

# Case Study - Establishing the integrated information system of Hyundai Green Food

## Hyundai Green Food

Hyundai Green Food, a subsidiary of Hyundai Department Store Group, is a comprehensive food service corporation, which began its business by supplying food products to the Middle East in 1973. Since then, the company has expanded its business to catering, retail, and restaurants. The company has strived to be the most reliable food company that faithfully keeps promises to customers and always puts customers first.

The comprehensive food company grew into the current scale when the three food companies under Hyundai Department Store Group were merged in July 2010 under the new name Hyundai Green Food. Thanks to the merger, the extensive company came to embrace both B2B and B2C areas while continuing its effort for overseas market. The company now has its operations in many nations including the UAE, Kuwait, China, and expand its size 10% every year.

Hyundai Green Food strives to be Korea's #1 trusted food service company and it works hard to be 'green partners' for our customers in providing them with healthy and pleasant dietary lives.

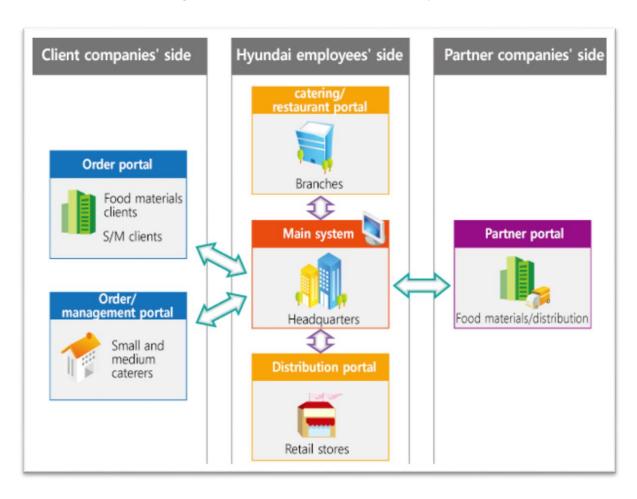




## **Project Overview**

In November 2011, Hyundai Green Food began a project aiming to integrate five systems operated by the three different companies which ran their respective business sectors (including food materials distribution, retail, restaurants, and catering). As the system development had to be completed by the time of opening a new logistics center, only 7 months were permitted for the project. This was a fairly complicated project in that developers had to combine clearly different user environments as well as processes although each had their own master data and system. In addition, project staff was required to develop systems in a number of spheres including purchasing, sales, computer telephony integration (CTI), vehicle control, and warehouse management system. Therefore, the keys to the success of this project were development productivity and environmental integration.

## Diagram of Structure of H.WIS System





## Introducing the Nexacro Platform

About 1,100 partner firms supply products to fulfill approximately 30,000 orders from some 1,000 clients. Moreover, about 260 delivery vehicles are dispatched from 5 logistics centers while the company needs to calculate payments made by clients efficiently. H.WIS is required to handle all those processes at once, so the success of the project depends on efficient and user-friendly integration of the five disparate systems.

In particular, H.WIS should be guaranteed sophisticated user experience (UX) since it is operated under a complicated situation where the users in various jobs and positions are on the constant move. Accordingly, we found it difficult to realize the functions, performance, and designs that befit such UX and to achieve harmony between those elements. We needed to find a highly productive development tool that enabled us to establish advanced UX within the short project period and to develop quality task screens. Just in time, we found a case of NEXACRO used to build the system of one of our company's affiliates and learned that the software was excellent in development productivity and user accessibility. After receiving UX consulting service, we decided to choose NEXACRO, which could be applied to the entire development process including planning, design, and development stages.





## Whey they chose the Nexacro Platform

#### Operational aspect

The existing systems were plagued by redundant tasks due to users' unconscious behavior while taking too much processing time due to the problem of screen accessibility. Because developers failed to understand users, usability was often absent from their agenda. Therefore, we thought about how to enhance usability from the development phase. Against this backdrop, we selected NEXACRO, the most robust development tool, and established UX in a way that is totally different from the past.

#### Development aspect

According to the analysis of the existing systems, 30 to 40% of task screens were almost disused. Therefore, we planned to improve the quality of truly necessary screens rather than caring about the number of screens.

#### Maintenance aspect

NEXACRO was a software program that was continuously upgraded, so we believed that we would receive sufficient help related to maintenance and updates. Moreover, we were happy that NEXACRO supports the development for mobile devices.

## Effects of NEXACRO

We discovered different positive effects in every stage: when we considered adopting the platform, when we developed the system, and when we operated the system. NEXACRO was beneficial at each stage.

Sophisticated UX was the biggest attraction in the beginning. In the development stage, its high productivity was appealing. However, as developers in the field, we like NEXACRO for a different reason: it allowed us to develop truly necessary screens while we could focus on the usability of those screens.



## During the project

- As the budget for the project had been reduced, we inevitably hired a lot of freelance developers. Due to the nature of a freelance group, each developer has a different style and speed with regard to development. Under this situation, NEXACRO helped us even up skills of the developers and set unified standards. As a result, we could significantly shorten the period of the development and maintain the quality at a certain level.
- A development team tends to build basic functions only while ignoring usability because of limited workforce. However, we could accommodate the demand for usability made by the UX planning team and thus enhance the quality of essential screens. NEXACRO encouraged us to think about UX even for a simple pop-up window.

## After the project

- The design has been refined, and adding functions for each screen can be done in a short span of time.
- The discrepancy between planning and development has been narrowed as the UX proposed in the planning stage became reality.
- In the satisfaction research asking about the screen layout—a concept that involves system design, screen movement, outputs, and convenient functions—, 37.5 % of the respondents expressed moderate satisfaction while 45.8% showed high satisfaction, suggesting that the system was made user-friendly.
- Because the quality of the system has been maintained at a certain level, big issues have not occurred at all making the maintenance work easy.
- The development platform combined with UX consulting service was very helpful in solving the problem of limited time and financial backing. Consequently, we improved development productivity, reduced opportunity costs, and thus cut the whole budget for the project.



