# FÍNCAD®

## Ashburton Investments Acquires F3 for Liability Driven Investment Solution

## Highlights

#### Client

Ashburton Investments

#### **Business objectives**

Develop a robust fixed income valuation and risk toolkit across all investment processes

#### Requirements

- Comprehensive OTC derivatives
  and fixed income coverage
- Ability to integrate with trade management system
- Limited key man dependancy on quant model development

#### **FINCAD** solution

F3 Excel<sup>®</sup> Edition

#### **FINCAD** features

- Bespoke, object-oriented modeling
- Universal Algorithmic Differentiation™

#### **Success factors**

- Single, scalable multi-asset pricing and risk environment
- Quant support

## Ashburton Investments' Challenge

Ashburton Investments, FirstRand Group's investment management business, is an African-based investment manager which provides integrated investment solutions involving the construction and implementation of Liability Driven Investment (LDI) solutions for pension fund and insurance clients to manage key investment risks.

Ashburton Investments identified a need for a quantitative analytics solution to develop its front office portfolio management toolkit for managing LDI mandates, including portfolio construction, implementation, and on-going risk management.

Despite having access to in-house analytics from FirstRand, Ashburton Investments decided to seek an external pricing and risk solution for holistic analysis of pension and insurance investment risk. This solution needed to analyze exposure to a wide range of risk factors related to LDI including interest rates, inflation, credit, equity, and liquidity.

Additionally, Ashburton Investments needed an analytics solution that could effectively quantify the collateralization impact on their derivatives and aid their investment decision making when comparing cash and derivative-based hedging instruments.

## **FINCAD's Solution**

Ashburton Investments chose F3 Excel<sup>®</sup> Edition for the key building blocks to develop its front office portfolio management toolkit.

The intuitive, flexible, and transparent object-oriented design of F3 resulted in a rapid implementation. Also, because F3 architecture segregates the concepts of products, models, and valuation methods, Ashburton's quantitative analysts can ensure that their analytics are calibrated to their local market conventions.

Furthermore, Ashburton Investments was well supported by FINCAD Professional Services and comprehensive F3 documentation. During the implementation phase of their portfolio management toolkit, ongoing access to FINCAD's support team and comprehensive model documentation enabled a rapid time to market and a clear understanding of F3 analytics as opposed to using a black box solution.

#### About FINCAD

An established leader with more than 25 years of experience, FINCAD provides innovative and trusted financial analytics software to organizations worldwide. With deep market understanding, a client-centered business approach, and unmatched quantitative and software engineering expertise, FINCAD is uniquely positioned to lead the market in enterprise valuation and risk technology. FINCAD serves more than 1,000 organizations across the globe. To learn more about FINCAD's award-winning solutions, please visit fincad.com.

#### **Global Support**

## Vancouver New York London Dublin



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## **The Results**

With the F3 solution in place, Ashburton developed a robust portfolio management toolkit. F3 is the unified analytics solution used across the investment process of each LDI mandate.

Ashburton's F3 implementation allows them to efficiently construct investment portfolios to hedge liability cash flows and enhance portfolio yield. F3 enables Ashburton to quantify interest rate risk across both zero coupon and par yield curves in a single framework, saving time, resources, and improving efficiency. Also, Ashburton Investments utilizes credit investments for yield enhancement. They can leverage their F3 solution to accurately quantify their credit risks across all their portfolios.

Across all analytics, Ashburton utilizes FINCAD's patented Universal Algorithmic Differentiation™ (UAD) to obtain optimized hedge proposals nearly instantaneously. Leveraging the F3's optimal architecture, UAD produces optimized hedge proposals on-the-fly with minimal resources as opposed to conventional numerical optimization methods which are both time and resource intensive.

Furthermore, because F3 is a unified framework for valuation and risk measures, Ashburton is able to effectively quantify portfolio level risk, like Value-at-Risk, and performance measures, like P&L attribution, efficiently and consistently in a single context.

Going forward, Ashburton Investments is eager to further develop their portfolio management toolkit by leveraging additional F3 analytics features and coverage.

"Most of our competitors are only using ad-hoc desk-top solution. Having a pricing and risk system with a solid back-end foundation and stability has made our investment process more robust. With the holistic F3 solution in place, we offer enhanced credibility, better investment management, and ultimately better performance for our portfolios."

Paramesan Mathen, Institutional Solutions, Ashburton Investments

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