

# IFTA UPDATE

2013 Volume 20 Issue 4

## IN THIS ISSUE

- 1 President's Report to Colleagues
- 2 Congratulations New CFTes!
- 3 Save the Dates!
- 5 Calendar At-A-Glance
- 8 The State of Global Technical Analysis
- 13 Defining Requirements for an Algorithmic Trading System
- 16 Arms Candlevolume
- 19 An Unexpected Encounter of the Third Kind...
- 24 Member News
- 26 IFTA Member Societies
- 27 IFTA Journal Call for Submissions

**Next issue: March 2014**

### Submission Deadlines

**Education articles:** February 15—  
send submissions to [newsletter@ifta.org](mailto:newsletter@ifta.org)

**All other content:** March 1—  
send submissions to [admin@ifta.org](mailto:admin@ifta.org)

Advertise in the *UPDATE* and reach more than 6,950+ IFTA colleagues worldwide. For more information, go to [www.ifta.org/publications/newsletter/](http://www.ifta.org/publications/newsletter/)

a newsletter for the colleagues of the International Federation of Technical Analysts

## President's Report to Colleagues

Dear IFTA Colleagues,

I am happy to report that the IFTA conference in San Francisco was a success! We had more attendees than in past years and the presentations were fascinating. Plus, San Francisco is a lovely place for a conference. I want to thank our host, the Technical Security Analysts Association of San Francisco (TSAASF), and our former conference director, Roman Bogomazov, for organizing such a wonderful event.

This time, it was not just the usual three-day conference; we also had an interesting preconference and a closing tour of Napa Valley. Because the conference covered so many different topics, every attendee could easily find a favorite presentation. My personal pick was the Market Wizard session on Friday. With such an extensive program, you usually find something that is totally counter to your own thinking. For me, that was the amazing presentation on market geometry by Scott Hathaway. We all learned

about nautical miles, tetrahedral latitude, and the orbital angle. I also learned a lot from Howard Bandy's presentation about system development. And of course, I will never forget the performance by Ed Seykota, as I have never seen a financial presentation where the speaker sings his main messages accompanied by his banjo.

For the first time ever, we awarded an individual for his contribution to IFTA and to technical analysis as a discipline. During the conference, Professor Henry "Hank" Pruden was given the IFTA Lifetime Award.

Prior to the conference, we held the Annual General Meeting (AGM). Our members reported many interesting things from their societies, and we voted on new directors. We welcome Jeanette Schwarz-Young, Akira Homma, Mohamed Ashraf Mahfouz, Dan Valcu, and Gregor Bauer as new directors of the IFTA board.

*IFTA UPDATE* is a publication of the International Federation of Technical Analysts, Inc. ([www.ifta.org](http://www.ifta.org)), a not-for-profit professional organization incorporated in 1986.

International Federation of Technical Analysts  
9707 Key West Avenue, Suite 100  
Rockville, MD 20850 USA

Email: [admin@ifta.org](mailto:admin@ifta.org) • Phone: +1 240-404-6508

I wish them a very successful three-year term. As well, we bid farewell to Saleh Nasser and David Furcagj, who retired from the IFTA board. We thank them for their commitment in the past years and their contributions for the federation. We are grateful that both of them will continue to volunteer for IFTA on a committee level.

In San Francisco, the *IFTA Journal* was distributed to the delegates. Our *Journal* director, Aurélia Gerber, has edited the most voluminous issue that I can think of. For those colleagues who were not in San Francisco, the *Journal* will be available on our website. Also, we have added four shorter articles to this newsletter. Richard Arms and Mario Kfoury have contributed a paper, and we also have a contribution from South Africa—Steward Reid's article on Algorithmic Trading. Finally, we've published an abstract from a presentation that our former IFTA president, Adam

*President's Message (continued)*

Sorab, presented at the Australian Technical Analysts Association (ATAA) annual meeting.

It is also worth noting that IFTA has started sponsoring webinars. Marketing director Dan Valcu has started that project and has already organized two webinars, which were hosted by IFTA's German society, VTAD. The speakers were Tony Plummer and Philipp Kahler. According to Dan, we will organize these webinars regularly next year.

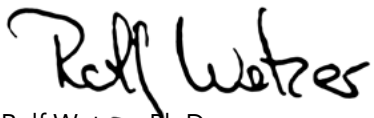
In November, I was invited by the French society to attend its autumn conference. AFATE organized a good conference, with Elliott Wave as the special topic. With that experience in mind, I encourage all colleagues to attend the conferences of other member societies. It is a good way to learn and socialize with experts and colleagues.

Our next conference will be held in London on 9-11 October 2014, and will be hosted by the Society of Technical Analysts (STA). The conference theme will be "Unravelling the DNA of the Market". Our new conference director, Deborah Owen, informed us that there will be special rates for very early birds, so I advise you all to check the website soon.

Last but not least, I want to thank all of you who took the time to send in material and news from your societies. It is part of IFTA's purpose to share ideas and information to other colleagues. Thank you very much for your efforts.

Best wishes for a healthy and prosperous new year! 🍀

Best regards,



Rolf Wetzer, Ph.D.  
IFTA President

## Congratulations New CFTes!

Abdul Razak Bin Abd Kathar (STA)	Munish Kumar (ATAA)
Muneera Al Dossary	David Victor Lipinski (STA)
Mohammed Al-Aker (STA)	Ley Yee Low (STA)
Constantinos Aristophanous (STA)	David Marchese (ATAA)
Edgar E. Aviles (ATAA)	Gabriele Massaro (STA)
Mohamad Shahrizul Nazli bin Bahrudin (STA)	Paul McLaren (ATAA)
Miroslav Brejla (STA)	Adam George McMaster (ATAA)
Steven Broom (ATAA)	Claus Meyer-Bothling (VTAD)
Robert Dean Chen (CSTA)	Mindaugas Miskinis (STA)
Andrew Clough (ATAA)	Omar Mohamed Naguib (ESTA)
Ainslie Ruth Clubb (ATAA)	Alexander Novak (VTAD)
Todd Luke Cole (ATAA)	Ivaylo Evelinov Pavlov (STA)
Charalambos Constantinides (STA)	Emanuella Petrou (STA)
Benjamin Denney (STA)	Charalambos Pissouros (STA)
Momen Atef El Shayal (ESTA)	Mario Walter Reich (VTAD)
Kieran Flynn (ATAA)	Richard Riccio (ATAA)
Doru Dumitru Gavrilă	Ahmad Hafiz Rusli (STA)
Michael Gilligan (STA)	Gil Sartena (ATAA)
Mohamed Waheed Hammoud (ESTA)	Mohd Redza Sazali (STA)
Farid Fadhly Haron (STA)	Henry Sidarta (AATI)
Jitka Havlova	Doni Sulistyono (AATI)
Marius Daniel Hutcheson	Nandesh Suresh Wagle (ATA)
Glenn Taufiek Ilahibaks (DCTA)	Benjamin Waite, Jr. (ATAA)
Wong Sui Cheen, Kelvin (TASS)	Ying Wang
Jeffrey William Kennedy (STA)	Junyang Woon
Sameer Khan (STA)	Wang Zhangliang

## Save the Dates!

### Certified Financial Technician (CFTe)—Level I

Date	Offered Year-round	
------	--------------------	--

See our website for further instructions  
[www.ifta.org/certifications/registration/](http://www.ifta.org/certifications/registration/).

Syllabus and Study Guide for exams to be taken through April 30, 2014:  
[http://ifta.org/public/files/publication-downloads/2014\\_CFTeI\\_Syllabus.pdf](http://ifta.org/public/files/publication-downloads/2014_CFTeI_Syllabus.pdf)

Syllabus and Study Guide for exams to be taken from May 1, 2014 onward:  
[http://www.ifta.org/public/files/publication-downloads/2014\\_IFTA\\_Syllabus\\_New.pdf](http://www.ifta.org/public/files/publication-downloads/2014_IFTA_Syllabus_New.pdf)

### Certified Financial Technician (CFTe)—Level II

Date	8 October 2014	16 April 2014
Registration deadline	7 August 2014	5 March 2014

Register at [www.ifta.org/register/cfte2.php](http://www.ifta.org/register/cfte2.php)

Syllabus and Study Guide for exams to be taken through April 30, 2014:  
[http://ifta.org/public/files/publication-downloads/2014\\_CFTeII\\_Syllabus.pdf](http://ifta.org/public/files/publication-downloads/2014_CFTeII_Syllabus.pdf)

Syllabus and Study Guide for exams to be taken from May 1, 2014 onward:  
[http://www.ifta.org/public/files/publication-downloads/2014\\_IFTA\\_Syllabus\\_New.pdf](http://www.ifta.org/public/files/publication-downloads/2014_IFTA_Syllabus_New.pdf)

For more information on the CFTe program,  
 visit <http://www.ifta.org/certifications>

### Master of Financial Technical Analysis (MFTA)

MFTA Alternative Path

Pre-Application deadline	28 February 2014	31 July 2014
Application/outline deadline (if approved)	2 May 2014	2 October 2014
Paper submission deadline	15 October 2014	15 March 2015

(Session 1) Register at [www.ifta.org/register/mfta\\_alt\\_session1.php/](http://www.ifta.org/register/mfta_alt_session1.php/)

(Session 2) Register at [www.ifta.org/register/mfta\\_alt\\_session2.php/](http://www.ifta.org/register/mfta_alt_session2.php/)

# It's time!



If you are like most of our clients, you're **busy** managing portfolios, analysing opportunities, measuring **risk** or writing reports, and that is before we even consider those emails or **meetings!**

We understand, and above all else, that's why we designed **Market Analyst** to make your life **simpler**. If you are looking for a solution that will give you the answers **faster**, make it **easier** to communicate those answers or just give you access to the **newest** break-throughs, you have to invest the **time** to examine Market Analyst.

Market Analyst is simply the most **powerful**, user friendly, in-depth software product available to market participants today. Isn't it time that you saw the **benefits** for yourself?

Come and see us at our booth, let us know **what's important** to you, and we'll show you how Market Analyst can give you the answers you need - **fast!**

portfolio managers  
 technical analysts  
 fundamental analysts  
 risk managers  
 private traders  
 educators

[mav7.com/ifta](http://mav7.com/ifta)





- The ultimate software for Technical Analysis and Algorithmic Trading.
- Develop and back-test any possible trading strategy instantly.
- Comprehensive simulation possibilities for various key risk parameters.
- Interfaces to Bloomberg, Trayport, Thomson Reuters, GlobalView, or your own database.
- Supports EasyLanguage™
- Made in Germany

**GET MORE AND ORDER YOUR FREE TRIAL NOW!** | <http://tradesignal.intalus.com>

**GREAT PERFORMANCE. WORLDWIDE. MADE IN GERMANY. SINCE 1990.**  
BERLIN. BERMUDA. BREMEN. DUBAI. FRANKFURT. KIEV. LONDON. MOSCOW. PARIS. ZURICH.

FOLLOW US [www.facebook.com/intalus](http://www.facebook.com/intalus) [www.twitter.com/intalus](http://www.twitter.com/intalus) [www.linkedin.intalus.com](http://www.linkedin.intalus.com) [www.youtube.com/intalus](http://www.youtube.com/intalus) [www.intalus.com/blog](http://www.intalus.com/blog)

