“The Virtual Grocery Store:
A Proposal to Improve the Quality of Life
for Retail Customers through a Virtual Environment”

Katrina Jones Choi

Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

Masters of Science
In
Architecture (Interior Design option)

Bradley Whitney, Chair
Joan Dickinson
Truman Capone
Dennis Jones

May 13, 2004
Blacksburg, Virginia

Copyright 2004, Katrina Jones Choi
“The Virtual Grocery Store: 
A Proposal to Improve the Quality of Life 
for Retail Customers through a Virtual Environment”

Katrina Jones Choi

Abstract

With the prevalence and integration of the Internet in our lives, online shopping has become a popular and convenient method of obtaining goods. However, there is an important experience that occurs between the customer and the product as well as the customer and the space in the actual, physical store which does not yet occur in the virtual store (Raijas, 2002). Customers’ increased use of new technology and the Internet illustrates that an incredible growth potential exists in the electronic grocery store industry. Currently, electronic grocery stores have not taken advantage of key components of traditional grocery retailing practices or information technology (Raijas, 2002). Consequently, electronic grocery stores have not yet provided customers with significant benefits for choosing online grocery shopping as opposed to traditional grocery shopping in the actual store. This finding suggests that a better quality shopping experience could be provided for online grocery store customers through the marriage of the benefits of online grocery shopping with the benefits of traditional grocery shopping. This study presents a proposal of how to combine the benefits of shopping in an actual retail store with the benefits of shopping online.
Contents

1 Introduction .............................................................................................................. 1
  1.1 Introduction ........................................................................................................ 1
  1.2 Purpose ............................................................................................................... 6
  1.3 Justification ...................................................................................................... 7
  1.4 Objectives ......................................................................................................... 8

2 Literature Review ..................................................................................................... 9
  2.1 Community Role ............................................................................................... 9
  2.2 Cultural Experience .......................................................................................... 10
  2.3 Physical Disabilities, Mental Inhibitions and Universal Design .................... 11
  2.4 The Evolution of Retail and Consumer Preferences ...................................... 14
  2.5 Traditional Grocery Store Shopping Trends of Young Adults ....................... 20
  2.6 Trends in Online Grocery Store Shopper Demographics .............................. 22
  2.7 Brick-and-Click ............................................................................................... 23
  2.8 Problems with Existing Online Grocery Stores .............................................. 24
    2.8.1 Ease and Visual Quality of Interface Design ............................................. 25
    2.8.2 Quality of Product Description ................................................................. 33
    2.8.3 Service Availability, Minimum Purchase Prices and Method
        of Distribution ......................................................................................... 37
  2.9 Need for a Market Niche .................................................................................. 44
  2.10 Design of the Virtual Space: Promoting Quality of Life through
      Entertainment ................................................................................................. 45
  2.11 Design of the Interface: Implementing Universal Design ............................. 47

3 Design Process and Explanation .............................................................................. 48
  3.1 Design of the Virtual Space ............................................................................. 48
  3.2 Design of the Interface ..................................................................................... 65

4 Final Web Site ......................................................................................................... 69

5 Conclusion .............................................................................................................. 72
  5.1 Limitations ....................................................................................................... 72
  5.2 Future Ideas and Directions ............................................................................ 72

6 References .............................................................................................................. 75