

Breaking the Frame: From Styling to Strategy

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Xihui Liu (Sylvia Liu) joined Hong Kong Polytechnic University as a PhD candidate at the School of Design in 2007. Prior to this, she was design manager in NOVA DESIGN(www.e-novadesign.com), which is one of the world's largest independent design consultancies and the largest of its kind in Asia, and responsible for the management of the design projects and the design department which includes three teams: design research, product design and transportation design. From 2002-2006, she had played a vital role in establishing NOVA DESIGN's branch in china mainland and its local design team. The majority clients she has serviced are market-dominated companies in China, such as GM, YAMAHA motor, Faw, Kinglong, SYM motor, Zongshen motor, Siemens, Electrolux, Haier, Hisense, CNC, Midea, BBK, Konka, and so on.

Her current research is focused on the theme of the role of design management and design capability in enhancing competitiveness in Chinese SMEs. Other areas of research include the development of design capacity in Chinese SMEs and models of outsourcing design in China.

Introduction

How design consultants create value for enterprises is still dominated by a focus on design skills, with outside designers generally being commissioned to bring a dimension of flair and uniqueness assumed to be lacking in internal design teams. Consultants therefore apply their practical design skills to work on projects within the boundaries of existing business strategies, which we term *bounded design projects*.

Although discussion of the strategic potential of design has been a continuing theme over the last twenty years or so, how design consultants break out from the confines of bounded projects to pursue a wider role and, in particular, contribute to more efficient competitive strategies in a client company, is relatively unexplored. Among other aspects, this requires inculcating a broader understanding of design in client companies and establishing a mutual relationship of trust.

The strategic dimension, moreover, is not only confined to client companies, but should also be reflected in the planning of design consultancies: in other words, they should know how to create value for themselves as well as creating value for clients. This means that while offering design services to enterprises, design consultancies should clarify their own role, think clearly about action process and establish strategies for their own businesses.

This case demonstrates how a design consultancy moved from an initial commission for a bounded design project to establish a strategic role, creating long-term collaboration from a one-chance opportunity. It is particularly relevant to understanding current developments in Chinese design, which is still dominated by limited visualization skills and with enterprises generally evaluating design consultancy's "design ability" on the basis of first-time collaboration.

In this case, a design consultancy, Nova, and Kinglong, a manufacturer, overcame initial obstacles in cooperation, transformed a problematic relationship into a win-win one, and eventually established a basis for long-term cooperation.

The Clients: Kinglong

King Long United Automotive Industry Co., Ltd. is a coach and bus manufacturer located in Xiamen, Fujian province, People's Republic of China. It was founded in December, 1988. Kinglong is now jointly owned by Xiamen Automotive Industry Corporation, Xiamen State-owned Assets Investment Co., Ltd and San Yang Industry Co., Ltd. from Taiwan.¹ It has facilities covering 200,000 square metres with over 1800 employees. It is the leading manufacturer in China with an annual production

¹ San Yang is a sub-company of the Chinfon Group, a Taiwanese conglomerate with annual turnover of over US\$4 billion, which has interests in a wide range of manufacturing and financial enterprises and has also invested in Nova Design.

capacity of 30,000 vehicles, and in 2006, sold 23,291 coaches with sales revenue of US\$9.2 million.

Revenue was expected to grow by some 30% in 2007. The Company currently offers 5 series of

products, which are also sold to overseas markets in

Europe, the Middle East, and the Americas as well as

Asia (Fig.1). Its competitive position in had been

essentially dependent upon the low labour costs typical

of the Chinese economy.



Fig.1. Coaches of Kinglong

The Consultants: Nova Design

Nova Design was established in 1988 in Taiwan by the Chinfon Group (see Fig.2). Employing 200

individuals from 12 different nationalities, it is one of the world's largest independent product design

consulting firms and the largest of its kind in the Greater China region, with operations across six

global offices, in Asia, including one in Shanghai, Europe and America.



Fig.2. Nova Design's Logo

With its global expertise and local experience, Nova Design's aim was

to bring business value and competitive advantage to clients through

expertise in research and trend study, product and interface design, prototyping and engineering

services. Over the past 20 years, it has served numerous industries and product categories, including

consumer electronics, computers, communications, medical equipment and healthcare, housewares,

and transportation.

Project background

King Long went through a change of organization in 2004, after a new top management team was appointed. Because Chinfon Group is a shareholder of both Kinglong and Nova Design, Kinglong looked to Nova to offer high quality design services to promote their new business plan, which included developing new styling for its coaches. Based on the experience of the project, they would then determine whether further cooperative relationships were feasible. Kinglong's target was to win a major award at the event which set the industry standard, the BAAV Asia 2006 (Bus World Exhibition) in Shanghai, the Asian offshoot of Bus World Kortrijk, the world's premier bus and coach exhibition. Kinglong senior management therefore assigned a coach exterior design project (K01-1) based on a low-cost basic chassis specification to Nova Design

For Nova, however, the project was to be anything but simple. Among the problems were:

- This was the first instance of design outsourcing by King Long, based on a top-down requirement, which created resistance from the in-house design department.
- In a first-time project, Nova had to distinguish its design services from the in-house department, otherwise it could be its last.

