



Forex Brokerage Roadmap



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1. Boston Technologies' Role and Nature

Boston Technologies builds, installs, maintains and supports foreign exchange software. Boston Technologies also works with our partners to help provide our customers with other related services to augment their foreign exchange businesses. However, Boston Technologies is not a broker or a trading company. We will assist our customers with any relevant technology needs but we will neither hold end user money nor initiate trades in any way. Boston Technologies is NOT a trading counterparty.



2. Introduction to this Document

This document is intended to provide a roadmap to help you start your brokerage business using the Boston Technologies framework.



3. Startup

Every brokerage is regulated in a variety of ways, and can be started in a variety of locations. Assuming you want to start in a thoughtful way, here are the steps:

1. Scope: first, deciding on the scope of the startup is important. We will discuss below a recommendation for the scope of this startup, and the reasons behind the recommendation.
2. Incorporation: Your company will need to incorporate in a location where there is a lot of background in financial services and where it will be fairly simple and inexpensive, but also legal and legitimate.
3. Registration: Registration brings legitimacy and credibility. Where registration is optional, your company will benefit from being registered. Where registration is required, your company would need to be registered as a financial body in order to market in these locations. You should start by looking at all the markets where you plan to accept client funds.
4. Capital requirements: In general, being registered means that the local authorities will go through a due diligence process on the owner and the credibility of the project. In addition, to secure the customer funds many authorities will require that the owner of the entity deposit some capital in the brokerage. This capital is called Net Capital (or Net Cap).
 - i. The next steps will be to put together a credit line based on the credit requirements you will need to get started. These requirements will be more fully laid out, below.
 - ii. We do a full evaluation of startup costs – including expected operating costs – in **Section 7: Initial Cash Burn & Sales Cycle**



Scope

We recommend judicious, thoughtful steps in starting your forex brokerage. This means starting with securities and a set of regulations that are manageable, and where you will be able to legitimately trade and compete without the danger of overstepping legal or regulatory bounds.

Because of this, we recommend starting as a spot forex company, trading over the counter, in order to start seeing how the process works. We also discuss below the next steps for entering into more complex securities like CFDs (http://en.wikipedia.org/wiki/Contract_for_difference), options, and futures. However, the regulatory requirements and environment for these products is significantly more complex. To jump into these right away would obfuscate the process of learning a workable business model, in an industry – forex – that is already early-stage and ambiguous in many ways.

However, we do discuss different ways to begin to take on more of the risk/reward below in **Section 10: Value Chain / Margins**. Essentially, there are a lot of different parts of the value chain to sort through – even with simple spot forex, and thus many different ways to take on risk and achieve margin.

Incorporation & Licensing: There are a number of different international locations where you could incorporate this firm and potentially become 'licensed' under that country's financial authorities.

- Established forex centers
 - U.K.: London has a very complicated setup procedure for starting a forex firm – given the desire to be light-footed, and lack of a need for being able to market in Western Europe, for now we recommend starting in a less complex environment. London has an established set of regulatory hoops to jump through, and FX is therefore more difficult there.
 - Switzerland: Several existing forex companies are headquartered in Switzerland, however, Switzerland now requires that forex companies also have a banking license – again, a cumbersome and unnecessary process for the markets that you may be looking into.
 - Belize: Interestingly, Belize has become fairly experienced in regulating forex because of the major forex company GCI's location, and so although it is offshore (with details below), it is a fairly established forex center



- Offshore financial centers: There are a number of islands such as the Cayman Islands and the Bahamas that are experienced financial services centers, though they may be less established forex centers. Obviously, many of these locations have fairly low cost barriers to entry and tax benefits, although many of them require that the institutions they license appear to have some sustainability. BVI officials, for example, typically do fairly extensive background checks on the principals/partners at a company. For general information about getting started doing business offshore, OCRA Worldwide is a good resource: <http://www.ocra.com/>. For a detailed comparison of jurisdictions in which to do business, go to the following link and hit the “View Comparison Chart” link: <http://www.ocra.com/jurisdictions/index.asp#compare>.

There are a large number of offshore financial centers but the following jurisdictions could be considered to be "market leading" jurisdictions for various reasons: [this segment is mostly from Wikipedia but we've added in relevant contact info and points].

- Bahamas, which has a considerable number of registered vessels. The Bahamas used to be the dominant force in the offshore financial world, but fell from favor in 1970s after independence.
- Belize, which is a relative newcomer in the field of financial services, is nonetheless home to one of the more experienced forex regulatory environments, given the location in Belize of GCI Financial, one of the leading forex trading companies (see <http://www.gcitrading.com/>).
 - Belize's financial services industry is overseen by the International Financial Services Commission (see <http://www.ifsc.gov.bz/about.html>).
 - Belize has very well thought out regulations around securities trading and licensing. Detailed regulations can be seen here: http://www.ifsc.gov.bz/acts/standard_conditions.pdf
 - For help in starting your brokerage in Belize, the IFSC has put together a convenient list of companies licensed by them to provide corporate services: http://www.ifsc.gov.bz/licensed_provider.html.
 - In addition, Belize has the added benefit of offering ecommerce solutions that help you bring your business offshore. See http://www.apintertrust.com/belize/belize_offshore_ecommerce_package.htm
- Bermuda, which is market leader for captive insurance, and also has a strong presence in offshore funds and aircraft registration.
- British Virgin Islands, which has the largest number of offshore companies.



- Regulation and supervision of the financial services industry is the responsibility of the BVI Financial Services Commission: <http://www.bvifsc.vg/About/PrimaryFunctionsoftheFSC/tabid/137/Default.aspx>
- Our contact at this commission is Leon Wheatley.
- We also made contact with a private sector specialist, Mark Dubois, at ABM Financial services:
 - ABM CORPORATE SERVICES, LIMITED: TEL.: 1-284-494-2933 www.abm.vg
 - His email is mark.dubois@abm.vg
- HOWEVER, our understanding is that BVI does not currently license brokerage companies specifically, including forex brokerages, and therefore the benefit of incorporating in BVI is reduced in our opinion.
- Cayman Islands, which has the largest value of AUM in offshore funds, and is also the strongest presence in the U.S. securitization market.
 - Regulation and supervision of the financial services industry is the responsibility of the Cayman Islands Monetary Authority (CIMA). The CIMA licenses firms to conduct securities investment business, which includes market makers, broker-dealers, securities arrangers, securities advisors and securities managers.
 - The woman to speak with there is Helen Jones: h.jones@cimoney.com.ky . The main phone line there is 345 949-7089, and you can ask for the "Investment & Securities Division" to get her info.
 - The annual fees for this are CI\$1,000 (one thousand Cayman Islands dollars), and the fees along with an annual declaration typically need to be submitted every January 31st.
 - Incorporation in Cayman Islands: The main government registry for new businesses can be found at: http://www.gov.ky/portal/page?_pageid=1142,1594248&_dad=portal&_schema=PORTAL The phone number is (345) 946-7922. In order to incorporate in the Cayman islands, you need to contact a register office.
- Gibraltar, which does not dominate the offshore market in any particular specialization, retains a strong presence in most fields.
 - Unfortunately, Gibraltar is no longer an offshore centre since 30th June 2006. No new Exempt Company certificates are being issued from that date.
- Jersey, which is a dominant player in the European securitization market and the European REIT market
- Luxembourg, which is the market leader in Undertakings for Collective Investments in Transferable Securities and is believed to be the largest offshore Eurobond issuer, although no official statistics confirm this.
- Panama, which is now second only to the British Virgin Islands in volumes of incorporations.



- **Our recommended locations for incorporation and licensing:** We believe that of the following offshore financial centers, the Cayman Islands and Belize are ideal locations to incorporate. Our top choice is Belize, given the country's experience in regulating forex brokerages, in particular. We originally looked into BVI, however forex brokerage is not currently a licensable activity in the BVI – it is not subject to registration. They actually do not have a brokerage division.
- **Fees:** Some consultants estimate that the legal and startup fees in these countries could be as much as \$30-40K, not including legal costs for 1) legal document of incorporation and the 2) “operating documents”. However, we believe there may be more cost effective ways to start – and will discuss them more in **Section 7: Initial Cash Burn & Sales Cycle**.

Registration:

Registration with regulatory authorities is required in markets where you are considered to be “marketing” to clients. This is typically defined by country. In general the rule of thumb is that registering in multiple countries can get very expensive. If you are on online company, it is possible that you will get online clients from a variety of countries beyond where you register. At first, you may choose just to register in the countries where you are actively marketing. If you start by incorporating in Belize, for example, then just registering in the developing countries where you will initially operate is likely the most cost effective path, to start. However, if you find that, say, you are getting a lot of clients from a different country – it will start to make financial and legal sense to go through the regulatory hoops of the country. Below is a discussion of the countries that you are focused on, Pakistan and Bahrain, and also an overview of the U.S. registration landscape for comparison.

- **Pakistan:** in Pakistan, the State Bank of Pakistan (SBP) is the primary financial regulator (see <http://www.sbp.org.pk/>). Currently, the SBP is not specifically regulating forex brokerages, but a good practice would be to incorporate in an area where there is forex licensing in order to put forth a good faith effort to follow sound regulations.
- **Bahrain:** in Bahrain, Central Bank approval is required to operate as a forex or other brokerage company. Bahrain requires that if you are selling to its citizens, you need one of their citizens to be part of your partnership, or be in partnership with a local company. There are a number of local management companies there that will help you meet this requirement, as well as individual Bahrain citizens (or potentially colleagues/friends one may already have). Either way, you can still own the majority of the subsidiary company that is you set up in Bahrain.



