

NUOS

Home

Automation

How a hard-wired Entrepreneur
brought Home Automation to India!





Internet of Things: The Rising Market

Internet of Things: The Rising Market

It is incredible to see that what you have made with your hands is now being used by thousands of people - Neil Savant: Founder & CEO | NUOS Home Automation

India is one of the fastest-growing economies globally. And with its young population and fast-growing internet penetration, digitization and technology adoption in the country is at their peak. The home automation sector is also riding on this up ticking Digital India trend.

The benefits of home automation range from energy savings, improved security & surveillance, to overall lifestyle convenience. Imagine being able to switch off all the lights and fans as soon as you leave the house with a click of one button on your mobile phone, or being able to see who just rang your doorbell when you are in office. How convenient it'd be to switch on the geyser and the air conditioner half an hour before you reach home! Such luxuries have allured the urbanized population to explore home automation solutions increasingly.

In 2018, the Indian home automation market was valued at \$1790 million. It is expected to grow to \$13,574 million by 2026, at an astounding CAGR of 29.8%.

Home automation in India is comprised of four primary segments:

HVAC - Heating, ventilation & air conditioning

Security

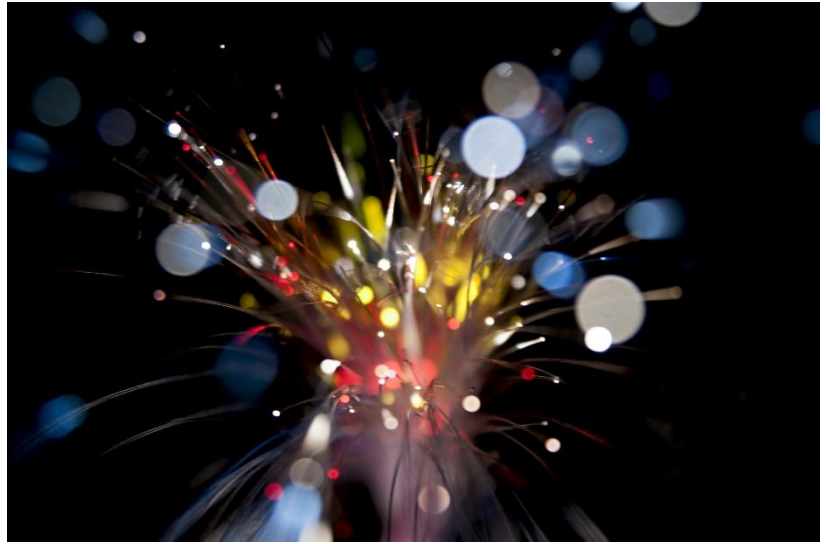
Audio & Video

Lighting



Internet of Things: The Rising Market

The lighting and security segments are the biggest and equally split, making up almost 85% of the automation market. Another important way to slice this market based on technology is by wired and wireless home automation systems. Wired systems are the



conventional cabled systems that are more reliable, cost-effective and can handle large information transfer bandwidths. Wireless systems are newer technologies based on IoT (Internet of Things). The wireless system includes Z-wave, Wi-Fi, Infrared (IR), Bluetooth, and others. They benefit from having better access control, quick installation and regular upgrading of software.

The automation market in India is concentrated around the top 10 metro cities from a geographical standpoint. It is primarily attributed to the growth of IT hubs and HNIs (High Net Worth Individuals) and their need for an improved and upgraded lifestyle.

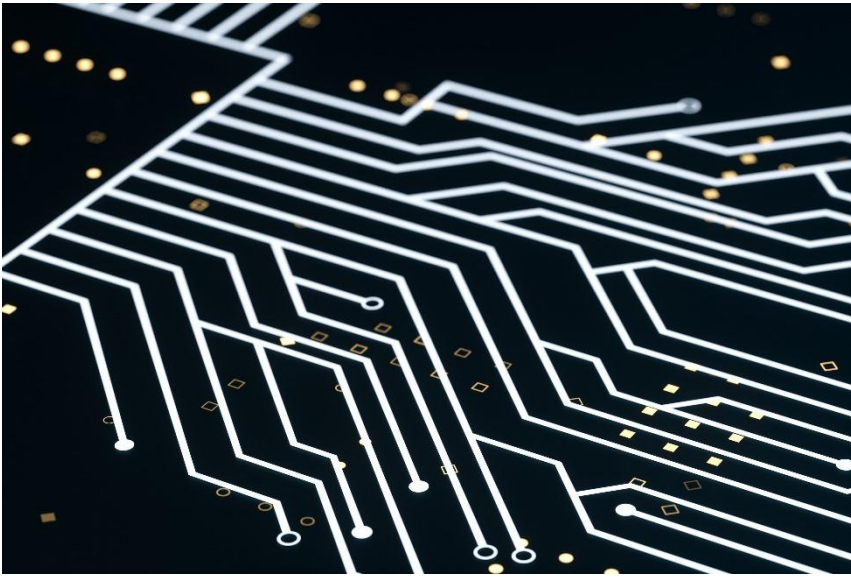
Neil spotted an opportunity here. It was the perfect industry to satisfy his entrepreneurial drive and passion for technology while ensuring that he capitalized on his strong technical background. There was no looking back, and he put all his energy and time into building Nuos - Home Automation.