#### User satisfaction increased

 78.9% answered they are satisfied compared to the previous system.

#### UX improved

- Quality of screens has been improved thanks to better usability.
- 83.1% answered that they are satisfied with the screen layout.

#### Development productivity improved

- Unified standards were provided to developers at various levels.
- Development was completed within the short project period.
- Certain level of quality is guaranteed.

#### Cost reduced

 Development was completed within the reduced project budget.



## The Developer Perspective

This issue features an interview with the operator and user of H.WIS.

"UX? I'll use NEXACRO once again because I know how good it is~"



Yoo Jeong-seok, Assistant Manager of the Strategic Planning Department



Koh Jae-hyung, Senior Manager of the Management Strategy Department

#### Q. What was the key point of the project?

The bottom line was that screens should be composed according to the work flow of the system of Hyundai Green Food. Particularly, CTI was crucial for providing one-stop customer service as it has a great impact on how long it takes to handle client claims and perform tasks. The histories of client claims and call records should be reflected in materials purchase, so two disparate functions should be smoothly integrated into one process. Throughout the integration process, we needed to provide each task with an appropriate UX application to improve efficiency of the relevant task. Accordingly, we conducted UI standardization by studying the customized UX, as preparatory work for the project, aiming to improve accessibility of users in the field.

#### Q. What is the feature of the system structure or architecture?

We had to merge five distinct systems, which were used by 320 main users, 630 branches, 500 clients and 1,100 partner firms (all in rough numbers), into one with some 1,200 task screens in it.

## Q. Development productivity is one of the advantages that NEXACRO is said to have. What's your perspective on this?

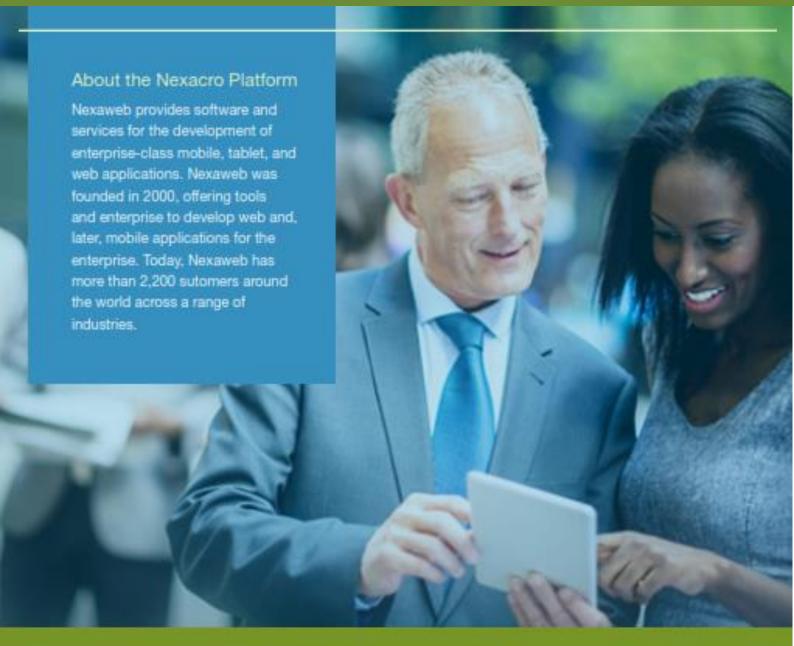
In fact, only three months were permitted for the development since the former three companies had been undecided on the allocation of tasks. Even worse, 70 to 80% of the development staff was composed of freelancers. Therefore, the project was expected to exceed the initially-set deadline. To everyone's surprise, however, the project ended in time and the system opened as scheduled. We believe that this was possible because of NEXACRO's high productivity as well as the constant training offered by Nexaweb to developers.

#### Q. What is the biggest advantage of NEXACRO?

As a planner and operator, I realized after the completion of the project that NEXACRO enormously helped us to overcome the obstacles posed throughout the project. An initial plan on UX can be changed according to a project period and budget. Furthermore, disparities are likely to happen between a plan and actual development. However, NEXACRO narrowed such a gap. That is to say, we managed to utilize all the interfaces that we designed in the planning stage on the basis of UX. This played a critical role in eliciting positive project results.

#### Q. How happy are you with the overall outcome of the project?

We did our utmost, being proud that this was an unprecedented project aiming to merge a couple of distinct systems of three companies. As a result, the integrated system, used by about 4,000 users, has facilitated various tasks related to purchasing, logistics, vehicle control, hygiene, CTI, and warehouses. We firmly believe that the innovation in IT infrastructure is a core source of energy that helps Hyundai Green Food grow 10% every year amid economic recession.



Contact us for more information.



www.nexaweb.com



781-345-5500



info@nexaweb.com

#### Nexaweb Inc.

1 New England Executive Office Park, Suite 205 Burlington, MA 01803 Tel: 781-345-5500 Fax:781-345-5501

www.nexaweb.com

## Nexaweb Japan Inc.

Akihabara OS building 10F 5-3-1 Sotokanda Chiyoda-ku, Tokyo 101-0021 Tel: 81-03-5812-6358 Fax: 81-03-5812-6343

www.nexaweb.co.jp

#### TobeSoft Co., Ltd.

Intops Building 2-5F 517 Bongeunsa-Ro Gangnam-gu, Seoul, Korea 135-873 Tel: 82-2-2140-7700 Fax: 82-2-2140-7799 www.tobesoft.com