- Example: United States: In United States most forex brokerage companies start by organizing as a Futures Commission Merchants (“FCM” - <http://www.investopedia.com/terms/f/fcm.asp>), which is essentially synonymous with being a brokerage in the forex arena. You would thus need to register with the FTC, and there is currently a minimum \$10MM capital requirement to start (this is going up to \$15MM+, soon). The retail market is still fairly young and therefore loosely regulated. However, there are two organizations that police the sector and they are beginning to step in and protect the consumer on a more regular basis. These organizations are the National Futures Association (NFA) and the Commodity Futures Trading Commission (CFTC). Of the two the CFTC is most heavily involved in the regulation of fraud, manipulation and abusive trade practices in the retail Forex sector. The www.CFTC.gov website is an excellent source of information on customer protection and on-going legal disputes against brokers and other entities. Here is a list of some of the regulating agencies:
 - NFA - the National Futures Association: it was originally the case that foreign exchange felt like a future, because most of the foreign exchange deals were done as hedges for large corporations doing business internationally.
 - CFTC – the Commodity Futures Trading Commission – oversees the FTA (the Futures Tradition Association).
 - FINRA—the Financial Industry Regulatory Authority—is a self-regulating independent (non governmental) agency that oversees all brokerage firms in the U.S. (see <http://www.finra.org/AboutFINRA/index.htm>)

Capital requirements:

Depending on where you are registered, capital requirements vary. Capital requirements here are a catch all phrase for the capital that countries, regulatory agencies, or the country of incorporation will require in order to feel comfortable with you as a forex institution. In more highly regulated locations like the U.S., large capital requirements of \$10MM+ are required by regulatory agencies.

It is likely that startup brokerages will be required to have significant capital in the form of credit lines with a big bank. This is especially true in the case you would like to offer straight through processing or you would like to have a reasonable amount of risk control. If you want to move beyond the developing country markets where you are located, you may be required to put up a higher net capital investment. See **Section 5: Business Model** for further discussion on this.

- Operating Accounts: for your normal business operating accounts, your local bank is fine.



- Credit Lines: For your capital requirements, there are a number of experienced banks that set up these type of credit lines. It is possible to get credit lines from multiple banks at the same time to fulfill your total capital requirement. See **Section 5: Business Model** for further discussion on these capital requirements, and the typical leverage ratios and fees of various banks:
 - Citibank
 - Credit Suisse
 - Dresdner
 - Deutsche Bank
 - Barclays
 - HSBC
 - JP Morgan

Overview of Risks and Mitigants for Startup:

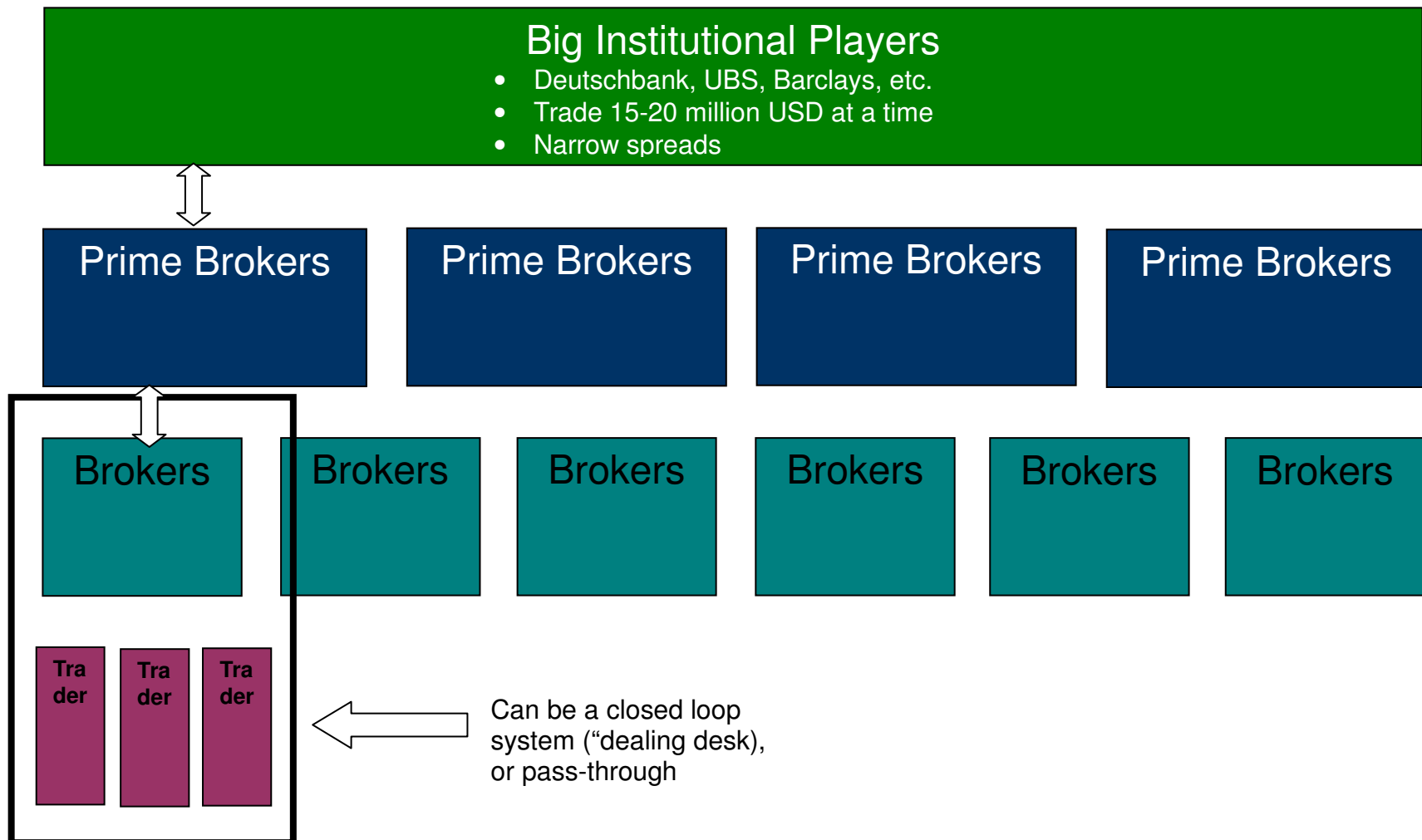
| Issue | Risks | Mitigants |
|----------------------|--|--|
| Market risk | To be prepared for unexpected market movements and unexpected events (example: major terrorist attack) | To be connected to news sources at all times |
| Technology problems | To be prepared for the situations where you need to act quickly (technology problems in the middle of the night) | Have backups and a plan for calling on your software / hardware providers in those situations |
| Regulatory existence | Unknown regulatory environment which leads to regulatory investigation and fines or other consequences | Ideally become a licensed entity where you are incorporated and know your local regulator; register in markets where you begin to see a lot of customer traction; hire a good lawyer who knows forex |
| Regulatory update | Forex is relatively new and faces regulations that are changing daily | Focus on simple securities first, then move into more complex and highly regulated ones |



| | | |
|-------------------------------|---|---|
| Location of incorporation | Incorporating in an offshore area means you are in a less-experienced country for dealing with forex issues | The Cayman Islands has a strong reputation as a financial services country. Belize actually has a good deal of forex experience given the location of on the largest providers is there. Both of these locations also provide more flexibility and lower startup costs than many other countries. |
| Countries of registration | You may get customers from countries where you are not registered | Start with countries where you are actively marketing, then move to new countries if customer concentration increases in new places |
| Taking risk as a counterparty | Taking the other side of trades that go against you risks your own capital | Hedging trading risk with liquidity providers |
| Fixed costs | Not enough income to pay the operating costs | Making sure that you pay your recurring costs from your recurring income |

4. *Market description*

- Market definition
 - This is an emerging market with a lot of disaggregated players. What are the categories and how do they interact?





Given the diagram above, let's start by defining the segments of the market:

- **Big Institutional Players:** Big institutional players include large banks like Deutschbank, UBS, and many others make the major trades in the Foreign Exchange industry.
 - **Size:** There are 7-10 total large banks/institutions estimated to be trading forex, for a total daily traded value of \$3.2 trillion USD reported in April 2007 by the Bank for International Settlement ¹
 - **Business model:** these companies trade between each other, and with Prime Brokers. Currency trade values are in the multiple tens of millions of US dollars at a time. These trades are the ones that really set the price of a particular currency. They are used for speculation, hedging and currency exchange for international commerce.
 - **Spread:** the 'spread' on the margins for these firms is low – i.e. 1 Pip. The prices are determined with less variability than smaller players.
 - **Regulation:** these banks are typically present in many market sectors and are well regulated on their forex operations.
- **Prime Brokers:** Prime Brokers are large capital firms that specialize in offering financial services to the trading industry.
 - **Size:** there are 25-50 total estimated Prime Brokers trading forex.
 - **Business model:** these firms aggregate trades by Brokers, and/or their own desired trades in order to get trade sizes in the \$100K-\$1MM level.
 - **Spread:** these entities aren't market makers, they only offer credit and services to traders who usually trade on ECNs. The 'spread' for these players is lower, at about 1.2 pips.
 - **Regulation:** These entities have similar regulations to large broker houses.
- **Brokers:**
 - **Size:** there are 100+ total estimated Brokers trading forex.
 - **Business model:** these firms send trades by individual customers to larger institutions for straight through processing, or alternatively act as "dealing desks" themselves – trading directly against their customer.

