



Matthew Klein

C2 feels it has revolutionized the world of trading systems offered on the Internet. For a small fee anyone can list his “system” – whether the signals are discretionary or algorithmically-generated – and have the system tracked in real-time via C2. Systems are then offered for sale or traded automatically via the C2 site. C2 is now the leader in this area, and has spawned a number of imitators, to a greater or lesser degree attempting to emulate the concept of a “systems supermarket.” With the thousands of systems on C2 and its excellent graphics and presentation, the site certainly levels the playing field for the small trader hoping to sell a system to a wide audience, both institutional and retail.

The e-FOREX Site Inspection

Larry Levy talks with Matthew Klein, founder and CEO of the trading systems portal Collective2.com, otherwise referred to as C2.



For the uninitiated please describe the Collective2 (C2) concept?

Collective2 is a trading platform. It allows people or institutions that believe they can outperform the market to prove to the public in a verifiable way that they indeed can do so.

Next, it allows traders to “subscribe” to any trading methodology and to have the trades from that method executed in a real-life brokerage account.

From the point of view of a trader, then, C2 allows you essentially to assemble a do-it-yourself hedge

fund by allocating portions of your available capital to various strategies. Want to allocate 10% of your capital to a quantitative forex strategy? Fine. Click a box on the C2 Web site and it’s done. Want to allocate another 40% of your capital to a medium-risk “deep value” strategy? Fine. Click another box on C2. Oh, and by the way, keep your capital in your own brokerage account, in your own name. No need to let anyone access your funds but you.

From the perspective of the money manager or system developer, C2 looks a bit different. In essence, C2 gives you instant access to a pool of approximately 20,000 traders who are looking to place money with various trading strategies. Since C2 acts as a “platform,” all you need to worry about is issuing your buy and sell calls. We take care of piping these calls into various brokerage accounts, or into the delivery mechanism of choice for each individual subscriber.

Finally, while all of this is going on, C2 gathers and creates statistics – tons of statistics – that allows traders to make educated decisions about which trading strategies to use.

How did the idea of starting Collective2 come to you? What was its genesis?

I’m a computer programmer who happens to be fascinated by trading systems. By “trading system,” incidentally, I don’t mean only quantitative black-box algorithms. I also mean discretionary strategies run by human beings. Regardless of whether a trading method is run by a computer or a human, there is a critical problem that anyone trying to evaluate the system faces. Is a trading system that purports to show good historical results a

worthy system, or is it a lucky system?

Nowadays, any knucklehead with a decent computer and off-the-shelf software can create a “system” that would have outperformed the market over the preceding twenty years. But so what? Essentially, what the software has done is tested the outcomes of 9,999,999 random systems, and picked the one that happened to do well in hindsight. That doesn’t mean the result is significant, or that you could have picked that system beforehand.

So I realized pretty early in my study of trading systems that what one needs to do is to commit to having his or her trading system tracked on a go-forward basis in public. And for that to be done, the industry needs a trusted third party to provide the verification and tracking. That’s what C2 does. By the time we were tracking a few thousand systems, our users were clamoring for the next feature: they

wanted us to add interfaces to brokers so that trades could be executed automatically within customer accounts. They told us: “Tracking a system’s results is useful; but, once I select a system, I want to be able to trade it automatically in my account.” So we allow that, too.

Tell us about how this auto-execution works in the forex area. What forex brokers are compatible with C2?

Our general business strategy is to

be broker-agnostic. We want to be able to say to a customer: “Don’t worry about where you have your account. Just select a trading system at C2, and let us worry about piping the trades into your brokerage account, no matter where it is.” And, alternately, to the trading-system creators, we say: “Why tie yourself to a particular broker? At C2, we’ve done all the work. Now, any customer anywhere in the world, at any broker, can trade your system. You don’t need to know or care where the trades get executed. You’ll still be compensated. Just issue your buy or sell recommendation, and we’ll deal with the technological difficulties of interfacing to myriad brokers.”

Now, that said, obviously there’s a difference between a company’s strategic goal and what a company can practically implement. So we’re not quite there yet – we’re not quite universal – but we’re getting there. In the world of forex, C2 has



C2's FX systems can be cataloged and sorted in many ways.

created or is about to release interfaces to FXCM, IFX, CBFX, Gain, Interactive Brokers, Strategy Runner, MB Trading, and a few others. Plus we interface to futures

and stock brokers, too. But if you are a broker and you're not listed here, we'll be happy to extend the C2 platform to you, too. We think it's a win-win-win: it benefits a broker because it means more trades will be coming his way; it benefits the end-user account holder, because it means more automated trading options; and it benefits the system developer because it means his trading system can be extended to yet another set of potential customers.

