



LEARNING TO READ THE MARKETDELTA® FOOTPRINT®

An Introductory Guide to Footprint® Patterns and Their Interpretation

INTRODUCTION

This guide is designed to introduce a structured way of learning how to read a Footprint® chart. It's about training your eyes what to look for, and training your mind to understand what it means. The material presented here is not necessarily the only or best approach; so please feel free to modify the suggestions to suit your needs. It is assumed that the reader has at least a basic understanding of what a Footprint® chart is and how it is created. If not, then please view the [MarketDelta® Simplified Video](#) and read the [Anatomy of a Footprint® Document](#) before proceeding. Upon completion of this document, you should proceed to the MarketDelta Footprint® Strategy Manual to continue your education and then consider attending a seminar hosted by MarketDelta® to deepen your understanding and get hands on training. More details can be found at the end of this document or at MarketDelta.com/education.

This data has traditionally been delivered in tabular form via what is generally called a Time & Sales window. The age-old concept of “reading the tape” refers to the skill of reading and interpreting the rapidly scrolling lines of the T&S window to gain insight into order flow. Tape reading tends to be mentally exhausting, it is relatively easy to miss something, and for all but a gifted few, the trading patterns hidden in this data can not be directly observed. The Footprint® chart can significantly reduce the challenges of pure tape reading, and even reveal market dynamics and trading behavior not easily recognized in pure tape reading.

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ORDER FLOW

If the meaning of the phrase “order flow” is not clear to you, it should be by the end of this document. Order flow analysis is the missing link for many traders. It refers to how the orders are coming into the market, how they are being filled; whether executing at the offer or on the bid. It is the dual auction at the most micro-level. Assessing order flow in real time can tell the trader how trade is being facilitated in any direction, a key concept in auction market theory. The order flow patterns, as revealed by the Footprint® chart, that we’ll be looking at are NOT traditional price patterns. Rather, these are T&S patterns that you’ve probably never even realized existed. The T&S data simply moves too fast to comprehend, and then in a flash the data has scrolled by, out of site. The Footprint® patterns can be classified into three general categories: **Intra-Bar Patterns, End of Bar Patterns, Multi-Bar Patterns**

These patterns rarely, if ever, mean anything in and of themselves. This is where the MarketDelta Footprint® diverges radically from traditional price pattern and/or indicator based analysis. No attempt is made to oversimplify or under-simplify. Nor is the Footprint® a red light / green light type “system”. Instead, the insight gleaned from a deep and experienced comprehension of the Footprint®, allows the trader to integrate this data along with current market context and sound market logic. For example, auction market theory or any other viable analytic philosophy which affords the trader the ability to assign structure and thus meaning to what he/she observes, combined with the Footprint®, will provide decision support of the highest possible quality. The Footprint® is not more or less important than either of the other two elements just mentioned; it is equal.

In general, Market Profile®, support and resistance analysis, trend lines, and other macro-type big picture analysis provides the **WHERE TO TRADE**. The Footprint excels in showing **WHEN TO TRADE** because of the way it represents order flow and volume.

Date Time	Last	Vol	Bid	Ask
8:09:00:14	1051.75	1	1051.50	1051.75
8:09:00:14	1051.75	8	1051.50	1051.75
8:09:00:14	1051.75	1	1051.50	1051.75
8:09:00:14	1051.75	1	1051.50	1051.75
8:09:00:14	1051.75	1	1051.50	1051.75
8:09:00:14	1051.50	1	1051.50	1051.75
8:09:00:14	1051.50	1	1051.50	1051.75
8:09:00:14	1051.75	1	1051.50	1051.75
8:09:00:14	1051.75	4	1051.50	1051.75
8:09:00:14	1051.75	1	1051.50	1051.75
8:09:00:14	1051.75	4	1051.50	1051.75
8:09:00:14	1051.75	1	1051.50	1051.75
8:09:00:14	1051.75	4	1051.50	1051.75

Always Keep In Mind

A Footprint® is essentially a graphical or spreadsheet-like rendition of the most basic and fundamental market generated data which trading activity produces. It is a very natural way to view the data.