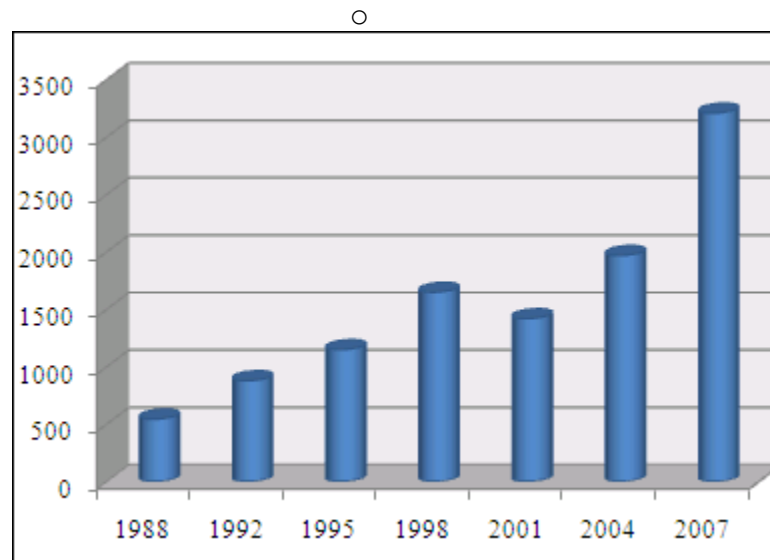
¹ [Triennial Central Bank Survey](http://www.bis.org/publ/rpfx07t.pdf) (December 2007), Bank for International Settlements. <http://www.bis.org/publ/rpfx07t.pdf>



- **Spread:** the 'spread' for these players is higher than for larger institutions – often at 2-3 Pips. However, in some developing countries, spreads are even larger, at 3-4 Pips.
 - **Regulation:** These entities have similar regulations to large brokerage houses.
- Legal matters: the major legal / litigious cases in this industry in the last couple years have been:
 - Forex liquidity [regulatory issues] ,
 - Rogue traders (see for example <http://www.cnn.com/2004/BUSINESS/02/01/nab.forex/>)
 - Country size problem (see <http://www.dnaindia.com/report.asp?newsid=1197859>)

The outcomes of most of these cases were more regulations, more control, and more risk control by brokerages. In general, this industry is still growing a great deal, and is thus in flux. Best practices are to get licensed in your country of incorporation, to start, followed by a careful review of the regulations in countries where you are marketing.

- Market size²:
 - Global foreign exchange market turnover according to the BIS study Triennial Central Bank Survey 2007 was estimated to be an average daily turnover in traditional foreign exchange markets of \$3.210 trillion. Daily averages in April for different years, in billions of US dollars, are presented on the chart below:



- Of this,
 - 30% of transactions were strictly interdealer (i.e. interbank);
 - 43% involved a dealer (i.e. a bank) and a fund manager or some other non-bank financial institution;
 - and 27% were between a dealer and a non-financial company.

Retail traders (small speculators) are a small part of this market, but constitute a growth opportunity.

² See <http://www.understandmarket.com/index.php?categoryid=81> for more detail



- Currency composition of turnover: In 2007, the dollar was on one side of 89% of all transactions, followed by the euro (35%). Only 3% of all transactions in FX derivatives did not involve either the euro or the dollar, underlining their importance as vehicle currencies. EURUSD continued to be by far the most traded currency pair, with 27% of global turnover, followed by USDJPY with 13% and GBPUSD with 12%
- What categories of investors / clients? According to the Wall Street Journal Europe, the top ten dealers in the foreign exchange market are primary dealers (banks or brokerage firms who may trade directly with the Federal Reserve System of the United States), and between them account for almost 73% of forex trading volume:

Top 10 Currency Traders³

% of overall volume, May 2010

| Rank | Name | % of volume |
|------|------------------------|-------------|
| 1 | Deutsche Bank | 18.06 |
| 2 | UBS | 11.30 |
| 3 | Barclays | 11.08 |
| 4 | Citi | 7.69 |
| 5 | Royal Bank of Scotland | 6.5 |
| 6 | JP Morgan | 6.35 |
| 7 | HSBC | 4.55 |
| 8 | Credit Suisse | 4.44 |
| 9 | Goldman Sachs | 4.28 |
| 10 | Morgan Stanley | 2.91 |

³ *According to the Euromoney FX survey FX Poll 2010



- What about internationally? Detailed information on international foreign exchange can be found in the following PDF: <http://www.bis.org/publ/rpfx07t.pdf?noframes=1> For Middle Eastern countries, there are only two – Bahrain and Saudi Arabia – that currently have statistically significant forex turnover, daily:

| | 2007 | |
|--------------|-----------|---------|
| | Amount* | % Share |
| Bahrain | 3 billion | 0.1% |
| Saudi Arabia | 4 billion | 0.1% |

* daily averages in billions of US dollars

- As a back of envelope calculation, one can often assume that forex market is mostly proportional to the size of the local stock market volume.

For the most recent study done on the Foreign Exchange market, please visit the Triennial Central Bank Survey from December 2007: <http://www.bis.org/publ/rpfx07t.pdf?noframes=1>



5. Business model

There are a variety of pieces of the "value chain" that you can take, and thus several different business models which don't have to be mutually exclusive. This includes being a pass through, or being a counterparty. Below are some simple overviews:

- **Straight Through Processing:** The lowest risk and lowest money is made if your brokerage doesn't take any risk, but just takes trades from customers, sends them to a liquidity provider automatically, and on the way asks for some commission and some spread. Here, the broker makes money regardless of the market movements ASSUMING his technology is able to act quickly and without errors to unload the risk from the customers to the liquidity providers. This is not zero risk! Errors can happen. Risk has to be monitored and controlled at all times. Rule of thumb calculations show that if a broker deposits \$10,000 USD then the broker will make about \$1,000 in profit over a month if he is active. For a not active trader the broker will make \$100, because fewer fees are collected.

Below is a representative model for Straight Through Processing:

| | | Chose | Types of liquidity providers and their fees | | | | Optional | |
|-----------------------|---------------|------------|---|--------------------------|------------------------|-------------------------|----------------------------|------------------|
| | Customer pays | You profit | Large bank (min deposit 10 million USD) | Small bank (min 100k) | Prof ECN (min 200k) | Retail ECN (min 10k) | Prime broker (min 100k) | Trading platform |
| Spread in pips | 1.80 | 1 | 0.8 | 1.2 | 1.2 | 0.80 | | |
| Commision in pips | 1.65 | 1 | 0 | 0 | 0.05 | 0.40 | 0.07 | 0.25 |
| Commission in \$/mill | 165 | 100 | 0 | 0 | 5.00 | 40.00 | 7 | 25 |

The way this works is as follows:

- **Spread:** spread is the difference between the bid and the ask price, calculated in pips. Thus when the customer buys currency, you the broker offer them a "spread". If you offer a 1.80 spread, they automatically lose 1.80 pips upon their purchase. Of this, 1 of these pips goes to you, and 0.80 goes to the retail ECN (an ECN – Electronic Communications Network – is defined in the **Appendix: Definitions.**)



- **Commissions:** The maximum number of pips you can realistically charge in the U.S. is about 2.5 pips, given the competition. In developing countries, you can actually charge higher commissions – up to 4 or 5 pips. Here, we give an example of charging a commission of 1.65 pips. The customer pays 1.65 pips, you get 1 pip, the retail ECN charges you 0.40 pips, and the trading platform charges you 0.25 pips.
- **Summary:** in sum, the customer is paying 1.80+1.65 pips, or 3.45 pips total. Multiply this by the U.S. dollar value of the pip, \$10, times total number of trading days in the U.S. (258), and you can start to define how much money you can make using this model. Below is an estimate of your company revenues using the Straight Through Processing model:

| Estimated profit STP model | | Number of trades per day per customer | | | |
|-------------------------------|------|---------------------------------------|--------------|--------------|--------------|
| | | 1 | 5 | 10 | 15 |
| Number of customers | 100 | \$258,000 | \$1,290,000 | \$2,580,000 | \$3,870,000 |
| | 350 | \$903,000 | \$4,515,000 | \$9,030,000 | \$13,545,000 |
| | 600 | \$1,548,000 | \$7,740,000 | \$15,480,000 | \$23,220,000 |
| | 850 | \$2,193,000 | \$10,965,000 | \$21,930,000 | \$32,895,000 |
| | 1100 | \$2,838,000 | \$14,190,000 | \$28,380,000 | \$42,570,000 |
| | 1350 | \$3,483,000 | \$17,415,000 | \$34,830,000 | \$52,245,000 |
| | 1600 | \$4,128,000 | \$20,640,000 | \$41,280,000 | \$61,920,000 |
| | 1850 | \$4,773,000 | \$23,865,000 | \$47,730,000 | \$71,595,000 |
| | 2100 | \$5,418,000 | \$27,090,000 | \$54,180,000 | \$81,270,000 |
| | 2500 | \$6,450,000 | \$32,250,000 | \$64,500,000 | \$96,750,000 |

- In the Financial Model section, we give more detail on these numbers



- **Closed loop dealing desk:** The second business model is to take more of the risk : The customer buys from the broker and sells to the broker. If the customer makes money, trader loses money, and the contrary. Most small retail customers have no experience and 95% of them WILL lose money. In this model, which is more like gambling for the customer, most customers spend 95% of their deposits in 2-3 months.

This model is simpler, but riskier. Here, most customers act like gamblers, and your model is to act as the “house”. If they start with a deposit of \$10,000, because of betting psychology most end up losing 90% of that investment in 2-3 months. They take small profits, and let losses run. Thus, this is a “non recurring” customer model, in that most customers lose their cash, and do not come back with additional investments. Ongoing customer acquisition is thus very important.

In this model, some of the more experienced or savvy customers will grow frustrated that they are not dealing with Straight Through Processing. Segmenting these customers out and dealing with them through a Straight Through Processing model is usually a good idea. Below we discuss such hybrid models.