# Calendar At-A-Glance

Date	Topic	Host	Speaker	Location	Time	Contact
Monthly	Presentations from local and international speaker on a comprehensive range of topics (sharemarket, CFDs, options, futures, foreign exchange (forex trading), methodologies, money management, psychology, etc.	STANZ (New Zealand)	Varies	Epsom Community Centre 200-206 Gillies Ave. Auckland, NZ	Varies	<a href="http://www.stanz.co.nz/">http://www.stanz.co.nz/</a>
Monthly	Chapter leaders and their volunteer members serve as ambassadors for the CSTA and plan social and educational events for the area. Events include presentations by Industry Professionals, Technical Analysis experts and peer learning gatherings. Chapters also play a vital role in their community by connecting individuals and promoting Technical Analysis.	CSTA Chapters:	Varies	Varies	Varies	<a href="http://www.csta.org">http://www.csta.org</a>
January	1 Certified Financial Technician (CFTe) Level II – registration opens for April 16 <sup>th</sup> examination through IFTA website	IFTA	NA	Varies	Varies	<a href="http://www.ifta.org">http://www.ifta.org</a>
	11 Pring Turner Annual Market Outlook	TSAA-SF	Joe Turner, Tom Kopas, and Jim Kopas	Golden Gate University Room 2202, 536 Mission St. San Francisco, CA USA	09:00– 12:00	Brett Villaume ( <a href="mailto:bvillaume@figpartners.com">bvillaume@figpartners.com</a> )
	11 Tracy Knudsen of Lowry Research	TSAA-SF	Tracy Knudsen, CMT	Bloomberg, Pier 3 San Francisco, CA USA	14:00– 15:30	Brett Villaume ( <a href="mailto:bvillaume@figpartners.com">bvillaume@figpartners.com</a> )
	18 Monthly Meeting	TASN	TBA	77B Mobolaji Bank Anthony Way, Behind Ikeja Plaza Ikeja. Lagos	10:00	<a href="mailto:admin@tasnigeria.org">admin@tasnigeria.org</a>
	23 Harmonic Elliott Wave	NTAA	Ian Copsey	NTAA Seminar Room 3-3 Nihonbashi-kabutoch Cho-ku, Tokyo, Japan 103-0026	18:30– 20:00	Tel: (81) 3-5847-2231, Fax: (81) 3-5847-2232 <a href="http://www.ntaa.or.jp/">http://www.ntaa.or.jp/</a> Email: <a href="mailto:office@ntaa.or.jp">office@ntaa.or.jp</a>
	24 New Year Networking Event	NTAA		NIHONBASHI PLAZA Building	18:00– 20:00	Tel: (81) 3-5847-2231, Fax: (81) 3-5847-2232 <a href="http://www.ntaa.or.jp/">http://www.ntaa.or.jp/</a> Email: <a href="mailto:office@ntaa.or.jp">office@ntaa.or.jp</a>
	25 Committee Meeting	TASN	TBA	77B Mobolaji Bank Anthony Way, Behind Ikeja Plaza Ikeja. Lagos	10:00	<a href="mailto:admin@tasnigeria.org">admin@tasnigeria.org</a>
February	5 Understanding the Use of the "Kaisha Shikiho (Japan Company Handbook)"	NTAA		NTAA Seminar Room 3-3 Nihonbashi-kabutoch Cho-ku, Tokyo, Japan 103-0026	18:30– 20:00	Tel: (81) 3-5847-2231, Fax: (81) 3-5847-2232 <a href="http://www.ntaa.or.jp/">http://www.ntaa.or.jp/</a> Email: <a href="mailto:office@ntaa.or.jp">office@ntaa.or.jp</a>
	7 Japanese Stock Market Outlook for the New Fiscal Year 2014	NTAA	Naoyuki Fujihara, CFTe	NTAA Seminar Room 3-3 Nihonbashi-kabutoch Cho-ku, Tokyo, Japan 103-0026	18:30– 20:00	Tel: (81) 3-5847-2231, Fax: (81) 3-5847-2232 <a href="http://www.ntaa.or.jp/">http://www.ntaa.or.jp/</a> Email: <a href="mailto:office@ntaa.or.jp">office@ntaa.or.jp</a>
	8 Introductory Technical Analysis Course for New Members	TASN	Membership Committee	77B Mobolaji Bank Anthony Way, Behind Ikeja Plaza Ikeja. Lagos	10:00	<a href="mailto:admin@tasnigeria.org">admin@tasnigeria.org</a>
	15 Monthly Meeting	TASN	TBA	77B Mobolaji Bank Anthony Way, Behind Ikeja Plaza Ikeja. Lagos	10:00	<a href="mailto:admin@tasnigeria.org">admin@tasnigeria.org</a>
	15 IFTA Update submission deadline for educational articles (mid-March release)	IFTA	NA	NA	Varies	<a href="mailto:newsletter@ifta.org">newsletter@ifta.org</a> , Attn: Aurélie Gerber, Journal Director
	28 Master of Financial Technical Analysis (MFTA) Alternative Path, Session 1 application deadline.	IFTA	NA	NA	NA	<a href="http://www.ifta.org">http://www.ifta.org</a>

## Calendar At-A-Glance (continued)

March	1	IFTA Update submission deadline for news content (mid-March release)	IFTA	NA	NA	Varies	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
	5	Certified Financial Technician (CFTe) Level II—deadline to register for April 16 <sup>th</sup> examination	IFTA	NA	Varies	Varies	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
	8	CFTe Introductory Class	TASN	TBA	77B Mobolaji Bank Anthony Way, Behind Ikeja Plaza Ikeja. Lagos	10:00	<a href="mailto:admin@tasnigeria.org">admin@tasnigeria.org</a>
	15	Master of Financial Technical Analysis (MFTA) Session 2 (2013) paper submission deadline	IFTA	NA	NA	NA	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
	15	Factors Driving the Forex Market and Their Influence on the Stock Market	NTAA		NTAA Seminar Room 3-3 Nihonbashi-kabutoch Cho-ku, Tokyo, Japan 103-0026	18:30-20:00	Tel: (81) 3-5847-2231, Fax: (81) 3-5847-2232 <a href="http://www.ntaa.or.jp/">http://www.ntaa.or.jp/</a> Email: <a href="mailto:office@ntaa.or.jp">office@ntaa.or.jp</a>
	18	John Lewis of Dorsey, Wright & Associates	TSAA-SF	John Lewis, CMT	Golden Gate University 536 Mission St., San Francisco, CA	TBD	Brett Villaume ( <a href="mailto:bvillaume@figpartners.com">bvillaume@figpartners.com</a> )
	22	Market Analysis Training	TASN	TBA	77B Mobolaji Bank Anthony Way, Behind Ikeja Plaza Ikeja. Lagos	10:00	<a href="mailto:admin@tasnigeria.org">admin@tasnigeria.org</a>
	29	Conference Committee Meeting	TASN	TBA	77B Mobolaji Bank Anthony Way, Behind Ikeja Plaza Ikeja. Lagos	10:00	<a href="mailto:admin@tasnigeria.org">admin@tasnigeria.org</a>
April	19	2014 Annual Conference	TASN	TBA	TBA	10:00	<a href="mailto:admin@tasnigeria.org">admin@tasnigeria.org</a>
	16	Certified Financial Technician (CFTe) Level II Examination	IFTA	NA	Varies	Varies	<a href="mailto:admin@ifta.org">admin@ifta.org</a> ; <a href="http://www.ifta.org">www.ifta.org</a>
May	1	Master of Financial Technical Analysis (MFTA) Session 1 application, outline and fees deadline	IFTA	NA	NA	NA	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
	15	IFTA Update submission deadline for educational articles (mid-June release)	IFTA	NA	NA	Varies	<a href="mailto:newsletter@ifta.org">newsletter@ifta.org</a> , Attn: Aurélie Gerber, Journal Director
	31	IFTA Journal Call for Paper submission deadline	IFTA	NA	NA	NA	<a href="mailto:journal@ifta.org">journal@ifta.org</a>
June	1	IFTA Update submission deadline for news content (mid-June release)	IFTA	NA	NA	Varies	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
July	31	Master of Financial Technical Analysis (MFTA) Alternative Path, Session 2 application deadline.	IFTA	NA	NA	NA	<a href="http://www.ifta.org">www.ifta.org</a>
August	15	IFTA Update submission deadline for educational articles (mid-September release)	IFTA	NA	NA	Varies	<a href="mailto:newsletter@ifta.org">newsletter@ifta.org</a> , Attn: Aurélie Gerber, Journal Director
	15	IFTA Journal applicants notification of acceptance/rejection	IFTA	NA	NA	NA	<a href="mailto:journal@ifta.org">journal@ifta.org</a>
September	1	IFTA Update submission deadline for news content (mid-September release)	IFTA	NA	NA	Varies	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
October	2	Master of Financial Technical Analysis (MFTA) Session 2 application, outline and fees deadline	IFTA	NA	NA	NA	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
	8	Certified Financial Technician (CFTe) Level II Examination	IFTA	NA	Varies	Varies	<a href="mailto:admin@ifta.org">admin@ifta.org</a> ; <a href="http://www.ifta.org">www.ifta.org</a>
	8	IFTA Board of Director's Meeting	IFTA	Varies	The Waldorf Hilton Hotel, London	TBA	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
	8	IFTA Annual General Meeting (Members Only)	IFTA	Varies	The Waldorf Hilton Hotel, London	TBA	
	9-11	IFTA 27 <sup>th</sup> Annual Conference: Unravelling the DNA of the Market	IFTA & STA	TBA	The Waldorf Hilton Hotel, London	Varies	<a href="mailto:admin@ifta.org">admin@ifta.org</a> ; <a href="http://www.ifta.org">www.ifta.org</a>
	15	Master of Financial Technical Analysis (MFTA) Session 1 paper submission deadline	IFTA	NA	NA	NA	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
November	15	IFTA Update submission deadline for educational articles (mid-December release)	IFTA	NA	NA	Varies	<a href="mailto:newsletter@ifta.org">newsletter@ifta.org</a> , Attn: Aurélie Gerber, Journal Director
December	1	IFTA Update submission deadline for news content (mid-December release)	IFTA	NA	NA	Varies	<a href="mailto:admin@ifta.org">admin@ifta.org</a>
	31	IFTA Journal web publication	IFTA	NA	NA	NA	<a href="http://www.ifta.org/publications/journal/">http://www.ifta.org/publications/journal/</a>



MEMBER OF MONEX GROUP

## **SCAN 1,000 CHARTS IN REAL TIME WITH RADARSCREEN**

- Monitor multiple markets
- Dynamically rank and sort
- Get instant custom alerts

## **EXTEND THE POSSIBILITIES WITH EASYLANGUAGE**

- Create custom strategies and indicators
- Lease your custom apps to other traders

***Voted Best Online Analytical Platform***

**Take the TradeStation Tour at [TradeStation.com/Tour](https://www.TradeStation.com/Tour)  
Or call 800.265.4139 to learn more**

*Please visit [TradeStation.com](https://www.TradeStation.com) for important information and disclosures.*

# Education Lounge

## The State of Global Technical Analysis

Extract from a presentation given by Adam Sorab, FSTA, CFTe, to ATAA in June 2013

### Origins of technical analysis

The precise origins of technical analysis are unknown. Andrew Lo argues that it dates back as far as Babylonian times circa 1500 BC. The first recorded mention of chart usage to support trading decisions is from Homma, a Japanese rice merchant from the 18<sup>th</sup> century. It is important to note that he not only advocated the use of price history to identify trends, but also understood the importance of price patterns and the changes in psychology of market participants that these patterns illustrated.

### Rise of capitalism and the growth of markets

The Industrial Revolution and the investment needed to build North America led to significant developments in stock, bond, commodity, and futures markets. New markets led to a growth in the investor base via brokers, bucket shops, and stock ownership in general. Charles Dow published his

technical analysis ideas on the Dow theory and point and figure charts in the late 19<sup>th</sup> century in his now famous "Wall Street Journal." There also was the first observable use of indices, bar charts, and inter-market analysis. WD Gann wrote articles based on his technical analysis approach in the 1920s with the first observable use of cycles and the Gann theory.

### Some key texts along the way

Some key texts, without being exhaustive, include:

- Maneshu Homma—*San-en Kinsen Hiroku* (1755)
- Charles MacKay—*Extraordinary Delusions, the Madness of Crowds* (1841)
- Charles Dow—*The Wall Street Journal* (First published 1889)
- WD Gann—*Truth of Stock Tape* (1924)
- Ralph Nelson Elliott—*The Wave Principle* (1938)
- Edwards and Magee—*Technical Analysis of Stock Trends* (1948)

- John Murphy—*Technical Analysis of the Futures Market* (1986)
- Peter Steidlmayer—*Markets and Market Logic* (1986)
- Jack Schwager—*Market Wizards* (1988)
- Steve Nison—*Japanese Candlestick Charting Techniques* (1991)

### Impact of computers

The Commodore's PET was launched in 1977 and came "fully loaded" with 8 KB of memory. Then, technology helped develop faster and cheaper processing power, spurring an explosion in technical analysis. The development of more powerful computing led to further developments, such as greater graphical capabilities and more

and more complex indicators. Real-time data and electronic exchanges encouraged further advances, like the development of techniques for intraday trading and algorithmic trading models and usage, as well as high-frequency trading.

### The rise of the machines

- Pre 1970s—Investors used paper charts (e.g., Commodity Research Bureau). Since then, machines have taken over.
- 1980—QG was founded and Computrac System developed on Apple II then IBM PC.
- 1984—The Market Mood Monitor was released and was eventually renamed "The Technician" (further developed under the Equis label to MetaStock 1.0 in 1986).
- 1986—Teletrac—Charting goes real-time. Spreadsheets are being widely used. Lotus 123 is later superseded by Microsoft Excel.
  - 1987—Bloomberg Terminals start to take off, also as a trading and email platform for fixed income market professionals.





# Education Lounge

- 1989 – System Writer Plus. End-of-Day (EOD) Programming Script is released and allows “Easy Language” to be developed to make it easy for mechanical trading system writers. Also Reuters Release Dealing 2000 becomes the world’s premier global forex network.
- 1990 – Ned Davis Research releases “Technalyzer,” a technical analysis package costing £250K. This is a powerful system running on a CRAY 2 to model entire portfolios. Everyone now tries to get on the bandwagon (e.g., Reuters [TRIARCH 2000], Teknekron [TIB], Telerate [TTRS], Micrognosis [MIPS]).
- 1991 – Tradestation is released with real-time system testing, and rule-based trading systems become more mainstream. The first black boxes are released for trading in Tradestation. William Schmidt, Ph.D. releases his peerless rule-based trading system, and Neural Nets begin to be used.
- 1994 – Personal Automated Trading Systems (PATS) starts for floor traders but is quickly adapted to be a technical analysis package.
- 1995 – Nirvana Systems’ first Automatic Reasoning Machine (ARM) trading system is released.
- 1997 – Neuroshell Trader was released by Ward Systems.
- 1999 – RadarScreen was released—a spreadsheet type ranking and alert system. Black-box systems are now being widely marketed.