- The project to design a coach required Nova's designers working with engineers in King Long, with a need to seamlessly integrate these functions.
- The schedule was very tight. The projects began in June 2005 and all design outcomes were to be ready for BVVA 2006, which took place in March 2006.

Kinglong had an R&D team, which had been responsible for the company's output in the last 20 years, winning numerous honours for successful products. When the decision to assign a project to Nova was announced, the R&D team, especially the industrial designers, expressed vehement disapproval. In an effort to placate the in-house team, Kinglong assigned another exterior design project to its own design team on the same time-scale, but with a higher-specification chassis. Both designs were intended to be submitted for exhibition and competition at BAAV Asia 2006. The results from BAAV were intended to provide an audit of Nova's design abilities, which would not only influence the subsequent partnership between two companies, but also directly condition the design development strategy of Kinglong in the future.

Nova's Strategy

Though Nova had full confidence in its design ability, their internal strategy was cautiously planned for success in a one-shot design project, avoiding, if possible, problems that were not design-related

and, in particular, any directly competitive conflict with the client's design team. The differing chassis specifications for the two projects, however, could be seen as unfairly disadvantaging Nova, which therefore applied for another concept design project for a bus interior from Kinglong on the same time-scale, which was approved as project FCB1. Since Kinglong's intention was to audit their design ability, Nova planned to emphasize improved efficiency and product quality through new advanced design technology in the exterior project, while switching the emphasis in the interior project to the value of improving product and brand image through creative design abilities.

Accordingly, Nova's internal strategy was directed to:

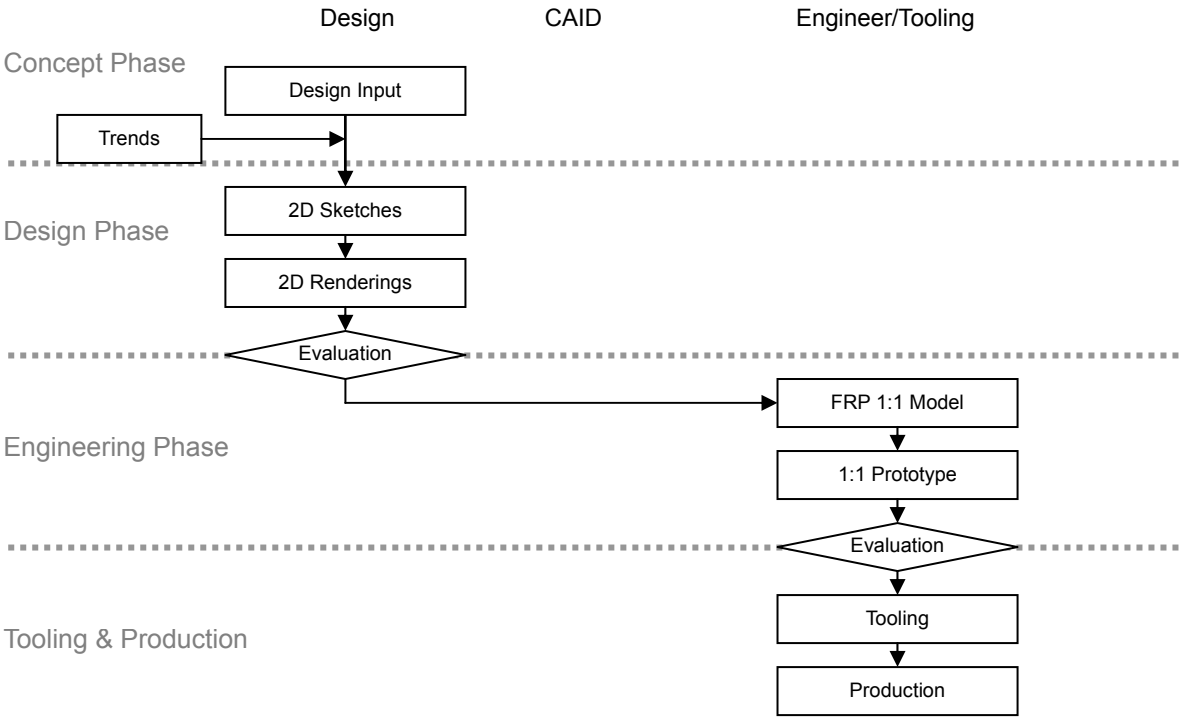
- Fulfilling two projects under the guidelines set by Kinglong and demonstrating design's capacity to enhance business value.
- Displaying various capacities to decision level, including innovation, skills, techniques, methods and management of design.
- Remaining cautious about relationships with Kinglong's R&D group and special design team, while seeking if possible to transform a tense situation into an amicable one.

Project Implementation: The Exterior Project (K01-1)

The established design process of Kinglong's in-house dept was a total linear flow, in which designers

received specifications of design requirements, started to collect evidence of new styles, and combined these new styling trends into their concept sketches. This reliance on what is essentially copying is indicative of the immature state of much Chinese industrial design. Once management approved what they considered appropriate concepts, designers continued on to complete 2D renderings. These documents were then passed to the tooling department, which developed FRP (Fibreglass Reinforced Plastic) models, turning the designer's 2D drawing into 3D form, which was followed by a development of a 1:1 prototype. When this was approved, engineering designers followed up with tooling and ramping up for production (see Fig.3).