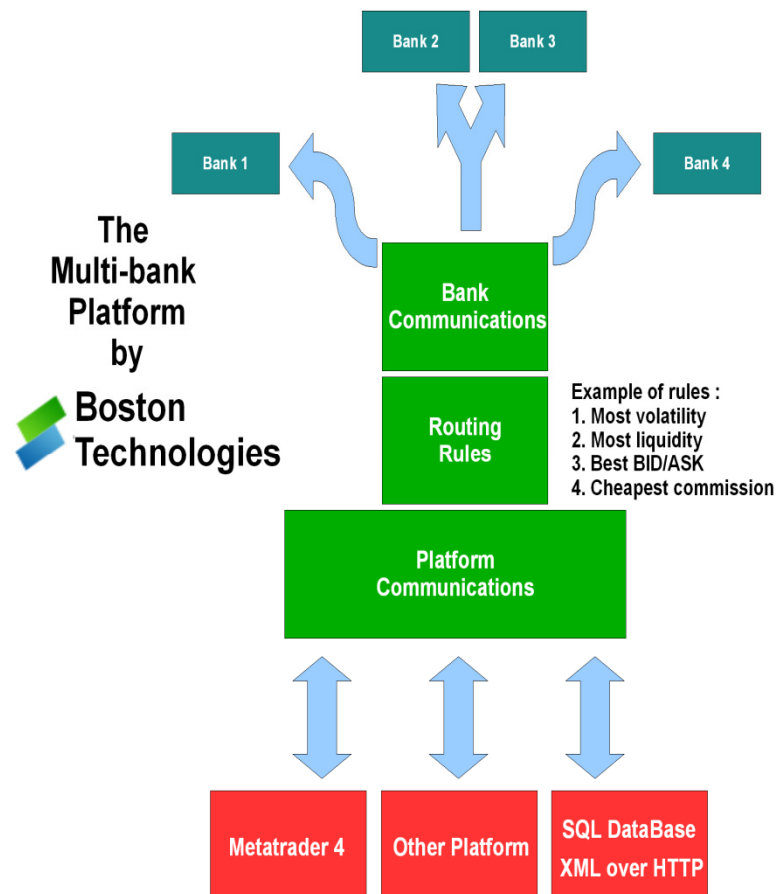
| Estimated profit from risk | | Percentage lost over 1 year | | | | |
|----------------------------|------------|-----------------------------|-------------|--------------|--------------|--------------|
| | | -25% | 25% | 50% | 75% | 90% |
| Total number of deposits | 1,500,000 | -\$375,000 | \$375,000 | \$750,000 | \$1,125,000 | \$1,350,000 |
| | 5,250,000 | -\$1,312,500 | \$1,312,500 | \$2,625,000 | \$3,937,500 | \$4,725,000 |
| | 9,000,000 | -\$2,250,000 | \$2,250,000 | \$4,500,000 | \$6,750,000 | \$8,100,000 |
| | 12,750,000 | -\$3,187,500 | \$3,187,500 | \$6,375,000 | \$9,562,500 | \$11,475,000 |
| | 16,500,000 | -\$4,125,000 | \$4,125,000 | \$8,250,000 | \$12,375,000 | \$14,850,000 |
| | 20,250,000 | -\$5,062,500 | \$5,062,500 | \$10,125,000 | \$15,187,500 | \$18,225,000 |
| | 24,000,000 | -\$6,000,000 | \$6,000,000 | \$12,000,000 | \$18,000,000 | \$21,600,000 |
| | 27,750,000 | -\$6,937,500 | \$6,937,500 | \$13,875,000 | \$20,812,500 | \$24,975,000 |
| | 31,500,000 | -\$7,875,000 | \$7,875,000 | \$15,750,000 | \$23,625,000 | \$28,350,000 |
| | 37,500,000 | -\$9,375,000 | \$9,375,000 | \$18,750,000 | \$28,125,000 | \$33,750,000 |



- **Hybrid Models:**
 - Send some customers to the liquidity providers and keep some in house
 - For all customers keep some trades in house and send some to the liquidity providers
 - Send all trades of size X or larger to the liquidity provider

6. Technology

To get started, below is an example of how a large multi-platform, multinational, multi liquidity provider brokerage organization looks. It will usually offer multiple trading platforms, one of which will be mostly for retail (maybe MetaTrader 4) and one of which will be mostly for institutional investors (see red boxes). It will also use multiple specialized liquidity providers (banks, in blue). Each liquidity provider will offer different spreads for different pairs and different volumes for each pair. The routing rules mechanism (in green) is a an advanced setup as there aren't any available of the shelves and it would be custom made to fit the needs of the brokerage.





There are 3 different ways to acquire a trading platform:

- Buy a platform. In general one can acquire a platform for a flat fee plus a monthly fee. Examples are:
 - MetaTrade 4: \$100,000 at time of purchase , payable over 12 months, 20k down, and \$1,500 per month for maintenance and support. MetaQuotes will come up with a new platform, MetaTrader 5, at the end of 2009 and an upgrade fee of about \$50,000 should be expected.
 - ACT Forex: \$25,000 at time of purchase and \$20 per million of USD traded + \$2,000 a month in maintenance costs.
 - Other platforms: around \$100k at time of purchase + a few thousands a month
- White label. This means that one can use somebody else's platform and just put his own name on it. In general this is the cheapest option (\$5000 + \$500/month or even free) but it comes with the condition that all the trade flow goes to the entity providing the white label platform.
- Lease a platform. Here the prices can vary between \$20,000 upfront and a few thousands a month (example: MetaTrader 4 leased by Boston Technologies). In this case over the 1st year one will end up paying less then in the case of buying a platform but over time one will end up paying more.

Tradeoffs:

In general the less you pay the more dependent you are on somebody else. If one purchases a platform one needs to also pay for its maintenance, add-ons, updates, and IT personnel to maintain and upgrade it. In addition the platform is usually installed in the broker's datacenter which means that the broker is responsible in case of hardware failure but also has full control of the platform access in case of security concerns. The broker who owns a platform fully controls it.

If one uses a white label one rarely has control over the minimum spread which is usually imposed on him (with a markup of course). In addition the white label provider could theoretically shut down the access and the platform at all times.

In the case of leasing a platform the control is somewhere in the middle.

Platform features:

Before one chooses a platform one has to choose the features it is looking for. We will now compare a few different trading platforms. There is no such thing as a perfect trading platform but a list of features can/should be obtained before purchasing a platform. Below is a comparison table between different platforms:

Trading Platform Comparison Chart

| Philosophy | Open E Cry | ACT FOREX | Fini FX Pro | MetaTrader 4 |
|--|------------|-----------|-------------|--------------|
| Multiple levels of user interface (beginner, intermediate , expert) | ✗ | ✗ | ✗ | ✗ |
| one time cost (no per trade cost) | ✗ | ✗ | ✗ | ✓ |
| server side managed accounts | | | ✗ | ✗ |
| public available API | ✓ | ✓ | ✗ | ✓ |
| allows partial fills | ✓ | ✓ | | ✗ |
| dealing desk | ✗ | ✓ | ✗ | ✓ |
| market maker | ✗ | ✓ | ✗ | ✓ |
| server side margin calls | | | | ✓ |
| SQL compatible Database | | | | ✗ |
| clusterable for performance | | | | ✗ |

| Trading | Open E Cry | ACT FOREX | Finix FX Pro | MetaTrader 4 |
|----------------------------|------------|-----------|--------------|--------------|
| Run complex strategies | ✗ | | ✗ | ✓ |
| Server-side trailing stops | ✓ | ✗ | | ✗ |
| MQL4 compatible | ✗ | ✗ | ✗ | ✓ |
| Client-side trailing stops | ✗ | | | ✓ |
| Custom Indicator Capable | ✓ | | ✓ | ✓ |
| 1-Click Instant Execution | | ✓ | ✓ | ✓ |
| Trading from Chart | ✓ | | | ✗ ✗ |
| Automated Trading Capable | ✓ | | ✗ | ✓ |
| Amount-Based Trading | ✗ | ✓ | ✗ | ✗ |
| Lot-Based Trading | ✓ | ✓ | ✓ | ✓ |

| Order Types | Open E Cry | ACT FOREX | Finix FX Pro | MetaTrader 4 |
|----------------------|------------|-----------|--------------|--------------|
| Instant | ✓ | ✓ | ✓ | ✓ |
| Markets | ✓ | ✓ | ✓ | ✓ |
| Pending | ✓ | ✓ | ✓ | ✓ |
| If then | | | | ✓ |
| One cancels an other | | | | ✗ |
| Market or better | | | | ✗ |
| Markte it touched | | | | ✗ |
| Fill or Kill | | | | ✗ |
| Market at open/close | | | | ✗ |
| Spread | | | | ✗ |

| Markets | Open E Cry | ACT FOREX | Fini FX Pro | MetaTrader 4 |
|---------------------------|------------|-----------|-------------|--------------|
| Forex | ✗ | ✓ | ✓ | ✓ |
| CFD | ✗ | ✓ | ✓ | ✓ |
| Stock | ✓ | | | ✗ |
| Futures | ✓ | | | ✗ |
| Options | ✗ | | | ✗ |
| Connectivity | Open E Cry | ACT FOREX | Fini FX Pro | MetaTrader 4 |
| Sold with connections | ✓ | ✓ | ✓ | ✗ |
| FIX connectivity | ✗ | ✗ | ✗ | ✗ |
| Easy to customize reports | | | | ✗ |
| Client terminal API | ✓ | | | ✗ |
| Connected to Exchanges | ✓ | | | ✗ |

| Tools | Open E Cry | ACT FOREX | Fini FX Pro | MetaTrader 4 |
|---------------------------|------------|-----------|-------------|--------------|
| Customized Alerts | ✓ | | | ✓ |
| Real-time Charts | ✓ | ✓ | ✓ | ✓ |
| Mobile reporting | | ✗ | | ✓ |
| Streaming News Feeds | ✓ | ✓ | | ✓ |
| Depth of Market | ✓ | ✗ | | ✗ |
| Features | Open E Cry | ACT FOREX | Fini FX Pro | MetaTrader 4 |
| 24 Hour Technical Support | ✓ | ✓ | | ✓ |
| Automatic Liveupdates | | | | ✓ |
| Multi-language platform | | | | ✓ |
| Mobile Platform Capable | ✗ | ✗ | | ✓ |



Last but not least I would like to mention that all brokers sooner or later will be interested in creating their own trading platform. The cost of such a venture is estimated to be at least 3 years and 2 million USD. Such an investment only makes sense in the case when the broker would like to have FULL control of the platform features and potential and in the case when the broker is envisioning becoming part of the top 10-15 largest brokers in the world.

