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The Design Process in Action

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ABSTRACT

What happens when a defined design process meets real life, with all its unexpected surprises? One of the many valuable skills architects and designers have is to be able work with defined design models, and to know how and when to adapt these working processes in the face of unexpected circumstances discovered during the life of a project. Design as a process is increasingly about how products and buildings exist in a wider context, which takes into account the services, systems, processes, spaces and experiences within which solutions have to successfully exist. Designing is not a static act, but a dynamic and improvisational process. 'Off the shelf' design models and processes are there to be adapted in the face of 'real life' conditions that emerge during design projects. This paper addresses how Kajima Design Europe (KDE) approached the redesign of the headquarters of JVC. The team creatively addressed a set of complex challenges associated with the existing site. Through successful teamwork, the design process included stakeholders throughout the development stages of the project to ensure design proposals took into consideration the various stakeholder needs and points of view. KDE viewed the project constraints and the site conditions as both an asset and a key to finding a truly contextual design solution. Once the client brief and the design objectives were established, the design team conducted a thorough evaluation of how the site could best accommodate the present and future needs of JVC's new headquarters and its employees. Design methodologies used included user-scenario designs and a detailed site analysis to maximise the ways in which sustainable design decisions could be made. Balancing costs against feasibility was a constant challenge for the project team; the result is a landmark building that provides an inspiring work environment for JVC employees.

KEY WORDS: Architecture, Design Process, Managing Internal and External Stakeholder Relations, Scenario Planning

INTRODUCTION

Kajima Design Europe (KDE) are a creative team of architects, designers and engineers adept at providing services for all stages of the building process. When asked to redesign the headquarters of the Japanese consumer electronics brand JVC, KDE's project team creatively addressed the needs of a range of stakeholders, and a complex set of challenges associated with the existing site, which had been JVC's London base for more than 30 years.

DESIGN OVERVIEW

The JVC site was a collection of contrasts that had to be brought into balance. To the north of the site was a reservoir and wildlife sanctuary while to the south was a noisy and busy motorway. With longstanding emotional and logistic ties to their location, it came as a shock when JVC discovered, in the early stages of site investigations, that they had been sitting on a brownfield site containing substantial deep pits of carbide lime. The design solution that allowed JVC to remain on the site would have to address its environmental responsibilities, the contrasting aspects of the site conditions, and contribute to the regeneration of the area.

KDE's first task was to address the brownfield issues and to make safe the site. Working with a number of external design team partners and environmental and regulatory bodies, the lime containment was addressed and the site secured, so maintaining the investment value and planned usability of the site.

The next task was to evaluate the way in which the buildings were used. JVC's current and likely future operational requirements had outgrown its existing arrangement of offices and warehouses resulting in numerous inefficiencies. In addition, the company's headquarters building no longer expressed the style and sophistication of the JVC brand, nor its future aspirations. KDE began the design work by viewing the project constraints and the site conditions as both an asset and a necessary part of finding a truly contextual design solution. The project team considered how the site, the existing and proposed buildings and the interiors could act as a showcase for the JVC brand.

DESIGN OBJECTIVES

The key design objectives for the project were to:

- **Respond to the existing site conditions and constraints.**
- **Respond to JVC's operational and logistical requirements.**
- **Create an effective, efficient warehouse and distribution facility.**
- **Add value to the site, both as a location and as a financial investment.**
- **Embrace sustainable design thinking.**
- **Create an inspiring working environment and a sense of place.**
- **Address and satisfy all government and institutional regulations.**
- **Propose a design for the new headquarter interiors.**

