중국 웹사이트의 프로그래스바 스타일에 관한 연구
A Study on the progress bar's styles in Chinese websites

마웨, 이동훈

동서대학교 디자인전문대학원

Ma Wei, LEE Dong Hun

Dongseo University, Graduate School of Design

Abstract

I investigated the styles of progress bar in the top 8 China's websites. According to the authoritative literature, I calculated the time which each kind of operation needed. I investigated 400 examples which were used the progress bar. The statistical result confirmed my idea — progress bar's style and user's waiting time has the relations. Finally, I gave the revision comment which the progress bar's style improvement.

I. Introduction

At present the large e-mail loads, online game loads, video downloads and other large operations are more and more in network. So progress bar's application was the realistic need. In the homepage, rests on what to establish the progress bar's style, this is goal which I study. I investigate the progress bar's style of China's well-known websites and study the instance. Then I confirm the progress bar's style and user's waiting time existence relevance. Finally, I apply the method of questionnaire survey.

II. Investigation of progress bar's styles

1. Rectangle progress bar (figure2-1)

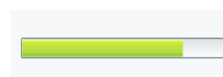The rectangle progress bar is the most commonly used style in the homepage. It clearly shows the progress.

Figure 2-1   Figure 2-2

2. Circular progress bar (figure2-2)

This type of progress bar generally used to indicate a system task. There is no clear progress indicator. Users will lose patience in a long time waiting.

3. The progress bar of percentage type (figure2-3)

The progress bar shows the percentage of load

is called the percentage type progress bar. There is the same effect with rectangle progress bar.

Figure 2-3   Figure 2-4: Liam

4. GIF animation

GIF animation is a disguised form of progress bar. It allows the users are no boring to wait for the process. Yahoo used an animated spokesman Liam.

Ⅲ. Analysis of Chinese website's progress bar's styles

3.1 Investigation of Chinese website's progress bar

According to websites rank of alexa, I selected the top 8 China's websites. I survey these websites, then I get table 3-1.

표 1. Table 3-1

	Baidu	qq	Sina	Taobao	Google	163	Sogou	Sohu
Rectangle	●	●	●	●	●	●	●	●
Circular		●	●	●		●		●
Percentage		●				●		
GIF		●	●	●		●		●

3.2 The relevance of the website's characteristics and the progress bar styles

I survey the application of progress bars. Statistical results are presented in table 3-2.

표 2. Table 3-2

	Homepage loading	Picture loading	Game loading	Video loading	Email loading	advertising
Rectangle	●	●	●	●	●	
Circular		●		●		
Percentage			●	●	●	
GIF						●

Execution time and the style of progress bar should exist link.

3.3 Waiting time of the operations in homepages

I selected the top 8 China's websites and investigated the operation of the data (table 3-3).

표 3. Table 3-3

	Homepage loading	Picture loading	Game loading	Video loading	Email loading	advertising
Data	<50K	50-500K	<15M	80-120K/S	<15M	<200K

According to 2009 China Internet Survey Report. Chinese users' Internet location is investigated. There are applied standard ports when users are surfing internet in home, Internet bars, companies and school. I draw out the distribution of China's network speed in figure 3-1.
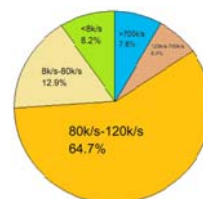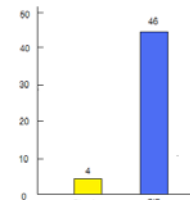

Figure 3-1   Figure 3-2

In China, the majority of users' network speeds are in 80K/S-120K/S. By the formula: Data / internet speed = execution time. The calculated results are listed in the table 3-4.

표 4. Table 3-4

	Homepage loading	Picture loading	Game loading	Video loading	Email loading	advertising
Waiting time	< 8s	< 10s	<5min	< 15s	<5min	< 4s

3.4 Progress bar's style and the execution time of operation relevance

I integrated previous researches. I get the table3-5.

표 5. Table 3-5

Waiting time	< 4s	< 8s	<10s	< 15s	<5min
Rectangle		●	●	●	●
Circular			●	●	
Percentage				●	●
GIF	●				

I have investigated 400 examples which the progress bar was used in top 8 China's websites. I recorded the execution time of each example with clock. The result is listed in the table 3-6.

표 6. Table 3-6

Waiting time	< 5s	5-10s	10-15s	15s-5min
Rectangle	30	31	55	62
Circular	39	55	25	2
Percentage	1	2	17	35
GIF	30	12	3	1

Rectangle progress bar can be use in any time. Circular progress bar mainly is used in 15 seconds ago. The progress bar of percentage type is used in after 15 seconds. GIF animation mainly is used in 5 seconds ago.

3.5 Feasibility analysis of GIF animation replaces circular progress bar

I investigated the net citizens' affection to the circular progress bar and the GIF animation. According to 2009 China Internet Survey Report, I found the information of Chinese net citizens' age, gender and surfer place. I select 50 net citizens to carry on investigation. (table 3-7, table3-8 and table 3-9.)

표 7. Table 3-7

Gender	Male	Female
Number	26	24

표 8. Table 3-8

Age	10-19	20-29	30-39	40-49	>50
Number	18	16	9	5	2

표 9. Table 3-9

Surfer place	Home	Internet bar	Company	School	Public place
Number	26	15	5	3	1

The statistical result was drew in figure 3-2. The Chinese majority net citizens enjoy the GIF animation. But the people who don't like the GIF animation are constituted by the age in 45 year-old above persons.

Ⅳ. Conclusion

I investigated the top 8 China websites. The length of users' waiting time has decided the progress bar's style choice. I investigated 400 application progress bar examples. The result confirmed the waiting time of user has decided the progress bar styles. The GIF animation replaces the circular progress bar is feasible. But the websites which serve old people must use the circular progress bar.

▌References ▌

[1] http://www.alexa.com/topsites/countries/CN

[2] 2009 China Internet Survey Report