

# NIFTY TRADING SYSTEM

*Developed by – Vishal Dalvi, CMT*



# About Us

**Waves Research & Advisory Pvt. Ltd.** is one of the Elite Market Research & Trading house in India.

Our core focus at Waves Research & Advisory is to provide in depth analysis and forecasting of global markets across varied asset classes including Equities, Commodities and Currencies in identifying market inefficiencies for achieving above normal returns.

**Vishal Dalvi** is a B.E, MBA, CMT and is the Founder at Waves Research & Advisory Pvt Ltd. He is also an Affiliate member of Chartered Financial Analyst Institute and is a Level II candidate.

Before his entrepreneurial venture he worked as a Head Research at Commtrendz Risk Management Services, heading the Trading and advisory for its Clients in Commodities & Currency segment. There after he also worked with ANAND RATHI, in their Commodities & FOREX Advisory department. Prior to his MBA, Vishal worked with Infosys Technologies Ltd. for two years as a software engineer which helped him develop his Coding Skills which are now helping him Develop & Back test Trading Strategies.

Vishal has been a guest speaker at the various forums and seminars teaching and creating awareness about the subject of Technical Analysis. He also conducts courses on Technical Analysis in several MBA and BFM colleges under Mumbai University.

He is a frequent speaker on CNBC channel for his views on Commodities and Currencies. He is an active trader and uses advanced tools like Elliott Wave, Time Cycles along with classical technical tools to trade in various Markets in all asset classes including Equities, Commodities and Currencies.



## WHY AUTOMATED TRADING SYSTEM?

- Elimination of Greatest Evil of Trading – “EMOTIONS”
- Back Testing makes sure that statistically the System will Generate ‘similar’ if not same returns in the coming future
- Disciplined Approach to Trading
- Consistency of Performance over the long Run
- Objective Trading Decision , without Bias, Views, News, Feelings etc.
- No Need of FORECASTING

*If you make a bad trade, you have money management, you have a whole bunch of things that will come to your aid, and you're really not in so much trouble if you make a bad trade. But if you miss a good trade there's really nowhere to turn. If you miss good trades with any regularity you're finished, you're doomed in this game.*

*- Bill Eckhardt*

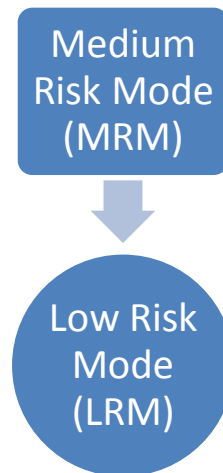
*No technical Indicator will help you in Sideways Markets. You are bound to lose some money there. And all technical Indicators will echo the same thing when there is a good Trend. Once you have a Trading System , no trending moves will be missed ever. So it all comes down to how less you lose in a Sideways Market*

*- Vishal Dalvi, CMT*

# NIFTY TRADING SYSTEM METHODOLOGY

*The System is a **Trend Following System** and Trades Nifty futures trying to capture major moves in Nifty. The key to the system is its ability to generate excess return while keeping the Drawdown least. This has been possible because of Prudent Risk Management Techniques & Position Sizing Algorithm embedded in the System*

- ✓ *Instrument – Nifty Futures*
- ✓ *The System can be executed in 2 modes depending upon one's Risk Appetite*



# BACKTESTING

✓ *Period for Back Testing – Aug 2006 to Aug 2014 ( 8 years)*



# BACKTESTING

*Following Expenses are included in the P&L calculations*

BROKERAGE	0.005%
TURNOVER TAX	0.002%
SECURITY TRANSACTION TAX(STT)	0.010%
STAMP DUTY	0.002%
SEBI CHARGES	0.0002%
SERVICE TAX	12.36%
SLIPPAGES	0.10%

# LRM (Low Risk Mode) SYSTEM -NIFTY vs LRM P&L

-NSE50 [NIFTY](7,951.25, 7,959.65, 7,939.20, 7,951.00, -0.29980), 1 SYSTEM1 Equity(478,147.8)

