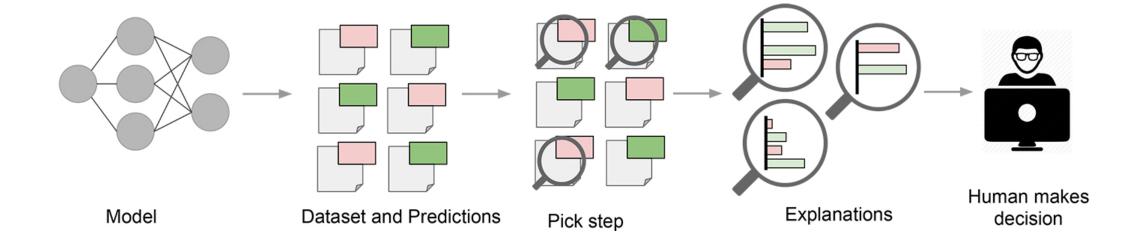






Interpretabilidade





Os DataLabs



Rede Global de DataLabs





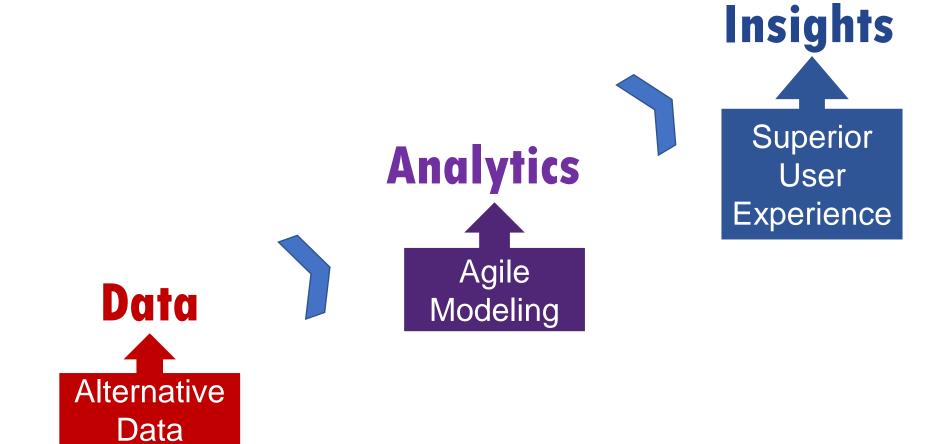






2010 2014 2016 2018

Cadeia de Valor em Analytics





O mercado tem validado nossa estratégia

CORE BARCLAYS Equity Research | Instant Insights 10 September 2018 Paul +44 (0)20 paul.sullivan@barc Barclay Completed: 09-Sep-Sullivan 3134 3307 s, UK 18, 17:38 GMT +44 (0)20 Paul paul.checketts@ba Released: 10-Sep-18, Barclay 3134 0522 Checkett rclays.com s, UK 04:00 GMT

mailto:paul.checketts@barclays.com

Experian PLC

Beyond credit

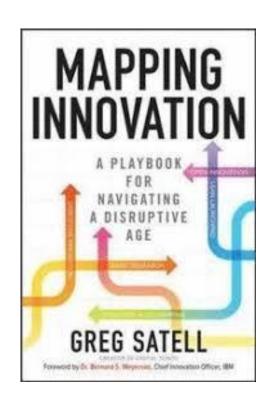
Stock Rating/Industry View: Overweight/Positive Price Target: GBp 2,000 Price (07-Sep-2018): GBp 1,890 Potential Upside/Downside: 6% Tickers: EXPN LN / EXPN.L

We recently hosted senior management as part of our Business Services Forum in New York. The message is clear: Experian is at the early stage of an elevated growth phase driven by new products and favourable market conditions, which should sustain annual organic revenue growth in the region of 6-8% in our view.

