CATALYZING YOUR ANALYTYCS TRANSFORMATION, THANKS TO EARLY MODEL RISK GOVERNANCE

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**BNP PARIBAS
CARDIF**

The insurer for a changing world

My personal experience on Model Risk Governance

DON'T WAIT, START AS SOON AS POSSIBLE

TAKE ON THE CHALLENGE
TAKE LEAD
TURN IT INTO AN OPPORTUNITY

ROI IS SIGNIFICANT

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Models? What are we talking about @ BNP Paribas?

BNP Paribas RISK department retained as « model » definition

Quantitative method, system or approach that produces **estimates of uncertain values** and used to **make decisions** and/or to **make public communications**

BNP Paribas Cardif – insurance branch of BNP Paribas

(z) Variation at constant scope and exchange rates

A DIVERSIFIED ACTIVITY

World leader in credit insurance

51% REVENUES* PROTECTION

49% REVENUES* SAVINGS

*Economic net banking income

GROSS WRITTEN PREMIUMS
31.8 €Bn
+9%/2017[1]

ASSETS UNDER MANAGEMENT
239 €Bn
+1%/2017

SERVING 100 MILLION POLICYHOLDERS AROUND THE WORLD

35 countries

10 000 EMPLOYEES

**Unique business model anchored in partnerships
500 partner distributors in a variety of sectors**

- Banks and financial institutions
- Credit companies
- Automaker financing arms
- Financial advisors and brokers
- Retailers
- Telecommunications and energy companies

Model Risk Management is not brand new

- **Highly regulated financial industries** have already built organisations around model risk management, partly driven by **regulatory and supervisory** instances' requirements

@BNP Paribas CARDIF	**ACTUARIAL AFFAIRS**	**FINANCE**	**RISK**
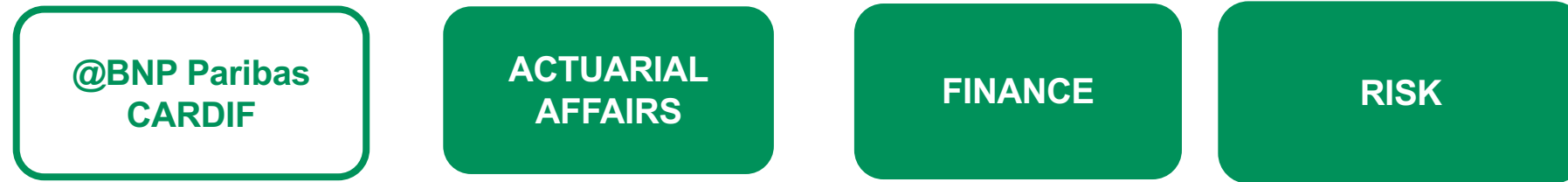
- **New advanced Machine Learning / AI based models** not traditionnaly used in financial industries get **regulatory and supervisory** instances' recent attention

- Legitimately, as turning into **a « model driven insurance company»** means the overall risk profile of the company will be significantly impacted

2 phenomenons observed @ BNP Paribas Cardif

1 - Model risk aware departments face changes in number, type and complexity of models developed (ML/AI)

ACTUARIAL AFFAIRS **FINANCE** **RISK**

Amplified by contribution and help from new internal teams and department, and/or external consultants providing expertise and ressources

2 - Traditionally not model risk aware departments all want to accelerate their transformation by introducing models in their processes

Operations Marketing / Sales HR Legal Compliance IT

ANALYTICS

Machine Learning & AI model risk governance needed

Need of a new governance, complementary to existing ones, addressing the challenges of:

NEW TYPES OF MODELS (AI/ML)

NEW USES SPREAD ALL OVER THE COMPANY

VOLUME OF MODELS IN PRODUCTION

Design of a AI/ML Model Risk Governance

Preconceptions about governances

Design may not be straightfoward

Time consuming project

Not the funiest part of the job

Complex and slow approval process

Innovation killer

Prevents agility

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1 – Take lead & strengthen your transformation strategy

Gain credibility and visibility
(ExCom, IT, Security, Risks)

- Show your roadmap is comprehensive
- Risk aware stakeholders will see you as a trustable leader

Step back
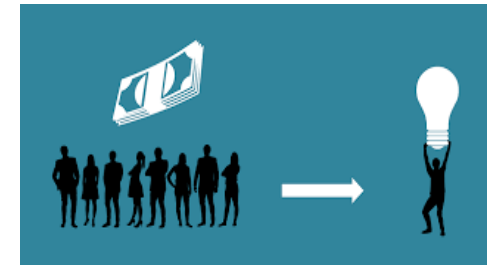about target organisation / recruitments / roadmap

- Opportunity to shape your vision and convictions
- Indentify your current weaknesses

Reinforce support for some strategic projects
(ex: data science platform)

- Some projects will become even more legitimate
- May help to raise additional funding for those projects

2 – Governance : a tool to focus on what's important

Help you focus on industrialisation aspects of your analytics project methodology

- Link your project methodology to model governance expectactions
- Make sure governance is project oriented

Control frenetic launch of unrealistic POCs in all departments

- Legitimately select projects with a chance to live up to production stage
- Save time and precious ressources

Contribute to acculturation, education & change management

- Model driven company = all employees should understand what is at stake
- Create contact opportunities with your internal clients

3 – Start soon & accelerate the transformation pace

Take lead & control on Governance content
designed to your vision and needs

- Ensure the governance leverages on your visions and expertise in Analytics
- Design a business oriented governance to keep agility and innovation possible

Decrease projects marginal cost & Increase probability of sucess

- Standardization thanks to a clear model risk governance
- Project managers clearly know what to do or not do at project inception

IP & strategic asset
along with data/people/technologies

- Can your competitors realistically industrialize dozens of AI models with no clear risk model governance?
- IP = Smartly designed, business oriented
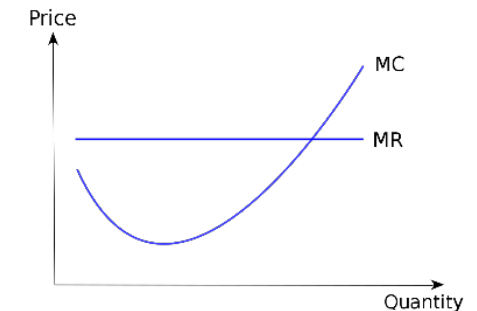
My advice on how and where to start

Get inspiration from existing governances

Start by writing macro principles (arrange details later)

Use approach of «test driven development »

Iterate with validators (top management)

Onboard RISK and IT from start

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My advice on content

Roles
&
responsabilities

Methodology
&
documentation

Scientific approval
&
Business approval

Technological set up

IT & Data Scientists
collaboration

Model Lifecycle

THANK YOU!

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