- Trading 10 lot of Nifty futures starting with a capital of 10,00,000 increases to 61,03,750
- Increased 410% from Aug 2006
- Compounded Returns of 22.6% per annum for 8 years

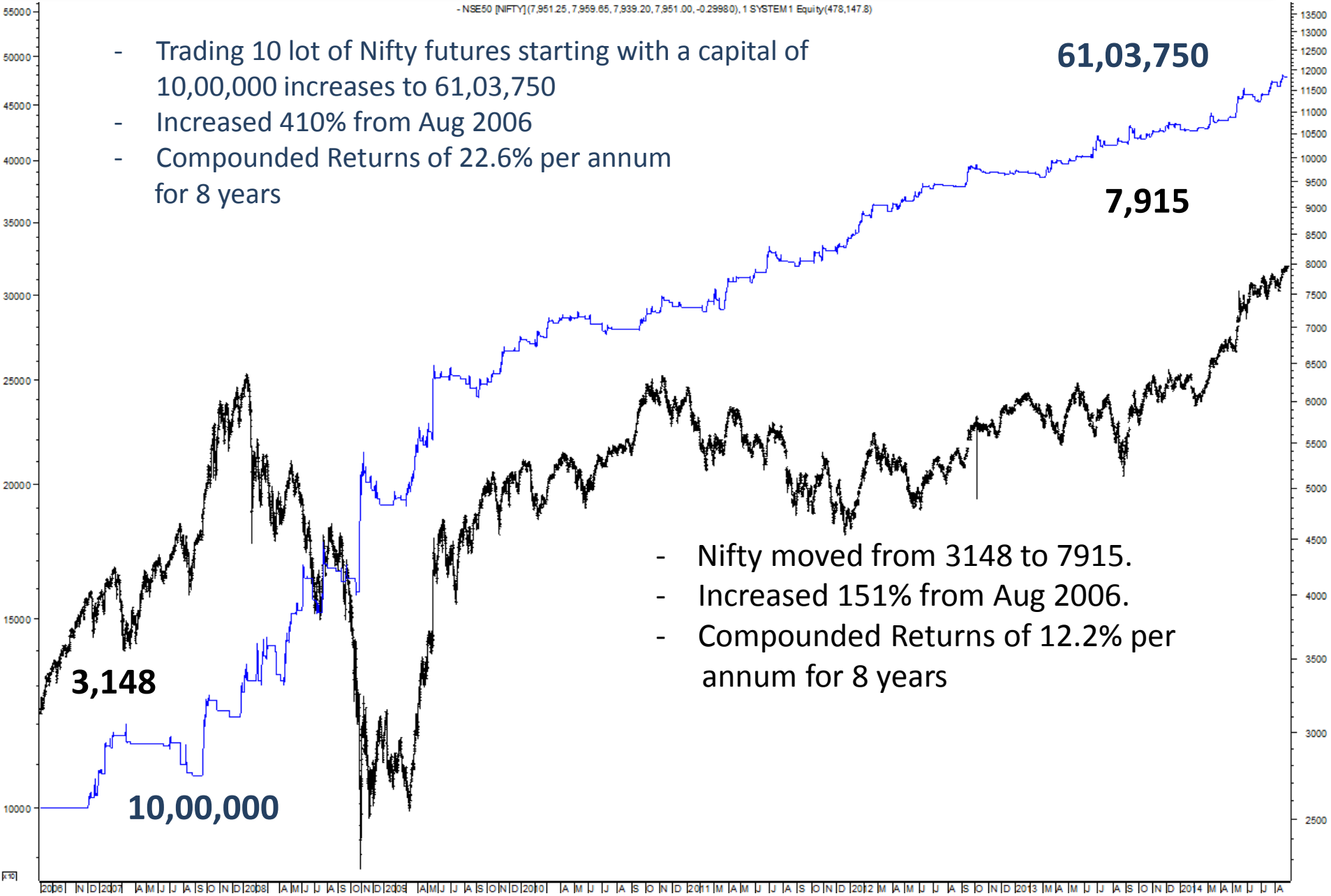
**61,03,750**

**7,915**

- Nifty moved from 3148 to 7915.
- Increased 151% from Aug 2006.
- Compounded Returns of 12.2% per annum for 8 years

