Siemen's Starter

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Old starter of Siemens

Siemens (India) had approached IDC for the design of a starter. Siemens (India) had to take approval from the original company as they controlled the quality and brand image. Prof. Nadkarni had worked in Siemens (Germany) as intern when he studied design at Hoshule Gestaltung (school Design), Ulm. Prof Nadkarni wanted me to take up the project to live up to their expectations! I had already designed Crompton 5A starter by then. This was a starter of 20A capacity and went into Rural use! Siemens (India) was making a starter earlier. It was a huge piece with 50's look! The company had union problems and was shut down for many years!

Those were the days when Trade Union leaders like 'Datta Samant' were ruling the Industrial Scene!



The problem was referred to us by the marketing team. The (R & D) had developed a housing, a copy of Japanese model, based on new technology transferred from Siemens (Germany). Siemens (India) also had some German production engineers working with them. The market leader for 20A starter was Larsen & Turbo. L & T had 70% of the market. Remaining 30% was shared by other smaller companies. The marketing team wanted a design to compete with L & T.

The senior Marketing Manager,Mr. K., visited IDC and had a discussion with me. He explained how R & D engineers still do not understand the importance of design. They had very little contact with the ultimate users and not well versed with 'Product Aesthetics.' I fully understood his concerns! In fact 'Industrial Design' plays big role in bridging the gap between Marketing, R & D and Production. So, he (Mr. K) arranged a meeting at Siemens office to consolidate a brief along with R&D team.

Starter made by L&T



Japanese starter

I went to Siemens Office in Worli. Their factory was at the other endofthe city. .

R & D personnel showed their new proposed design. It was a copy of a japanese design. Small in size, looking like a 5Ampere starter. Siemens (India) was not making 5A starters as their main supply was to big Industries. They also brought the earlier Siemens model. They said the new technology can be accommodated in the small housing! Discussion went on.... They were waiting for my comments! Prior to this, I had designed a 5A starter for Crompton Greaves. This gave me an overall view and an advantage to look at the problem differently! I said that their new model will easily get mixed up with 5A model of other companies like L&T and Crompton Greaves. I also questioned what would be the image-link of new Siemens starter with their old one? How does marketing team propose to convince their customers who had seen or used earlier 20A starter?

My question hit them hard!

R&D engineers had not thought of this. A field officer from Marketing said, "yes sir, we will have a problem with our rural customers. We should go with proper campaign." Then the senior manager said. 'Let us keep some co-relation. We can have both the starters i.e. earlier model of Siemens and the new model, of same height, width can be less in the new model!' I didn't know what to say. I thought it could be a starting point. Switches in the Siemen's sarter were to one side unlike in other models. In the L&T starter switches were in the middle. Switches remained to one side in the new design as well because of the guts inside. The meeting was over.

I started working with this as brief!







There was little scope for any major change in the 'form'. To match with its semantic image as well as physically fit into general switch boards, the starter had to be of box shape. So I started working on radii and edge slopes. I made 7 or 8 plaster models with variations in looks. The starter has to show that it had an advanced technology compared to the Market Leader. L&T model was dark blue in colour and massive in size. But the rural user believed that the starter had more power and is meant for 'heavy duty'. It had a robust look but the form did not express a refined, contemporary image!



I have a habit of working omn 3d models after few initial sketches. At this stage i don't therize much. After struggling for long time I arrived at a satisfying form! I used the new position of the switches to one side as a virtue! I played with the champers to emphasize the shift. The new form brings focus to the changed position of switches. Design had the proportions as decided in the meeting i.e, it had width of new japanese based model and height of old Siemen's starter.



The switch had a new look. Slight circular depression in flat square created distinct identity. I made final mock up model in plastic and wood. Base was in wood. Top part was vacuum formed and finished. Siemens had standardized 'colours and surface finishes' for all their products. Original company had frozen them to ensure corporate identity. I chose one of their approved colour shades. In their earlier model 'name' was embossed as 'projection' in deep drawn metal. How to simulate this was a problem.

I invented a new method!