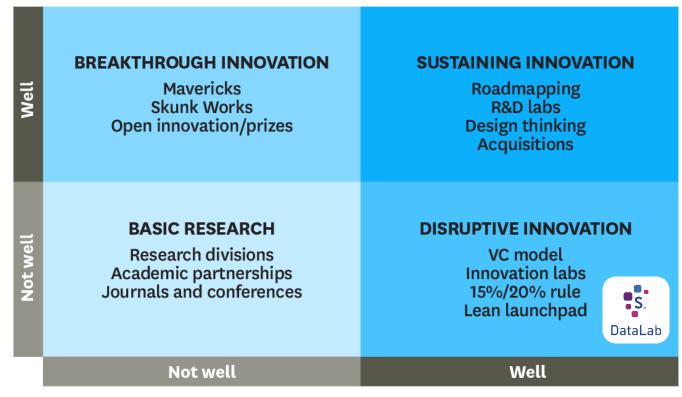
The pace of product innovation has intensified:
The pace of change has undoubtedly quickened, with more new products coming to the market than ever before. We met with Eric Haller, EVP and Global Head, Experian Data Labs – which is an experimental R&D centre with approximately 60 PhD data scientists, tasked with discovering new ways to exploit linkages between Experian and client data.

Praticamos inovação de ruptura

4 Types of Innovation



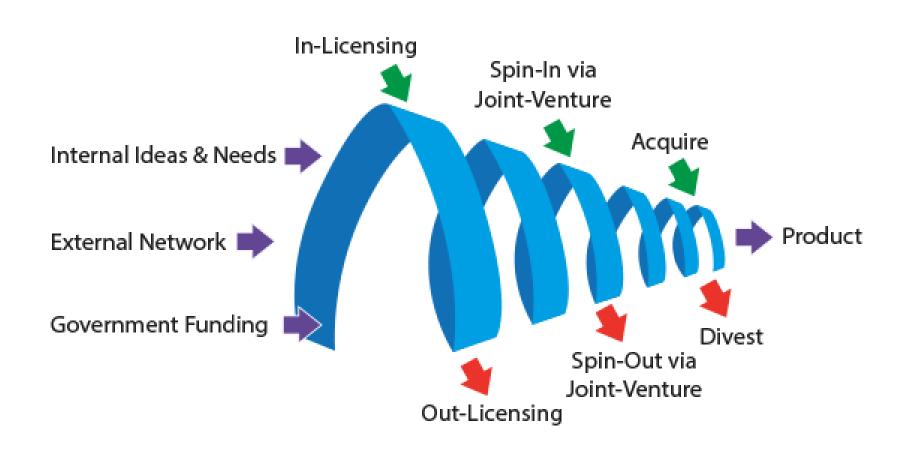
HOW WELL IS THE PROBLEM DEFINED?



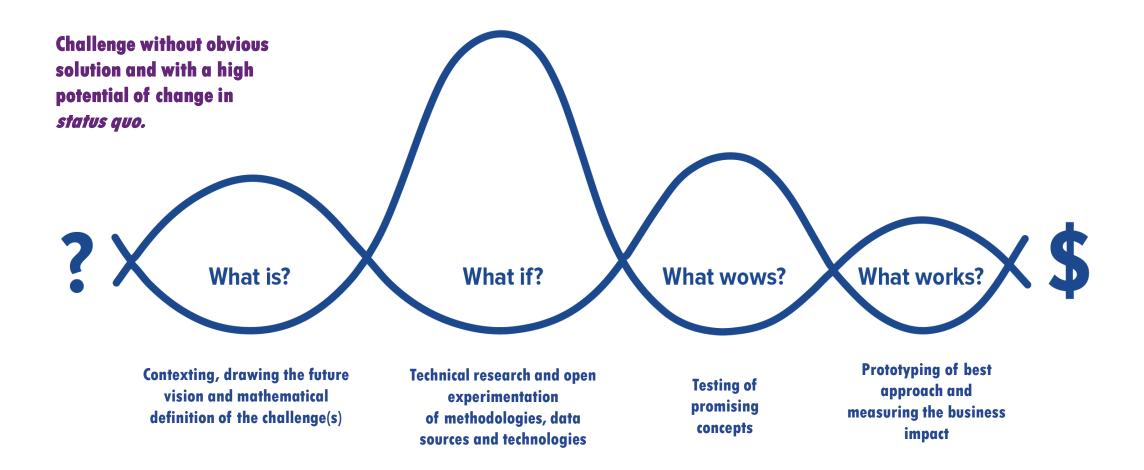
HOW WELL IS THE DOMAIN DEFINED?