**3,148**

**10,00,000**



# LRM SYSTEM - PERFORMANCE

<b>NO. OF TRADES</b>	<b>362</b>
SUCCESSFUL TRADES	155
FAILED TRADES	206
PROFIT IN PROFIT TRADES	8213490
LOSS IN LOSS TRADES	-3109920
AVG. PROFIT IN PROFIT TRADES	53000
AVG. LOSS IN LOSS TRADES	-15100
EXPECTANCY	14050
CUM P&L	6103570
MAX DRAWDOWN	153820

# MRM(Medium Risk Mode) SYSTEM -NIFTY vs SYSTEM 2 P&L

-NSE50 [NIFTY] (7,951.25, 7,959.65, 7,939.20, 7,951.00, -0.29980), 1 FINAL SYSTEM Equity(832,027.6)

- Trading 1 lot of Nifty futures starting with a capital of 10,00,000 increases to 81,40,780
- Increased 714% from Aug 2006
- Compounded Returns of 30% per annum for 8 years

81,40,780

7,915

3,148

10,00,000

- Nifty moved from 3148 to 7915.
- Increased 151% from Aug 2006.
- Compounded Returns of 12.2% per annum for 8 years

# MRM SYSTEM - PERFORMANCE

NO. OF TRADES	801
SUCCESSFUL TRADES	324
FAILED TRADES	476
PROFIT IN PROFIT TRADES	13462020
LOSS IN LOSS TRADES	-6321240
AVG. PROFIT IN PROFIT TRADES	41550
AVG. LOSS IN LOSS TRADES	-13280
EXPECTANCY	8900
CUM P&L	8140780
MAX DRAWDOWN	208050

## Detail Evaluation of the System\*

- Net Profit / CAR
- Success Ratio
- Average Num. Of Trades per Month
- Most Consecutive Losses
- Average Gain per Trade v/s Average Loss per Trade
- Expectancy
- Maximum Drawdown
- Maximum Drawdown Time / Recovery Factor
- Profit Factor
- t –Test

*\* All System performance figures are based on Initial Capital of INR10,00,000 Trading 10 lot of Nifty Futures for every signal.*

# PROFITABILITY

	LRM	MRM
<i>NET PROFIT</i>	51,03,750	71,40,780
<i>Compounded Annual Return</i>	22.6%	30%

## ACCURACY

	LRM	MRM
TOTAL TRADES	362	801
AVG. MONTHLY TRADES	4	10
SUCCESS RATIO	43%	41%
MOST CONSECUTIVE LOSSES	8	7
AVG. PROFIT PER TRADE	53000	41550
AVG. LOSS PER TRADE	-15090	-13280

# EXPECTANCY

*Expectancy tells you on average how much you expect to make per dollar at risk.*

*Expectancy Score is an annualized Expectancy value which produces an objective number that can be used in comparing various trading systems. In essence the Expectancy Score factors in a trading system's trade frequency. The higher the Expectancy Score the more profitable the system. This final score allows you to compare very different trading systems.*

*While net profit can be a factor in your decision about a particular trading system, profit factor is often even more important in my opinion. **Profit factor** measures the efficiency of your trading system. Profit factor is calculated by dividing the generated profit by the generated losses.*

	LRM	MRM
EXPECTANCY	14100	8910
EXPECTANCY SCORE	159	313
PROFIT FACTOR	2.64	2.12

## RISK / DRAWDOWN

	LRM	MRM
MAX. % DRAWDOWN	15%	20%
MAX. DRAWDOWN TIME	9 Months	4 Months
RECOVERY FACTOR	33.2	34.3

**Recovery Factor:** It is equal to the absolute value of Net Profit divided by Max Drawdown. Recovery Factor should typically be larger than 1. A healthy Recovery Factor is an indication that a system can overcome a drawdown.