I took a negative cast of the 'Siemens' name in the earlier production piece in polyester and re-casted it to get the positive! So I had the projected name on a flat 25X50mm piece in 3mm thick polyester! I cut out the Vacuum formed cover of same size. Then I stuck the polyester piece in the gap and finished it. Once the whole cover was finished with putty and painted, the model started looking like a 'produced piece!' For lay men or even engineers it was difficult to make out that it was a simulated model.



For initial presentation, their works manager a senior engineer with lot of experience came to IDC. But before the scheduled time, a junior engineer, a M.Tech from R & D arrived. It is little annoying when people come before scheduled time (as it often happens in India). I was in my room doing final preparation. The model was lying on the side table! This person entered and said, "Oh! When did you get that new model from Germany!" I told him it was our design and a 'mock-up model'. He simply refused to believe. he had not seen a mock-up model before!

Then the works manger Mr. N came on scheduled time! We had a meeting in Ergo lab as conference room was occupied.

Mr. Nene had a problem, He said, "the design is not symmetrical, we should have the switches in the middle! We can increase the size to make it symmetrical!"

I was angry! I was in no mood to buckle to a production manager. The marketing Manage hadn't come. They want this as a preliminary round for feed back! The model was looking cute!" I asked him "Mr. N, Are you responsible for Aesthetics or am I responsible as a design consultant?" He said, "You are!"

"then please listen to me, what are you are talking is of pre-bauhaus aesthetics. If you want to give any suggestions, please attend my course on 'Form'. I don't have time to convince you on aesthetics, you are responsible for problems in production and assembly" I said. Thus the preliminary meeting ended with the works manager. A final presentation was arranged in Siemens factory, where their M.D and others would be present. More senior people in the Marketing would also come", they said.

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After the meeting with the 'works Manager I started reflecting on my design. I was convinced of the look! Clear about product statement. I felt it didn't look strong, powerful and enough compared to the 'L& T' starter in the market. I thought I got trapped by the initial meeting and brief which followed. It was arbitrary and had no 'semantic' basis There was just weeks time! 'Is it necessary to work on a new model or take chance and "push" the cute looking design?'.

I was not happy after the discussion with the works manager, though I took an aggressive stand and dominated him. I also realized that the space inside the box was less for connecting the incoming and outgoing thick cables!



And I remembered the story of "Charles Eames" our tacit 'guru'. Eames went for a presentations to Washington from Chicago(where his office was) on a Friday. Monday he was to show a film as presentation for design of 'Aquarium!' He had been studying fish behaviour for more than a month as part of the project. He saw the film on Saturday in Washington and was not satisfied. He flew back! Reshot the film overnight on Sunday and Came back to Washington and presented it on Monday!

This story had left a deep impression on me! I quickly casted couple of P.O.P(Plaster of Paris) blocks and started working with different proportions. Same slopes on wider base. By evening the model was ready and looking more like an industrial starter! I got the wooden mould made for vacuum forming. My team was working day and night. The product got ready before the presentation day.



There were two models for presentation. I showed both the models, explained use of refined chamfers to convey sophistication of advanced technology and how I took advantage of the switch position which had gone to one side to create a new identity with asymmetric chamfers! Though the smaller model was looking cute, I recommended the bigger one keeping in mind the L & T competition. The M.D was happy with the new design. He was saying to his engineers that even in the guts inside the details should be refined. Just at that time one Mr. G, a senior Marketing Manager arrived. He said, he was sorry that he got held-up in the traffic. When he was shown both the models and asked which one he would prefer, he said, "I like the small one, it is cute! But my customers will like the bigger one!" So my views got validated by the senior marketing manager!

It was a happy ending.



The German production engineers made sure that each slope and radius was produced as per our specification.

The works Manager Mr.N changed his views. He started praising the design. He was requesting me to help in working out details. I told him not to worry and I will solve any problem which will come in the new design!

The design got produced. It was little too plain. Black label with white letters was not in the standards given by Siemens. We had to use black letterrs on aluminum plate. it was little short of visual weight The advertising agency added stickers on the top to make it colourful. Looked good for a first look and the pictures which will be advertised became more emphatic!

I Learnt something!

A decorative touch brings life to an industrial product!