After first gaining a basic understanding of what a Footprint® chart is (which presumably you've already achieved) the next step is to gain some level of observational awareness. Avoid making preconceived conclusions. Avoid deciding, in advance, what something is going to mean. Instead, begin the process with simply learning how to pick out key elements of Footprint® structure. That's what this document is all about. Once you have gained some facility with what the various elements of Footprint® structure are, then you can begin coming to conclusions regarding the meaning of the elements in various contexts. Also, you can begin to assemble the elements into patterns. In this way, you'll start making your own rules, based on what is real, not what some tradition, some book, or some trading guru has told you; which may or may not be valid information. The Footprint® lets you come to your own conclusions, if you learn to see the Footprint® in an unbiased fashion.

STRUCTURAL ELEMENTS OF THE FOOTPRINT®

WHAT SHOULD YOU BE WATCHING FOR?

As you learned in the Anatomy of a Footprint®, there are many different variations of Footprints. Bid by Ask, Total Delta, Total Volume, etc. For learning purposes, we suggest sticking to the Bid by Ask Footprint®, and possibly the Footprint® Profile.

The Bid by Ask Footprint® displays all the data, broken down into the finest resolution possible. Only after you have experience with the Bid by Ask Footprint® will you be able to make an informed choice about other ways to slice and dice the data which best fits your personal trading style. For now, we are only focused on training your eyes what to see. Don't trade while learning the Footprint®. The act of trading and the emotions involved can and usually does remove ones ability to clearly see what is, in an objective fashion. The added pressure of learning the Footprint® while in a position or pondering an action to enter or exit, will likely cloud what you're seeing, such that you see what you want to see which supports your position... and not what is actually there.

Again, even if you end up preferring to work with a Footprint® style other than bid/ask Footprint®, it is recommend starting out with the Bid by Ask Footprint® for learning purposes, so you can see all the data. The other Footprint® variants simply rearrange, filter, or alter how this basic data is displayed.

THE BUILDING BLOCKS OF FOOTPRINT® PATTERNS

The following sections will provide examples of some of the more important order flow patterns which the Footprint® exhibits. The patterns can be broken down into three general categories:

- 1. Intra-bar patterns: those patterns which form within and as a bar builds in real time.**
- 2. End of Bar patterns: those patterns which can only be assessed and analyzed at or after the time which the bar closes.**
- 3. Multi-bar Patterns: which build over a series of bars.**

Looking at the finest resolution of how the patterns are built up, leads us to the three considerations below. It is these considerations that form the building blocks (or elements as they will be referred to) upon which the larger patterns are composed, perceived, and analyzed by the trader. As you go through this document, and more so as you begin your learning and discovery process working with actual charts, it is these three pattern types which you can lean on if you become stuck or confused. No matter where you find yourself in the process, you can ask yourself questions about these three pattern types. Questions about context, about relative and absolute changes between the elements within the pattern, and about how these three elements can create actionable patterns. Here are some of the key elements to watch out for within the three pattern types.

- 1. Intensity of volume and/or delta in a given Footprint® bar or cell.**
- 2. The level of imbalance or balance between bid traded volume and offer traded volume in a given cell or cluster of cells.**
- 3. The ability or inability of price to continue in the direction of the current order flow, judged in the context of items #1 and #2 directly above.**

INTRA-BAR PATTERNS

COLORS & SHADES OF INDIVIDUAL CELLS

The darker the shade, the more imbalanced is the order flow. Lighter shades indicate a more balanced scenario. Likewise, a series of adjacent cells, all the same color, indicate directional trade. Roughly alternating colors (candy-cane-like if you will) indicate balance and/or indecision. Don't expect to see "perfect" patterns. You may find it easier to ask yourself what something doesn't look like, rather than what it does look like. This inverse way of thinking can sometimes release you from being too attached to what you believe, instead of what's really there.

RELATIVE AND ABSOLUTE NUMERIC VALUES

Relative balance between bid volume and ask volume in each cell provides clues about trade facilitation and supply and demand. Roughly equal levels (within an order of magnitude) of bid volume versus ask volume indicate balanced trade. Unequal amounts indicate directional trade. However, once the inequality reaches an extreme, this suggests a wall of demand or supply has been reached. For more detail on understanding this phenomenon, see this article from the MarketDelta® Blog: [How to Spot Supply in MarketDelta®](#).