SOURCE GREG SATELL © HBR.ORG

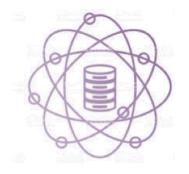
Open Innovation



Engagement cycle for innovation



Estrutura dos times



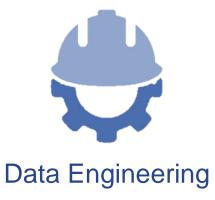
Data Science







- 1) Pesquisa cientifica
- 2) Experimentação
- 3) Teste de novas idéias









- 1) Prototipação
- 2) Construção de MVPs
- 3) Implantação em produção











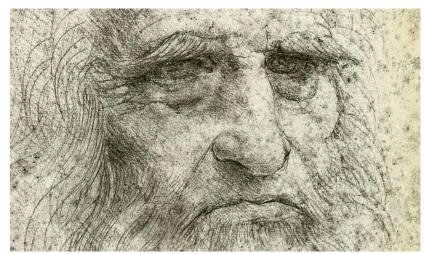
- Dimensionamento de oportunidades
- Definição de modelo de negócio
- 3) Estratégia de ida a mercado

Atraímos jovens talentos



noite

Cultura e melhores práticas



- 1. Seja curioso como uma criança
- 2. Observe
- 3. Comece pelos detalhes
- 4. Se concentre naquilo que ninguém parece dar atenção devida
- 6. Respeite os fatos
- 7. Pense visualmente
- 8. Evite silos
- 9. Crie para você não para seu chefe
- 10. Colabore

- 0. Be antifragile
- 1. Google it first
- 2. Test small first.
- 3. Check data quality
- 4. Use Bayes theorem



O espaço físico é expressão da cultura





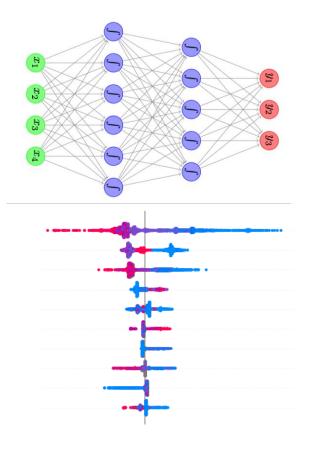
Áreas de Pesquisa



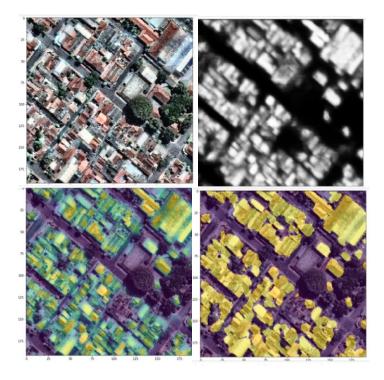
Mobile Insights

Calls Calls Calls Consumption Applications Calendar cts File Statist Consumption Applications Messages File Statist Consumption Messages

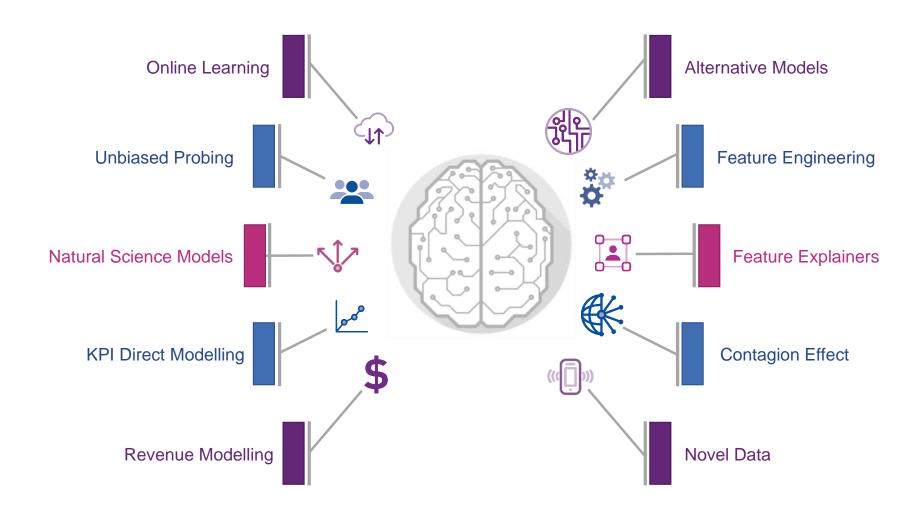
NextGen Credit



Remote Sensing Data



NextGen Credit





Mobile Insights: Score Digital



