



Will Elon Musk solve most problems of the world?

By
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Elon Musk

- He is 42
- He is creating waves in various industries and he is a disruptor whichever industry he enters like Steve jobs
- He thinks anything is possible
- His TESLA car surprised the world by winning the 2013 Motor trend 'Car of the year' award
- He is UK's personal advisor on electric vehicles
- He thinks future of automobiles is fully electric

He starts with laws of physics and works back

- To lift x pounds into orbit would take y amount of fuel and that requires raw material costing z
- $Y+Z$ is barely 1% of what NASA spends
- Elon Musk launched SpaceX (Space exploration technologies) based on this premise and gambled a large portion of his net worth investing in it
- THIS IS BREAK THROUGH THINKING THAT CAN CHANGE THE WORLD
- AND HE IS DOING IT!
- SpaceX may make going to Mars something like going from India to USA!

Elon Musk likes Physics thinking

- Reasoning by analogy will lead to ridiculous ideas like people thought some centuries back
 - If transportation increased at same pace world would be inundated by Horse manure! They could not think beyond 'more horses' to solve transportation problem!
- Elon Musk says: “ I go by first principles; I boil things down to their fundamental truths and reason up from there, as opposed to reasoning by analogy”

The electric car of the future

- TESLA his electric car is making waves
- Revenue at Tesla is up more than 12 fold for first 3 quarters of the year!
- Company's sale will touch \$2B in 2013!
- It has a market cap higher than the very old car company General motors.

How Elon Musk changes everything

- TESLA is a great electric car that is desirable!
- Just look at one of its features right out of SCI-FI
- The door handle extends as driver approaches and automatically retracts to minimise air resistance during motion!
- People said “This is the stupidest thing ever; how will such a feature work in all temperatures , in desert as well as in snow, and also be sensitive enough to distinguish a child’s finger? This can’t be done”
- Now it is there in TESLA!

How Elon Musk changes everything contd.

- For SpaceX he wanted reusable rockets –the industry felt it was a fool’s errand as Space shuttle had been shelved by NASA
- Reusability is the main agenda in SpaceX now
- Grasshopper rocket has already demonstrated its ability to hover, maneuver under precise control and return to base from 2441 feet
- He is on his way to MARS! in some time!

Eye on the horizon and Eye for detail

- He is the rare combination of having the BIG picture and also looking at minutest of details
- He would notice the head lamp which is misaligned by 3 mm!
- He would notice the wrong type of screw in sun visor
- He gets his EUREKA moments everywhere –including the bath
- He woke up at 2 am one day and realised that methane-oxygen rocket engine can achieve a specific impulse greater than 380
- That was the real AHA! Moment!

TRANSPORT REDEFINED

- With ‘HyperLoop’ the ultra-high speed –transit system he can change the way we commute
- He is talking of traveling from San Francisco to Los Angeles in 30 minutes using Vacuum Technology
- He revealed the design in Aug 13
- A working scale model of Hyperloop is expected by beginning of 2015

Other exciting things on his plate

- An Electric pick up truck and even a supersonic jet
- Iron man style design set up
- Self driving cars
- Cars which can become submarines
 - Smart planet asks –does he ever sleep?

Parallels with Steve Jobs

- Dropped out of Stanford Ph.D. program (I think one important requirement for success seems to be dropping out of college!) (Steve dropped out of Reed college)
- Simple dress –T shirts and Jeans (Steve wore Turtlenecks and jeans)
- Was fired as CEO of X.com! (when he was on vacation) (Steve was fired from Apple)
- Ousted Tesla co-founder (Steve ousted NeXt ceo)
- Musk is chairman of SolarCity (like Pixair for Steve)

How does he do it?

- TED's Chris Anderson says like Steve Jobs
 - Elon Musk combines system level design thinking with extraordinary conviction
- He just doesn't bother about failure
- When a Falcon rocket launch failed in Aug 08 a third time he told his employees " Pick yourself up and keep trying!"

Past success

- First company ZIP2 sold for \$300m
- Paypal sold for \$1.5B
- He has had a string of successes to his credit in past

Elon Musk Mantra

- Dream big
- Don't focus on making money (That comes by itself- he is reported to be worth over \$7B)
- Broaden your mind
- Embrace thinking from outside disciplines
- Expose yourself to world's most inspiring designs and designers

Elon Musk mantra contd.

- Make things simple
- Immerse yourself in science and leading edge technologies
- Don't be limited by what's gone before
- Play with radical outside-the-box future possibilities and keep playing until you find something really big that you believe in!
 - With this type of thinking he may end up solving most of our problems and also become very very rich!
 - We would welcome that!

Sources

- Fortune Dec 9, 2013 –has many articles on Elon Musk- he is the 2013 BUSINESS PERSON OF THE YEAR
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