A Starry-Eyed US Return Engineer

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Neil Savant has been no ordinary engineer; his life story is no less than a T-20 cricket match - filled with excitement, adrenaline and bold decisions.

After completing his bachelors in electronics engineering from Mumbai, India, Neil decided to

test the American waters and left on an educational expedition to get a masters degree in electrical engineering from a reputed college in the US.

His futuristic mindset, risk appetite and the urge to do something new enabled him to write a thesis on autonomous driving of multiple vehicles - something that even massive multinationals hadn't worked on in the year 2008.

The year 2008 is etched in world history books as the year of the Great Recession - the year of global meltdown. The recession caused multiple industries to suffer, automotive being one of the worst affected industries. Despite these adversities, Neil's thesis was funded by Honda, making him the only person in the US in that year to get funding from an automotive company. Following completing his masters, Neil got a fellowship from NSF (National Science Foundation).



A Starry-Eyed US Return Engineer

He then joined Navistar in their Indian headquarters, where he worked on some advanced engineering problems and the most cutting edge technologies. His work there was instrumental in helping the company adapt their technologies to the ever increasingly stringent Euro 6 automotive standards.

Neil then had another management breakthrough with Cummins Inc in their US office. He handled two teams across the US and Europe and was one of the youngest engineers in the management that hadn't seen many brown men in the top brass. He had direct exposure to four company directors thanks to the critical projects he picked up and delivered with the highest effectiveness and efficiency.

At the peak of his career in 2014, he decided to channel all his passion, dedication, and energy to fulfil his early life goal of starting his venture. He moved to India and started working on Nuos.

Neil's past experiences and expertise helped him build intuitively designed superior home automation products. He kept the customer at the center while thinking about the solutions and strategically built their business. He realized that technology alone wouldn't be enough. He'd need a well-structured framework covering all the essential parameters to build a successful business.





NUOS: The Garage Startup, which got it right!

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Nuos is a classic garage startup story!

Niel spent the first eight months creating the technology and the wireframe for the products out of his garage. It was then a function of constant iterations to make the product better with time and feedback. His main objective was to use his control systems knowledge to solve the power consumption problem. Home automation was a stepping stone towards achieving power saving. In this process, he realized the market for home automation and pivoted his vision towards building his entire business around that milestone.

Once the home automation product was ready, the proof of concept was achieved, and the prototype was built, it was time to build the final product.

Niel was very particular about the tactical touch, feel and look of the product. He wanted to be the Apple of home automation solutions. A product that is easy to use with a fantastic user experience with a premium feel. All products were made in India under his supervision with a strict quality checks procedure.

Here is a quick snapshot of Nuos' vision

NUOS is a brand with a passion for creating IoT products that offer solutions that are beyond smart. Products that think for themselves. NUOS is an offering born out of that drive. Our holistic home and office automation solutions are thoughtful and intuitive.