- 2000 – Reuters’ Dealing 3000 trading system is released.
- 2000 to 2010 – Entire software industry starts to explode—Omnitrader, Teletrac 2000, etc. Neural Networks are superseded by Genetic Algos, and high-frequency trading begins.
- Since 2010 – Quant packages, HFT, Algos are used extensively. Also NSP-33 is developed by Omnitreader. The system incorporates a self-coding package similar to Tradestation.

Now, how does the future look? Intelligent systems that continually react to numerous fundamental and technical market changes (i.e., robotic trading systems).

### History of technical analysis societies

In 1968, the Association of Chart and Technical Analysts (ACTA) was created in the U.K., later to become STA. In 1971, the Market Technicians Association (MTA) was created in the United States. In 1978, the Nippon Technical Analysts Association (NTAA) was created. In 1984, the International Federation of Technical Analysts (IFTA) was established as a not-for-profit organisation to support the work of its members: the global community of technical analysts and their national associations. In 1990, the Australian Association of Technical Analysts (ATAA) was created. And the community is still growing.

Country		Society/Association	Member Since
Australia	ATAA	Australian Technical Analysts Association	Jun-90
Austria	VTAO	Vereinigung Technischer Analysten Österreichs	Jan-11
Bosnia and Herzegovina	SMS	Society for Market Studies	Dec-09
Canada	CSTA	Canadian Society of Technical Analysts	Jan-86
Croatia	CTAA	Croatian Technical Analysis Association	Jan-11
Egypt	ESTA	Egyptian Society of Technical Analysts	May-00
France	AFATE	Association Francaise des Analystes Techniques	Jun-91
Germany	VTAD	Vereinigung Technischer Analysten Deutschlands e.V.	Jun-92
India	ATA	The Association of Technical Analysts	May-09
Indonesia	AATI	Asosiasi Analis Teknikal Indonesia	Dec-94
Italy	SIAT	Societa Italiana di Analisi Tecnica	Dec-86
Japan	NTAA	Nippon Technical Analysts Association	Jan-86
Lebanon	LSTA	Lebanese Society of Technical Analysts	Aug-10
New Zealand	STANZ	Society of Technical Analysts New Zealand	Jan-11
Nigeria	TASN	Technical Analyst Society, Nigeria	Oct-10
Pakistan	STAP	Society of Technical Analysts Pakistan	Jul-11
Romania	AATROM	Asociatia Analistilor Tehnici din Romania	Jan-08
Saudi Arabia	SSTA	Saudi Society of Technical Analysts	Apr-08
Scandinavia	STAF	Scandinaviens Tekniska Analytikers Förening	Jan-86
Singapore	TASS	Technical Analysts Society Singapore	Oct-02
South Africa	TASSA	Technical Analysts’ Society of Southern Africa	Dec-07
Spain	IEATEC	Instituto Español de Analistas Tecnicos y Cuantitativos	Oct-13
Switzerland	SAMT	Swiss Association of Market Technicians	Jan-86
The Netherlands	DCTA	Dutch Commission of Technical Analysis	Jun-87
Tunisia	ATAT	Association Tunisienne des Analystes Technique	Jul-13
United Kingdom	STA	Society of Technical Analysts	Jan-86
United States	AAPTA	American Association of Professional Technical Analysts	Apr-06
USA	TSAASF	Technical Security Analysts Association of San Francisco	Jan-06

**Growing academic acceptance**

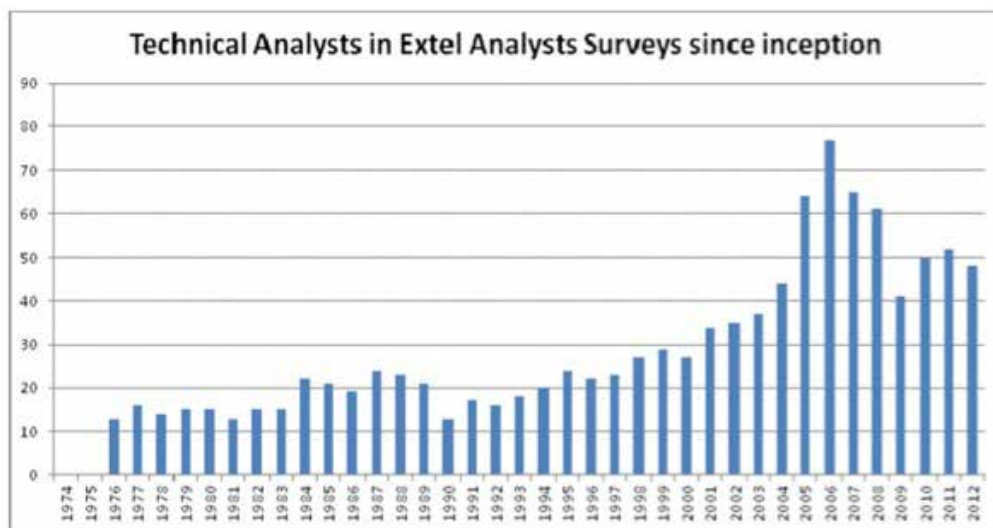
There is growing academic acceptance, as demonstrated in the article "Head & Shoulders above the Rest? The Performance of Institutional Portfolio Managers who use Technical Analysis," published by the Department of Finance and Center for Institutional Investment Management, School of Business, University at Albany, New York – Smith, Faugère and Wang - January 2013.

Important academic papers on technical analysis might also include:

- GROSSMAN, S.J., et al., 1980. On the Impossibility of Informationally Efficient Markets. The American Economic Review.
- BROWN, D.P. and R.H. JENNINGS, 1989. On Technical Analysis. Review of Financial Studies.
- FRANKEL, J.A., K.A. FROOT and M.P. PAGE, 1990. Chartists, Fundamentalists, and Trading in the Foreign Exchange Market. The American Economic Review.
- NEFTCI, S.N., 1991. Naive Trading Rules in Financial Markets and Wiener-Kolmogorov Prediction Theory: A Study of "Technical Analysis." The Journal of Business.

**Global data on technical analysis coverage and growing academic acceptance**

Technical analysis coverage is steadily increasing globally.



- BROCK, W., J. LAKONISHOK and B. LEBARON, 1992. Simple Technical Trading Rules and the Stochastic Properties of Stock Returns. The Journal of Finance.
- TAYLOR, M.P. and H. ALLEN, 1992. The use of technical analysis in the foreign exchange market. Journal of International Money and Finance.
- BLUME, L., D. EASLEY and M. O'HARA, 1994. Market Statistics and Technical Analysis: The Role of Volume. The Journal of Finance.
- LEBARON, B.D. and M.P. PAGE, 1994. Technical trading rule profitability and foreign exchange intervention.
- NEELY, C.J., P. WELLER and R. DITTMAR, 1996. Is technical analysis in the foreign exchange market profitable?: a genetic programming approach.
- NEELY C., 1997. Technical Analysis Layman's Guide
- NEELY, C., 1997. In: The Foreign Exchange Market: A Layman's Guide.
- LUI, Y.H. and D. MOLE, 1998. The use of fundamental and technical analyses by foreign exchange dealers: Hong Kong evidence. Journal of International Money and Finance.
- NEELY, C.J., 1998. Technical Analysis and the Profitability of US Foreign Exchange Intervention. Federal Reserve Bank of St. Louis Review.
- FERNANDEZ-RODRIGUEZ, F., C. GONZALEZ-MARTEL and S., 2000. On the profitability of technical trading rules based on artificial neural networks: Evidence from... Economics Letters.
- LEE, C.M.C. and B. SWAMINATHAN, 2000. Price Momentum and Trading Volume. The Journal of Finance.
- LO, A.W., et al., 2000. Foundations of Technical Analysis: Computational Algorithms, Statistical Inference, and Empirical. The Journal of Finance.
- NEELY, C.J. and P. WELLER, 2001. Technical analysis and central bank intervention. Journal of International Money and Finance.
- KAVAJECZ, K.A., E.R. ODDERS-WHITE and O. JOURNALS, 2003. Technical Analysis and Liquidity Provision. Review of Financial Studies.
- CESARI, R. and D. CREMONINI, 2003. Benchmarking, portfolio insurance and technical analysis: a Monte Carlo comparison of dynamic. Journal of Economic Dynamics and Control.
- PARK, C.H. and S.H. IRWIN, 2004. The Profitability of Technical Analysis: A Review. AgMAS Project Research Report No.

**Growing regulatory acceptance**

The Federal Reserve Bank of New York also conceded in its Economic Policy Review, July 2000, using technical analysis for its intraday exchange rate monitoring.

**Global survey of technical analysts**

In a global survey of technical analysts, one could notice the discrepancy between the usefulness and significance of technical analysis for investment decisions and the low but growing coverage or use by media and regulators.

	USA	UK	Japan	Australia	South Africa	Indonesia	Italy	India	France	Egypt	New Zealand	Lebanon	Romania
Generally effective in most liquid markets:	Generally effective in most liquid markets	Generally effective in most liquid markets. Volume data sometimes dubious	Generally effective in most liquid markets	Generally effective	Limited to most liquid names	Limited to most liquid names - NB Other market restrictions also increase volatility	Limited to most liquid names	Limited to most liquid names	Generally effective in most liquid markets	Limited to most liquid names - NB Other market restrictions also increase volatility	Generally effective but sometimes illiquid	Limited to most liquid names	Limited to most liquid names
<b>How useful is TA in your local markets?</b>													
<b>How significant is TA in investment decision-making?</b>													
- By Professionals?	High	High	High	Low but growing	Low but growing	Low but growing	Low but growing	Low but growing	Low but growing	Low but growing	Low but growing	Low but growing	Low
- By Retail?	High	Low but growing	High	High	High	High	High	Low but growing	Low	Low	Low	Low	Low but growing
- Stocks?	High	Low but growing	Low but growing	Low but growing	Low	Low	High	Low but growing	Low but growing	Low	Low	Low but growing	Low but growing
- Bonds?	High	High	Low but growing	Low but growing	High	High	Low	Low but growing	Low but growing	Low	Low but growing	Low	Low
- Commodities?	High	High	Low	High	High	High	Low	High	High	High	High	High	Low
- FX?	High	High	High	High	High	High	High	High	High	High	High	High	High
<b>How is TA resented by your local media?</b>													
Local TV	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Newspapers	High	Low	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
<b>How is TA resented by your local regulators?</b>	Positive	Neutral	Poorly	Neutral	Poorly	Poorly	Poorly	Positive	Poorly	Poorly	Poorly	Poorly	Poorly
<b>How many locals get formal training in TA?</b>	Few	Few	Few	Few	Few	Few	Few	Few	Few	Few	Few	Few	Few
<b>How many locals get formal qualifications in TA?</b>	Growing	Growing	Growing	Growing	Few	Few	Few	Growing	Few	Growing	Few	Few	Few

**Most popular techniques**

This same survey also classified the techniques used by analysts into most and least popular.

**Most Popular Techniques**

- |                                   |                     |
|-----------------------------------|---------------------|
| 1. DiscretionaryTA                | 9. Systematic TA    |
| 2. Trends/Patterns                | 10. Elliott Wave    |
| 3. MAV/MACD                       | 11. Cycle Theory    |
| 4. RSI                            | 12. Tom DeMark      |
| 5. Stochastics                    | 13. Point & Figure  |
| 6. Candlesticks                   | 14. Ichimoku        |
| 7. Relative strength/ Intermarket | 15. Bollinger Bands |
| 8. Fibonacci                      |                     |

**Least Popular Techniques**

1. Gann
2. Elliott Wave
3. Point & Figure
4. Market Profile
5. Cycle Theory
6. Ichimoku
7. Tom DeMark
8. Stochastics
9. Volume

**Global data on actual technical analysis usage**

According to Paul Ciana at Bloomberg, these are the primary analyses used by Bloomberg clients for displaying price information:

- 49% use only line charts
- 27% use bar charts
- 22% use candlestick charts
- 3% use semi-log scaled charts
- 35% only use daily charts
- 65% use intraday charting (growing in recent years)

The most popular technical indicators are :

1. RSI
2. MACD
3. Bollinger
4. Time & Sales
5. DMI
6. Ichimoku
7. Value at Time

The following tables and figure illustrate chart and indicator preferences across the world.

Table 1.1 gives an overview on the chart types over a recent six-year period.

**TABLE 1.1** Yearly Averages of Chart Types and Chart Periods

	2005	2006	2007	2008	2009	2010
Line	46%	47%	49%	52%	50%	50%
Bar	29%	29%	27%	26%	25%	25%
Candle	22%	22%	21%	20%	22%	22%
Log	2.9%	2.7%	2.5%	2.6%	3.6%	3.1%
Historical	74%	74%	71%	67%	65%	65%
Intraday	26%	26%	29%	33%	35%	35%

Source: Clana, P. New Frontiers in Technical Analysis, Wiley, 2011

Table 1.2 gives an overview on the chart types for a selection of world regions.