How to choose the platform and set of services that is right for you? We have put together a model that estimates the margin gain in each step of the value chain, and what that means for the cost to the customer of the entire transaction. Below is an example set of choices that lead to the customer payment for any given transaction:



| Choices | | a | b | c | d | e | f | g | h | i |
|------------------|----------|------------|----------|---------------|-----------|----------|------------|----------|----|-----------------|
| 1. Counter-party | | Large Bank | | | ECN | | Small Bank | | | Other Brokerage |
| choice | j | UBS | Barclays | Deutsche Bank | Currenex* | HotSpot* | Lava* | Saxo | na | ODL |
| cost | 1.5 pips | 0.5 pips | 1 pip | 0.5 pips | 15\$/mil | 40\$/mil | 20\$/mil | 1.5 pips | na | 1.5 pips |

| | | | | | | | | | | |
|-----------------|-----------|---------------------|------------|---------------|---------------------|-----------|-------------------------|--|--|--|
| 2. Prime broker | | Large Prime Brokers | | | Medium Prime Broker | | Small Broker | | | |
| choice | f | UBS* | Barclays* | DeutscheBank* | FCStone* | PFG* | ODL* | | | |
| cost | \$50 /mil | \$5-12 /mil | \$6-7 /mil | \$7 /mil | \$15 /mil | \$40 /mil | \$50 /mil (less on ODL) | | | |

| | | | | | | | | | | |
|-------------|-----------|------------|-----|---------|--------------------|--------------------|-----------|--|--|--|
| 3. Platform | | | | | | | | | | |
| choice | d | MetaTrader | ACT | Fini FX | trading platform 1 | trading platform 2 | Fx Bridge | | | |
| cost | 0.05 pips | 0.05 pips | na | na | 0.05 pips | 0.02 pips | na | | | |

| | | | | | | | | | | |
|------------|-----------|-----------|--------------|----------------|---------------|----------------------------|----------------------------------|----------------|--|--|
| 4. Options | | | | | | | | | | |
| choice(s) | a,d,e,f | Free news | Prime broker | Custom routing | Money manager | Pattern recognition system | Introducing Broker incentive fee | Manager market | | |
| cost | 1.21 pips | 0.01 pips | 0.05 pips | 0.05 pips | 0.5 pips | 0.2 pips | 0.5 pips | 2 pips | | |

| | | | | | | | | | | |
|-----------------|----------|--------------|------------------|--|--|--|--|-------------------------------|------------|-----|
| 5. Added Margin | | Spread added | Commission added | | | | | PIP | \$/million | |
| cost | 0.6 pips | 0.5 | 0.1 | | | | | PIPS to \$/million calculator | 1 | 100 |

| | | | | | | |
|-------------|------|---|----------|-------------------------------|---|-----------|
| FINAL COSTS | 3.36 | + | 0.5 pips | (see pips calc for (2) above) | = | 3.86 pips |
|-------------|------|---|----------|-------------------------------|---|-----------|



THIS IS HOW THIS MODEL WORKS:

1. **Counterparty:** You need a counterparty for all your trades. You need to set this up in advance, but a counterparty is a relationship for each major trade. They just take the other side of a trade, but you can switch counterparties on different trades. As counterparties, a large bank will be a market maker, whereas an ECN is just an exchange – they find someone else to make a match against you.
 - a. To get one of the banks to act as the “counterparty” for your trading accounts, you may need managers that are known in the industry, some history of how you trade, etc.
 - i. Thus, for practical reasons, sometimes it is easiest to use a counterparty favored by your Prime Broker, because they already have a relationship.
 - b. Fees: counterparties charge you a fee either in pips, or in dollars per million traded (which you can estimate / translate into pips to add to each customer’s transaction)
 - i. If you go with ODL, you might find it useful to also use ODL as a counterparty in their trading platform, because you will get a fee discount
 - c. **Example:** here, we have chosen ODL as our counterparty, which charges 1.5 pips per transaction.
2. **Prime Broker:** Your Prime Broker is your credit source – it is a bank that provides a service to you. For this relationship, you need to put money down in an account with that bank, and also pay a fee per transaction.
 - a. There are several types of Prime Brokers, with varying associated fees.
 - i. UBS, Barclays and DeutscheBank are the most expensive. These companies service large companies, governments, and other large institutions.
 1. Minimum balances are \$5MM+ for UBS, and \$25MM+ for DeutscheBank
 - ii. FC Stone and PFG are cheaper, starting at \$200K minimum balance
 - iii. ODL would start significantly lower, at \$20K+ or so, but they charge higher fees per million USD
 1. So for example at ODL, if I put in \$20K, I can get leverage of 100:1 – which increases the leverage, but also the risk of losing everything. So I can start buying up to \$2MM at a time of something, against a counterparty (might be ODL, or not)
 - a. An early stage company would likely start with ODL. www.odlsecurities.com – because ODL is easier to start with. The upside of something like ODL is that it allows you to start with low startup costs. The downside is that fees are higher.



- b. **Leverage:** in order to figure out leverage they're willing to offer you, these banks usually do due diligence. The bank or prime broker that you work with will provide you leverage for trading – i.e. if you have \$100,000 on deposit with this company, they will give you, say 33:1 leverage. This means that you can trade up to $(33 \times \$100,000) = \$3,300,000$ – or \$3.3 million. Usually, however, banks provide at most 20:1 leverage. Smaller / riskier Prime Brokers like ODL will provide higher leverage ratios.
 - c. **Fees:** these credit sources also vary not just by leverage, but by the fees they charge. Thus, UBS may charge \$5-12 per million dollars traded, whereas Barclays might charge \$6-7 per million dollars traded. So to evaluate which credit source to use, you must look at both the leverage, and the fees per million dollars traded. Below is a list of common Prime Brokers:
 - i. Credit Suisse
 - ii. Dresdner
 - iii. Deutsche Bank
 - iv. Barclays
 - v. HSBC
 - vi. JP Morgan
 - d. **Example:** here, we have chosen ODL as our Prime Broker as well, and thus we pay \$50 per million – so given the PIPS to Million Calculator, we add 0.5 pips per transaction (see at end of spreadsheet)
3. **Platform:** as a brokerage, you offer a trading platform to your customers. For example, when a customer gives you \$20K, you open a credit line with, per our example ODL, at 100:1. You then offer that leverage to our customers. The customer trades against you via a platform, per our example Metatrader (service that shows prices and charts, etc. – shows the forex market), and then you send the same trades up to ODL as their counterparty (you are the counterparty for the customer). So Metatrader charges you, the brokerage, a monthly fee, and then you translate that into a variable cost in pips that is added on to the customer fees.
- a. **Example:** here, we have chosen Metatrader as our Platform, and translated the monthly fees to us from Metatrader into a per-transaction customer fee of 0.05 pips.
4. **Options:** You can also add-on options given to the trader. This package of options is chosen by the broker, you, as a business decision. You would basically add in costs to the trader, per trade, as part of your offering.
- a. **Example:** here, we added free news, a money manager service, pattern recognition system, and Introducing Broker Incentive Fee for a total cost of 1.21 pips per transaction.



5. **Added margin:** Then, you add whatever spread you think you can get. As mentioned earlier, a reasonable TOTAL spread is between 2 and 3, and maybe 3 and 4 pips for a developing country.
 - a. **Example:** here, we add commission of 0.1 pip per transaction, and “spread” of 0.5 pip per transaction. **This brings out total cost to our customer to 3.86 pips per transaction.**
 - Of course, this would be high for the U.S., but is more reasonable in developing countries.

AS A GENERAL RULE IT IS GOING TO BE HARDER TO SELL WITH HIGHER PIP SPREADS

Technology security and reliability certification

In order to offer a secure environment and become a market leading competitor in the electronic trading industry the trading platform security and reliability have to be outstanding. In order to achieve such a level of professionalism the following steps need to be achieved:

- Authentication. The broker needs to verify the different authentication methods used by the trading platform and to test these authentication methods.
- Encryption. The broker must explain the different encryption methods used for the platform and it will demonstrate and test its functionality.
- Firewalls. The broker needs to verify the installation and test the functioning of the customer’s firewall to comply with the highest standards of security.
- Authorization. The broker needs to work with the customers to identify each account that has privileged access to the platform and to provide a list of all the accounts with the list of rights for each account.
- Administration. The broker needs to verify the presence of written security charts and the appropriate level of training of the Information Technology personnel with a two page questionnaire.
- Testing. The broker should conduct the following tests in accordance and in control of the customer’s support team and with the Internet Service provider approval and in conjunction with the customer’s datacenter team:
 - Verification of the presence of a firewall
 - For authentication, verification of a dictionary password attack
 - Verification of the password robustness
 - Verifications of physical security precautions for employees.



- Preparation of a network analyzer or network monitor and use it when needed.
- Verification of a physical security management like closed circuit television for entry areas and restricted zones to the customer datacenter.
- Verification of the presence of Fire extinguishers for fire-sensitive areas
- Verification of the presence of Security guards in the datacenter to help maximize security.

Capacity

General Standard. The broker should constantly measure the present capacity of the customer's Electronic Trading Platform and test the present capacity with 2 benchmarks -- execution speed and the number of simultaneous connections

Capacity Reviews. The broker should identify methods and indicators to assess the present used capacity which will allow the customer to monitor its used capacity and available capacity at all times.

Customer Support. The broker should test and verify the customer capacity to answer end user complaints regarding access problems and other electronic access problems. The broker should test his capacity to escalate problems it is unable to resolve to the appropriate entity.

Disaster Recovery and Redundancies. Broker should verify regularly its Disaster Recovery and Redundancy capacity and its knowledge and control of the fail over procedure. It should conduct disaster recovery and failover exercise with the IT team.