What percentage of your customers use automated trading?

The number is growing. Order of magnitude: something like 30% of the people that analyze systems on our site use automated trading to execute orders.



Each systems performance can be run with various criteria

What proportion of the trading methods at C2 are highly profitable and have track records over a year or more?

Before I walk into a verbal trap – nice try, by the way, Larry – let me suggest that the question is unfair. The whole point of Collective2 is to democratize the world of finance.

Consider what C2 has done: first, we said to the average Joe Trader that he can construct his own hedge fund by picking and choosing from multiple strategies; he can use sophisticated analytics to sift through all the possibilities; and – once he has found what he is looking for – he can automatically execute his strategies in any brokerage account he likes! This is the stuff of magic, which previously only institutional money could access. On the other side of the equation, we said to smart finance jocks everywhere: “Great news! Now you can offer financial strategies to consumers without all the expense and heartache previously required: no need to go out and raise money (C2 has a pool of liquidity), no need to worry about back-office (C2 handles it), no need to worry about client management.” Okay, so given this massive democratization, what happens? Well, when you open the doors wide, everyone walks in. And I mean everyone. So a byproduct of democratizing finance is that everyone gets to participate – perhaps even people that shouldn't. And that creates one more job for C2, incidentally – which is the task of allowing people to separate the gold from the dross. It really is our responsibility, and we take it quite seriously. Our attitude internally is that it's fine to let everyone participate, but we want to make it easy for customers to screen out losers very quickly. So we spend a lot of time building tools that let customers do just that.

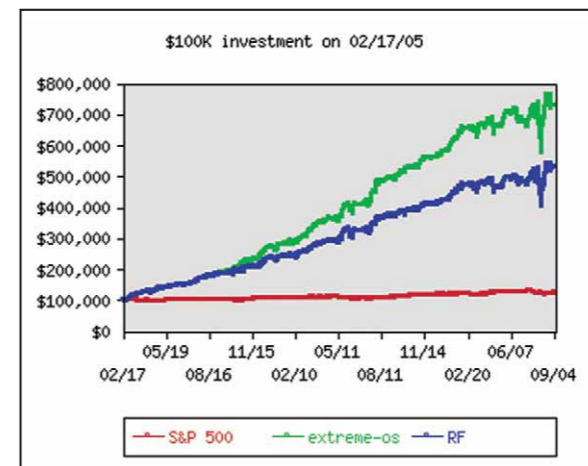
So, to answer your question: What percentage of trading methodologies are profitable over the long term? I don't have an exact answer, because the C2 universe is always expanding and contracting. Now, before you think I'm being disingenuous and evading the question, let me ask you

a question: “What percentage of mutual funds are profitable over the long term?” Do you know the answer? It's something I've studied, and I do know the answer. The answer: almost none. Okay then, how about this question: “What percentage of hedge funds are profitable over the long term?” Answer: almost none. Yes, yes, after the fact you can always point to one or two long-term winners. That's really great. But could you have pointed to those same winners 20 years ago, before they were the winners? No.

So I would say you should expect a very similar phenomenon at C2. Out of an expanding and ever-changing universe of strategies, only a small percent of strategies will wind up being outstanding. But the point is: people managing money face that same problem everywhere. C2 is not any different. But what we've managed to do is, first, to cut out a layer trouble and expense. Now anyone can have access to sophisticated hedge-fund strategies without hedge-fund expense. And second, by expanding the size of the intellectual pool, so to speak, we've increased the odds that you will find something worthy.

Has the number of forex systems offered and their performance profile changed since the inception of C2?

Yes. Despite everything I've said above, and despite my Rosa Luxemburg act – “More power to the people!” and all that – the reality is that C2 has grown more professional. We're still open and accessible; we're still democratic; and there are still some embarrassing rough edges. But, overall, we've begun to attract a better sort of system vendor, and a



"Best fills" in green vs C2's realism factor graph in blue

better sort of end-user customer. We still welcome everyone, mind you, but a little growing up never hurt anyone.

Can developers with TradeStation and other system development tools send their signals to C2 automatically for onward distribution?