**TABLE 1.2** Chart Type Preference of Each Region

	Americas	Europe	Asia	MESA
Line Chart	51%	55%	41%	48%
Bar Chart	32%	20%	14%	20%
Candle Chart	14%	21%	43%	31%
Log Chart	3%	4%	1%	1%
Total	100%	100%	100%	100%

Source: Clana, P. New Frontiers in Technical Analysis, Wiley, 2011

Table 1.3 shows a comparison of regional chart type preferences to world preferences.

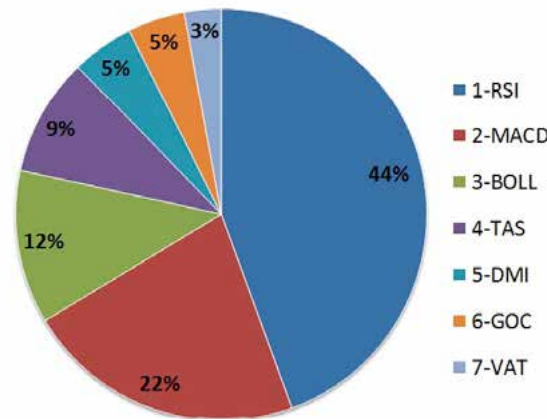
**TABLE 1.3** Comparison of Regional Chart Type Preference to World Preference

	Americas (44%)	Europe (38%)	Asia (12%)	MESA (2%)	Total
Line Chart	43%	40%	15%	1.5%	100%
Bar Chart	58%	30%	11%	1.3%	100%
Candle Chart	27%	34%	37%	2.2%	100%
Log Chart	44%	47%	8.7%	0.6%	100%

Source: Clana, P. New Frontiers in Technical Analysis, Wiley, 2011

The figure shows a breakdown of world indicator preference.

**World Indicator Preference**



Source: Clana, P. New Frontiers in Technical Analysis, Wiley, 2011

Table 1.4 compares regional indicator preference to all indicator preferences.

**TABLE 1.4** Comparing Regional Indicator Preferences to All Indicator Preferences

	Americas	Europe	Asia	MESA	World
RSI	46.1%	45.1%	39.4%	50.1%	44.4%
MACD	20.0%	23.2%	23.2%	20.6%	22.0%
BOLL	11.7%	12.8%	11.4%	9.9%	12.0%
TAS	10.3%	9.3%	8.0%	8.7%	9.3%
DMI	4.2%	5.0%	5.6%	6.1%	4.9%
GOC	2.5%	2.8%	10.8%	2.6%	4.5%
VAT	5.3%	1.8%	1.6%	2.0%	2.9%
Total	100%	100%	100%	100%	100%

Source: Clana, P. New Frontiers in Technical Analysis, Wiley, 2011

Table 1.5 displays regional indicator preferences to total indicator preference.

**TABLE 1.5** Regional Indicator Preferences Compared to Total Indicator Preference

	Americas (44%)	Europe (38%)	Asia (12%)	MESA (2%)	Total
RSI	33.9%	40.5%	20.2%	5.3%	100.0%
MACD	29.6%	42.0%	23.9%	4.4%	100.0%
BOLL	31.8%	42.6%	21.7%	3.9%	100.0%
TAS	35.9%	40.0%	19.6%	4.4%	100.0%
DMI	27.9%	40.4%	25.9%	5.8%	100.0%
GOC	18.2%	24.6%	54.4%	2.7%	100.0%
VAT	59.0%	25.3%	12.4%	3.3%	100.0%

Source: Clana, P. New Frontiers in Technical Analysis, Wiley, 2011

**Technical analysis today**

Today, technical analysis is central to all professional trading activity. It is adopted by producers, consumers, market makers, fund managers, retail investors, and central banks. Technical analysis received academic acceptance of several

key technical phenomena, such as behavioural finance (just an academic euphemism for technical analysis) and momentum investing (just a another term for following trends). Media now admit that their misgivings concerning

the approach were misplaced and that there is increased use of technicals in financial papers and broadcasting. So technical analysis is now mainstream (ironically, it is macroeconomics that is currently being questioned!). †

# Defining Requirements for an Algorithmic Trading System

Algorithmic trading systems make trading decisions, submit market orders, and manage orders after submission.

by Stuart Reid

An algorithmic trading system has three high-level functional requirements: make trading decisions, submit market orders, and manage orders after submission. Yet an algorithmic trading system that satisfies these three requirements may still fail to meet expectations. This is because algorithmic trading systems are also subject to strict nonfunctional requirements, which are often overlooked at the onset of a software engineering project or a system sourcing and selection exercise. Trying to satisfy nonfunctional requirements ex post facto can become very costly. This article suggests relevant nonfunctional requirements to consider when building an algorithmic trading system or buying one off the shelf. It also articulates the responsibility of an algorithmic trading system's architecture in satisfying those requirements.

## Algorithmic trading

Algorithmic trading is often used by buy-side trading institutions as a means of reducing costs, remaining anonymous, improving productivity, executing trades faster and more consistently, and reducing the risk of significant market impact. Because of these benefits, the quantity of securities traded algorithmically has

risen significantly since the early 2000s. This progress has given rise to a subset of high-performance, low-latency algorithmic trading systems called high-frequency trading systems. Currently, a debate over the market impact of these systems is being waged. Some industry players support algorithmic trading, and others cite the flash crash as an indication that financial markets are becoming increasingly unstable. This changes how algorithmic trading system architectures should be designed and implemented.

## System architectures

There is still no consensus regarding what a system's architecture is. This article defines a system's architecture as "the infrastructure within which application components that satisfy functional requirements can be specified, deployed, and executed." Functional requirements are the expected functions of the system (e.g., make trading decisions) and its components. Nonfunctional requirements are measures through which the quality of the system can be measured (e.g., make millions of trading decisions per second [performance] and log the audit trail for all trading decisions made [auditability]).

## Nonfunctional requirements

Whether initiating a software engineering project to build a new algorithmic trading system or initiating a sourcing and selection exercise to buy an algorithmic trading system, the following eight nonfunctional requirements should be taken into consideration:

1. **Scalability** – measures the ability to continue performing under an expanding workload. An algorithmic trading system should be scalable when it comes to adding additional data feeds, the number of markets and instruments traded, the number of supported trading strategies, and the number of concurrent users.
2. **Performance** – measures the amount of work accomplished as compared with the time and resources required to do that work. An algorithmic trading system should be able to process data efficiently and accurately. It should also maintain a high network throughput.
3. **Modifiability** – measures the ease with which changes to the system can be made. An algorithmic trading system should be modifiable when it comes to trading strategies, financial reporting, rules for data pre-processing, and message queue structures.
4. **Reliability** – measures the accuracy and dependability of a system to produce correct outputs for the inputs received. Because bugs in algorithmic trading systems could result in financial losses and fines, algorithmic trading systems should be reliable.
5. **Auditability** – measures the ease with which the system can be audited. Because of increasing regulatory pressure on algorithmic trading systems to comply with new laws and standards, they should be auditable from both from a financial and IT point of view.
6. **Security** – measures the safety of a system against criminal activity such as terrorism, theft, or espionage. Trading strategies are proprietary and represent valuable intellectual property; as such, the algorithmic trading system should ensure their confidentiality and integrity. Large orders should also be obfuscated to avoid market impact and ensure anonymity.
7. **Fault tolerance** – measures the ability of a system to continue operating properly after a fault or failure. This is similar to reliability, except that the algorithmic trading system should continue to be reliable even after a fault. This is

required in order to mitigate the risk of financial losses.

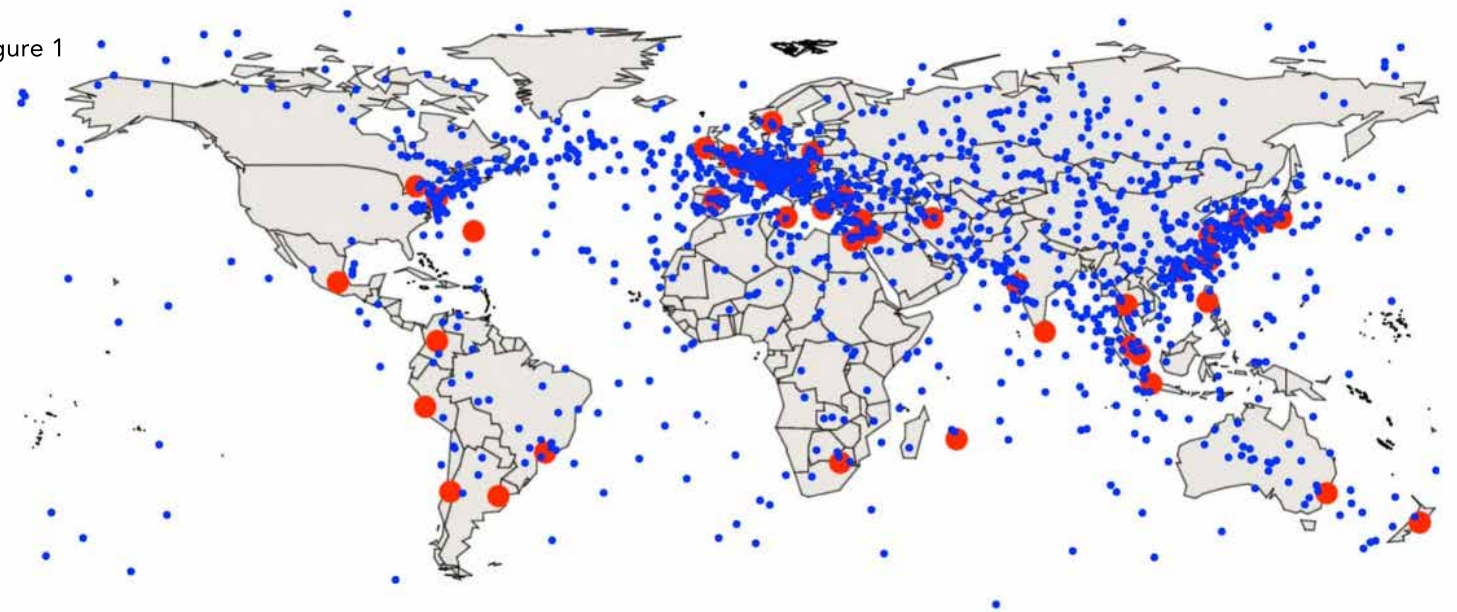
8. **Interoperability** – measures the ease with which the system is able to operate with a diverse range of related systems. This is important for an algorithmic trading system, which may be required to interface with order management systems, portfolio management systems, risk management systems, accounting systems, and even banking systems.

Even if an algorithmic trading system satisfies its functional requirements, that system will not meet expectations unless it also satisfies its nonfunctional requirements. As an example, consider an algorithmic trading system that makes great trading decisions but is completely inoperable with the organization's risk management and accounting systems. The cost of satisfying the interoperability nonfunctional requirement may be significant, and if the repair were conducted poorly, this could impact the performance, scalability, or even profitability of the algorithmic trading system.

#### Architectural constraints

In a perfect world, the person or organization building or buying an algorithmic trading system would have a complete list of clearly articulated functional and non-functional requirements. They would also have enough time and resources to build a system that satisfies those requirements. However, in the real world, the ability to

Figure 1



satisfy requirements can be constrained. Real-world constraints often include:

1. **Organizational constraints** – could include budget, resourcing, system dependency, vendor lock-ins, governance, and other constraints. Such constraints should be identified in advance and proactively managed to ensure the successful implementation of the algorithmic trading system.
2. **Geographic constraints** – the physical locality of the algorithmic trading system will impact its performance. When high performance is a strict requirement, an option is to co-locate the algorithmic trading system with the exchange. However, the decision to co-locate may
3. **Regulatory constraints** – regulatory constraints vary among different countries and sometimes even within countries where state laws exist. Additional regulations governing specific exchanges and securities will also constrain the algorithmic trading system where applicable. Some regulations and standards worth taking a look at include the SEC's rules regarding system compliance and integrity (SCI), the EMEA guidelines for algorithmic trading systems, the ISO 9000 algorithmic trading standards (AT9000), and the international financial reporting standards (IFRS).

constrain the system in other ways (e.g., infrastructure limitations).

Where nonfunctional requirements are often universal, constraints are mostly localized. Therefore, constraints on the algorithmic trading system should be analyzed on a case-by-case basis.

A study by MIT open press identified physical locations where the network latency for algorithmic trading systems is minimized. These are indicated by the blue dots on the diagram. The larger red circles show the locations of large international securities exchanges. Network constraints have a large impact on the performance of algorithmic trading systems, especially high-frequency trading systems.