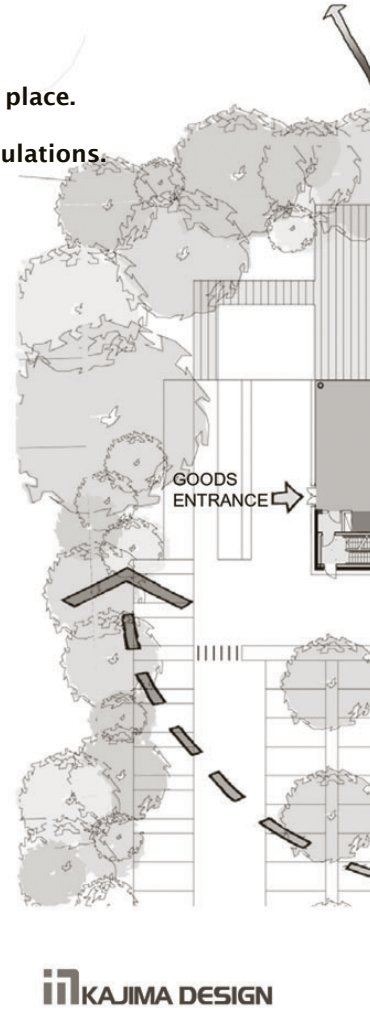

Figure 1. Exterior: The new JVC headquarters building on the outskirts of London

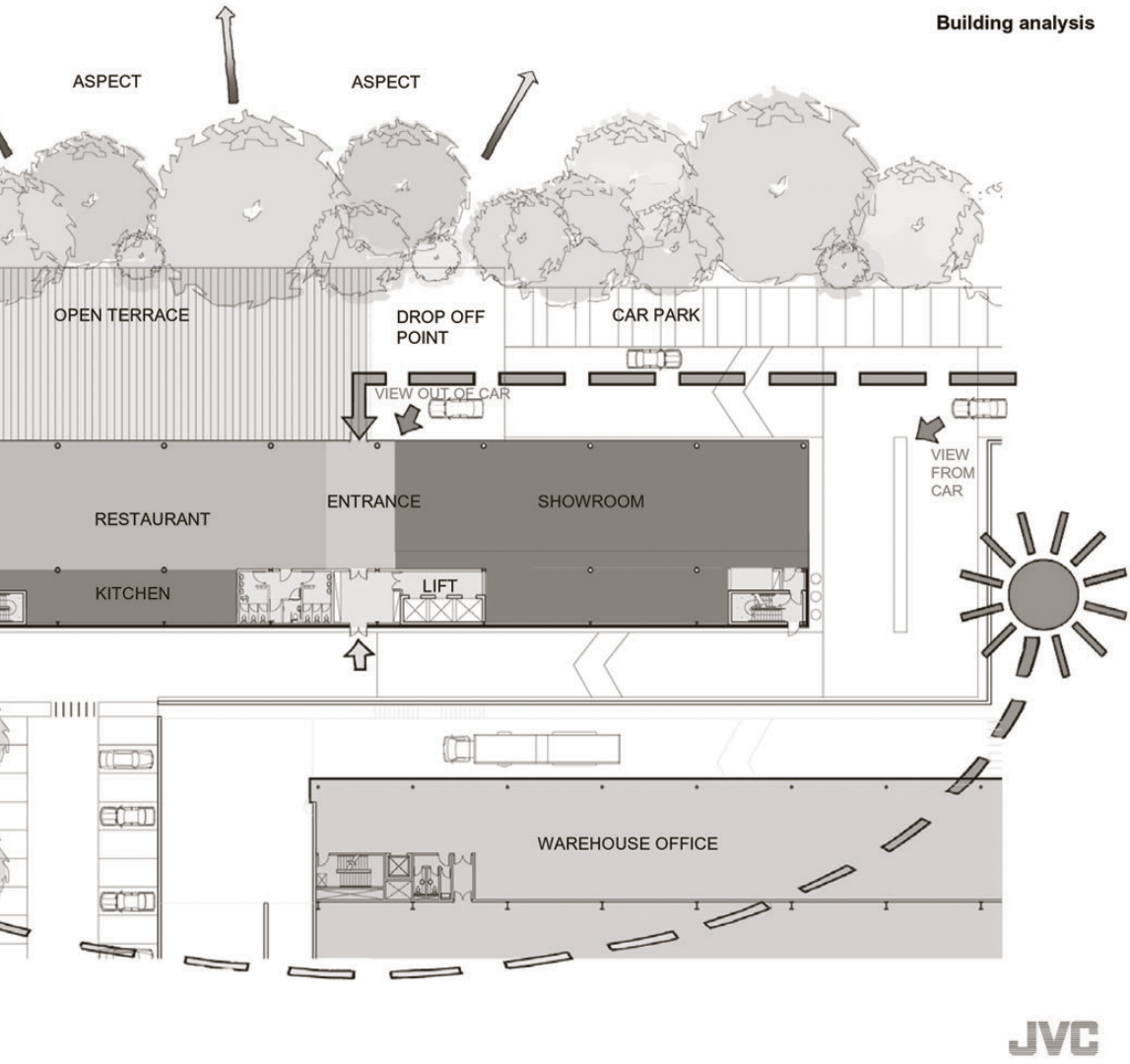

Figure 2. Site Plan: The new JVC headquarters building on the outskirts of London

DESIGN METHODOLOGY

One of the many valuable skills designers have is to be able work with defined design models and processes, and to adapt these working processes in the face of unexpected circumstances discovered during the life of a project. Design as a process is increasingly about how products and buildings exist in a wider context, which takes into account the services, systems, processes, spaces and experiences within which solutions have to successfully exist. Design is not a static act, but a dynamic and improvisational process that has to adapt in the face of changing conditions and unexpected challenges. 'Off the shelf' design models and processes are there to be adapted in the face of 'real life' conditions that emerge during design projects.

Once the design objectives were agreed, the site was analysed and a design approach that took into account a range of different needs was established. This approach included design proposals for the site, buildings and interiors.

KDE proposed to demolish almost all the existing buildings and build a new administration centre to house various corporate departments, a new showroom and a staff restaurant. An additional large single warehouse and two smaller units would accommodate the vastly increased product storage, and would allow for future flexibility. JVC were to stay on site throughout the two phases of construction. The first phase would temporarily relocate staff to one building, complete construction of the main administration building, and begin construction of the warehouse complex. The second phase would complete the warehouses and the landscaping.