When observing factors such as just described, keep in mind where price is and where it has come from – The overall context. For example: are you witnessing an extreme imbalanced cell AFTER a significant price move, or at the beginning? Does price currently reside at the boundaries of a long-term bracketing market, or is it dead in the middle of the range? The context will turn out to make all the difference in the world.

As price moves to new extremes (intra-day high or low, new daily high or low, etc), what is the bid/ask volume doing? The goal while observing the Footprint® is to determine whether trading activity is drying up, being facilitated, or increasing in pace at one form of price extreme or another.

The numeric values can have both relative meanings and absolute meanings. By relative, we mean how a particular value compares to its own value earlier in the bar formation, and to adjacent cells and bars. Absolute numeric values will help with anticipating volatility. Each market will exhibit characteristic absolute values, as well as specific chart periodicities doing likewise. All this really means is depending on the market being followed and periodicity being viewed the numeric values shown on the Footprint will vary. Time of day, special events (pre-holiday trade, quad-witching day, news events, etc) should be considered when evaluating absolute volume levels.

0x648
1120x3717
2829x4123
1311x2401
780x2257
286x1199
663x2937
1049x1928
399x1535
122x319
423x210
7x0

} Note variations in color and shade. Are the sequential cells the same color?

0x58
112x1425
1061x2889
688x432
40x878
1360x1791
1011x965
292x58

} Or, do they vary, with only 2 or 3 cells in a row the same color?

0x9
507x955
1480x637
803x1268
1400x1338
2613x1051
668x143
1687x1309
2027x152
19x0

— Moderately Imbalanced

— Extreme Imbalanced

— Dry Up of Activity

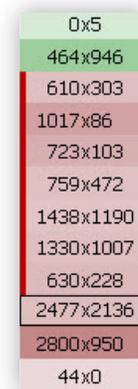
END OF BAR PATTERNS

VOLUME NODES AND HIGH VOLUME POINTS

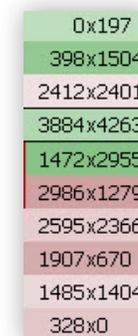
A volume node is simply a price level with a pronounced “bump” in the total volume traded at that price. A given bar (or period of time) will have associated with it a high volume node (the highest volume traded price) but there will also be minor volume nodes, which can and often are significant. The nodes should be tracked and price behaviour noted upon revisiting these nodes. When assessing a Footprint®, ask yourself which end of the bar held the bulk of the traded volume. Was it nearer the open of the bar or nearer the close? Or, was the entire bar more or less distributed evenly? Perhaps the trade is distributed in a bell-curve shape distribution, suggesting a very balanced market, at least in the moment. Again, context is vital. Is the volume so high in the node that it suggests bumping into supply or demand? Is there a distinct node, but the overall volume of the bar is so low as to render the volume node meaningless?

Markets in micro-balance can mean different things at different times. It is the trader’s job to understand the context: is balance being caused by typical lunch time inactivity or is the balance being caused by a consensus of value among all the participants? Is this part of a larger balance? Or a pause in a strong trend? Is the balance the result of reasonably wide trading rotations, or the result of little or no market activity?

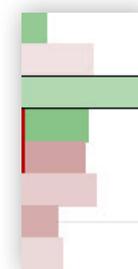
Another variation on volume node at bar extreme is shown in the graphic is shown in the graphic on the top right of the next page. Note the similarity of the distribution of volume to the first example in this section. The total volume distribution is similar. However, the first example (above right) showed a volume node low in the bar, and was shown as selling volume. In the case shown below, we again have a volume node low in the bar, but this time with significant buying volume indicated. There is a battle going on, not just a pause. Is this a reversal? One can’t say for sure. It’s far from certain what this means, but this sort of information still can help. Having information which suggests uncertainty in the market is still useful. You might use such a signal of uncertainty to take profits or to get out of a trade altogether.



Bulk of volume located nearer close of bar, suggesting continued movement in that direction or at least a pause; not a reversal.



This is a relatively balanced Footprint®. Note that the bar opens and closes near the same point, exactly what you would expect in balance.



Here is the same bar, shown in profile form. Clearly, some patterns are more apparent graphically, while others are more clear numerically.