Defining requirements for an algorithmic trading system (continued)

**Additional requirements**

In addition to functional and nonfunctional requirements, there are also access and integration requirements. Access requirements define the way in which end-users (e.g., traders, system administrators, auditors) interact with the algorithmic trading system. Integration requirements specify how the algorithmic trading system must interact with external systems (e.g., exchanges, brokerages, banks). These interactions are mostly controlled by standard protocols such as FIX, FAST, FIXatdl, XML, and SWIFT, or application programming interfaces (APIs) such as the Bloomberg Open API.

**Conclusions**

Algorithmic trading systems are complicated by strict nonfunctional requirements, numerous access and integration requirements, localized regulations that govern algorithmic trading, and challenging architectural constraints. Unless these are understood and taken into consideration in the architecture, an algorithmic trading system is unlikely to meet expectations. This article aims to articulate some requirements that are often overlooked when building or buying algorithmic trading systems.

**Bibliography**

Solms F, *What is software architecture?*, University of Pretoria, 2013

Cliff D and Northrop L, *The global financial markets: an ultra large scale systems perspective*, the future of computer trading in financial markets review, 2012

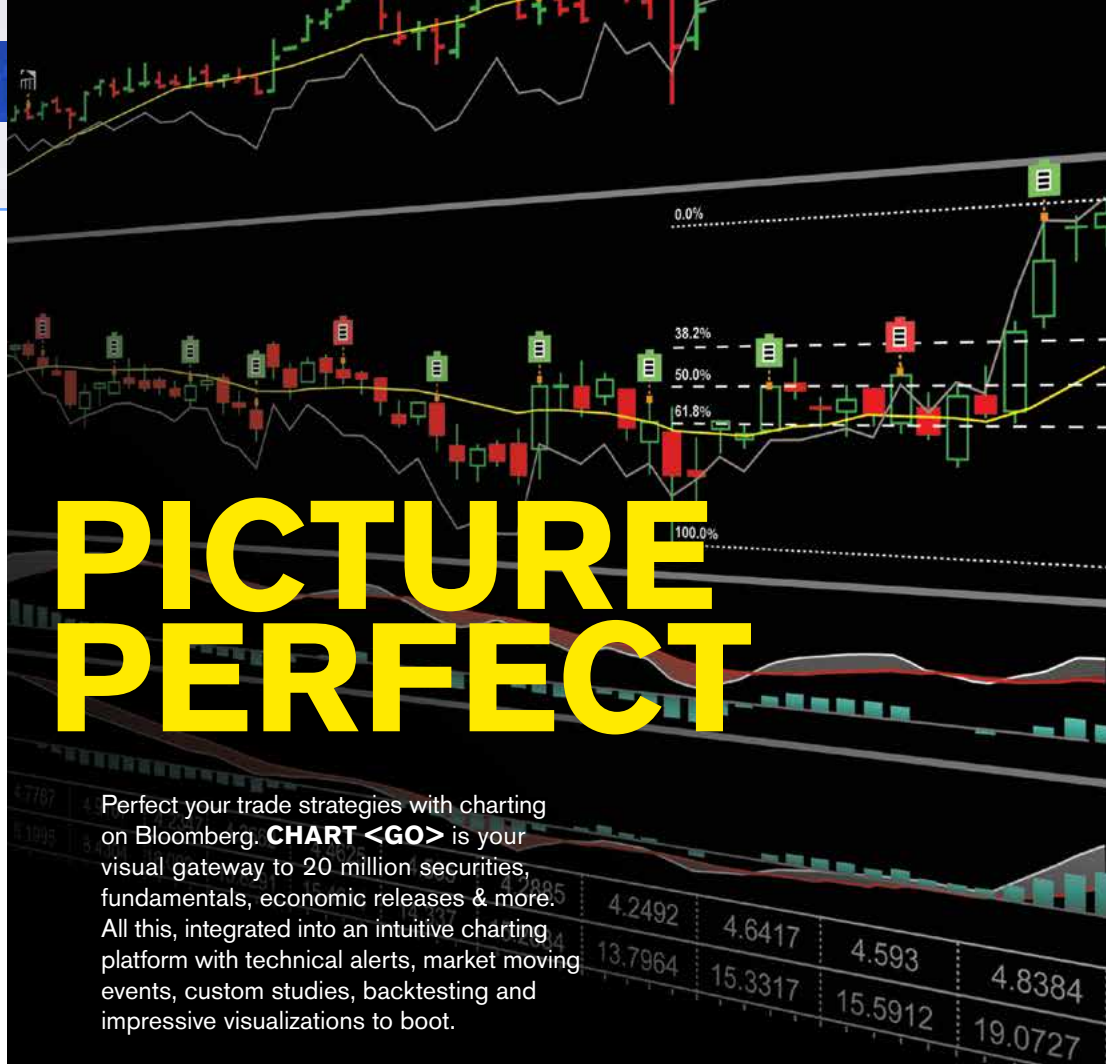
Avellaneda M, *Algorithmic and high frequency trading: an overview*, New York University & Finance Concepts LLC, 2011

Wissner-Gross, A and Freer, C. *Relativistic statistical arbitrage*, Massachusetts Institute of Technology, American Physical Society, 2011

Tellefsen Consulting Group, *Algorithmic Trading Trends and Drivers*, 2005

**About the author**

Stuart Reid works as a junior consultant in the management consulting practice of KPMG South Africa. He is also a computer science honours research student at the University of Pretoria. He is currently majoring in artificial intelligence and software engineering. Mr. Reid has a passion for financial markets and plans to begin his CFA in 2014 and complete an MSc in computer science in 2015. For more information or to contact Mr. Reid you can visit his website at <http://www.stuartreid.co.za>. †



# PICTURE PERFECT

Perfect your trade strategies with charting on Bloomberg. **CHART <GO>** is your visual gateway to 20 million securities, fundamentals, economic releases & more. All this, integrated into an intuitive charting platform with technical alerts, market moving events, custom studies, backtesting and impressive visualizations to boot.

Explore **CHART <GO>** on the **BLOOMBERG PROFESSIONAL®** service.

# Bloomberg

For more information about Bloomberg, contact a Bloomberg Sales representative or visit [www.bloomberg.com](http://www.bloomberg.com).

**New York** +1 212 318 2000

**London** +44 20 7330 7500

**Tokyo** +81 3 3201 8900

**São Paulo** +55 11 3048 4500

**Dubai** +971 4 373 9400

# Arms Candlevolume

by Richard W. Arms, Jr.

The history of technical analysis involves the quest for depicting information in an understandable and informative way. Each improvement has helped the analyst to better see what is happening, with the goal of making better trading or investment decisions. All the other indicators we use are merely mathematical applications of six very basic pieces of information. When the market closes for the day we are left with only these data:

- Opening price
- Closing price
- Volume
- High for the day
- Low for the day
- Change from the prior day

Of course, these data can be augmented by looking at shorter timeframes, such as hours or minutes, or generalized by looking at longer timeframes, such as weeks, months, or years. But there is no other information available except the six items enumerated above. So any method of charting is only an attempt to depict this limited information as clearly as possible.

Throughout the history of markets, men have tried to visually depict the numbers

generated by the buying and selling of items, be they stocks commodities, debt instruments, or anything else with a trading market.

First, there were line charts that connected the end of the day data, day to day, and gave an impression of how prices were changing. Chart 1 shows recent trading of Google stock. The charts that follow, courtesy of [StockCharts.com](http://StockCharts.com), will all look at the same timeframe for the same stock, using the various methods being discussed.

Then, there were bar charts, where each day was represented by a vertical line, indicating the high and low for the day. It included more information—the trading range for the day.

That was soon improved upon by adding the opening and the closing prices as tick marks on the vertical line. In Chart 2, the tiny line to the left of each daily bar is the opening for the day, and the line to the right is the close. Each improvement was an attempt to better inform the observer as to what prices were doing, and much more importantly, to allow one to try to forecast future prices based on past

Chart 1

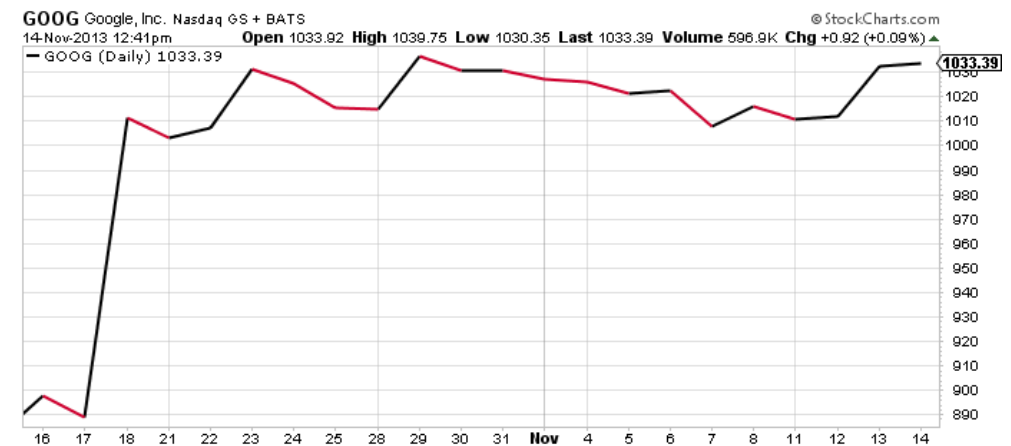
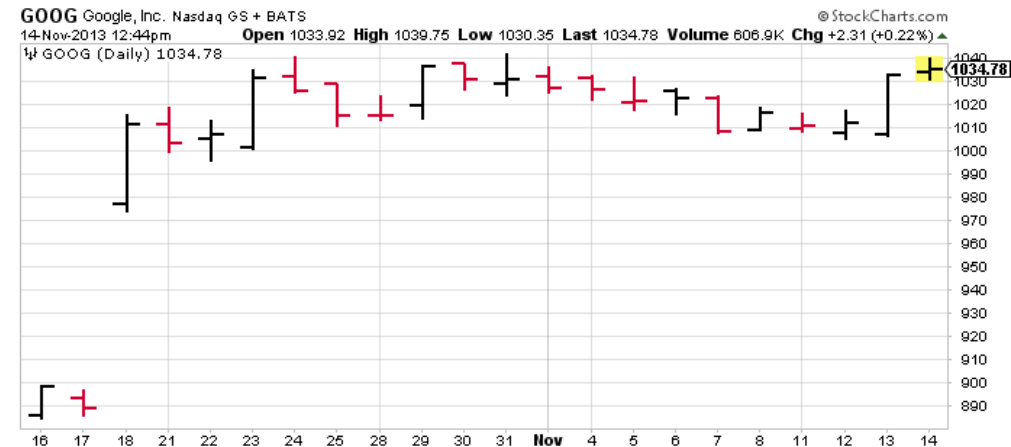


Chart 2





performance. Comparing where the two lines were carried the additional information as to whether or not the stock closed higher than it opened, and by comparing one bar with the next, it was also possible to see whether the stock showed a gain or a loss for the day.

In the quest for more information, and therefore better market decisions, volume was added as a histogram across the bottom of the chart. It allowed the trader or investor to see how much interest there was in each move as it developed. The thought was that days with more volume were probably more important, with a bigger public interest in the activity.

These were the tools of the technical analyst for many years, and they were used with great success by some of the legends of the technique, such as Richard Wyckoff. Each change in the methodology was intended to add more data to the chart, in order to facilitate decision-making.

In 1972, Equivolume was unveiled in my book *Profits in Volume* (since republished by Marketplace books) as a model of technical analysis. The technique moved volume off the lower margin and included it in the price posting. To do this, each bar was expanded laterally to become a box instead of a line, with the width of each box representing the volume on that day. In Chart 4 we see Google for

the same timeframe, but using the new methodology.

To understand the new method of charting called Arms Candlevolume, presented in this article, one should look at the Equivolume system in depth. But for now, be aware of a few important changes that were brought about by this advance:

- 1) It allowed one to look at both price and volume in a single entry ;
- 2) It abandoned time on the X-axis, replacing it with volume, enabling the analyst to measure accumulated volume laterally on the chart;
- 3) It produced boxes that reflected how easy or hard it was for prices to change;
- 4) It included, *in a single posting*, the advantages of bar charts and the volume histogram, thereby revealing an entirely new approach, which allowed the study of each entry as a price move with a particular volume characteristic.

In the meantime, though, some analysts were using an ancient Japanese charting method called Candlesticks. These charts emphasized the importance of the opening and closing prices rather than just the high and low. A Candlestick chart inserted a box over the vertical line indicating the high and low. A filled box signified a day in which the close was lower than the opening, while an unfilled box meant that the close was higher than the opening that day. Chart 5 is a Candlestick chart of the same stock over the same time period (Google).