Communication channels:

Broker should insure that the IT personnel has the knowledge and control of the following communication channels with the end users :

- Displaying messages on the Member's web site;
- Capacity to e-mails or instant message all the customers;
- A recorded telephone message for customers on hold; and/or
- A recorded telephone message on a line dedicated to providing system bulletins to existing customers.

Advance Disclosure. Broker should verify the presence of an electronic trading disclosure information form in the package



received by each end user upon opening a business relationship with the customer. The disclosure form should contain reasonable and clear information on the limits and possible problems of electronic trading.

Credit and Risk-Management Controls

General Standard. Brokers should have a detailed written document explaining the different risk indicators and their presence in the platform. This document will explain the functioning of the risk management tools and their meaning.

Account Controls. Broker should verify the level of training and knowledge of the customer employees on the risk management and their controls. An exercise will be performed to verify the procedure to be taken in case the amount of risk taken by the customer is above the level described in the customer internal procedures and risk control manuals.

Review. Broker should verify the presence, in the organization, of a risk control monitoring system and the presence of the appropriate risk control communication channels.

Recordkeeping

General Standard. Broker should have a document explaining the record keeping and redundancy standards of the platform.

Transaction Records. Broker should demonstrate and exhibit example of the following details in the record records and will verify that the personnel is knowledgeable in finding and understanding the following information :

- Date and time the order is received by the system;
- Price at which the order is placed;
- Price quoted on the trading platform when the order was placed Account identification;
- Currency pair;
- Size;
- Buy or sell;
- Type of order (if not a straight market order);
- Date and time the order is transmitted to the trading platform;
- Date and time of execution;
- Size and price at which the order is executed;



- Date and time the execution information is received and
- Date and time the execution information is reported by the system.
- Date and time of the rollover;¹⁵
- Price of the position after the rollover;
- Bid and ask prices quoted on the platform when the rollover occurred;
- Amount of interest credited or debited to the account, if any;
- Any other fees charged for the rollover.

Individual reporting : Broker should write a document demonstrating the capacity of the platform to provide information for each individual, for each order and account in real time.

General reporting. Broker should verify the capacity and the knowledge of its IT personnel to provide create and maintain daily records containing the following information:

- Account identification;
- Funds in the account (net of any commissions and fees);
- Open trade equity (the net profits and losses on open trades); and
- Account balance (funds in the account plus or minus open trade equity).

Time and Price Records. Customer should possess a document explaining and exhibiting the platform time and price records.

Retention. Broker should verify its capacity to provide safe and durable retention of all the platform information for a duration of 5 years, including verifying the available capacity for this purpose.

Trade Integrity

General Standard. Broker should possess a written document explaining the general capacity of the platform to provide bids and offers that are reasonably related to current market prices and conditions. Broker should verify the presence of redundancy in price sources and the reliability and fail over of the pricing sources.

Slippage. Broker should check the configuration of the trading platform to ensure that any slippage is based on real market



conditions and that slippage is less frequent in stable currencies than in volatile ones, and prices should move in customers' favor as often as they move against it.

Multi market availability and cost

Most platforms were built to work in a given market. For example, in forex, while the builders usually claim that the platform also works in other markets (Example CFDs) one should perfectly understand the requirements of each particular market.

To enlarge the platform usage to other markets one needs to address the following questions :

- Can the platform handle the prices from that market (example : prices with 5 digits ?)
- Can the platform handle the symbols from that market (example ZB 07 for 30 YEAR treasure bonds expiring in December 2007)
- Can the platform handle all the order types needed for a given market ? (Example : To trade futures in United States some order types are required which are not offered by MetaTrader 4).
- Can the platform handle the executions ? (For example MetaTrader 4 doesn't handle partial fills).
- Can the platform handle the number of symbols ? (Example : there are about 20 000 symbols at the NY Stock Exchange, MetaTrader 4 can only have 1024 symbols).
- Is the platform practical for a given market ? Example : How do you setup for each contract different expiration dates in the Futures market ?
- Is the platform legal to be used in United States for a given market ? For example for Futures the platform has to be NFA compliant in United States.
- Can the platform be connected to the liquidity providers ? For example for Futures to the eCBOT and eCME and for stock to the New York Stock exchange...

For example one cannot trade Futures (to be differentiated from Futures CFDs) if the trading platform isn't connected to a physical exchange where the transaction are taking place. In order to be connected, a platform needs its API connected to the exchange.

Most platforms go around all these difficulties by allowing forex only and enlarging their list of available products to CFDs which are in fact treated like over-the counter, off-exchange products very much like the forex symbols.



7. Initial Cash Burn & Sales Cycle

In order to start this business you need to have a firm, comfortable handle on what the “sales cycle” is – i.e. REALLY how long does it really start to gain market traction and what does this mean for the REALISTIC CASH BURN in the meantime? Attached is a detailed model that will help you plan these things, and estimate a realistic plan for how much cash you would use to start an FCM.

- Cash burn: we put together a pragmatic, detailed “Startup Model” with a section for management, sales hires and their expected productivity, rent, etc., that gives a sense of what the monthly cash burn will be for the startup.
 - The Excel model that you can use literally for starting the business and budgeting the specific detailed costs for starting it.
 - Keeping cash burn low is crucial and this will likely require a smart manager / sales person who “gets his/her hands dirty”
- Revenue: flowing into this cash burn “Startup Model” is a “Revenue” tab that allows the user to choose which type of business model he is going to use, including expectations on the number of new customers per year, and average customer trades/deposits.
- Margin: in addition, there is a detailed “Liquidity Supply Chain” tab that pulls together all the different segments of a startup model in term of partnerships with prime brokers, platform, counterparty you use, etc., to estimate the total price a startup will have to charge a new customer, and the resultant margin that startup will receive on each transaction.
- Marketing costs: this tab put has an illustration of the leads + conversion ratios as part of a theoretical marketing costs overview, which then flows into the model. This can be modified, but gives a sense of the success of different methods.
- Capital costs: we used real data to show the technology options, and give the startup FCM a chance to choose amongst these options. Once making these choices, these capital costs should flow into the overall startup costs for the company on a monthly basis, plus an initial cost.



8. *Marketing*

How are existing companies selling/marketing to retail clients? From being in the industry, we know many of their models from working with their technology.

Marketing has three dimensions:

- **Marketing:** aim is to generate leads of people who might potentially be interested in the products of your brokerage
- **Sales:** aim is to convert the leads into accounts, or actual customers
- **Customer support:** aim is to keep the present customers happy by answering their needs, questions and any concerns they have

Marketing:

- One can purchase leads from leads resellers. Example : www.salesgenie.com
- One can do internet marketing by setting up a website
- One can do advertisement via different means(radio, TV, paper media, posting boards, or many other ways).
- One can go to targeted trade shows like: <http://www.moneyshow.com/msc/lvfx/main.asp>
- One can network to find potential customers by becoming part of different organizations



To give a sense of the marketing costs we have seen in this industry, we put together the following table to show one view of the efficacy of different marketing methods:

Monthly employee cost

2000

| | Monthly Sales and Marketing | | | | | | | | | | |
|------------------|-----------------------------|-------------------------------------|---------------------------------------|-----------------------|---------------|----------------------|--|------------|---------------------|-----------|-----------|
| | Monthly cost | Number of leads expected each month | Number of employees needed to convert | Expected success rate | # of accounts | Account average size | Account average number of trades per month | Profit STP | Profit Dealing Desk | Cost | Net |
| Leads purchased | \$5,000 | 5000 | 5 | 0.10% | 5 | \$15,000 | 43 | 2150 | \$22,500 | \$15,000 | \$7,500 |
| Internet | \$15,000 | 300 | 2 | 10.00% | 30 | \$15,000 | 43 | 12900 | \$135,000 | \$19,000 | \$116,000 |
| Phone | \$10,000 | 100 | 5 | 1.00% | 1 | \$15,000 | 43 | 430 | \$4,500 | \$20,000 | -\$15,500 |
| TV | \$100,000 | 1000 | 5 | 10.00% | 100 | \$15,000 | 43 | 43000 | \$450,000 | \$110,000 | \$340,000 |
| Newspaper | \$15,000 | 300 | 2 | 10.00% | 30 | \$15,000 | 43 | 12900 | \$135,000 | \$19,000 | \$116,000 |
| Event sponsoring | \$10,000 | 100 | 2 | 5.00% | 5 | \$15,000 | 43 | 2150 | \$22,500 | \$14,000 | \$8,500 |
| Trade shows | \$30,000 | 300 | 4 | 2.00% | 6 | \$15,000 | 43 | 2580 | \$27,000 | \$38,000 | -\$11,000 |

In the associated **Financial Model** with this business plan, this marketing overview flows into your startup model, giving a sense of how you might think about marketing dollars in your startup period.

One rule of thumb for finding potential customers is that those who think alike can be found together. This translates into the fact that you can find forex traders and forex investors in many predictable places:

- Other trading industries (stock, futures, options...)
- Betting industry
- Investment industry and banking
- People comfortable with risk and looking for quick profits



- People interested in the financial industry (economics)
- People aware of foreign exchange solutions and problems like business owners with an international component (import/export, purchasing of raw materials in foreign currencies...)

Sales:

Leads conversion from marketing leads into actual sales involves a combination of the following:

- The quality of the product sold. The better the spreads, the lower the commission, the faster the execution, the bigger the liquidity of the FOREX products the better.
- The availability of a broad array of product. The more symbols to be traded, the more likely that you will find the product everybody is looking for.
- The capacity of the contact person to convince. This is tied to the conversation skills, the convincing capacity and can involve friendship-bonding, self suggestion, conversation directing, step-by-step approach and other convincing techniques.
 - As one might guess, a big factor is cultural and thus setting up an in-person office can sometimes be effective for reaching certain populations.

For lead conversion the following techniques can also be used :

- Special offers and deals. For example one can offer double leverage during some time to sign up new accounts;
- One can offer special commission during some particular time frame;
- One can offer a smaller spread during some time frame, on a given currency.

