

>> OVERVIEW

Parent company:	BondDesk Group
Management:	Jan Mayle, president, TIPS LLC/TechHackers; Peter Crosbie, CEO, BondDesk Group
Date founded:	1986 (acquired in 2005)
Ownership:	Private Equity
Products:	@analyst and QuantTools
Major clients:	JPMorgan, Nomura Securities, Merrill Lynch, Goldman Sachs, Charles River Development
Website:	www.thi.com
Email:	sales@thi.com
Head office:	332 Springfield Avenue, Summit, NJ 07901, USA
Telephone:	+1 908 598 1460 Ext. 450

HISTORY

TechHackers was founded in 1986 by former Coopers & Lybrand (now PriceWaterhouseCoopers) consultant Atul Jain. The company started by developing analytical software catering to institutional players in the fixed income and derivatives markets. The products are delivered to financial clients in the form of C Libraries and Excel Spreadsheet add-ins.

In 1999, TechHackers was acquired by IT services company Unisys Corp. as part of its overall strategy to expand its services into the financial arena. By the time of the Unisys acquisition, TechHackers had expanded its product functionality to include asset securities and risk management.

At that time, Jain joined Unisys as a managing director and head of that company's American capital markets technology business. Jain left Unisys after a year and a half for Countrywide. He is now CEO of Vichara Technologies, a consulting firm offering software services to the financial sector.

In 2005, BondDesk purchased TechHackers from Unisys for an undisclosed amount. TechHackers was embedded within BondDesk's BondDesk Analytics division. This acquisition extended BondDesk's product line with additional security types and more sophisticated modelling tools. BondDesk also took advantage of TechHacker's specialisation in quantitatively complex areas to expand their footprint into other markets. The TechHackers product line was also integrated with the TIPS fixed income analytics system, which was acquired by BondDesk in 2002.

BondDesk provides software and systems for the fixed income industry in North America. It also runs the BondDesk Alternative Trading System (ATS) through its broker dealer subsidiary BondDesk Trading.

PRODUCTS AND DEVELOPMENT

TechHackers claims to have sold its products to around 3,000 financial institutions world-wide. The @analyst Excel Spreadsheet add-ins is a set of financial functions and calculations, which create Excel spreadsheet models. It offers pre-built templates which allow you to test calculations and customise real spreadsheet examples of various financial models.

The QuantTools Analytics Libraries are a comprehensive set of C/C++, Java and VB callable object code libraries for financial system builders and developers. The market-tested and market approved analytics are provided in Windows FLL or Unix libraries.

TechHackers have not announced any new client wins or product developments of late.

However, when they were still owned by Unisys, TechHackers worked with eSpeed, the electronic trading platform of bond broker Cantor Fitzgerald, to develop the AutoSpeed @analyst product. AutoSpeed @analyst allows traders to model and execute market-making, relative value and sophisticated proprietary strategies through an Excel spreadsheet, in real-time.

In 2000 Redwood Investment Systems, developer of redwood.com, an integrated web console created specifically for professional portfolio managers and analysts, signed an agreement with TechHackers to supply its QuantTools solution to the redwood.com destination site.

In 1999, Arbitrade Holdings, a market maker in exchange traded derivatives, licensed TechHackers' Bond QuantTools module libraries and a number of @analyst spreadsheet add-in packages to support their fixed income trading operations.

Also in 1999, Charles River Trading System, a buy-side multi-currency order and trade management system for investment managers, owned by Charles River

Development, incorporated TechHackers' Bond and MBS QuantTools libraries in its trading system.

In 1998, the New York City branch of Rabobank International and TechHackers completed the first phase of a project to develop a comprehensive front, back, and middle office production and management information system for Rabobank's Stable Value Product (SVP) business. The SVP provides book value accounting for fixed income securities in a 401(k) Stable Value fund. The project was completed by the end of the first quarter of 1999.