Fig.3. Linear design process in Kinglong

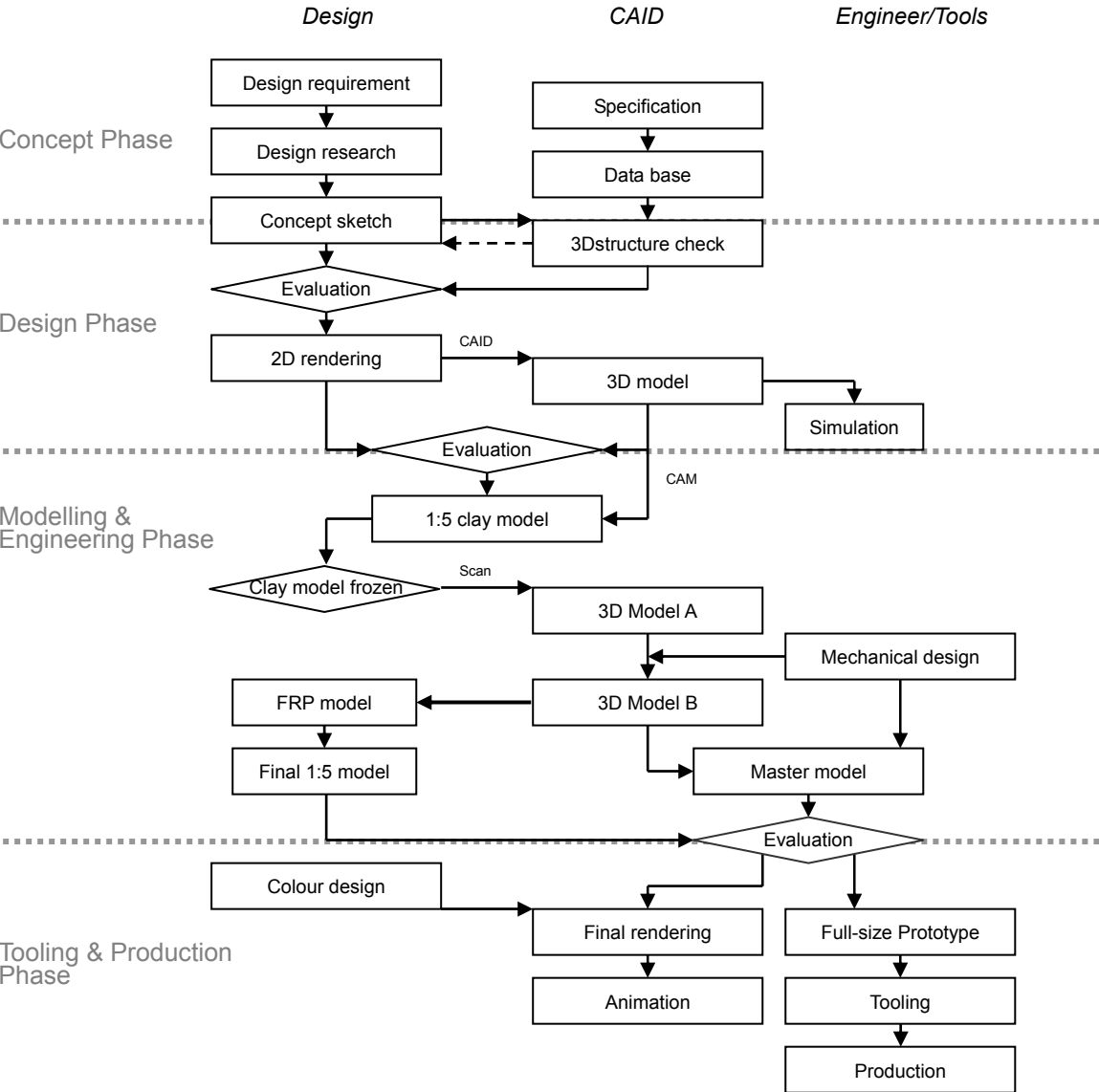


With the linear process, any original concepts generated in the design phase are difficult to sustain, since in-house designers lacked the engineering knowledge to follow designs through to

implementation. Consequently, when engineers took over and found any conflict between styling and structure, they preferred to modify the style to match the engineering requirement.

In the exterior project implemented by Nova Design, designated K01-1, the focus was on the project plan and the utility of CAID techniques in a digitalized process, (Fig.4).

Fig. 4. The integrated design process of K01-1



Compared with the design process of Kinglong's in-house department, Nova's design process integrates different professional functions, ranging through design, computer-aided processes and engineering to tooling. In this process, all functional units take part in the project from the earliest phase, so they can share the data, information and knowledge, evaluate design concepts and make suggestions for design refinements. The aim was to get all contributors buying in to the overall design concept at the earliest stage to achieve unanimity in the crucial implementation stages.

Comparing the two design processes, Nova's project implementation demonstrated its difference and advantages on five levels:

1. Design research in the Concept Phase

In the concept phase, Nova emphasized design research to distinguish their approach from the emphasis on design reference work and sketches in Kinglong's process. This stage was carried out by specialist design researchers from Nova (see Fig.5).