Customer support:

As one might expect, customer support is very important in this industry. Being careful to monitor trade activity, respond to questions quickly, and solve electronic / online, and other technology issues quickly is crucial to your business. See **the Technology Section on “Technology security and reliability certification” above.**



9. Competition

What are the Forex Brokers (FCMs) out there, what business model do they use and how do they market?

The following information has been garnered from from conversations with sales staff at various FCMs (ACM, Saxo, PFG, Gain and Currenex, among others.)

Model:

The model employed by many FCMs is to have accounts trade as frequently as possible as the FCM (Broker) usually participates in the spread (unless they charging a commission only).

- Where Does This Mentality Come From?
 - The retail Forex industry has been brought up on the fact that FX is worth \$3 trillion in volume every single day (in reality only a fraction of this comes from private speculators, the vast majority is generated by large banks and multinational corporations). This is attractive especially when we are reminded at how this figure completely dwarfs the stock market. Now add the statistic that between 90% and 95% (GFS claims 70% due to their focus on Straight Through Processing) of all retail speculators lose money with a gambling mentality, and there are a bevy of firms climbing all over themselves to gain these customers.
- How do Retail Brokers Position Themselves vs. The Competition?
 - To answer this question we need to briefly explain some market dynamics. The Forex market is completely decentralized. This means that, unlike centralized exchanges such as the NYSE and LSE, there is no central location where each transaction can be traced and recorded nor do currencies have specialist market makers responsible for providing quotes for the entire market. Instead, the entities that act as market makers for the currency market are the world's largest banks. These banks carry out transactions between each other on a regular basis, hence the term 'interbank market'. In order for you to deal directly with these large banks you need to establish credit relationships with them which takes a vast amount of money and consequently most people cannot afford to do this. So this is where the retail brokers come in; they connect customers with the large banks. Because they are representing many clients they have enough equity to establish credit relationships and deal



with these banks, on the customer's behalf.

- However, this position is open to exploitation. Retail Forex Brokers are the middleman between customers and the interbank market so every time a customer places an order to buy EURUSD for example, their broker alters their currency holding positions with their large bank partners to reflect this. Rightly so your broker charges a fee for this service which usually comes in the form of spread (the difference between the bid and the ask). The spread they offer you is slightly larger than the spread they are offered in the interbank market so your broker can make a small profit on every trade you make.
 - With this said, this model allows brokers who know who is losing and who is making money to profit more on each trade. The broker can now take the other side of the trade of those clients who are known to be consistent losers thus making money for the "house". Not every broker out there is guilty of these 'bucket shop' tactics (rest assured that every brokerage will deny it however) but it is common.
- How do Brokers Market themselves?
 - All FX brokers follow a similar sales model in attracting clients.
 - Online advertising:
 - The larger brokers employ more capital to online advertising. This makes sense given that retail FX is all online. Sites like www.thestreet.com and www.fxstreet.com charge heavily for banner advertising based on the demographic they attract to their website. Ads typically start at \$5000. To be effective, multiple ads on various sites would be needed. Small Brokers often use this resource as well, though with smaller investments.
 - While all brokers use this source, none of them were able to quantify the revenue from this source of advertising despite the technology being available for them to do so. Most when pressed on this issue, claimed that at least they got their names out into the market.
 - It seems that those brokers who don't have STP tend to spend more on advertising as they are able to take the other side of the trade. As a result of this, advertising costs for all FX brokers have gone up dramatically in the past few years.



- Introducing Brokers: By far the most tangible source of gaining clients is through Introducing Brokers (IB's) – which are essentially sales people. These take on two forms, in-house and independents.
 - Typically, in-house IB's earn half the commissions that independent IB's do. Commissions are typically paid from the spread from the round turn and at some brokers are standard and at others are based on volume traded. The more that is traded the more the IB shares in the spread. In-house IB's sometimes earn a base salary. In all cases where this is the case, the IB's earned less in commission. The cost of having a sales force is very low as they are only paid on a per trade basis.

Examples:

- **Saxo:** Saxo is one of the largest and oldest retail forex brokers around. In the retail market, Saxo is among the top three FCMs (FXCM is the oldest, and the biggest retailer). Saxo is headquartered in Denmark, registered with several regulatory agencies, and have been around for about 7 years.
 - Marketing: Saxo employs a lot of capital in online advertising. They cannot divulge an exact ad budget, but do pay \$3-\$10k for online ads – and more than \$100K per month in online advertising (this is likely the same as competitor FXCM and any other large player). Almost all online ads are banner ads and flash advertising. Their goal of course is to generate as many leads as possible. Their ads are designed to first take a customer to an online demo site, where they can demo trade for free for 30 days. To get this ability, the customer has to fill in all their details on their location and personal information. Approximately a week after the customer has started the retail trading, they get a call from the Saxo sales staff in order to try to convert the lead to become an actual customer. Saxo's goal, of course, is to get the customer to open an account, and trade it frequently.
 - Model: Saxo bank uses a combo of the STP and Dealing Desk model. They, like many FCMs, do not necessarily give customers the best pricing at any given time. Even places like FXCM, who try to follow the letter of the law, still take the other sides of the trades. However, to maintain their reputation, Saxo goes the extra step and insures clients' accounts up to \$50K Euros, in the case that something major goes wrong – i.e. a catastrophe or Saxo going bankrupt. (Over the last ten years, there have been lots of retail bankers going down. Refco went down about three years ago, and took down about \$40B of assets. At the time they owned a big portion, 41%, of FXCM.)



- On the prime broker front, Saxo has an alliance with Dresna, UBS, and particularly DeutscheBank. If they have three prices coming in from DB, UBS, and Dresna, they buy at the lowest price, in pips. However, for Saxo's own clients, they have software that check what the fee is, say 20 pips, but then purposefully price the client at another banks' higher bid, say 22 pips, and then the order is executed. So the back office executes at 20, but the front office charges 22 to the customer, gaining 2 pips on that transaction. They also frequently do this when there is market volatility—charging customers the higher prices at peaks, but then locking in better prices for themselves, and taking the spread as margin.

- **GCI:**

- Model: GCI is run out of Belize and has been around for about 5-10 years (as a comparison, FXCM is about 12 years old and GFS is only 3-4 years old...the other ones that were around in the beginning of this industry did not have a model that was competitive.) GCI has a very unique model in that they allow you to go long and short on the same position, without opening additional leverage. They are not regulated at all. They are profitable, however.
- Marketing: their marketing model is very similar to other big firms in the industry – they do a fair amount of online ads. Unfortunately, like many others, they also do not focus on client retention. It used to be that a customer needed \$5K to start an account, whereas now a customer can start with \$100. A customer can now fund with a check, wire transfer, Paypal, etc. and so anyone can basically get access to accounts, now. This means that the firm has higher turnover because of lower-tier customers. On the other hand, the ability to market to absolutely anyone becomes a lot bigger – if anyone can be an investor, marketing can be more broad-based. In the end, the gambling mentality usually wins over for their customers. And, unfortunately, like many others, GCI does not appear to be in the market to establish an ongoing client base.
- Commentary on GCI: Unfortunately, without much regulation, customers have no recourse when something goes wrong. GCI has been around for 10 years. In 2003, they had \$57 million of client assets. Refco was talking about buying GCI at that time. And GCI is probably at \$100 million in assets, now. But if one was to look at their business model now, and ask whether they should ascribe to a regulatory authority, what would be the point? As of now, GCI is kind of an “untouchable”, and in a jurisdiction where they are not required to be highly regulated.
 - If you're running a business out of the U.S., by not regulating yourself you are opening up your self to attack. However, if your target market is Pakistan, Bahrain, and the Middle East, things are different, and



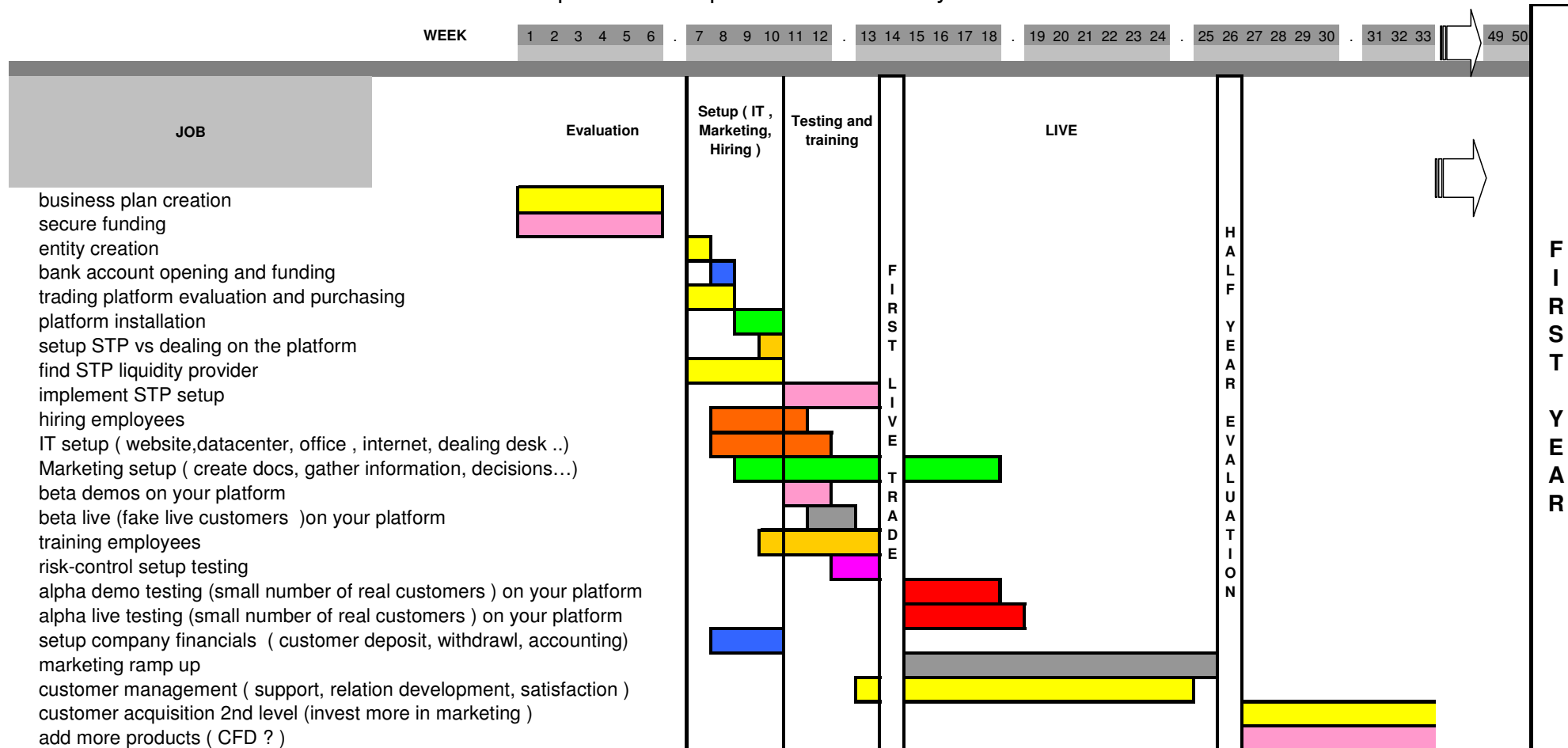
often just regulated by the banking authority. For example, the business can be centralized in Pakistan, and as the FCM you only accept client deposits from there, and the banking regulators will oversee it. From the get go you could attract assets that would make clients feel comfortable. [Although if you want to market in Bahrain, you do need to register there from a marketing point of view. When you're marketing, the business itself does not have to be registered with the Bahrain. But the business that is working in Bahrain will have to go to the Bahrain authorities and work out an agreement].