Chart 3

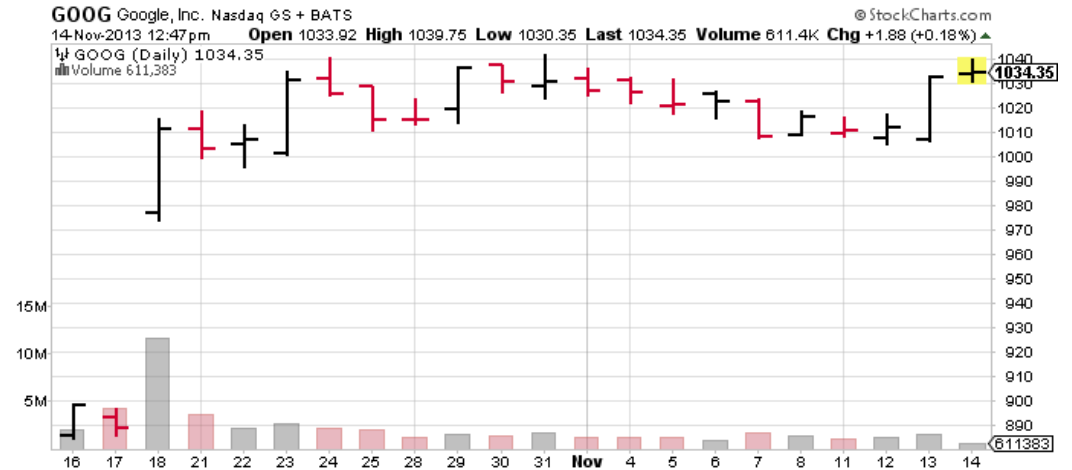
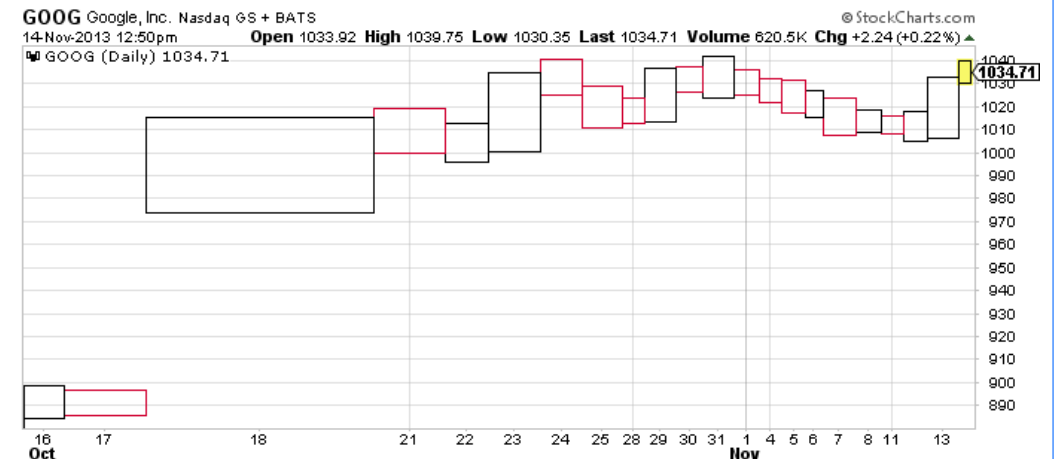


Chart 4



What could be more logical, then, than to combine the two methods to gain the advantages of both? This was attempted by various charting services, but in a way that lost the value of Equivolume boxes by eliminating them. But Arms Candlevolume charts accomplish what we are looking for. So, to differentiate, we are calling these "Arms Candlevolume Charts." They retain the Equivolume box but superimpose the data and display of Candlestick charts. The candlestick method is placed inside the Equivolume posting. Unlike the regular candlestick chart, though, the posting is expanded laterally based on the volume, as in the Equivolume system.

Now we have, for the first time, all of the six available pieces of data included on a single chart in a clear, understandable, and interpretable manner. In addition, the Point and Figure charting methodology, which allows one to establish probable moves, is replaced by volume width measurement, as explained in my various books on Equivolume. So we have, in a single system, the ability to apply all the information that we have garnered from multiple charts in the past.

The interpretation of these charts is perhaps obvious to IFTA members who are professionals. In addition, an in depth analysis is beyond the scope of this brief article. A book is already in the works and will soon be available that will show how to put this methodology to work. †

Chart 5

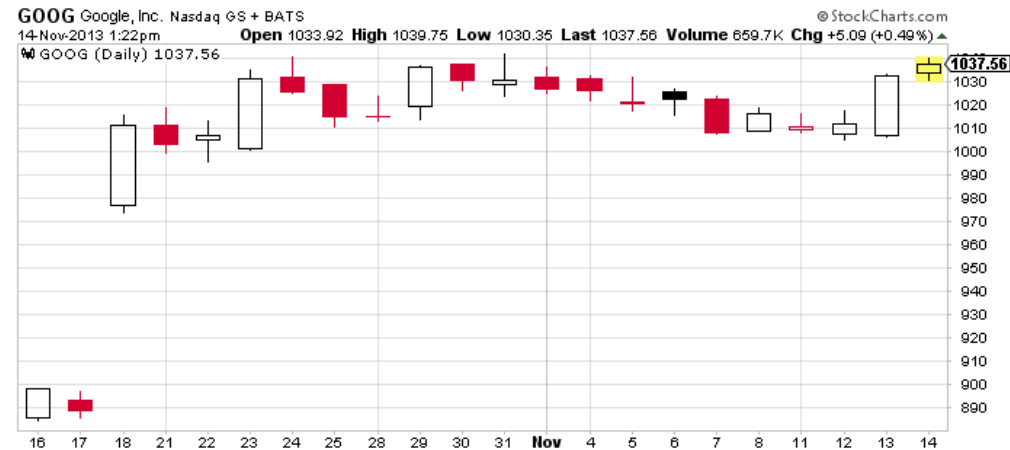
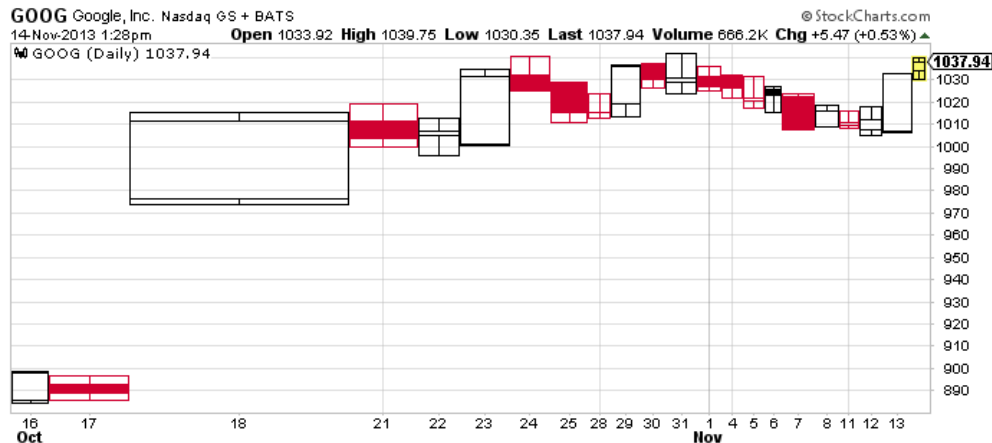


Chart 6



## Education Lounge

## An Unexpected Encounter of the Third Kind...

by Mario Kfoury, CFTe, Board Member, Lebanese Society of Technical Analysts (LSTA), Beirut, Lebanon

It all started on a winter afternoon. It was raining cats and dogs outside. The wind was gusting with bursts of hail, while thunder and lightning were splitting the sky, unleashing nature's wrath as it was believed a long time ago. I was lucky to have made it to that neon sign advertising my favorite American-style café unsoaked, walking swiftly along the city's wall, sheltering me from the havoc above, my umbrella torn to pieces by the might of the wind. From my traveling backpack, I was unpacking my two laptops and mobile phone, through which I enter and exit the markets, when I noticed a man sitting across the place looking at me, scrutinizing me with a smile while sipping his cup of tea. My computers were booted and ready to go as the rain drops were building a wall of haze on the glass windows, drawing shapes that were leaving the visitors reflective.

"Hello, I am Mario," I pitched at him. "Well hello Mario, you can call me Pythagoras," he said with a smile. "Pythagoras! You must be Greek then," I hit back with a playful wink. "Let's just say I come from a long lineage of Greek descendants," he answered with a twist "And you are...an itinerant

trader?" Something in my mind clicked; my intuition was pointing to something familiar, some sort of déjà-vu, might be his features or physiognomy, my memory was telling me otherwise.

"How did you guess?" I reacted, trying to hide my surprise. "From your books," he pointed his finger to the new books I had just purchased from the local bookstore: *The profit magic of stock transaction timing*, by [J.M.Hurst](#), and Martin Pring's *Trading systems explained*. "Yes, indeed. Everywhere and nowhere are my homes, and that's the beauty of the craft—it procures total freedom and independency for those who are willing to walk the talk."

It was a time when I had just made and lost 140 grand trading information and reports, such as balance sheets, P/E ratios, PEG, EPS, 52 weeks highs and lows, from financial sections of popular websites... thinking the market was a generous benefactor and that whoever had a few dollars to lend could take it back fructified, multiplied by at least two or three. Having discovered the ruthless, unforgiving nature of the market's reality and coming from a context of fighting sports, I had made

a new resolution: to know everything I can about my newly encountered foe and learn to dance his dance no matter the cost or time.

"So how is the market treating you nowadays?" he pursued. "Well, you know what they say," I retorted with a little nervous tick in my face, as if revealing my secret, "Sometimes you win, sometimes you lose, sometimes you laugh, sometimes you cry." "Hmm, you sound as if life is a 50/50 strive. I thought you wanted to make a living from the markets. How can you survive if there is such a high element of chance?" He went on, "Can I ask you a personal question?" "Sure, go ahead!" I thought in my mind; "huh, make my day whoever you think you are." "Why do you trade? Why did you pick this challenging and dangerous craft?"

"Well, as I told you, it procures independency and freedom!"

"While this is in part true, it is only the surface of it. What draws us to the market is collective psychology, we know without knowing that there is something in that market beyond the financial and material gains and losses, and then there are the



fears of being excluded and of missing out. There are three kinds of people attracted to it: the gamblers, the materialists, and the spirituals; this whole world is driven by an existential question, the eternal search for meanings in an endless loop of simulation and stimulation. So which kind are you?"

I could hear my heartbeat. Holy moly, I thought, is this guy for real or out of some story? And the name! Must be for something...either given or earned! "So what do we do in the face of this eternal, unsolvable, ungraspable search or quest as you call them?" I snapped back. He responded, "As a market participant, Mario, you have to transcend, tame your ego. I don't know how much study or experience you have in this field, but the most important aspect of life, and trading in particular, is of psychological and spiritual dimensions. No one will succeed in the long run if not in tune and harmony with universal laws. Let's have a tea, how do you like your drink?" "It's okay, I'll get it, how would you like yours?"

*An Unexpected Encounter of the 3<sup>rd</sup> kind... (continued)*

## Education Lounge

As I returned from the bar, holding two glasses of steaming tea, he was flipping through the pages of my books. As soon as he was holding the cup in his hand, he took a sip of it and followed, "Contrary to what many believe, technical analysis is an ancient discipline, long before Elliott, Da Vinci, and Fibonacci, there was a Greek philosopher mathematician who discovered the magic of squares and numbers, golden proportions, and founded a religion based on nature's laws and metempsychosis (day and night, awakening and sleep being fractals in the bigger cycle of life and death). In today's world, running at the speed of light, fundamental analysis has become obsolete; you need technical analysis to keep up with the new pace of paradigm shifts and dynamic changes that have occurred since the telecommunication revolution. Fundamental analysts are like existentialists, spending their time looking for the whys of things, while technical analysts are concerned with the *hows*: how to enter and exit the market. Technical analysis is a more accurate and leading discipline. "The chart is your treasure map, study the chart."