Considering that Kinglong was probably experiencing design research as a professional methodology for the first time, Nova planned to implement it in a precise manner, so that its advantages would be clearly demonstrated and effectively understood by Kinglong.

First, after basic information was collected, the researchers precisely defined the design specifications of K01-1 in a “kick-off meeting”, with the cooperation with CAID specialists and the engineering department.

Second, researchers explored the context of the project using effective information collection and analysis, which included the product history and styling development of Kinglong; comparing competitors’ products; analyzing design trends in coaches around the world; and combining structural possibilities with cost considerations to define the design scope (see Fig.6).

Fig.5. Design research process

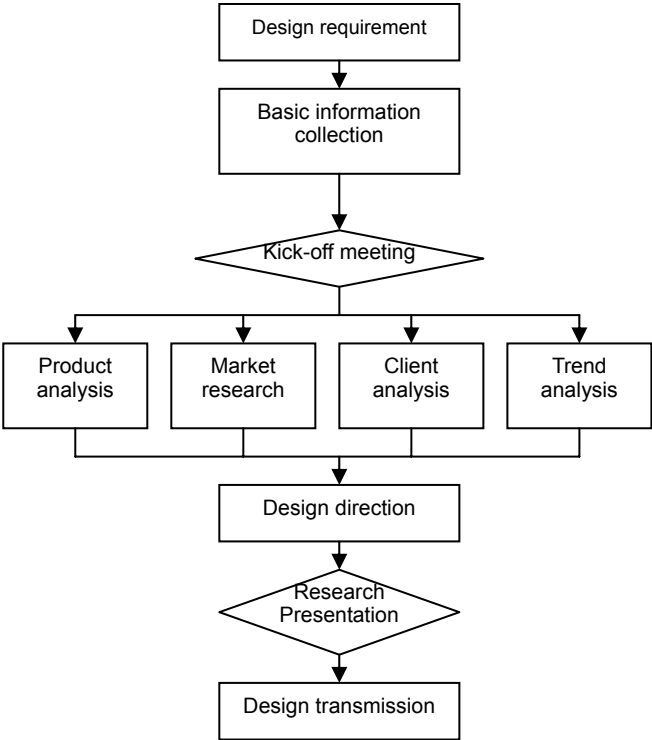


Fig.6. Sample pages from Nova’s Design research presentation

Finally, two design directions were summarized in terms of desired characteristics:

1.1 Direction one

- (a) A simple front face;
- (b) A continuing side character line flowing from the front face;
- (c) Adoption of a leaning-forward line to modify the box-like image of the coach;
- (d) Styling in the front part of the side-window should be continued to the front windshield to form an integrated element.

1.2 Direction two:

- (a) A simple, plump and rounded front face;
- (b) Streamlining in the side-window;
- (c) Continuing a side-character line to front face as styling emphasis and combining it with the styling of front lamps.

Because this was the first experience of working with Kinglong, Nova sought to narrow down the design scope through research that would avoid confusion. In fact, the two design directions proposed, combined with other design information relevant to the project, were presented in a research report to a formal meeting of Kinglong management and were confirmed by them. With this approval, the report was now transmitted to Nova's design team. They therefore began the concept phase following the design directions set out in the report in full confidence that there would be no obstacles from the Kinglong design team or decision level management.

More importantly, from the Kick-off meeting to the research presentation, Nova managed to gradually and successfully involve Kinglong in the K01-1 project.

2. CAID (Computer-aided Industrial Design)

In Kinglong's process, once design concepts were manifested in 2D renderings, they were handed over to engineers without any significant interchange of ideas and information other than that manifested in the drawings. Design concepts were either lost or diluted in this situation. An essential element of Nova's strategy was to bridge this gap between designers and engineers using Computer-Aided Industrial Design (CAID). The advantages of this emphasis were:

2.1 Kinglong did not have any CAID capability. The Nova team therefore reasoned that at the very least, no one would feel uncomfortable or threatened in Kinglong if Nova introduced CAID as a major function in design, and there was always the possibility that CAID techniques might be accepted as a significant improvement by the Kinglong team.

2.2 Most importantly, CAID offered a possible solution to the problems between the design and engineering departments in Kinglong through improving efficiency and delivering a far higher-level specification than a 2D rendering, in terms acceptable and familiar to engineers.

2.3 While introducing CAID as a new profession tool, Nova chose to emphasize the utility of the software used, in this case, Alias. It was presented as useful and advanced software, capable of solving existing problems in the hope that Kinglong would accept and adopt it once its advantages were demonstrated.

2.4 In Nova, the CAID specialists are industrial designers who are enthusiastic about computer technology and trained to master the Alias software. This enabled them to establish digital models with great precision, render models as simulations, create animation where appropriate and transfer the data to engineering software platforms (see Fig. 5). The CAID designers were also trained to be familiar with basic engineering knowledge.