QUANTTOOLS & @NALYST	
5 FLEXIBILITY IN TERMS OF TECHNIQUES continued	
Subsidiary	No
Product	No
Maturity band	No
Sector	No
Concentration	No
Country	No
Trader	No
Portfolio	No
Collateral	No
Number of hierarchy levels	No
VaR limit	No
Pre-deal check	
Workflow	
Other (please describe)	
Operational Risk	
RCSA	
LED	
KRI	
Structured scenarios	
Capital calculation	
SOX	
Economic Capital	
Calculation	
Reporting	
Allocation	
Regulatory	
Basel II Pillar 1: Regulatory Capital	
– Basel II Mkt Risk	
– Basel II Credit Risk: Standardised	
– Basel II Credit Risk: IRB Foundation	
– Basel II Credit Risk: IRB Advanced	
– Basel II Operational Risk: Basic	
– Basel II Operational Risk: Standardised	
– Basel II Operational Risk: AMA	
– Basel II Pillar 1: Regulator Capital	
Basel II Pillar 2: Supervisory Review	
Basel II Pillar 3: Market Disclosure	
Patriot Act	
SOX	
IAS40	
Automated model inventory: Materiality	
Data pooling	
EPE	
EEPE	
Alpha	
IDR	n/a
Multi-jurisdiction	
Other (please describe)	
6 PERFORMANCE	
Speed	
Overnight VaR	n/a
Intra day VaR	n/a
Near real-time VaR	n/a
What can trigger an update?	
Update on new trade	n/a
Update on market data change	n/a
Update at predefined sub-minute time intervals	n/a
Change of day	
Is your system:	
Multi-threaded	Yes
Able to run simultaneous Risk engines on the same multi-processor box	n/a
Multiple simultaneous Risk Engines on different boxes	n/a
Grid	
Real-time feed interfaces:	
Which are supported (e.g. Reuters, Bloomberg, Datastream)?	Any
Can you compare between two different sources for quality control?	n/a
7 INTEGRATION OF DIFFERENT RISK AREAS (MARKET, CREDIT, OPERATIONAL)	
Does your system support and allow integration of the following type of risk:	
Market	Yes
Credit	Yes
Pre-settlement	
Settlement	Yes
Liquidity	Yes
Operations (STP)	Yes
Operational (strategic)	Yes
Event	Yes
Legal	Yes
8 EASE OF IMPLEMENTATION	
When a system is being implemented:	
What is the minimum/typical/maximum implementation time?	n/a
What is the minimum/typical/maximum implementation cost?	n/a
Do you offer fixed price implementations?	
What middleware systems do you interface to?	n/a
What type of import/export interface do you use?	Flat functional interface for C, Java, Visual Basic and Excel
What other vendor software have you linked to?	CQG, SAS-Risk Dimensions etc. Toolkit designed to be easily integrated into any software that can call analytic libraries
Which system integrators have experience of implementing your product?	n/a

TechHackers factsheet

QUANTTOOLS & @NALYST

9 SCALABILITY

Does your system support the following:

Global operation with replication of risk databases

No

Fault tolerant/redundant processing

n/a

Largest number of trades currently being processed by your system

n/a

10 CONFORMS TO INDUSTRY STANDARDS

What hardware/software platforms do you support for:

Client (e.g. XP, Vista, etc.)

Windows/NT, Solaris, Linux, AIX, HPUX, SGI, XP, Vista

Risk server (e.g. XP, Vista, Solaris, Linux etc.)

Windows/NT, Solaris, Linux, AIX, HPUX, SGI, XP, Vista

Database server (e.g. NT, Solaris etc.)

n/a

Underlying database (e.g. Sybase, Oracle, SQL Server)

n/a

11 COMPANY SUPPORT

Please supply the following information:

Support hours

8:30am-5:30pm, Monday to Friday, except on NYSE holidays

Number of support personnel

n/a

Number of employees

n/a

Company turnover

n/a

Number of clients

Approx. 3,500

Number of sites

Approx. 3,500

Source code available

No

Additional cost of source code

n/a

Approximate software costs for small single site/large single site/global

n/a

Annual maintenance fee (%)

20%

Top strengths (in 10 words or less)

Spreadsheet add-ins and object code libraries for fixed income and derivative analysis

Website address

www.thi.com

Top five sites

n/a

Most recent five new business sales

n/a