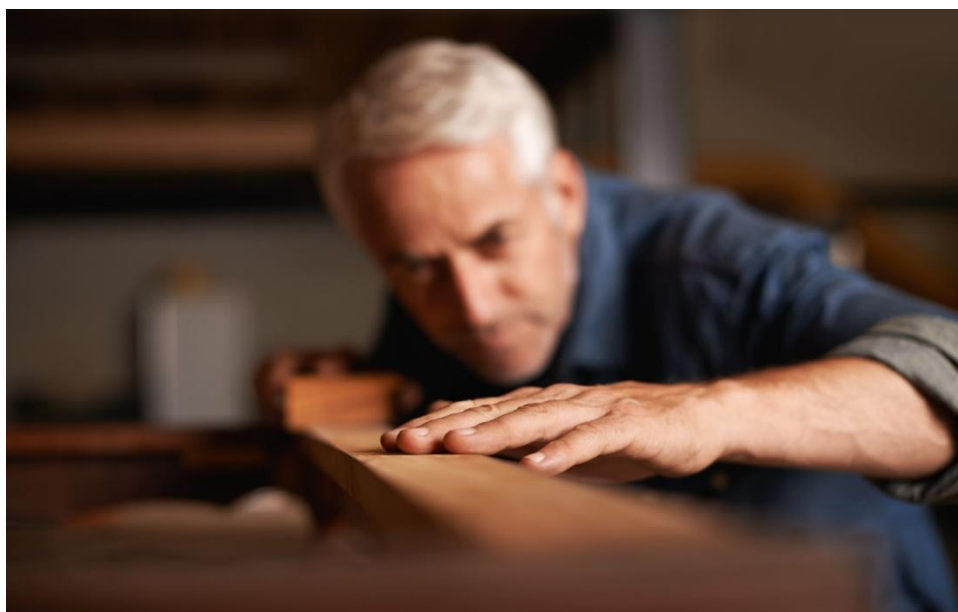


NUOS: The Garage Startup, which got it right!

Niel now required financial backing to scale the venture. He was confident about the product, the market and the company vision. Still, every hardware company needs deep pockets to get the product manufactured and available to the right people in the correct quantity at the right time. In 2017, he participated in the IIT Bombay Annual Pitch Fest. This is a marquee event held at the prestigious IIT Bombay campus, where the best of startups pitch their product and solution to top angel investors in the country. NuoS was able to secure an investment from Sanjay Mehta, one of India's top angels.

This jump-started their growth and enabled NuoS to be their scaling journey.

NuoS also started scaling their team. Neil got Geetika Srivatsava on board as the Co-Founder and Director in 2019. She came with a broad experience spanning across industries in the marketing function. This enabled them to keep their marketing function in house and build a more robust story around their brand and services.





Fitting in the Business Model Canvas

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Every entrepreneur needs advisors and mentors. The first thing most entrepreneurs and investors ask them to create a 'Business Model Canvas'. Now, this also got Neil to scratch his head. He was an engineer at the core, but now suddenly, he was finding himself in the shoes (or instead sneakers!) of a business person. He did believe that his inventions were of great value, but there was a need to communicate their value on paper. The business model canvas helped him visualize his business in one single sheet. It took him 4-5 days to build the business model canvas. And at the end of it, he saw that it was a well-furnished business plan. At many places, he introspected, asked himself difficult questions, and consoled himself at places where he didn't have answers. He realized amidst all this exercise that it is okay not to have all the answers, but at least a starting point should be there to find these answers.

The business model canvas was divided into nine parts :

- Value Propositions
- Customer Segment
- Channels
- Customer Relationships
- Revenue Streams
- Key Resources
- Key Partners
- Key Activities
- Cost Structure



Useful Links:

[The Business Model Canvas - 9 Steps to Creating a Successful Business Model - Startup Tips](#)

Fitting in the Business Model Canvas

Neil decided to focus on the following aspects of the Business Model.

Crafting a value proposition :

'There is a reason it is called crafting a value proposition and not creating!' Neil's mentor and investor told him almost all the time. Every time he asked himself, 'What is the compelling reason a person would want to be a NUOS product?' The most critical word in that question was 'compelling'. Neil realized that the value proposition could be significant, but it needed to communicate crisply. The value proposition wasn't always about what you say, but who are you saying it to. Does the product that you are building appeal to its need? If yes, then there is a good chance of succeeding in the building.

After a lot of trial and error, Neil understood that his value proposition lay in enabling homeowners to create a home of the 21st century. To bring the ease of maintaining their home and the tips of their fingers. But this value proposition didn't come to him in the first instance. It was after a lot of iterations he identified his value proposition.