NON-ZERO PRINTS AT BAR EXTREMES

The fact that buying or selling does not completely “shut off” or “dry up” at the extreme of a bar (an auction theory concept) suggests that business at that price level is not yet complete, at least in the very short term time-frame. A retest of such a level is highly probable because trade can still be facilitated at that price.

BAR TOTALS

Do not forget traditional data like total volume and price range. The Footprint® doesn’t replace basic price/volume relationship analysis, it supplements it. But now, in addition to total volume for a given period (or bar) the trader can look at total delta, which is essentially showing the net order flow conviction. It can be useful to compare these values (price range, volume, and delta); both from bar to bar, and also to note how volume and delta for the bar are correlated. In order to make it easier on the trader, MarketDelta has a built-in function which displays these bar totals for you. It’s called the Footprint® Bar Statistics indicator and is shown below. The Footprint® Bar Statistics panel can also show numerous other data values for each bar and is fully user adjustable.

0x61
915x123
562x5
336x553
1175x498
1607x978
1055x169
549x141
786x239
761x223
1468x1147
1559x1263
1504x726
864x1921
1859x1019
1327x758
1261x1609
1129x2690
2717x3464
2420x1728
54x0

High volume node, the bottom of a down bar, is showing buying; not what you want to see if you are short.

152x1353
743x1640
2111x4411
4492x4654
3010x2701
1748x1558
90x0

At bar extremes, when neither the bid side or ask side is zero, there is a high degree of probability that this price will be retested.

348x939	0x3		
1122x387	729x763	50x6	
247x160	662x367	139x79	
478x146	170x0	460x345	0x249
150x0		662x382	680x738
		776x314	886x853
		194x0	1485x1139
			504x141
3977	2694	3407	6808
-713	-428	-1155	-568

The upper row is total volume, the lower row is delta, which is the net difference between volume traded on the bid and the offer.

MULTI-BAR PATTERNS

FAILED AUCTION

Failures can take many forms. Buyers or sellers may not be active at a particular price level. Neither side may be interested at current prices. Learn to differentiate between a true failure and something that appears like a failure. For example, compare a market which has moved up on strong volume to a key point of resistance immediately after the open and then volume at the extreme prices drops off to a mere crawl; versus a market with no news, moving into lunch time, and just not much going on, also showing very weak volume at a relative price extreme. In the first case, there is potential for a trade, in the second case, most traders would be wise to simply stand aside as the potential reward, given the risk, just isn't present.

In the example below, we see a combination of volume first dropping off as price makes little upward headway, and then one last round of buying (the dark green price cell) with no ability to move price up.

This example begins to show how the analytic puzzle pieces start coming together. First, we take note of successively higher prices (bar by bar) ending with failed auctions at the top of each bar. Then, the order flow shows relatively strong buying in the form of a dark green Footprint® cell and a significantly imbalanced cell at that (89 sells versus 1,022 buys). Yet, the best price can do is move up 1 tick from the heavy buying and immediately dries up. Next thing you know, that strong buying turns into strong selling, in the adjacent two price cells below. This is how you read the Footprint®. If this arrangement occurred at a price level of significance (i.e. a previous day high, edge of multi-day range, upper boundary of a value area, etc), then this scenario would represent an ideal potential trade entry.

We urge you, though, not to simply go looking for patterns that exactly mimic this scenario. That's not what this is about. It is about assessing how all the pieces fit together for a given context.

			0x58	
		0x67	662x1858	0x3
	0x250	986x1372	2426x2073	89x1022
	35x942	874x571	80x0	1201x151
0x547	900x2062	634x465		1011x166
2487x2700	1256x1210	487x0		97x0
3743x1889	1347x2499			
1662x1105	452x0			
425x0				

Note the series of Footprint® top cells, each showing ZERO selling, yet buying is at a very low level, and continues to decrease.

Buying comes in, but cannot budge price.

HOW IS THE POC/HIGH VOLUME NODE MOVING

Determining whether or not trade is being facilitated at a given time or a given price level is a vital component of real time analysis. Trade facilitation is part of the answer to the question: what is the context? It is equally important to understand in which direction trade is being facilitated and which it isn't. This is simply another way of looking at order flow characteristics. Merely looking at price bars (i.e. no Footprint®) will not provide the whole story, much less an accurate story. However, if the trader tracks the directional movement of the high volume node, this will provide a more accurate picture of the true trend direction of the market. In a given time frame. In the sequence of bars displayed below, the Volume Price Statistic indicator (the blue dots), another function unique to MarketDelta, has been added to the Footprint®. This tool eliminates the need for the trader to mentally calculate the high volume prices. With the VPS indicator, they can be easily seen at a glance.