He put the books down. I felt as if time was suspended. "What you are reading is very bright; however, you need to add to it a metaphysical measure of ethical dimension. Otherwise your endeavor will be devoid and dull in this vast and infinite universe." "And how do I add this

measure," I asked dumbfounded. "All our fears are those of mortals, yet our desires of immortals," he carried on. "Beauty is proportion and moderation. People give different names to the same principles, then try to interpret and apply them in an infinite variety of ways, creating conflict and misunderstanding," he said. "If we observed this world, nature, and the universe, we cannot miss underlying active laws from which everything is inspired, namely, the law of Karma, from which the Golden Rule is deduced—the principle of consensual reciprocity. Technical analysis can show us this way. Through the ages, mystics, philosophers, gurus, so-called messengers, and prophets fasted, mused, searched, and came up with systems of beliefs, or what they called 'truths,' to live and achieve self-realization and fulfillment in this world. From Egypt to India, Greece, China, Japan, and North and South Americas, philosophers, thinkers, gurus, so-called messengers, and prophets dwelled hard and proposed for us The Way. From the principles of Hermetism, Kama Sutraism, Poly to Monotheism, Communism to Capitalism, left or right, success or happiness, pleasure or pain, love or hate... There is so much wisdom in this world, yet people choose evil out of ignorance, chauvinism, dogmatism, narrow-mindedness, and ideologies. But what is the merit of a monk, rabbi, priest, sheikh, or prophet who finds 'the truth' when secluded and isolated on a mountain

top, in a desert, or down in a valley when they then come to the city to herald about it and claim it as the ultimate truth, if they were unable to find it in the first place amongst their people, amid the daily concerns, business, and preoccupations of life in the city? And why would they veil it in some secret, cryptic message, riddle, or mystery if their intention truly was to benefit all human kind? It might be that truth is so simple, yet to hide it and complicate it, they would draw and seduce the weak, curious, and discontent in life and bring some attention to themselves and their philosophy. You trade instruments in the market and roles in life, but the ultimate commodity is love; everything else is replacement; every excess, compensation. Not the kind of exclusive, possessive love experienced between two individuals (this kind of love balances our anima/animus, feminine versus masculine proportions on the narcissistic level), but rather the type of love that binds us to the human family, to creation; it is experienced as oneness or empathy and compassion. There is an ongoing battle waged in the stock market, where every support, resistance, and trend line are frontlines where buyers and sellers confront. This whole economic system is dependent on a vicious cycle of production and consumption and a barrel of oil among competing nations. There is an analogy between trading and martial arts: today's traders are modern warriors and modern samurais. You need to be

prepared technically, financially, and psychologically. Give back a share of what you have been rewarded; never trade above the means of your retribution. The cardinal sin in life and trading is pride; the only conviction worth having is having no convictions. You have to accept and embrace uncertainty. Having convictions closes your senses, affects your perception, and makes you biased in life. All you need is the Golden Rule and the Golden Number. But most important, never lose your head," he said. "The measure of a man is inversely proportional to the size of his ego..."

On that day there was a Golden Rule, a gold trade, a Golden Number, and the never-ending flow of time. ...I had made \$10,000 dollars setting up a Fibonacci level confirmed by all the signals of the Ichimoku cloud with a 1 to 3 risk/reward ratio, but most importantly, I had opened my eyes to a new dimension...

$$\varphi = \frac{1 + \sqrt{5}}{2} = 1.6180339887 \dots$$

I wish to thank the Lebanese Society of Technical Analysts (LSTA), for giving me the opportunity to learn and develop the skills and discipline of technical analysis, to its actual president, founder, and introducer to Lebanon, as well as my first instructor, Mr. Gregoire Azar and to Pythagoras, Avramis Despotis, and Andreas Thalassinos. †

# IFTA2014



Unravelling the DNA of the Market

The Society of Technical Analysts would like to invite you to IFTA 2014 in London

- London is an accessible, convenient and efficient travel destination for North America and Asia as well as Europe.
- London is a cosmopolitan, vibrant and bustling city. Having hosted the Olympics in 2012, the celebratory atmosphere is set to last!
- The title of the conference “Unravelling the DNA of the market” will allow us to explore some of the underlying causes of market behaviour.

## Headline speakers

Marcus du Sautoy, OBE

Alexander Elder

## Conference Secretariat

IFTA2014@contendam.com

Visit the website now to register your interest

[conference.ifta.org/2014](http://conference.ifta.org/2014)

## 27<sup>TH</sup> Annual Conference

9–11 October 2014

The Waldorf Hilton Hotel, London

SAVE  
THE DATE



26<sup>th</sup> Annual IFTA Conference  
9-11 October 2013 • San Francisco, CA USA

**IFTA2013**   
**EVOLUTION TO MASTERY**  
Technical Analysis, Systems and Execution

# Highlights

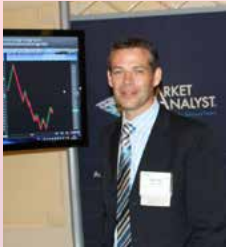


# IFTA2013



## EVOLUTION TO MASTERY

Technical Analysis, Systems and Execution



## Member News

### The Australian Technical Analysts Association (ATAA)

The Australian Technical Analysts Association (ATAA) held its Annual General Meeting in October and announced a new board for the coming year. The current board consists of 12 directors. In the past, ATAA has operated with a smaller board, which placed a heavy workload on the directors who volunteered their time. With a full board of 12 members, we are excited to enter 2014 with a greater capacity to tackle our various initiatives.

Our first board meeting took place recently over a weekend in Melbourne, at the venue that will host our 2014 conference. The meeting itself was very congenial and constructive, and directors left with a great

sense of motivation for the year ahead. Achievements during the meeting included:

- Getting new directors up to speed with the operations of the ATAA.
- Electing committee heads for each portfolio.
- Working on action items to get the ball rolling on our new initiatives.

The board now consists of the following members (heading each portfolio in brackets):

- Kevin Murphy (President)
- Ian Flack (Education, Qualifications and Training, and Volunteer Coordination) <co-Vice President>
- Marc Chandler (Speaker Register and

Liaison) <co-Vice President>

- Robert Grigg (IT/Website/Business Process and National Conference)
- Robert Brain (Member Services)
- Michael Gable (Editing, Publishing, and Authoring)
- Mario Conti (Marketing – Social Network)
- Philip D’Souza (Marketing)
- Richard Holden
- Sam Khawaja (Traders Expo)
- Vladimir Pavasovic
- Paul McLaren (Accounting, Auditing, and Corporate Governance)

The main initiatives for the board that are worth mentioning include:

- Finalising new branding for the ATAA
- Completing the new website
- Developing a marketing strategy
- Providing an education revamp in relation to the Dip TA (ATAA)
- Targeting new demographics to add further depth to the ATAA membership
- Working on ways to help the chapter presidents
- Ensuring access to quality speakers on a more consistent basis

We look forward to providing an update on the progress of these initiatives at the next quarterly update.

### American Association of Professional Technical Analysts (United States)

The American Association of Professional Technical Analysts’ (AAPTA’s) 2014 Annual Conference and brainstorming will be held March 28–29 at the Marriott Courtyard, 300 E. 4<sup>th</sup> Street, Austin, Texas, United States. Attendees should plan to arrive the night before the conference. For questions, contact Tom Ham at [TomHam@ameriticech.net](mailto:TomHam@ameriticech.net).

The speakers include Cynthia Kase, Nigel Bahadur, Doug Janson, Mike Moody, Mike Jepson, Ian McAvity, and Charles Bassetti, among others.

This is a fun and exciting event, packed with great information. You will have the opportunity to meet and greet fellow analysts and enjoy the intimacy that a cohesive group of equals brings to this group. Great ideas have emerged from past meetings and this is where you will have the opportunity to learn, share, and engage with one another.

In the brainstorming portion of the meeting, our heads will be put to the test of sharing our thoughts on new and used methods of technical analysis. Each attendee will have the opportunity to speak and discuss new studies, adventures as



**Back row (L-R):** Marc Chandler, Paul McLaren, Richard Holden, Ian Flack, Michael Gable, and Robert Grigg  
**Front row (L-R):** Mario Conti, Kevin Murphy, Sam Khawaja, Philip D’Souza, and Robert Brain.



*Member News (continued)*

they relate to technical analysis, new takes on old methods, and the previous day's events. There are no restrictions, other than that topics must relate to technical analysis.

### Egyptian Society of Technical Analysts (Egypt)

In November, the Egyptian Society of Technical Analysts (ESTA) held two ESTA days. ESTA days are attended by professionals with market experience, in addition to those who want to learn more about technical analysis. On November 11, there was a panel discussion with prominent market professionals as well as the vice chairman/dean of the faculty of Economics and Political Science in Cairo University. On November 23, Mahmoud Akl, CFTe, CETA gave a presentation on "KAGI as a tool for simple trading". ESTA is always keen on encouraging speakers who wish to present innovative ideas with their colleagues. If you live in Cairo or are visiting and have a topic worth presenting, please contact our IFTA liaison, [iftaliaison@estaegypt.org](mailto:iftaliaison@estaegypt.org)

### Instituto Español de Analistas Técnicos y Cuantitativos (Spain)

In October, IEATEC was accepted as a new developing member of IFTA. Welcome IEATEC!

### Technical Analyst Society, Nigeria

In October, the Technical Analyst Society, Nigeria (TASN) was awarded full member status. Congratulations TASN!

### Society of Technical Analysts (United Kingdom)

2014 promises to be an exciting year for the Society of Technical Analysts (STA), as it hosts the 27<sup>th</sup> Annual IFTA Conference on 9–11 October 2014, at the Waldorf Hilton, London. Headline speakers include Marcus de Sautoy OBE (the Simonyi Professor for the Public Understanding of Science and a professor of Mathematics at the University of Oxford). To receive updates and information on how to book at the early booking rate please visit <http://conference.ifta.org/2014/>.

STA is continuing to videotape its talks. Members unable to attend the meetings in London can benefit from watching the speakers' presentations online. Recent speakers include Brian Whitmer, Elliott Wave International, Linda Bradford Raschke, and Simon Maelzer.

STA's annual dinner held in October was once again a resounding success. Comedian and MoneyWeek commentator, Dominic Frisby, was this year's guest speaker.

The end of October saw the start of the 2013–2014 taught courses, with over 30 students enrolling in the Diploma I Course. This will be followed in January by the STA Diploma II Course. For more information on our taught courses, our Home Study Course, or the Diploma I and II exams, whether in London or overseas, please contact the STA office at [info@sta-uk.org](mailto:info@sta-uk.org) or visit our website, [www.sta-uk.org](http://www.sta-uk.org)



 Market Technicians Association's

# annual .2014 symposium

April 2 - 3, 2014

Learn more at <http://symposium.mta.org>

at Convene, 730 Third Ave, New York City



## IFTA Member Societies

AUSTRALIA—ATAA Australian Technical Analysts Association [www.ataa.com.au](http://www.ataa.com.au)  
 AUSTRIA—VTAO\* Vereinigung Technischer Analysten Österreichs [www.vtao.at](http://www.vtao.at)  
 BOSNIA and HERZEGOVINA—SMS\* Society for Market Studies [trzisnestudije.org](http://trzisnestudije.org)  
 CANADA—CSTA Canadian Society of Technical Analysts [www.csta.org](http://www.csta.org)  
 CROATIA- CTAA\* Croatian Technical Analysis Association [www.huta-ctaa.hr](http://www.huta-ctaa.hr)  
 EGYPT—ESTA Egyptian Society of Technical Analysts [www.estaegypt.org](http://www.estaegypt.org)  
 FRANCE—AFATE Association Française des Analystes Techniques [www.afate.com](http://www.afate.com)  
 GERMANY—VTAD Vereinigung der Technischer Analysten Deutschlands e.V. [www.vtad.de](http://www.vtad.de)  
 INDIA—ATA The Association of Technical Analysis [www.taindia.org](http://www.taindia.org)  
 INDONESIA—AATI Asosiasi Analisis Teknikal Indonesia  
 ITALY—SIAT Società Italiana di Analisi Tecnica [www.siat.org](http://www.siat.org)  
 JAPAN—NTAA Nippon Technical Analysts Association [www.ntaa.org.jp](http://www.ntaa.org.jp)  
 LEBANON—LSTA\* Lebanese Society of Technical Analysts  
 NIGERIA—TASN Technical Analysts Society, Nigeria [www.tasnigeria.org](http://www.tasnigeria.org)  
 NETHERLANDS—DCTA Dutch Commission of Technical Analysis  
 NEW ZEALAND—STANZ Society of Technical Analysts of New Zealand [www.stanz.co.nz](http://www.stanz.co.nz)  
 PAKISTAN—STAP\* Society of Technical Analysts Pakistan [www.stap.com.pk/index.html](http://www.stap.com.pk/index.html)  
 ROMANIA—AATROM Asociatia Analistilor Tehnici din Romania [www.aatrom.org](http://www.aatrom.org)  
 SAUDI ARABIA—SSTA\* Saudi Society of Technical Analysts [www.saudi-sta.org](http://www.saudi-sta.org)  
 SCANDINAVIA—STAF Skandinavians Tekniska Analytikers Förening [www.staf.se](http://www.staf.se)  
 SINGAPORE—TASS Technical Analysts Society (Singapore) [www.tass.org.sg](http://www.tass.org.sg)  
 SPAIN—IEATEC\* Instituto Español de Análisis Técnicos y Cuantitativos [www.ieatec.es](http://www.ieatec.es)  
 SOUTH AFRICA—TASSA Technical Analysts Society of Southern Africa [www.tassa.org.za](http://www.tassa.org.za)  
 SWITZERLAND—SAMT Swiss Association of Market Technicians [www.samt.org.ch](http://www.samt.org.ch)  
 TUNISIA—ATAT\* Association Tunisienne des Analystes Technique  
 UNITED KINGDOM—STA Society of Technical Analysts Ltd. [www.sta-uk.org](http://www.sta-uk.org)  
 USA—TSAASF Technical Securities Analysts Association [www.tsaasf.org](http://www.tsaasf.org)  
 USA—AAPTA American Association of Professional Technical Analysts [www.aapta.org](http://www.aapta.org)

\* Developing

## IFTA Update Schedule

*IFTA Update* is the quarterly electronic newsletter of the International Federation of Technical Analysts, reaching more than 6,950+ IFTA colleagues worldwide. The *Update* is an efficient and cost-effective way to communicate with IFTA's member societies and colleagues.

