How Technology Enables Efficient Exposure Management

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1. Automation
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Reduce the time analysts spend on processing and tasks that are able to be and should be automated. Allowing analysts to focus on aspects that add even greater value.
Automation of Workflow

An opportunity to improve the workflow, reducing email traffic, increased transparency, auditability, and the ability to trigger processing tasks automatically.
Manual Operating Models

Raw Data
- Data attached to SQL server.
- Data manipulation / Augmentation / Preparation / Conversion

Pricing & Underwriting
- Transfer of summarized data to subsequent teams

Submission
- Initial contact from Broker.
- FTP link provided.
- Data Downloaded to drive

Catastrophe Modelling
- Application of financial terms
- Analysis of view of risk through Catastrophe Model

Portfolio Aggregation
- Bound list of accounts per class.
- Aggregation across classes.
- Multi-level reporting.

Even in this simplified model there are 11 manual processes listed – often comprising of multiple sub-processes.
Automated Operating Models

Inclusion of human integration at specific touchpoints

Submission
Automated data ingestion into corporate environment

Catastrophe Modelling
API driven analyses

Portfolio Aggregation
Integration of multiple systems

Raw Data
Standardized Curation

Pricing & Underwriting
Direct Transfer to Underwriting toolkits
Automation – the questions...

**What?**
Any repetitive tasks where logic can be applied.

**Touchpoints**
Dependent upon the data & sources – where is human intervention required?

**Skill Gap?**
Can the automation of manual processes create a separation from underlying data?
Skills
Skills within Exposure Management

**Skill Gap?**
For new joiners into the Catastrophe Modelling space, is there a risk of separation from the underlying data & processes.

**API Utilisation & Engagement**
Processes should be built out in conjunction with developers to avoid key person dependencies. What about those out of scope?

**Learning from data science**
Many incumbents have joined from geophysical & mathematics background.
Needs to continue, but supplement with data science skill sets, either through recruitment, or inhouse training & development

**Prompt crafting...**
A comparable new skill to develop to engage with AI Large Language Models.

What skills should we be looking for in prospective team members?

What skills should we be looking to train our teams in?
Artificial Intelligence
Each new technology and product category has an adoption curve which represents the cumulative rate at which a population adopts a service, product or technology over time.
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Historic Technology Adoption – US Households

Technology Diffusion (Comin and Hobijn (2004) and others)

- Landline
- Automobile
- Internet
- Colour TV
- Electric Power
- Cell Phone

Adoption by US Households (%) vs Years since Launch
Online Services Adoption – a Chat-GPT comparison

Platform User Growth to 100m Users

Source: Netscribes.com
Online Services Adoption – a Chat-GPT comparison

Source: Netscribes.com
Technology Adoption

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Exciting proposition of this technologies maturity considering unprecedented interest, user base and potential.

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Where are we?
Industry Applications – how could we use it?

Asking the right questions!

**Summarisation**
The ability to obtain, review & summarise data live on the internet i.e. assist in review of events.
Summarisation of Model settings provided from a broker?

**Automation**
Automatic e-mail/quote/report generation in underwriting/pricing systems.
Email/Account triage?

**Slip interpretation**
Improve on where Machine Learning is operating to help interpret Slip wordings rather just classifications

**Can we insure it?**
Does it offer a new threat vector? Is this a new opportunity for Insurance?
Summary

Automation should be undertaken wherever significant repetition of work occurs – however it’s important to consider where human integration is required.

Must consider holistic training of new joiners to an automated process. Both new joiners & incumbent professionals should be considering skills to handle large data volumes & sources in our industry.

AI is a potentially transformative technology which is important to embrace as it develops at rapid pace. Prompt crafting is a skill for us all to develop.