Yes, our business philosophy is to be an open platform. Our goal is: No matter how you generate your signals, we'll take them and monetize them for you. So, yes, we have a TradeStation interface, a Metatrader interface, an Interactive Brokers interface. And then we have several APIs. If you are a modestly competent programmer you can send us your trading

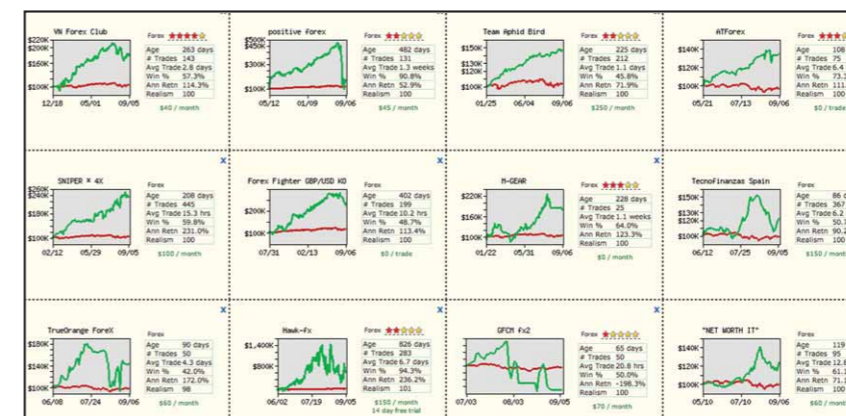
signals via an API call, and we'll take care of distributing it across our network. We also have an API for brokers, and even a full data-services API, which lets scientists and researchers access our database and analyze it. It's very cool.

Are there any common traits to system failure, and conversely, success on C2? You must have been monitoring many of your developers systems over time?

There is a common trait among systems that fail. And, again, it's not specific to C2 – you see this trait everywhere, especially in the world of hedge funds – but from my vantage point at C2, I see it quite often. How to define the problem? I think it's technically referred to as an “agency” problem, but less academically, the problem is that everyone managing money essentially gets a free long “call option” on their clients' funds. That is, the financial industry encourages excessive risk taking because the people managing money are not punished for taking

excessive risks, but are rewarded when gambles pay off. Imagine a class of 100 money managers who all start work on the same day. Now imagine that the ones that take excessive risks do well for a few years, and make a lot of money and attract lots of clients. They take outsized risks, but their risks just happen (luckily!) to pay off. And the money managers that take reasonable risks (i.e. the ones that manage client money as if it is their own) – what happens to them? They get fired. Why? Because they don't keep up with their peers, you see! So it's an industry where ultra-high-leverage and ultra-high-risk-taking is subtly encouraged. Every twenty or thirty years, things blow up and people learn their lessons, and promise never to do it again. Five years later the people that actually keep their promises are fired, because they underperform everyone else in the industry, who forgot their promises and began chasing risk again, usually with tons of leverage. The point is: most people's financial careers are shorter than the average period it takes to witness a spectacular blowup. So people can do quite well for a while... perhaps for an entire career – by taking outsized gambles. What do they care? It buys them a house in Greenwich.

Anyway, I'm not saying anything particularly novel. People have been aware of this problem since the beginning of finance. At C2, we try our best to give rational customers tools to help them spot a system that takes outsized risks – even if it is outwardly “successful.” But, you know, you can lead a horse to water, and it still may not drink. We have customers who ignore our analytics. They start trading high-risk systems. Some of them do well for a while.



A large number of systems can easily be compared on one screen

And then?

And then the inevitable happens. But before I scare everyone away, let me say that a sensible investor can find systems at C2 that offer appropriate levels of risk and reward.

Statistics	
Statistics are for combined open and closed positions. If open positions are included, results calculations may be delayed by several hours.	
Realism Factor	99.7
Trades	212
Profitable	97
Losses	115
Win %	45.8%
APD Ratio	0.67
Correlation w/ S&P	-0.159
Cumu \$	\$44,223
after typical commission	n/a
and real-life slippage	\$44,224
Avg Win	\$922
Avg Loss	\$396
Profit Factor	2.0:1
P/L per unit	n/a
after typical commission	n/a
after real-life slippage	\$0.00
Avg Trade Length	1.1 days
Compound Annual %	96.4% over 225 days
Sharpe Ratio	5.028
Max Drawdown	3.1% (20070904 to 20070905)
Risk of 20% account loss	0.0%
Risk of 50% account loss	0.0%
Risk of 100% account loss	0.0%

Crowd Opinion	
Viewed	6,117 times
Tracked by	169 My Analyst pages
With commentary:	16

Basic C2 systems stats page

Let me point out that the problem of slippage isn't caused by C2. The problem exists no matter what trading platform you are using: too much money chasing too few opportunities creates slippage, right? But at C2, our philosophy is complete transparency, so traders and potential traders can see the effect of slippage with their own eyes, and can take that into consideration as they search for a trading strategy.