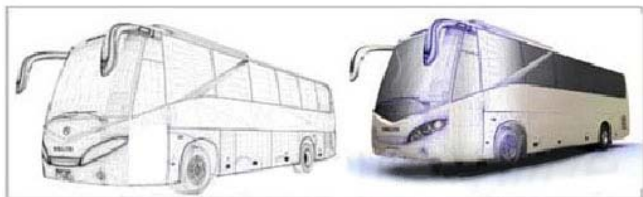
3. CAID procedures

The K01-1 project was therefore a perfect opportunity to introduce CAID as a new professional tool into Kinglong that could offer distinct advantages over existing methods. The responsibilities of Nova's CAID designers were to:

3.1 *Convert the specification into a basic digital model*

This meant establishing a basic 3D model for the development of initial concepts for the K01-1 model, which could then be used by

Fig.7. Digital model as basement for concepts



designers as a basis for sketches (see Fig.7).

3.2 Check the 3D structure

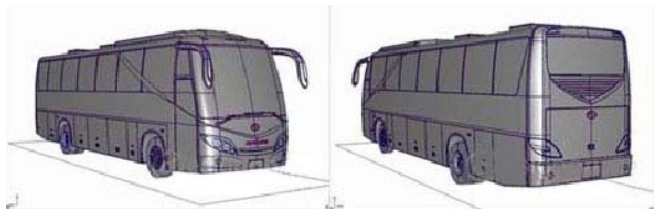
Through their understanding of K01-1's structure and knowledge in engineering, the CAID specialists could review design concepts in a more detailed and objective light, as a means of offering rational and efficient feedbacks to the designers

3.3 Establish 3D digital models

Parallel to the development of initial design concepts, the CAID specialists used Alias to set up 3D models based on the design team's initial 2D rendering proposals. The 3D model data then provided the basis for a scale clay model produced by CNC (Computer Numerical Control). After modifications by the designers, the surface data of the finalized scale clay model was scanned into the computer again as cloud data, which led to the final

3D styling model. The mechanical structure could then be built on to the digital surface data in the 3D model (see Fig.8).

Fig.8. 3D digital model



3.4 Generate conceptual and demonstration models for publicity purposes

Simulation rendering, animation and 3D surface digital data were other capabilities of CAID. With

Alias, the Nova team could create simulation renderings of the finished concept and high-quality animation to

Fig.9. Final simulation rendering



demonstrate the products capabilities and offer possibilities for advertising and demonstrations (see Fig.9).

4. Team work in the Design Phase

In Kinglong, each designer was usually responsible for his or her own concepts and fulfilling them. For management, this made it easy to evaluate the design ability and efficiency of each individual designer. To emphasize difference of design organization with Kinglong, Nova established a temporary design team for K01-1, which consisted of designers from different locations, ranging from China and Taiwan to Europe. In Nova's thinking, it would be very useful in developing Kinglong products for international markets if designers from different countries and cultural backgrounds worked together as a team.

A consideration in the design phase was that since this was the first experience of cooperation, and Kinglong might lack correlative experience, the design implementation should be organized on a step-by-step basis, instead of offering a large number of sketches to Kinglong at one time. This could help Kinglong discover what they really wanted and why, and avoid the potential for confusion in simultaneously throwing numerous design concepts at them.

The step-by-step design phase was implemented in three main phases:

Step 1. Concepts of major characteristics

According to the design directions, Nova designers created concepts of side-character lines and the front face. In this way, the major identified characteristics could be clearly illustrated, which was easily understood and accepted by Kinglong because the design simply followed the design directions confirmed by management in the research stage. As planned, Kinglong chose some styling characteristics for further development at the end of this step.

Step 2. Developing an integrated visual form

Designers went on to develop the rear face of K01-1 after the identity of the front view was audited and confirmed (see Fig.10). From the standpoint of design, Nova was setting out to control the character consistency and refine



Fig.10. Integrated styling

the visual identity of the coaches, something Kinglong had never tried before. From the standpoint of business, this approach encouraged Kinglong to be involved in the design process and understand the professional nature of the design methods used, which also reduced the design risk for Nova.

At the end of this step, the integrated proposals were substantially confirmed at an audit meeting, although some modifications were carried out according to suggestions from the audit.

Step 3. Detailed design

Once the integrated characters of both front view and rear view were confirmed, Nova went on to complete the design phase and to perfect the



Fig.11. Design of front lamps

quality of detailing. Logo, grill and lamps were all taken into account at this point (see Fig.11). Angles, curves or filleted corners could be further refined for a better correspondence with the whole visual character.

On completion of each of the three steps, there was a design audit in which Nova compiled correlative design research information and proposals into a report. The design process would not proceed further, unless management approved the report. It was believed this was an efficient solution to push the design process forward with low-risk, higher accuracy and more efficiency, by insisting on total team-work involving all the main players. The emphasis on team-work and its consistent application in practice, with various Nova designers responsible collectively for all elements, avoided comparisons with Kinglong – the latter’s designers worked as individuals, the former worked as a team and there was simply no basis for comparison.

5. Increasing value in the Modelling and Engineering Phases

In the K01-1 project, the majority of work in the modelling and engineering phases had never involved

the Kinglong designers and so constructing clay models and 3D digital models were totally new methods for them. In this phase, Nova focused on the value of modelling and of integrating design using CAID. Their CAID specialists established 3D models by Alias, in accordance with the 2D rendering of concepts approved by audit. After refining the 3D model, data could be transferred directly into a CNC milling machine to carve a clay model. In the K01-1 project, the full size of coach was too big for this process so Nova chose to produce a 1:5 scale clay model in accordance with international practice.