- **New Models:**

- Customer Retention: GFS, ACM , and FXCM are starting to change their mentality by looking for successful managers that can help the retention client base. They start by having professional traders that aim to help a customer make 20% in a year, rather than the 'big' promises of 100% in a month, by many retail FCMs. This has been a shift in the mentality of these larger firms, who have realized that if your customer retention year on year is 10%, you're doing a lot of work to find new customers, and not much to retain them. There also may be some saturation occurring in certain markets, such that the rate of new customers is slowing.
- Retail Storefronts: None of the FCMs right now have retail storefronts, like a Scottrade. All of them have centralized offices, a trading desk, sales desk and back office, and run these very aggressively. It's all computerized and centralized. However, consultants in the industry have never heard of any FCMs that have storefronts. Many thinks it would be a great idea, but the capital constraints and investment may be too high to sustain an FCM.
- Big Banks Entering Retail: Interestingly, the big banks that want to enter retail are not doing so by building up their own retail operations from scratch. Instead, many are making alliances. For example, Saxo now has an agreement with DeustchBank (DB) where DB is using Saxo as a counterparty—sort of as a retail "front" for them. FXCM has a similar arrangement with Citibank.
- In the view of some, the favorites in this industry are Saxo, FC Stone, PFS, etc., all who are older companies, and who are moving toward a model of more retention, rather than "churn & burn" Dealing Desks.

10. Implementation / Timelines

Below is a Gaant chart with an overview of the implementation process across one year:





Below are details on each step of the suggested implementation:

1. First do a business plan to evaluate the situation
2. Then start by registering the entity.
3. Open a bank account in the entity name. Make sure you can do payments online, receive wire-income notifications by email or some other ways each time a wire arrives.
4. In parallel, work on choosing the platform. Test it, demo it, verify that it is what you need . Ask for a free two week demo. Negotiate the price.
5. Once the platform is chosen, see what you need to for delivery (hardware and other requests).
6. You should, nearly always, be prepared for two types of customers: “A” book (the ones you will STP to the liquidity providers to lower your risk) and “B” book (the ones you will keep on your dealing desk).
7. Once the platform chose you should know how to implement these two groups of customers. See with which liquidity providers you can connect it. You are mostly looking for reliability, not low price. A tested existing solution is preferable then a new cheap one. Once you have the list of compatible liquidity providers approach them (try to go with an ECN, with a cheap prime broker, with a small bank, with another large broker, many choices are available) . Ideally you should have at least two liquidity providers to have a backup, and some competition. A liquidity provider could cut the line of credit at any time if the market is unstable or if you get in a fight. Be prepared!
8. It will take time to find an agreement with the right liquidity provider. This is normal. Ask for a free demo.
9. In the meantime you should start to hire your employees and train them to their tasks.
10. The first employees you need are: 1 IT personnel to take in charge the platform, 1 manager to help you with the organization and the relationships and the purchases. He should be also trained on the platform back office. The IT should also be trained on the liquidity provider connection.
11. Get a sales-marketing manager who already knows the industry. This is the key to get started fast and well. He will bring you relationships and know-how. He should start selling your products as soon as possible. Give free demos...
12. Do some tests. Put in some demo customers, get used to their questions, the platform, how everything operates.
13. Open a live account for yourself, place some test trades. Make sure you understand how everything works, especially the reporting and the risk management.
14. Test the execution prices. Test the margin requirements. Test the reporting. You should know your positions at ALL



- times, day and night, down to 1 cent. Make sure that you capture the markup if you do STP.
15. Put in some “Beta tester” customers. These customers should be aware that they are testing a new product. They should also be ok with small problems and they should let you know each time they have a problem. Work with your IT contacts and the liquidity provider to solve them.
 16. Instead of hiring an accountant (expensive in some countries) rather invest in Quick Books and have a certified accountant that knows the rules inspect your Quick Books once a trimester. Keep a track of the money in, money out.
 17. Now you can roll out the large marketing campaign. Do your best to bring in customers via all available means.
 18. Invest in customer support. Customers need to be kept happy. Having customer that stay means you will have a steady income for long time. Invest in customer support.
 19. At this time you might want to invest in a CRM tool (a software that will keep track of your customers , who wanted what, when, what they said and what they were told and where they are right now).
 20. Then go to level 2, offer more products Grow...
 - CFDs / Stock / Futures are all possible securities, among other possibilities for growth



APPENDIX 1: DEFINITIONS

For the purposes of this document, and for an understanding of general industry terms, we have put together a list of terminology definitions:

- Brokerage = legal entity allowed to open customer accounts and collect customer money
- Broker = an employee of the brokerage that is working with the a customer
- Introducing broker = independent company that is bringing customer to the broker in-exchange of remuneration (usually 1 PIP).
- Prime Broker = an entity that is willing to represent the brokerage in all its trading transactions and settle the trades in your name. Usually requires a security deposit. Could be automatic or manual. Examples: Barclays, FC Stone, JP Morgan, etc.
 1. For example: In a model where you have a VISA credit card from your retail bank, like Bank of America, and you go to do a transaction in a restaurant and you have a line of credit of \$2,000 from Bank of America (you had to deposit \$200 to open the account) then this is comparable to Bank of America being your prime broker, VISA being the ECN, the restaurant the seller and you the buyer in the transaction. You could use a different ECN, MasterCard, with the same Prime Broker (Bank of America). But in sum, Bank of America is charging you a fee, the ECN is charging you a fee and if you can resell the meal for more then you paid for you will make profit!
- ECN = electronic trading system which pairs offer and demand without a middle man (in this Case Forex). Example : Currenex, Hot Spot. See another definition of ECN here: <http://www.goforex.net/forex-basics.htm#ECN>
- Forex = foreign currency exchange
- Customer or client or end user = a private or commercial entity that opens an account with the brokerage
- Wire = electronic money transfer
- Self traders = customers that direct the trading of their own money
- Managed accounts = customers that open an account, deposit money but who give power of attorney to 3rd party to initiate trades in their account
- Dealer = a human or computer software that will monitor the risk taken by the brokerage
- Trading platform = a computer software that gives access via the internet to humans or other computer programs to the information they need to monitor trading information



- Trades = (Forex context) the action of buying or selling one currency in exchange of for another.
- P&L = profit and loss
- Deposit currency = currency of the money deposited in his account held at the brokerage by the client
- Margin trading = allowing the customer to borrow money automatically when he is placing a trade (this involves MUCH HIGHER RISK , and a customer could POTENTIALLY LOSE MORE MONEY THEN HE HAS).
- Margin currency = currency used for the margin
- Pair = (forex context) a symbol one can trade
- Front end = the part of the trading platform that seen by the brokerage client
- Back end = part of the trading platform only seen by the brokerage employees
- Rates = exchange rates
- Counterparty = entity that will take somebody's account, money and will allow the account opened to trade against the deposit
- "Rates" and "Quotes" = (for Forex purposes) exchange rates
- "Symbols" and "Instruments" = the different exchange rates a counterparty is monitoring and could offer to its customer for trading
- Marketing = the action of attracting interest from people and collecting their contact information for commercial purposes
- Product = (Forex context) a type of service the broker can offer
- Sales = the action of selling a product to a customer
- Base currency = in a pair like EURUSD the 1st currency (in this case Euro)
- Lot = (Currency context) usually 100 000 or 10 000 of the base currency
- Open P&L = the potential P&L of a trade if the trade was to be closed IMMEDIATELY but which is still open
- Balance = total amount in the client account NOT including the open P&L
- Equity = total amount of a client has IF the trades were closed IMMEDIATELY
- Pip = the smallest amount a currency will move by. Either 0.0001 or 0.01 if a pair involves Japanese Yen.
- Margin call = when a customer equity is not enough to cover the margin he used to borrow money to trade. At that time typically all brokerages close the customer position automatically.
- Bid = price at which one can SELL
- Ask = price at which one can BUY



- Spread = difference between bid and ask (spread = ASK-BID), calculated in pips. This means that if you buy and you sell RIGHT AWAY before the price changed you WILL lose money. Example: you typically can buy at 2 pips higher then you can sell on the EURUSD.