## t -Test

	LRM	MRM
t-Test	5.2	5.9

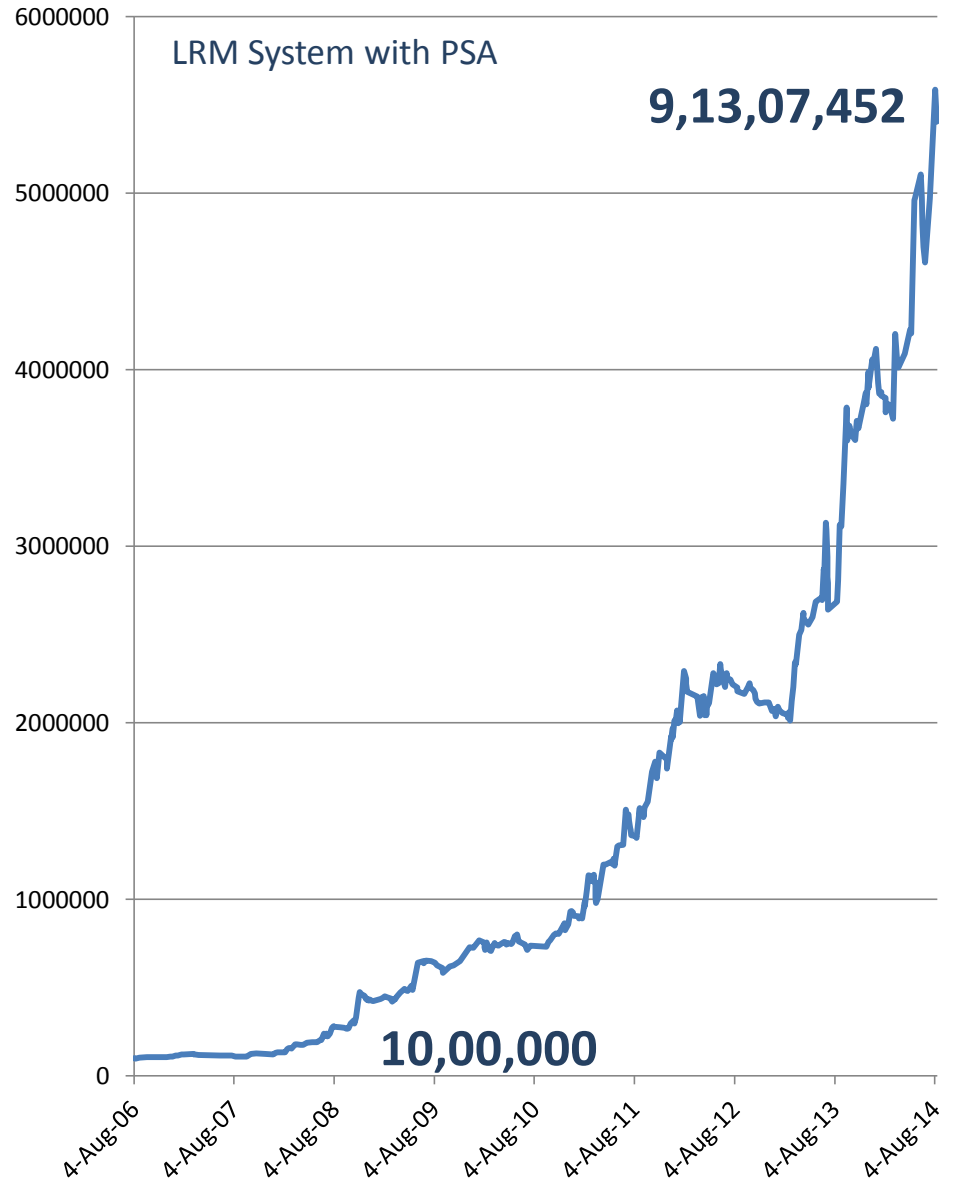
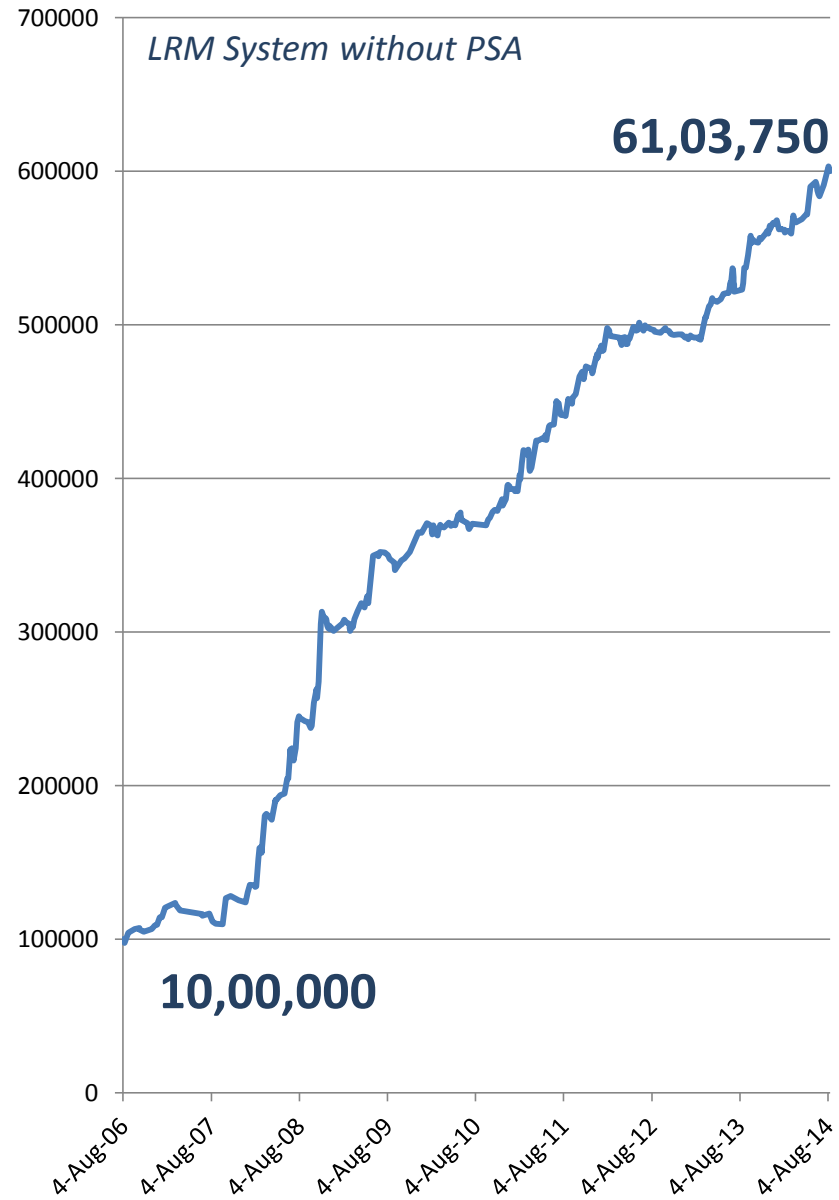
*This is one you don't see much of. The t-Test is a statistical test used to gauge how likely your trading system's results occurred by chance alone. You would like to see a value greater than 1.6 which indicates the trading results are more likely to not be based on chance. Any other value below indicates the trading results might be based upon chance. The t-Test value should be calculated with no less than 30 trades. Below is the t-Test calculation.*

*$t = \text{square root ( number of trades )} * (\text{average profit per trade} / \text{standard deviation of trades})$*