Designers modified and refined the styling of the clay model until it was finally frozen following approval by an evaluation meeting (Fig.12). From then on, the styling would not be further changed. The surface of the clay model was then scanned into computer as cloud

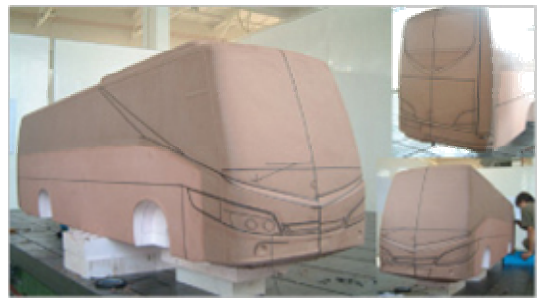


Fig.12. Clay model

data, from which a 3D digital model was established by CAID.

The design process was then divided into two parts, which could be implemented at the same time. One part was for engineers to develop an engineering structure based on the surface model, leading to the data being transformed for CAM (Computer-aided manufacturing) (Fig.13). A master model was produced by CNC milling. By these methods, the integrity of the styling concept was maintained and

engineering design became more efficient (see Fig.14).

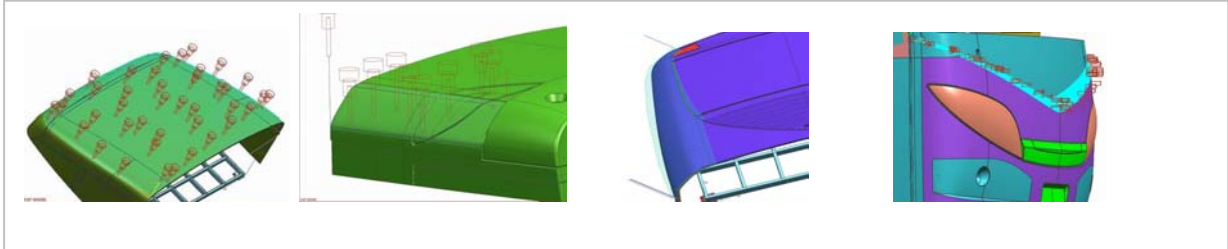


Fig.13. Engineering design and preparation for CNC



Fig.14. Master model

Another parallel process was to carve a new scale clay model by CAM, according to the 3D digital model. The new scale clay model not only was considered as a final audit of the design proposal, but

was also transformed into an FRP model by using the scale clay model as a mould. The model was then painted with lamps and plating fitted. This scale show model was exhibited as one of design achievements in BAAV (see



Fig.15. 1:5-scale show car

Fig.15).

Inside the process, there were several steps which enhanced the value of the modelling and engineering phase.

(1) The basic clay model was carved directly by CNC, which saved work-hours and improved precision.

(2) After the clay model was frozen, a parallel process went further in developing a scale show-model.

(3) Through the application of CAID, designers not only controlled the design concepts and styling, but also offered a precise data base for engineering design.

The advantages of an integrated process were also clearly demonstrated:

1. Design directions were pinpointed through design research;
2. The schedule time-scale was shortened by integrating engineering into design through the application of CAID;
3. The design concepts were constantly refined throughout the whole design process by means of 2D drawings, clay models and 3D digital models;
4. Precise data was provided that enabled product quality to be dramatically upgraded;
5. A professional design process with multiple levels of performance and achievement was demonstrated to improve the brand image of Kinglong, especially in its R&D ability.

The Interior Project (FCB1)

The designation of FCB1 comes from the abbreviation of Future City Bus No.1, which was the target of project. Although this was a concept design, the specified chassis was an old one, which limited the scope for innovation to a considerable degree.

Using different design methods, including investigation, brainstorming and image boards, designers set out to identify consumer's need for future buses in large cities and managed to utilize all the space available inside the bus. In the layout planning, designers distinguished different function areas according to the action routines of passengers and their requirements. In the case of FCB1, every detail was thoroughly considered by the design team. A broad range of users was taken into account, for example, long-distance and short-distance passengers, those with disabilities, parents with children, local passengers and city visitors. (see Fig.16).

An information centre and luggage space was added to cleverly utilize unused space in the original bus chassis. In addition, a ticketing



Fig.16. The Layout of FCB1

system, information LEDs, guide boxes, multi-direction handles and many other detailed design elements were developed (see Fig.17).

The schedule for the design process was very limited, only about half a year. Nova meticulously

planned the whole process and organized the creative team to utilize time efficiently. To make sure every concept idea and detail involved was examined carefully, a checklist for all the design detailing

Fig.17. New functions in FCB1



Luggage space

Information center with touch screen and printer

LED direction to inform next station

Multi-direction handles

in the bus was established. Finally, in cooperation with CAID designers and engineers, all models were finished and assembled on time. Most importantly, the final model was a functional show bus, in which every function could work. As the first concept bus in China, FCB1 not only showed the power of creativity in design, but also created many ‘firsts’ in bus design.

