

OneSumX

The HKMA's Global Regtech Challenge
Winning Solution of Problem
Statement 4: Risk Management



Wolters Kluwer

Industry Challenges around Stress Testing

3+ months Time required to implement stress testing

\$100M+ Estimated annual spend of 25% of the Banks

80% Banks Data Automation and Data Quality concerns



COVID-19, recession, losses



New business; Credit quality?



New regulations and compliance



Changes in the playbook; digital only banks



Speed of changes and economic events unlike none previously experienced



Predicted increase in the frequency of stress events



DISINTEGRATED POINT SOLUTIONS

Lack of unified stress testing results across risk types - Credit risk, Market Risk, Liquidity and Capital all in one view.



DATA SILOS

Segregated portfolios & reconciliation issues as data are not integrated and often kept in silos.



DIFFICULT & TIME INTENSIVE PROCESS

Manual processes, long turnaround time to create stress scenarios and generate stress testing results.



LACK OF OPTIMIZATION

Lack of bottom-up and top-down approach for capital & liquidity planning.



LACK OF CONSISTENT SCENARIOS

No enterprise-wide implementable & reusable scenarios, different data sets, models & methods.



SIGNIFICANT COST OF OWNERSHIP

Disintegrated solutions lead to high maintenance costs & infrastructure costs.

OneSumX Integrated Stress Testing Solution

How can Regtech Help

Challenges	Solution	Regtech
Data Silos	Single risk & finance data model sourced from multiple internal and external systems	✓
Slow turnaround time	Intuitive, fast & easy scenario creation & execution Reconciliation by design	✓
Disintegrated point solutions & stress testing results	Single comprehensive platform for stress testing across risk types	✓
Lack of consistent Scenarios	Reuse scenarios across departments, consistency in definition & assumptions	✓
Lack of Optimization	Unified business analytics enabling actionable management actions	✓
High Cost of Ownership	Reduced ownership with subscription model	✓

Data Management

- World Class **Reconciled** central Data layer
- **Historical Data** management
- Strong data **glossary**
- Robust Interfacing capability
- Store data from multiple sources and domains to give one **seamless integrated platform**

Ad-Hoc Stress Scenarios Agility

- Quickly **create ad-hoc stress** scenarios
- Easy **slice and dice and analytics** for capital and liquidity planning

OneSumX Solution

Robust Risk Stressing Methodologies

- Credit Risk, Market Risk, Reputational Risk, etc. are **prebuilt and available** to be stressed
- **Stochastic** stress testing using **Static** and **Dynamic** analysis



Multi-dimensional Solution

Finance & Risk Calculation

- **Easily** configurable Business Rule engine to **perform complex calculations**
- Supporting various Finance & Risk Calculations such as **IFRS9, Credit Risk (RWA), CVaR, Market Risk, Reputational Risk**, etc.
- Strong stress capabilities to stress various risk factors such as **macro economic factors, credit risk factors, market risk factors**, etc.

Business Analytics

- Online analytical processing (OLAP) cubes to view reports in various **dimensions & hierarchies**
- Generation of **regulatory reports** in prescribed format given by regulators
- **Management dashboards** using analytical tools

Proof of Value¹

Error Reduction



With OneSumX, errors are drastically reduced, and once maturity is achieved with the tool, experience **0 errors** making stress testing results actionable for competitive business decision



Effort & Cost Reduction



Working days are reduced from **930 man-days** to 204 man-days (for a single Bank), with better efficiency and reduced resourcing requirement. Cost is drastically reduced from **11M HKD** to only 2.6M HKD



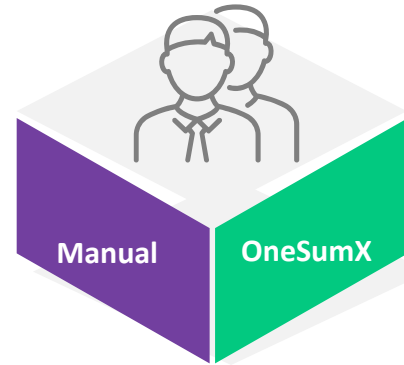
Ad-Hoc Agility Improvement



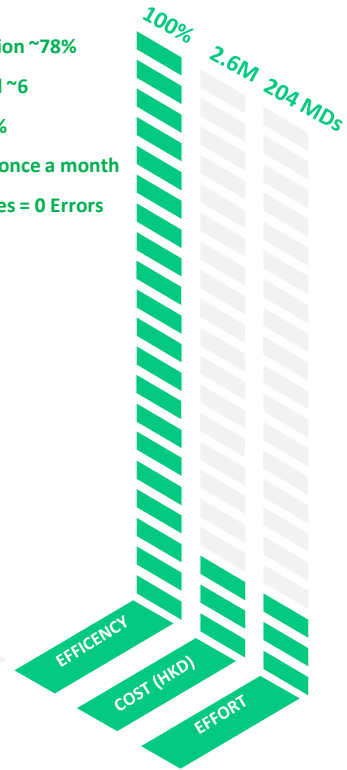
With OneSumX, agility for crisis reporting is increased by 100%. **Cost for 5 years of License is recovered** within the **first year** of implementation. Lower capital buffer is charged by a regulator



Man-days (MDs) required ~930
 Employees required ~ 19
 Cost is 11M HKD per year
 Stress reporting is done once every 6 months ~ 20%
 Error-prone processes



Effort (MDs) reduction ~78%
 Employees required ~6
 Cost reduction ~76%
 Stress testing done once a month
 No Manual processes = 0 Errors



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