		0x129
		735x1194
	0x950	535x1109
0x13	1180x1731	37x0
432x451	558x380	
392x616	74x0	
57x374		
57x103		
166x119		
5x0		

The blue dots show the price level with the highest traded volume, otherwise known as the point of control.

	0x6
	139x171
0x170	90x91
146x159	98x53
247x205	214x117
101x25	96x0
65	-199

Price made a higher (bar by bar) high...

Yet the total delta for the bar was negative.

DIVERGENCES BETWEEN PRICE AND TOTAL DELTA

“Delta Divergences” can take many forms, but ultimately they show only one thing: the convictions of traders’ choices do NOT match price movement. There is behavioral incongruence. Essentially, for a given price movement, there is a lack of aggressiveness which is normally needed (and associated with) to support continued price movement in a particular direction. In addition to the bar-by-bar type divergence shown above, divergences can occur over a sequence of an arbitrary number of bars.

USING THE FOOTPRINT® PROFILE

As you now know, there are numerous variants of the basic Bid by Ask Footprint®. However, there are two fundamentally different types of Footprint® which you should be aware of. Each does a better job displaying certain aspects of the order flow. First, there is the type with actual numeric values (as used thus far in this document). The second type places a focus on a graphical representation of the Footprint®. This is known as the Footprint® Profile, and itself comes in several variants. This was introduced in the Footprint® Profile above, in the section on volume nodes. There are pro's and con's to each type, so it is generally a worthwhile endeavor to experiment with both. Some traders will have a clear preference between the two, others will prefer to make use of both.

The Footprint® Profile is particularly useful for making rapid, broad distinctions, where as the Bid/Ask Footprint®, provides the most detail.

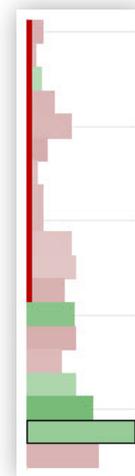
At the beginning of the Footprint® learning curve, you might find it helpful to have two Footprint®s open, both identical EXCEPT for the Footprint® type. Set one to Bid by Ask, the other to Footprint® Profile. Seek out an understanding of how the various numeric patterns appear in profile format, and vice versa. Looking at the same data through different lens' allows a perspective that can not be afforded in any other way.

0x61
915x123
562x5
336x553
1175x498
1607x978
1055x169
549x141
786x239
761x223
1468x1147
1559x1263
1504x726
864x1921
1859x1019
1327x758
1261x1609
1129x2690
2717x3464
2420x1728
54x0

Trend bar down example from section on Volume Nodes, not easy to pick out the high volume buying a the high volume node.

SUGGESTED SELF-TEACHING EXERCISES

Many of the best traders approach the learning process and refinement of skills in a similar way to what professional athletes do. Slow things down, speed things up, lots and lots of review. Tons of practice. Below are some suggested exercises which are designed to improve the accuracy and speed with which you are able to assimilate the data being presented in the Footprint®. Do not let the simplicity of these exercises fool you. They are designed to both train your mind to notice important patterns, and do so with greater and greater speed. It's not a bad idea to revisit these exercises from time to time, further enhancing your skill level. Doing these exercises with Playback at both accelerated and reduced speeds will train your mind to notice patterns more quickly and confidently. Finally, when performing a drill for an extended period of time, every so often switch over to a different drill or even a live market for brief stints. Mixing and matching the exercises and drills will afford a learning environment that can more easily be translated into real world, practical, skill improvement.



In profile format, it's very easy to see and see quickly.