Achievements

1. As the result of these projects, the exterior design completed by Kinglong’s team (Fig.18) was awarded “Coach of the Year” in the 2006 Asia Coach Week-BAAV Awards (see Fig. 19).

2. The interior design (FCB1) completed by Nova’s team was awarded “City Bus of the Year” by BAAV 2006 (see Fig.



Fig.18. XMQ6111Y

19).

Although K01-1 didn't gain an award at BAAV, it made a deep impression on visitors to Kinglong's booth (see Fig. 20). From its scale show car, animation, simulation rendering and visual applications demonstrating the design processes involved, it was clear that Kinglong had making huge improvements in its development process.



Fig.19. Prizes in BAAV 2006



Fig.20. K01-1 in BAAV

Design Cooperation

Keeping to its strategy, Nova presented a review report for the whole design process to summarise the new technology and methods used in the project, with a suggestion that Kinglong modify its design system accordingly. After considering the report the senior management of Kinglong accepted it and proposed establishing a long-term cooperation relationship with Nova.

Nova still works as design consultant for Kinglong, with special responsibility for the essential image definition for major exhibitions. Nova shares a CAID team with Kinglong, its staff working together with Kinglong's designers and engineers as an in-house department and also training fresh CAID

designers for Kinglong at the same time.

In 2007, as the latest result of this collaboration, Kinglong’s new coach (K07) was awarded “Coach of the Year” by BAAV, making Kinglong the first enterprise in China to win this honour two years in succession.

The design process of K07 was based on that of the K01-1, as a learning-by-experience process for Kinglong’s designers to practice working as a team (see Fig.21). Implementing this enhanced process meant Kinglong offered greater scope for designers to express more creative ideas in the project and as a result a strong product identity image was created.

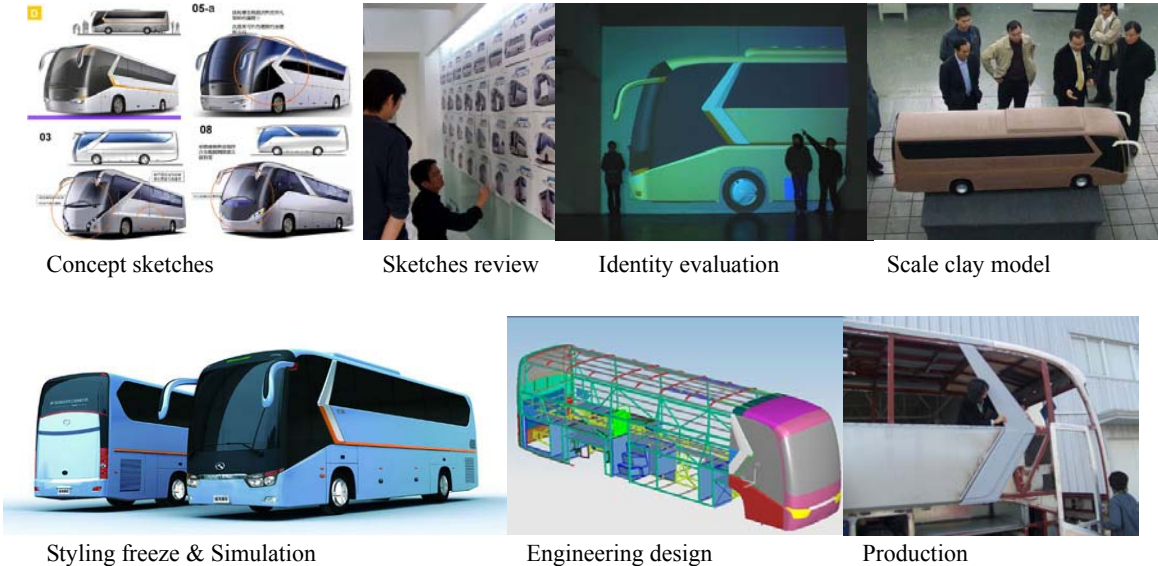


Fig.21. The design process of K07

The Influence of the Project Strategy on Kinglong

1. A process of transference

The design process of K01-1 was so different from Kinglong's that at first they couldn't understand it.

As the project progressed, however, and Nova shared the results of each phase with Kinglong, they gradually came to join in the flow of ideas. The design process adopted by Nova was therefore a teaching process initially, which was transformed into cooperation in the later stages. The key techniques in coach design, ranging from design research, CAID, scale clay modelling to show car models were introduced to Kinglong and their effectiveness was successfully demonstrated. When Kinglong came to understand and accept these ideas, they embraced the design technique, design process and design management approaches of Nova.

2. Advanced technique proved by acclamation

Before 2006, Kinglong had never earned so much praise at BAAV. With exhibitions of sketches, simulation rendering and show cars, both projects, K01-1 and FCB1, offered totally new concepts and designs for coaches and buses. A flow of admiring comments both from professionals and ordinary visitors constituted a powerful confirmation of Nova's design ability and the acceptance of these new methods by Kinglong.

3. New professional methods combined with the client's organization

To Nova, demonstrating their design system through integration of techniques was the main target of K01-1. During the planning period, they paid close attention to the organization of professional and functional responsibilities in Kinglong, identifying which techniques would most probably be accepted and combined with Kinglong's original capabilities. As a result, they determined to introduce CAID to Kinglong. In implementing this approach, however, there is a mantra in Nova's strategy that was constantly borne in mind: never thrust new techniques upon clients, and remembering that less is more, in most situations.