System	Age	Trades	Avg Trade	Win%	Profit Factor	Avg Win	Avg Loss	Avg. Return%	Max Draw	Sharpe	Realism Factor	APD
QVN Forex Club	263 days	143	2.8 days	57.3%	1.4	\$3,334	\$3,132	114.3%	21.01%	1.9	100	0.34
positive forex	482 days	131	1.3 weeks	90.8%	1.2	\$4,229	\$36,110	52.9%	82.15%	0.4	100	0.07
Team Aphid Bird	225 days	212	1.1 days	45.8%	2.0	\$922	\$397	71.9%	3.1%	5.0	100	0.67
ATForex	108 days	75	6.4 hrs	73.3%	2.4	\$1,044	\$1,209	111.9%	10.45%	4.1	100	0.41
SNIPER = 4X	208 days	445	15.3 hrs	59.8%	1.3	\$1,997	\$2,232	231.0%	15.88%	3.8	100	0.18
Forex Fighter GBP/USD KD	402 days	199	10.2 hrs	48.7%	1.4	\$4,520	\$3,074	113.4%	29.52%	2.0	100	0.27
GM-GEAR	228 days	25	1.1 weeks	64.0%	2.1	\$9,316	\$8,008	123.3%	52.39%	1.6	100	0.47

Tabular Grid comparison of relative systems performance

C2's business in terms of forex versus everything else. C2 is in the finance business, period.

Without revealing any secrets, what are your plans for the future?

I'm a big believer that businesses can't have secrets. You can look at a business – any business – and know what its strategy should be. How, after all, could someone hide a business strategy, unless the

strategy were completely insane and irrational? So I always laugh when Silicon Valley companies talk about starting their companies in "stealth mode" – as if the thing that will make them successful is the ability not to tell anyone what they do!

How do you model the impact of subscribers trading activity on strategy performance?

That's an interesting problem. Some strategies at C2 have so many subscribers, and so much money trading the signals through our platform, that it degrades system performance around the edges. But here's where C2 gets really fascinating, because one of the things we do is to report back to customers the actual fills versus best-case fills, so that potential subscribers can see results for themselves. In the case of some of these high-profile systems, slippage becomes a significant factor, but – because it is reported openly and honestly to potential traders – it drives traders away from subscribing. So the process is pretty nifty: a self-adjusting feedback loop.

How do you see the importance of FX developing at C2 relative to other markets?

Forex has become increasingly popular as an asset class at C2, and I don't see this trend slowing down soon. Forex is popular on C2 for the same reasons it's popular elsewhere: 24-hour trading; deep, liquid markets; lots of leverage. There are nearly 400 forex systems on C2. Some of them are quite outstanding, actually. Even so, I think the whole notion of discrete types of financial instruments is going away. I tend not to think of

So, what are our plans? Our plans are to extend the C2 platform to as many brokers as we can, to work with brokers and increase their opportunity to offer customers high-margin products, to encourage software developers to write software and services on top of the C2 platform, and to attract end-users through effective marketing. Sure, I'd like us to be working on a top-secret business-landscape-altering strategic project in our office basement, but we just don't have the time for that.

LATEST SUBSCRIBER REVIEWS	MOST LOOKED-AT THIS HOUR	GAINERS THIS WEEK	LOSERS THIS WEEK
<p>★☆☆☆☆</p> <p>This system is completely untradeable without automation, and emails are nothing but cancellations of previous orders: if you fol...</p> <p>[more]</p>	<p>Team Aphid Bird</p> <p>ATForex</p> <p>SNIPER = 4X</p> <p>JAG fx</p> <p>MWZ</p> <p>Trend Blue #1</p>	<p>Polar Bear 66.7%</p> <p>Resilience</p> <p>GY only 54.3%</p> <p>high prob LT 42.2%</p> <p>MONSTER FX™ 34.8%</p> <p>positive forex 32.1%</p>	<p>sniper2007 (46.6%)</p> <p>Smart Predictor (39.1%)</p> <p>Safe Capital Management (34.3%)</p> <p>InvincibleX (23.1%)</p> <p>Ravstovnn's Market</p>

It is perhaps the user friendliness and attractiveness of the C2 site that has contributed to its success. See this example of default systems classification.