- Print out several copies of each of a number of days Footprint®s in your choice of periodicity. Pick one of the Footprint® patterns or elements described in this document and circle every instance you can find. Go back later and see if you missed anything. Then, take another printout of the same day, and repeat the exercise for a different pattern or element. Repeat for each element or pattern you choose to.
- Choose a particular range of time and examine it on several different periodicities. For example, 5 min, 15 min, 1.0 range, 5000 volume and 610 tick. Make sure you choose several periodicities which are non-time based. Compare these charts to see how the Footprint® elements and patterns can be similar and how they can be different merely by changing periodicity. The markets are fractal in nature. This exercise provides some insight to seeing inside the fractal dimension of market data.
- Using playback charts, choose a pattern to watch for. Then, repeat the playback at gradually increasing speeds. This will instill the pattern in your unconscious and make it seem as though the real market is almost in slow motion, thus affording you additional decision making time with real trading, via the phenomenon of time distortion.
- During a live market, record in a journal the elements and patterns as you see them form, along with other related observations. After the close, go back and review what you recorded versus what actually happened. Did you observe and record accurately? Did you miss anything. Did you discover anything?

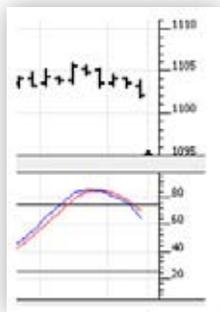
Doing these sort of exercises is how any sort of skill is initially developed. It's how the best athletes improve, and it's how great traders improve. Use drills as an opportunity to focus on learning one aspect well, then move on to the next. Don't try and learn it all at once.

The above discussion and suggested drills can be described as explicit learning. You, the trader, is provided with specific information and practice techniques. You know what you're doing and what the purpose of the drills are at any moment. However, there is another type of learning known as implicit learning. In trading, implicit learning is essentially the process of unconscious pattern recognition development. This can only occur through extensive time in front of the screen viewing live markets and reviewing played back data. We would be the first to admit that we used to cringe when we were told "it takes screen time". We didn't want to hear about screen time. We wanted to be given a set of instructions, make trading black and white, and then just do it. We felt this way because we didn't have any confidence in this unconscious learning being real. We didn't have confidence that we were actually learning anything via practice drills and simulated trading. It didn't feel like screen time was producing any benefit. Well, it turns out that this implicit type of learning does actually occur. We would strongly recommend anyone serious about developing their own training regimen and desiring more details on how implicit learning plays a role in trading success, to obtain Dr. Brett Steenbarger's books on trading psychology. They are an invaluable resource.

USE WHAT YOU ALREADY KNOW:

Learning the Footprint® doesn't mean having to give up what you've already learned, what you've already discovered to be useful. With the MarketDelta Footprint®, it's possible to superimpose indicators on the Footprint® if you have confidence in indicator signals. If you already watch volume using a standard histogram, don't stop watching that. Instead, use what you know about the volume histogram and see what that looks like in the Footprint®. Are you partial to basic price action: higher highs, higher lows, etc? Well, use that. And start looking at how the Footprint® can reveal subtle differences between what happens at higher lows in an uptrend versus a higher low (a potential reversal) in a down trend. Whatever you currently do that seems to make sense and/or affords some level of success, see if you can't figure out a way to combine that with what the Footprint® reveals.

A word of caution though: watch out for making the mistake of information overload. Don't add everything together at once. Don't pile on so many indicators that your screen looks like spaghetti. Take your time. See how the various analytical tools you have at your disposal fit together like a puzzle. A scientific approach, where you change one aspect at a time, and learn what that can tell you or does, is probably the best way to go about this discovery process. Another profoundly powerful suggestion from the field of learning theory is to focus on just a single pattern. Master it. Make it your own. Once you do this, something of a miracle occurs: mastery of one particular pattern seems to carry over in such a way that you suddenly seem to know about lots of other patterns too. The key to obtaining this learning leverage is to really focus on just a single pattern.



If you use an oscillator (such as the stochastic shown here) crossing over some reference level, compare the Footprint® elements and patterns of scenarios which show price follow through against those which do not follow through.



If you use pure price action, like this higher low, compare the Footprint® elements and patterns of higher lows which continue up, versus those that fail and continue down. There will often be clues which simply can't be seen without the Footprint®.



If you use trend lines: compare Footprints® of trend line break out bars which fail against those which follow through. Look at all the Footprint® elements and patterns described in this document and how they vary between successful and unsuccessful breakouts.