4. Design instead of styling

To Kinglong's designers, the design process meant referencing designs of international brands, sketching concepts, rendering in 2D and passing these on to the engineering department. Based on this approach, Kinglong management regarded design as just styling or sketches and designers as visualisers. Even the designers themselves accepted this image. In contrast, Nova's emphasis on design methods and cooperation enabled them to present design as something more, a wide-ranging and complex professional ability using a battery of tools and methodologies. The result was to change Kinglong's understanding of design and how it could contribute to competition on the basis of enhanced quality and not just cost.

5. Integrating design instead of linear design process.

The differences between the design team of Nova and Kinglong were illustrated earlier in the flowcharts (Fig. 3 and Fig. 4). In Nova's process, different functions worked together throughout the design process. Even in the concept phase, CAID designers would offer a sketch-base to designers, based on product specifications, and engineers were encouraged to comment on the feasibility of these early design concepts. It was a process that integrated all relevant professional knowledge and capabilities in the product development process. The advantages of this over a linear, sequential design process, which strictly divided functions and seldom made cooperation possible, were obvious.

The Influence of the Project Strategy on Nova

1. Design itself should be planned strategically.

In offering their design services, consultants need not only to plan a strategy for their clients, but should also plan their own role in the cooperation. When Nova received the project, they planned the total cooperation strategy as the primary component of their approach. During the design process, they presented review reports to confirm this strategy, both for themselves and for Kinglong. On completion of the projects, they summarized the fulfilled aims and went beyond their conclusions to outline further strategies for future collaboration.

2. Manifesting the value of design service.

Nova distinctly analyzed the whole situation and background of the cooperation and as a result, applied different plans in two projects. They demonstrated design techniques and project management in K01-1 to upgrade design quality, while emphasizing creativity in FCB1 to express the core meaning and value of design.

In most situations in China, clients like to audit the design abilities of consultants on the basis of one project. To design consultants, it is the only chance to show-case their abilities. Only with careful strategic planning could they demonstrate their potential in a design project providing limited scope for innovation.

3. Considering the client's standpoint.

The first project (K01-1) was assigned to Nova by top managers in Kinglong who were more concerned with outcomes rather than processes. However, Nova understood the standpoint of people at different levels and in different functional departments in Kinglong. Since Nova's role is as a design consultant, those people in Kinglong whose professional competence was closer to design were more likely to feel threatened. Nova carefully chose to keep enough distance from them, creating a comfort zone for designers in Kinglong, allowing them to view Nova's work from a more objective standpoint as the design progressed.

4. Converting the relationship from supply-and-demand to win-win.

In the cooperation, Nova was always careful to position itself as a quiet partner, foregrounding its client and adopting a reserved role. This meant being concerned not only with the projects for which they were commissioned, but with using every opportunity to present Kinglong in a positive light. An example was the way the whole design process was considered as a powerful instrument to enhance the Kinglong exhibition at BAAV, with all the design outputs used to illustrate a powerful demonstration of Kinglong's ideas and offerings. Nova knew it was a chance to earn an objective audit by visitors and judges, which in turn would influence the audit inside Kinglong. For the company, a major aim was to win awards at BAAV, with consequent benefits in publicity, sales and profitability. Creatively supporting the company in these aims were essential elements in helping Nova convert its role from a design service supplier to a win-win partner.

Conclusion

In China, there is a widespread attitude among management that industrial design provides superficial styling for products. Many enterprises, and design consultants too, emphasize sketches or simulation rendering as the only way to evaluate design ability – some designers are even paid by the page quantity of sketches. With more and more enterprises establishing design departments or

commissioning design consultants, they frequently end up with products that have a superficially differentiated styling from competitors, without understanding the broader scope for enhancing value which design can offer them. A further problem of such approaches is that such enterprises then come to doubt the value of design. Viewing designers as stylists and treating design as concerned primarily with visualization techniques leads to them assigning order numbers for design concepts as a means of evaluate designers 'work efficiency' on a weekly or monthly basis. Even worse, many enterprises complain that designers only 'waste money' and cannot create business benefit.

So what is the value of design?

Nova's strategy demonstrated another way which positioned the design projects at a strategic level and avoided competition on the basis of styling. Their concept was to not only emphasize design strategy in terms of design definition and direction, but also to include a broader concept of project strategy, demonstrating what the project could be in relation to its clients, how the design process should be organized and what the role of design can be in the company and how it could shape market response. As design consultants, Nova viewed not only their design service in an objective manner, but also the business requirements of clients and their customers. This breadth of view enabled Nova to not just provide design services but to actively participate in the business development of Kinglong.

The experience of the Kinglong projects also helped Nova to develop new insights into their own potential role. Soon after completing the Kinglong work, they launched a brand refinement program for themselves as a total strategy (Fig.22). As a result, Nova established a new slogan, “Design Competitiveness Redefined”, which they explained as ‘Turn our passion for design and know-how for building competitive design systems into a strategic asset for each client.’



Fig.22. Nova’s new image