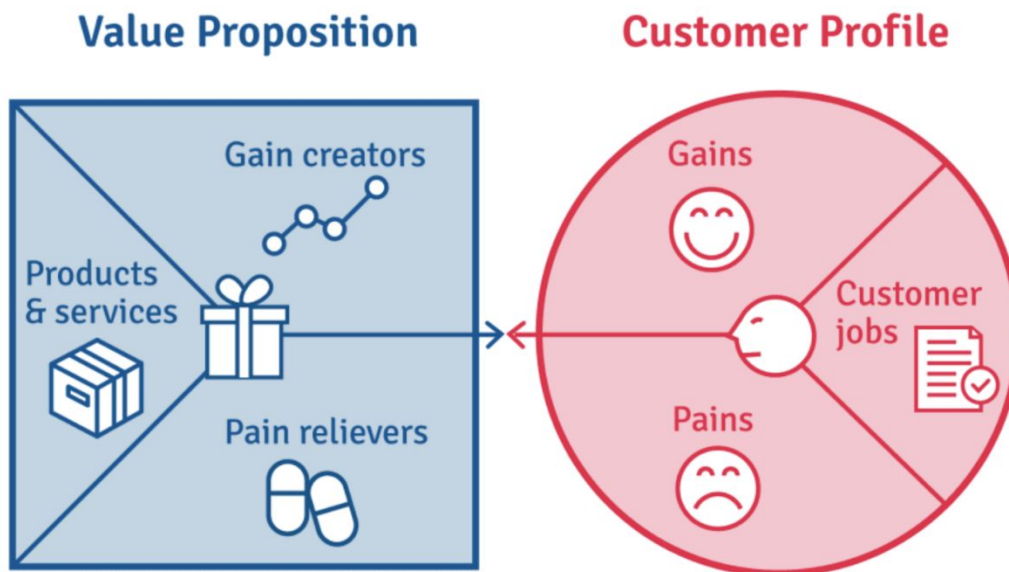
Useful Links:

[Strategyzer's Value Proposition Canvas Explained](#)

Fitting in the Business Model Canvas

One of the handiest tools that he identified was creating the Value Proposition through the value proposition canvas. The value proposition canvas talks about mapping the value proposition under the customer profile. The customer profile needs to get split into three types. The customers who would feel a 'gain'. That is where Neil found his value proposition. That NUOS helped the customers feel a 'gain'. Then Neil tried to derive that customer gain into what product he is building and is he giving the feeling to the customer that their job is done.

Neil used this canvas to refine and get his value proposition after seven trial and error attempts.



Useful Links:

[Strategyzer's Value Proposition Canvas Explained](#)



Fitting in the Business Model Canvas

Identifying the Customer Segment for NUOS



During his pitch days, Neil recalls that every startup home automation had one single pitch, 'Every home will have our devices!'. He instantly knew that he shouldn't be chasing this total market size but identify his early adopters. Instead of focussing and having an approach that, 'I have to build a product everyone', he minimized his customer lenses. He focused on west India and specific builders and a segment of the society he could target. He identified that young couples, the rising upper middle class of Mumbai and Pune, would be his ideal customers. And post this identification of his customer persona, he stayed loyal to his customer persona until either his product or marketing efforts got exhausted. He realized early on that he needed to stick to one singular product and one customer segment and then increase his product portfolio to the same set of customers.



Useful Links:

[Customer Segmentation](#)

Fitting in the Business Model Canvas

Channels

Channels are the bridges through which your customers can connect with you. For NUOS, this meant having a support team the customers can get in touch with you via your website, by email, by phone, by live chat, or even by ping you via your website, sending your support team an email, contacting you by phone, chatting with a live agent, or even posting a problem on social media.

It is also how NUOS can reach out to its customer. The reason why channels are called bridges is that they facilitate two-way communications.

Here Neil could reach out to his customers, and the customers could reach him. The channels here also refer to the mediums through which Neil sells NUOS



products. Neil identified two channels here; B2B2C and B2C. B2B2C was high volume and low margin, and B2C was low volume high margin. B2B2C was NUOS products being sold through real estate developers and builders, whereas B2C was a channel through direct marketing he could get the users. Both channels gave the same amount of revenue and interestingly took the same amount of effort.



Fitting in the Business Model Canvas

Customer Relationships and Revenue Streams

NUOS, to ensure that there is high referral and an extended customer lifetime value, had to invest in excellent customer relationships investments. Moreover, this can assure them steady revenue streams and a good net promoter score.