WHAT THE FOOTPRINT® REALLY MEANS:

If the purpose behind the Footprint® had to be distilled down to a single sentence, it would be to answer this question: Do the buyers or the sellers, right now, exhibit more conviction. The Footprint® expresses this conviction, via the patterns described in this document and the raw data itself as displayed either numerically or graphically. The pace or rate of trade, comparative levels of buy and sell volume, and statistically significant shifts in the order flow (eg. how much did delta reverse or shift?) all provide evidence of either supply, demand, or indecision. Understanding the conviction of the order flow is not something which any indicator or price alone can provide. The Footprint® affords an entirely new perspective on price movement, and thus works well in conjunction with other methodologies. The Footprint® is not simply a regurgitation of data, like so often happens when stacking numerous indicators on a chart, which all show essentially the same thing. The Footprint® adds dimensionality.

Another word for conviction is certainty. An old adage says that he who has the most certainty wins. In trading, this translates roughly to the idea that strong conviction will continue to carry price until stronger conviction in the opposing direction is met. You can call it the physics of price movement, a teetor tottor, or a battle. The metaphor matters not. In the sense that the word is being used, certainty should not be confused with the hope or wishful thinking a trader has over a particular trade working out. We're referring to the certainty represented by the actions taken by a collection traders. The certainty we speak of is that represented by a seller hitting the bid with a market order. Or, by a buyer lifting an offer at the market. At the most basic level, trading is a game of conviction. If any of this idea is not clear, we invite the reader to once again review the video entitled MarketDelta® Simplified (linked to earlier).

We would also like to make a remark that doesn't really fit in well under any particular heading thus far. It regards the notion of follow through. A key concept in understanding order flow, or any aspect of the dual-auction market cycle is that of continuation versus change. The opposite of price moving in a direction is price NOT moving in that direction. This initially may sound like nonsense. But think about it: price may continue in the same direction, it may reverse, or it may just sit and stagnate. Only one of those three possibilities produces profits, so start training yourself to look for signs of follow through and signs of non-follow through. Different trading styles and specific trading plans require specific approaches to dealing with each of these three scenarios.

WHAT COMES NEXT?

Screen time, practice drills, and testing ideas through simulated trading and simple chart analysis. Those are the activities which lead to improved skill and confidence in employing the Footprint® charts in your trading. How long before a clear advantage develops for you depends on where you are on the learning curve and your trading style. We truly wish we could give you a definite answer, but the question is akin to asking how long it takes to become a world class golfer, or an artist who consistently produces beautiful art. It also ignores the question of what your own goals and experience as a trader are. An experienced, successful trader, adding the Footprint® to his or her toolbox, might require several weeks

of daily observation before things really start clicking. A less experienced trader, particularly one who has yet to clearly establish a solid analytic style, could easily require several months or more to begin effectively assimilating Footprint® data into his or her decision process. And, that's a good way to think about the Footprint®: it's a decision support tool. It doesn't make decisions for you. When or if you attempt to force it to make decisions for you, failure is sure to ensue.

Equally, a trader who makes many, many intra-day trades will be seeing patterns more frequently and thus has the potential to learn more quickly. On the other hand, an intra-day position trader looking for a handful of opportunities each day, being far more choosy about trades, won't be seeing patterns at potential entry and exit points nearly as often as a scalper. Therefore, this trader will of necessity require relatively more time to fully embrace what the Footprint® has to offer. Liberal use of playback study will obviously help here. Be very cautious about becoming too fixated on the Footprint®. Sure, while learning the elements described in this document, you'll need to focus for extended periods on the Footprint®. However, when used as a decision support tool, think about those comments from earlier in this document: WHERE to trade and WHEN to trade. If the Footprint® is used to help in timing, it's probably best not to even look at it when you're nowhere near the WHERE to trade.

These pages represent merely an introduction to practical application of the Footprint® charts. After you've made progress with the material contained herein, the next suggested step in the training process is the MarketDelta® Strategy Manual. The Strategy Manual offers insight on the next level of sophistication in use of the Footprint®. Using the Footprint® in trending markets, consolidating markets, dealing with specific market contexts, and much more is covered in this manual. For additional information on how you can obtain the manual, please visit MarketDelta.com/Education. Further training can be obtained by attending a live seminar hosted by MarketDelta® and invited trainers. These will prove to solidify your understanding and put you on the right path to growing as a trader!