While developing the overall masterplan for the project, the design team established a structured layering of functions within the boundaries of the site, from warehouse to workshop and service distribution to the headquarter building, expanding into the landscape beyond. Every aspect of the design of the project was considered on many levels, including in terms of improving the functionality and servicing of how JVC operated their business. A soft, industrial aesthetic and the neutral palette of the building materials themselves were carefully chosen to reflect the JVC brand, to express the individual building functions within the architectural composition, and to complement the contrasting surroundings of the motorway and the nature reserve.

A section of the administrative building was to be used as a 'brand showcase' for JVC products and events. KDE made a proposal for the design of this JVC brand showcase, and used scenario planning as a process to imagine how the building could be successfully utilised, in existing and new ways, by a range of stakeholders such as dealers, retailers, visitors attending special launch events, and the employees themselves. Scenarios, as a design tool, create a context in which to imagine consumers using potential products, services and spaces. 'Thinking about everyday experiences and behaviours of consumers in a scenario can provide the design team with a better understanding of their target audience as they highlight the relationships between consumer behaviour, situation and the products, services and spaces' (Best, 2006). By sharing these scenarios with a range of stakeholders and then brainstorming and experimenting, new ideas for products, services and the use of spaces can emerge. Rollestone (2003) points out another advantage of using scenarios; because they focus exclusively on a users' behaviour and experiences, the client and the design team looks at things from the point of view of the user, thereby putting aside any of their own personal biases.

These 'day in the life' scenarios were used during the design process to solicit feedback from the different stakeholders and user-groups, to help understand the needs of all the parties involved, and to inform decisions made during the design process. The user-groups for which scenarios were developed were: Professionals (professional users of JVC products), Dealers (who sell JVC products), Staff (working for JVC), and Press (for product launches and special events).