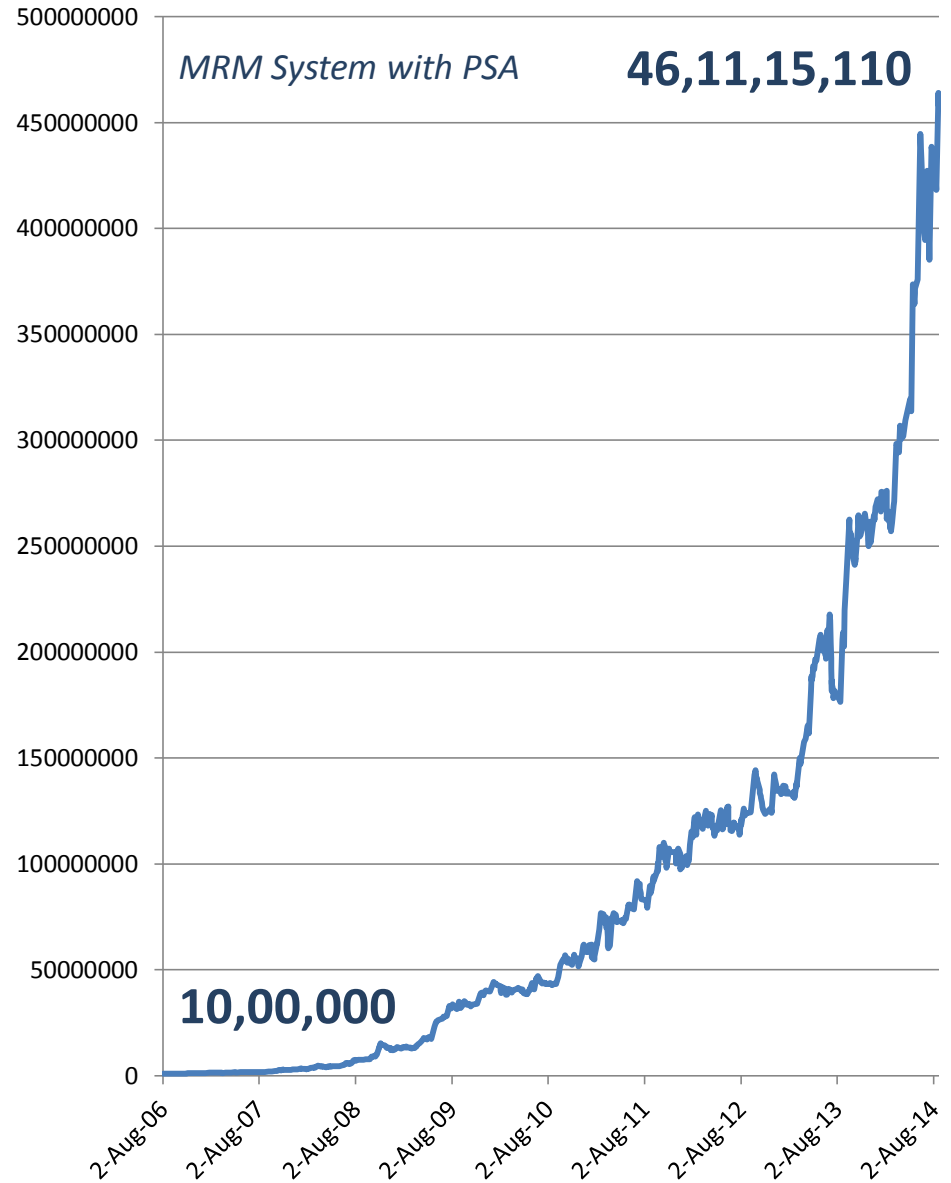
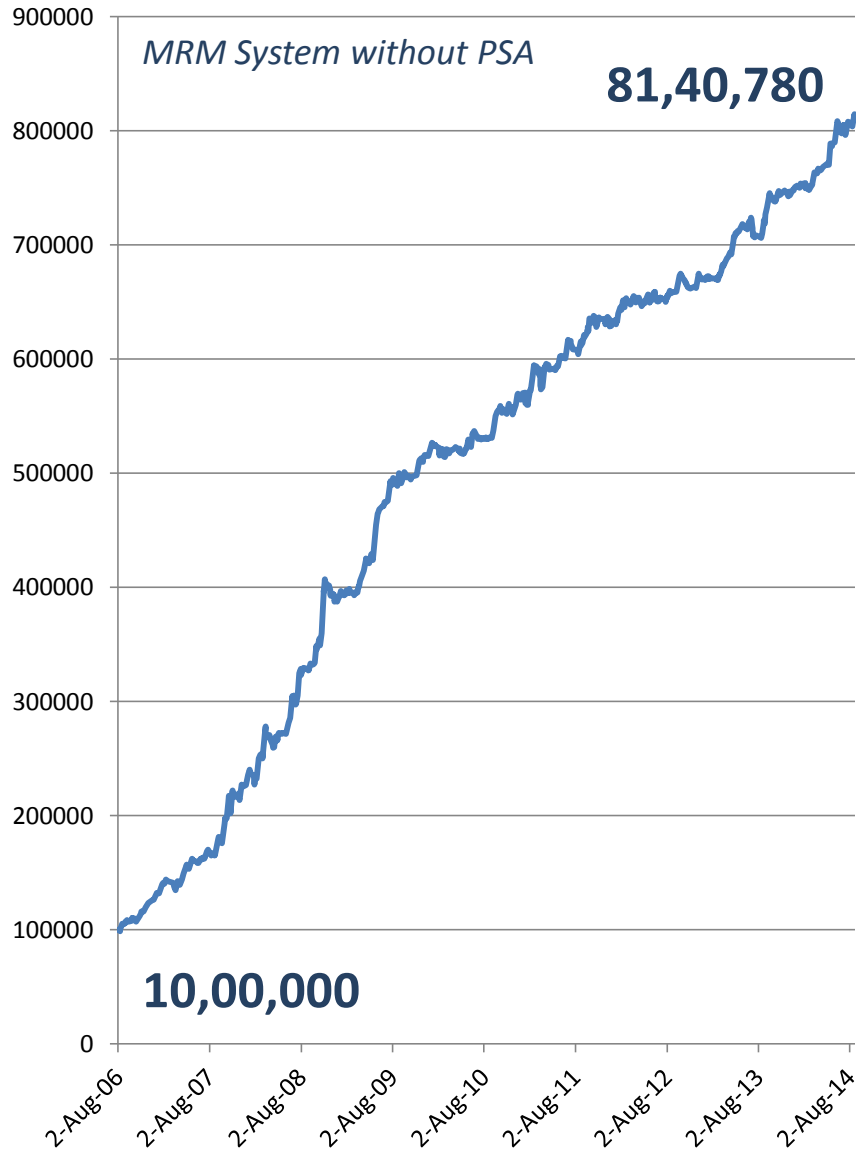
## KEY INGREDIENT – POSITION SIZING ALGORITHM(PSA) ,

- Position Sizing forms a very significant part of a Trading System and can drastically enhance the performance of the System keeping the Risk at the same level.
  - The earlier System performance showed 10 lot of Nifty future for all the 8 years. But as the Capital size increases , more than 10 lots could be traded thus enhancing the performance.
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# LRM - POSITION SIZING ALGORITHM(PSA) ,



# MRM- POSITION SIZING ALGORITHM(PSA) ,



## Performance with Position Sizing Algorithm

	LRM	MRM
CAR Without PSA	22.6%	30%
CAR With PSA	75.82%	115.27%
Risk Without PSA	15%	20%
Risk With PSA	16%	22%

# Want more Details?

For further details about the Trading System, Back tested Excels, Personal Meeting or Collaboration please contact us at [helpdesk@wavesresearch.com](mailto:helpdesk@wavesresearch.com)

Our Director, Developer of the Trading System can be reached at [vishaldalvi@wavesresearch.com](mailto:vishaldalvi@wavesresearch.com)



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