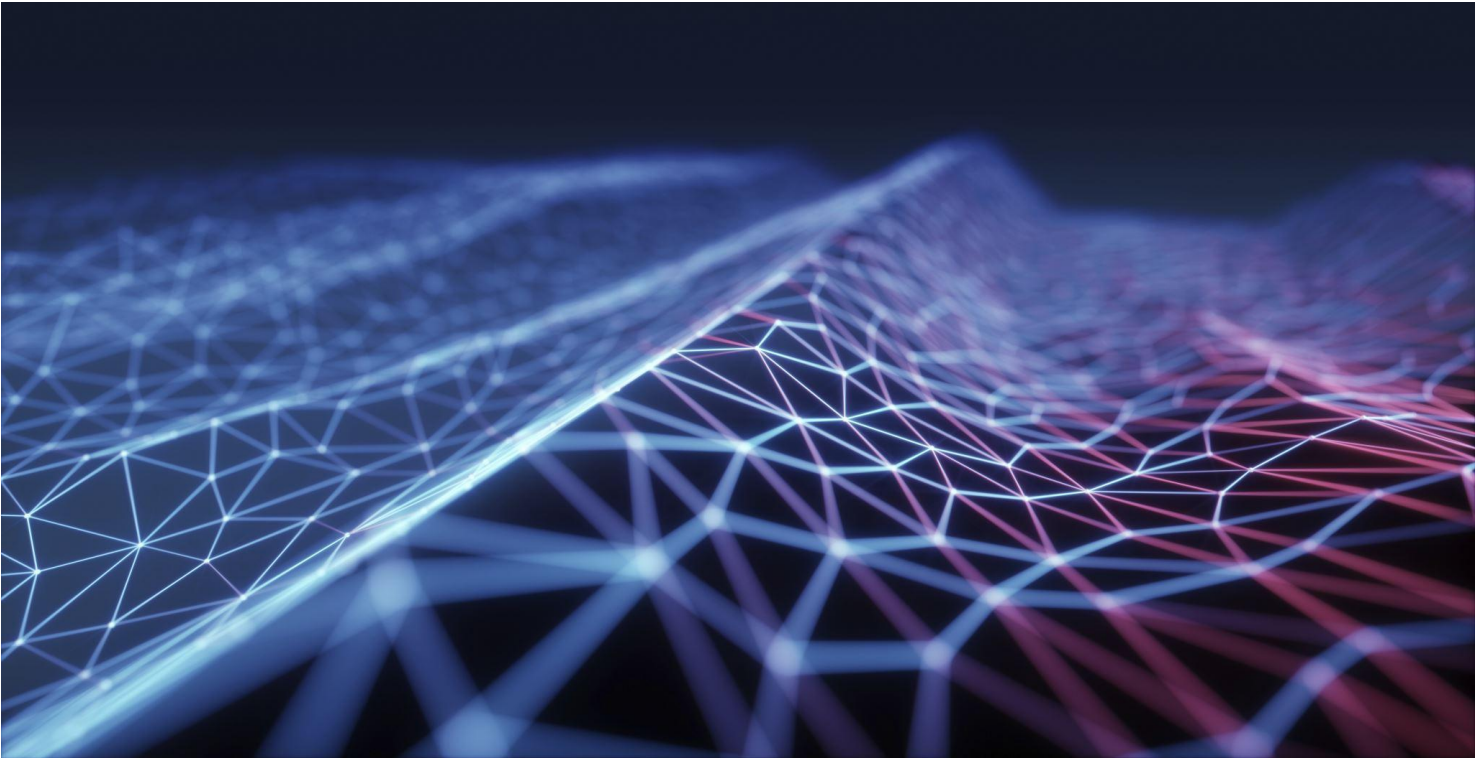
Neil identified that to nurture good customer relationships categories; he realized he could extend that through the following way :

- **Personal relationships & assistance:** He identified high-value customers, which not only gives him higher revenue but has a high referral value. He started building personal relationships with these customers and maximized his revenue and customer loyalty.
- **Self Service:** He divided customers into high and low touch. High touch customers were the ones who were high paying and in low volume. He created a self-servicing model for low-touch customers where most of the questions and relationships are automated. If there is any escalation within low touch customers, Neil decided a 24 hours turnaround time to address.
- **Communities:** One of the excellent ways for NUOS to ensure customer relationships are well maintained is through building communities of loyal customers. Neil knows the power of the community but yet is identify a way to get all his customers on one single platform.
- **Co-creation:** One of the most powerful ways to ensure the customer never leaves you is the method of co-creation. Neil realized that if NUOS future products are co-created by customers, they would stay for longer and, there would be high referral value. Moreover, it would help in managing his product road map effectively





Future Plans



Neil now is planning to penetrate other cities with his designs and products. After learnings how to get acquire and create relationships with customers. Furthermore, he is looking at the Southeast Asian market with modern housing facilities and building a B2B2C customer base. After testing all the plans and validating all the riskiest assumptions, Neil is in a great position to go to the next stage of scaling NUOS Home automation.



End of case questions

1. What is the problem that NUOS Home Automation was solving?
2. Can you identify the type of Business Model that NUOS Home Automation adopted?
3. Can you estimate the market size?
4. Create the Lean Canvas for NUOS Home Automation