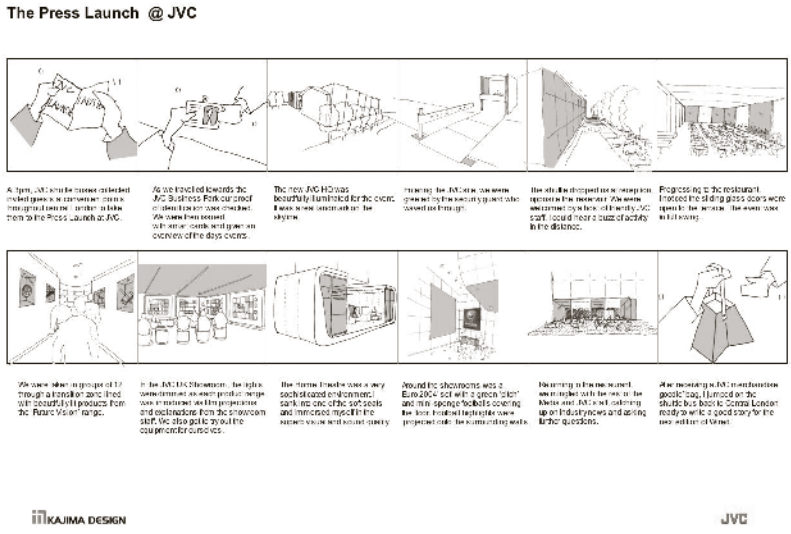

Figure 3. Scenario: User-experience scenarios, describing a day in the life of various stakeholders who would use the new buildings

DESIGN PROCESS

KDE viewed the site conditions as both an asset and a key to finding a truly contextual design solution. Situated as it was, in an area of outstanding natural beauty, afforded the project an environmental heart. KDE's design of the new 'face' of JVC would be a window onto this natural asset. The new administration building would accommodate the offices over the four levels, on the building's north side, a glazed façade would allow for excellent natural light and gave staff and visitors unobstructed, open views of the reservoir. By locating the building closer to the reservoir, it would become a focal point for the design, and would create a working environment where the staff had a much more immediate relationship with the nature reserve.

The administration building's ground floor entrance and reception lobby were to expand into a dynamic double-height space and showroom, which would also serve to accommodate the differences in the site's levels. The staff restaurant was to visually extend into the landscaped area to the north, and this would create a hub of activity on the ground floor. The new warehouses would provide an environmental buffer to the noise and air pollution from the motorway, and would shield the administration building, accessible landscaped areas, outdoor spaces and walkways, serving to improve both staff safety and vehicle manoeuvring. Rationalization of JVC's operations into fewer warehouse buildings also allowed for vast improvement in their logistics and storage capacity.

Figure 4. Exterior detail: The scale and orientation of the cladding profile provides a sense of proportion to the new administration building.

Figure 5. Exterior detail at night: The façade of the administrative building, which faces a busy and noisy motorway, displays a jewel-like presence at night.

Three key steps were taken in KDE's design process, which resulted in a more sustainable design solution. The steps allowed JVC, a major organisation in the area, to remain in their existing location and continue to enhance the local economy, while simultaneously reinforcing the JVC brand.

Firstly, the orientation of the buildings would not only maximise the site's potential, but would also minimise the environmental affects of removing excavated material. Secondly, the existing change in level across the site, disguising a disused underground car park, was modified to reduce the importing and exporting of soil from the site. Through careful demolition and construction phasing, the disruption to JVC's operation was minimal, allowing them to continue with business whilst construction took place and preventing any costly and time consuming relocations. Finally, mechanical ventilation was controlled through the location of core elements and cellular rooms to the rear of the main administration building; this was effectively an environmental buffer to the sun, air pollution and traffic noise.