### PUBLICATION SCHEDULE

September	Education articles: August 15—send submissions to <a href="mailto:newsletter@ifta.org">newsletter@ifta.org</a> All other content: September—send submissions to <a href="mailto:admin@ifta.org">admin@ifta.org</a>
March Issue	Education articles: February 15..... All other content: March 1
June Issue	Education articles: May 15..... All other content: June 1
December	Education articles: November 15..... All other content: December 1

For more information and to advertise, visit our website:  
<http://www.ifta.org/publications/newsletter/>

## Board of Directors

**President** Rolf Wetzer, Ph.D. (SAMT)  
 Email: [rolf.wetzer@ifta.org](mailto:rolf.wetzer@ifta.org)

**Vice-President—the Americas** William Chin, MBA (CSTA)  
 Email: [wchin@e3m.com](mailto:wchin@e3m.com)

**Vice-President—Asia Pacific** Akira Homma, CFA, CIIA, CFTe, FRM, CMA, CMT (NTAA)  
 Email: [akira.homma@ifta.org](mailto:akira.homma@ifta.org)

**Vice-President—Europe, Conference Director** Deborah Owen, FSTA, CFTe (STA)  
 Email: [editor@irc100.com](mailto:editor@irc100.com)

**Vice-President—Middle East, Africa** Mohamed Ashraf Mohfauz, MFTA, CFTe, CETA (ESTA)  
 Email: [mohamed.ashraf.esta@gmail.com](mailto:mohamed.ashraf.esta@gmail.com)

**Treasurer** Ralf Böckel, CFA (VTAD)  
 Email: [ralf.boeckel@freenet.de](mailto:ralf.boeckel@freenet.de)

**Education Director** Gregor Bauer, Ph.D., CFTe  
 Email: [gregor.bauer@vtad.de](mailto:gregor.bauer@vtad.de)

**Exam Management Director** Jeanette Schwarz-Young, CFP®, CMT, M.S.  
 Email: [optnqueen@aol.com](mailto:optnqueen@aol.com)

**Accreditation Director** Roberto Vargas, CFTe (TSAASF)  
 Email: [roberto.vargas@ifta.org](mailto:roberto.vargas@ifta.org)

**Marketing and Membership Director** Dan Valcu, CFTe (AATROM)  
 Email: [ta@educofin.com](mailto:ta@educofin.com)

**Secretary** Maurizio Milano (SIAT)  
 Email: [maurizio\\_milano@libero.it](mailto:maurizio_milano@libero.it)

**Strategic Development Director** Robert Grigg (ATAA)  
 Email: [robert.grigg@ifta.org](mailto:robert.grigg@ifta.org)

**Online Development Director** Roman Bogomazov (TSAASF)  
 Email: [roman.bogomazov@ifta.org](mailto:roman.bogomazov@ifta.org)

**Journal and Newsletter Director** Aurélie Gerber, MBA, CFA (SAMT)  
 Email: [aurelia.gerber@ifta.org](mailto:aurelia.gerber@ifta.org)

**Website Content Director** Akihiro Niimi, MFTA (NTAA)  
 Email: [niimia@aifaminc.com](mailto:niimia@aifaminc.com)

### STAFF

**Executive Director** Beth W. Palys, FASAE, CAE  
**Vice President, Meetings** Grace L. Jan, CAE, CMP  
**Senior Member Services Manager** Linda Bernetich  
**Marketing Manager** Julie Hill  
**Senior Graphic Designer** Jon Benjamin  
**Accounting** Dawn Rosenfeld  
**Director of Editorial Services** Lynne Agoston

### IFTA HEADQUARTERS

International Federation of Technical Analysts  
 9707 Key West Avenue, Suite 100  
 Rockville, MD 20850 USA

Phone: +1 240-404-6508  
 Fax: +1 301-990-9771  
 Email: [admin@ifta.org](mailto:admin@ifta.org)

# IFTAJOURNAL CALL FOR SUBMISSIONS

The *IFTA Journal* is an annual publication established by the International Federation of Technical Analysts. It is collated by a committee of IFTA colleagues. The *IFTA Journal* is essential reading for academics, students and practitioners of technical analysis in all arenas. It is an excellent reference source for anyone interested in technical analysis, containing a wealth of resource material.

## Credibility And Recognition

The *IFTA Journal* is the only international journal of technical analysis with original contributions from all continents covering developments in technical analysis in global markets. The *Journal* reaches leading practitioners and students of TA throughout the world.

The *IFTA Journal* is a major professional resource. Its archival online publication on the IFTA web site will make your original work available as a future resource to the worldwide community of technical analysts.

## Topics

IFTA is seeking papers that cover developments impacting, either

directly or indirectly, on the field of technical analysis; they may be drawn from such areas as:

- Basic market analysis techniques
- Indicators—sentiment, volume analysis, momentum, etc.
- Global and intra-global TA
- Styles of TA
- Data
- The changing role of TA in the investment community.

We would especially like to see contributions that draw from areas not previously examined, and/or topics tangential to technical analysis.

The above list is just a guide and should in no way be considered restrictive. We wish to make the *Journal* open to new and innovative ideas from all areas of TA and those that connect with it.

## Submitting Contributions

Registration and submission of contributions is via the web at [www.ifta.org](http://www.ifta.org), or by email to the editor, Aurélia Gerber, [journal@ifta.org](mailto:journal@ifta.org).

## Language

Contributions must be submitted in English with British grammar required.

## Writing Style

Papers should be written in a Thesis style and a guide can be found in the following links:

<http://www.ifta.org/public/files/member-resources/d-ifta-style-Style-Guide-to-Thesis-Writing.pdf>

<http://www.ifta.org/public/files/member-resources/d-ifta-style-MS-Guidance-on-Presentation.pdf>

## Referencing

All texts referred to in the paper must be appropriately referenced with a bibliography and endnotes (footnotes will not be accepted.) Please use the following guides:

[http://www.ifta.org/public/files/member-resources/d-ifta-style-A-Guide-To-Referencing-\[Oxford\].pdf](http://www.ifta.org/public/files/member-resources/d-ifta-style-A-Guide-To-Referencing-[Oxford].pdf)

Responsibility for the accuracy of references and quotations is the author's. We expect these to be

checked thoroughly by the author before submission.

All references are to be included as endnotes. No separate list of references or bibliography should be provided.

## Figures, Charts and Tables

Illustrations and charts must be referred to by Figure Number and source (when applicable). Tables must be referred to by Table Number and source.

## Length Of Contribution

Papers should be approximately 1200 to 3000 words, with supporting graphs and charts.

## Format

We ask for submission in MS Word or other text format as well as a PDF. Charts and graphs may be in gif or jpeg, but we ask that authors also keep a tif format in case it is required for printing purposes. An Excel spreadsheet supporting your submission may also be submitted.

## Editorial Timeline

December 13	Call for papers distributed
May 31	Deadline for all submissions
May 31	Papers distributed for review
July 31	Reviewer's comments returned to editor
August 15	Notification of acceptance/rejection
August 31	Submission to printer
October 2014	Worldwide distribution
December 2014	Web publication

For more information, see our website <http://www.ifta.org/publications/journal/>

## Licenses And Copyright

We require all submissions to include the author's signature on the Publication Agreement at the end of this document. (see Publication Agreement.)

We may publish on a website. We require that you place your submission under the Creative Commons Attribution-NonCommercial 3.0 <http://creativecommons.org/licenses/by/3.0/>.

Unless another license is noted, we will assume that your contribution is under this license.

## Selecton of Contributions

Contributions are selected based on their content by the *IFTA Journal* Editorial Committee. Please understand that we cannot accept all contributions. Depending on the number and quality of the submissions and the Editor's findings, selections are not negotiable.

## Remuneration

The International Federation of Technical Analysts is organised and operated by volunteers and supported by its members. We ask you to understand that we will not be able to pay for contributions.

## Questions

For more information, please contact [journal@ifta.org](mailto:journal@ifta.org).

# Publication Agreement

The following is an agreement between

---

author(s) and the International Federation of Technical Analysts, Inc., concerning

---

a work written by the author(s).

## Author's Grant of Rights

The author(s) grants to the publisher exclusive first publication rights in the work, and further grants a non-exclusive license for other uses of the work for the duration of its copyright in all languages, throughout the world, in all media. The publisher agrees to publish the article in the *IFTA Journal*. The publisher shall include a notice in the work stating "Copyright [author(s)'s name(s)]." Readers of the article may copy it without the copyright owner's permission only if the author(s) and publisher are acknowledged in the copy, and copy is used for educational, not-for-profit purposes."

## Author(s)'s Ownership of Copyright

Copyright in the work remains with the author(s).

## Warranty of Authorship

The author(s) warrants to the publisher that the article is original and that he/she is/are the sole author(s) and has the full power to make this agreement. The author(s) indemnifies the publisher against any losses and other expenses, including reasonable attorney's fees, after final judgment of any claim or action against any of all of these warranties.

---

Author(s) name(s)

---

Author(s) signature(s)

---

Date

Upon acceptance, please fax or email completed Publication Agreement to: IFTA Headquarters, (fax) +1 301-990-9771 or (email) [admin@ifta.org](mailto:admin@ifta.org)

# IFTAJOURNAL RATE CARD

## Editorial and Readership Profile

The annual *IFTA Journal* publishes original, well-documented papers and articles on a diverse range of topics related to the technical analysis of financial and commodity markets. The *Journal* provides colleagues and interested persons with continuing education in Technical Analysis (TA). The broad editorial content helps colleagues remain informed of the developments and leading body of work in Technical Analysis.

The *IFTA Journal* is the only international journal of technical analysis reaching a global audience of interested and dedicated practitioners of TA throughout the financial community. It is read by Analysts, Fund Managers, Financial Writers and other decision makers throughout the international financial industry.

The *IFTA Journal* is distributed on the web and a print copy is provided to IFTA colleagues and delegates at the yearly IFTA International Conference, building awareness, visibility and providing extra exposure for your message.

## Circulation and Readership

**Total Circulation** ..... Published on the web  
**Coverage** ..... Worldwide  
**Readership served** ..... Institutional Analysts,  
 Account Mangers,  
 Fund Managers,  
 Investors and Students  
**Publication Schedule** ..... December 2014

## Editorial Committee and Staff

**Editor** ..... Aurélia Gerber  
**Staff** ..... Linda Bernetich

## Organizational Affiliation

International Federation  
 of Technical Analysts, Inc.  
 9707 Key West Avenue, Suite 100  
 Rockville, MD 20850 USA

**Telephone** ..... +1 (240) 404-6508  
**Email** ..... [journal@ifta.org](mailto:journal@ifta.org)

## Preferred Position Rates

<b>Backcover (cover 4)</b>	\$1,800.00
<b>Inside back (cover 3)</b>	\$1,500.00
<b>Inside front (cover 2)</b>	\$1,300.00

## 2015 Issue Deadline Date

June 30, 2014

## Material Specifications

Full page ad format = 8.5" x 11"  
 (215 x 280mm) 300dpi JPEG or PDF. Include crop marks and room for bleed.

## Printing

Perfect binding Journal/Book Format, 8.5" x 11", 80# gloss weight. Aqueous Coating on covers. (This is a clear water based coating that adds a high gloss finish and additional protection to the *Journal*, and will give your printed advertisement a richer look.)

## General Information

### Principles Governing Advertising in the IFTA Journal

These principles, developed jointly by the editorial committee of IFTA, are applied by the International Federation of Technical Analysts (IFTA) to ensure adherence to the highest ethical standards of advertising and to determine the eligibility of products and services for advertising in IFTA print and electronic publications.

As a matter of policy, IFTA will sell advertising space in its publication when the inclusion of advertng does not interfere with the mission or objectives of IFTA.

The appearance of advertising in IFTA publications is neither a guarantee nor an endorsement by IFTA.

### Advertising Acceptance Policy

All advertisements must be submitted in writing. Advertising is subject to approval by IFTA. All advertisements must be non-discriminatory and comply with all applicable laws and regulations. IFTA reserves the right to decline, withdraw and or copy edit at our discretion. Every care is taken to avoid mistakes, but responsibility cannot be accepted for clerical or printer's error.

### Payment

Prepayment by check, credit card (Visa, Master Card or American Express) or wire transfer is required for all ads. Bank details will be provided to you upon request.






## Cancellation and Changes

We will send out an acknowledgement confirming your order. You will be required to check that your ad and scheduling are correct. Any changes, cancellations or corrections must be communicated to IFTA in writing, by fax, e-mail or mail, prior to the submission closing date.

## Orders, Materials & Payment

Please send all orders, materials, payments and related communications to IFTA at [admin@ifta.org](mailto:admin@ifta.org).

## Advertising Rates (pricing in USD)

	<b>Full Page</b>	\$1,200.00
	<b>2/3 page</b>	\$1,056.00
	<b>1/2 page</b>	\$823.00
	<b>1/3 page</b>	\$545.00
	<b>1/4 page</b>	\$300.00