WORKING WITH THE TEAM

External stakeholders with specialist skills were brought in to supplement the project team. The project aroused public interest and had to be in keeping with regulations of a number of environmental bodies. These groups worked in partnership with KDE and the construction team to resolve all aspects in the most mutually beneficial manner, and ensure that the plans for the site fully accommodated the need to obtain planning permission and address the sensitive environmental issues.

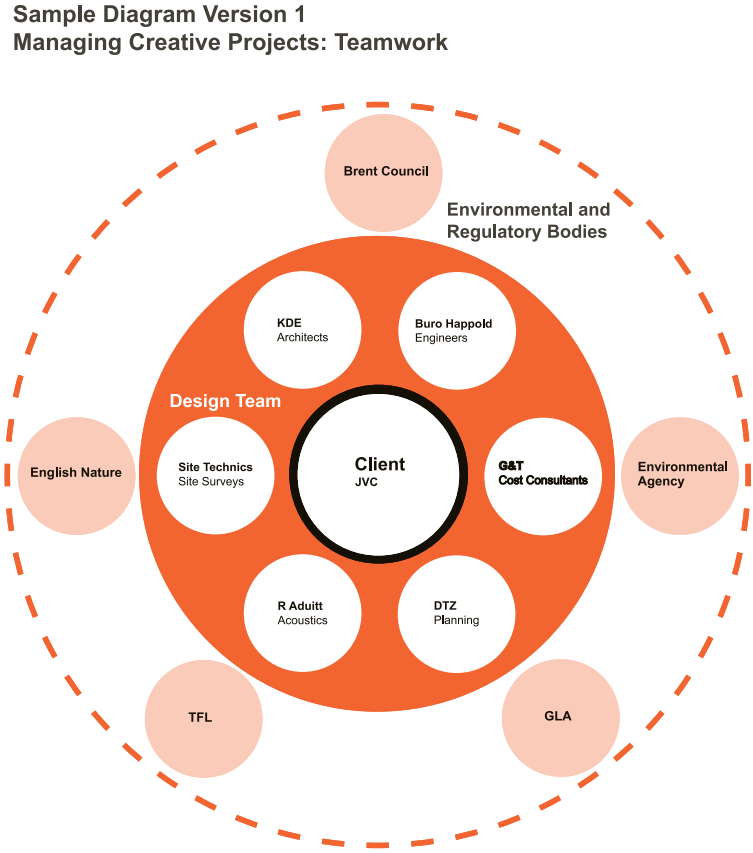

Figure 6. Team: The KDE design team was composed of a range of internal and external service partners. This team had to interact with the client (JVC) and outwardly with a range of government and environmental bodies.

Engineering firm Buro Happold sought in-situ treatment and containment alternatives to removing waste materials from the site, as part of an environmentally sound, sustainable and cost effective solution. Simultaneously, the new buildings were to be developed while the site itself was being physically stabilised. Further significant obstacles lay underground. Two large sewers and a number of electrical cables ran under the site. KDE wanted to build in this area, but if they diverted the pipes they would have to assume responsibility for the pipe's contents. To mitigate the risk the warehouse was positioned and built over the drains, which retained the status quo.

The process was a constant challenge to understand, accept, and manage the conditions of the site, to reassure the planning authority that requirements would be met, and to balance the costs and the viability of the project. John Chapman, Design Director of KDE, comments that 'this really was a case of a project made possible by everyone coming together right from the start of the process allowing us to steer it forward, explain the difficulties, offer solutions and develop it in a way that was beneficial to everyone involved.'

CONCLUSION

Through successful teamwork, the project result is a stylish business park that is in harmony with its surroundings, and a landmark building which provides an inspiring work environment for JVC's employees. The project relied heavily on the success of the relationships formed between the client, the design team, and the public and environmental organisations involved, illustrating the complexities of managing creative projects with a large and diverse team of people.

ACKNOWLEDGEMENT

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