

A White Paper for Public and Academic Libraries

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## 1.0 Purpose

Public and academic libraries face a plethora of information age challenges. In a world of customized service, where Amazon knows what books you might like to read and Netflix suggests films you'd like to watch, libraries have an opportunity to reinvent their customer relationship and to strategize how to create meaningful relationships with potential customers. Libraries that become customer-centric – those that start from understanding their customers' needs and develop products, services, and programs to meet those needs – will ultimately find success as a 21st century community leader.

We believe that market segmentation is instrumental to understanding customer needs and reinventing the customer relationship. Within this context, the purpose of this white paper is to:

- 1. Provide a general introduction to the concept, methodology, and use of market segmentation
- 2. Inform public and academic librarians, including administrators and reference librarians, about the importance of market segmentation
- 3. Provide information about the Tapestry market segmentation system (Tapestry), one of the nation's leading off-the-shelf (OTS) market segmentation systems

## 2.0 Introduction

According to <a href="www.bplans.com">www.bplans.com</a>, a free resource to help entrepreneurs plan better businesses, market segmentation is "the categorization of potential buyers into groups based on common characteristics such as age, gender, income, and geography or other attributes relating to purchase or consumption behavior."

Medium and large companies have been using market segmentation for years.

> See Appendix for Case Study: Customer Prospecting, DS Waters, Atlanta, Georgia

Small businesses, non-profit organizations, entry-level entrepreneurs, and public and academic libraries, however, know virtually nothing about market segmentation.

Until recently, the cost of segmentation systems and the level of expertise needed to employ them have been beyond the reach of these organizations. With the entry of the BusinessDecision database (<a href="www.businessdecision.info">www.businessdecision.info</a>) into the public and academic library market, the Tapestry segmentation system brings professional level segmentation to all public and academic library patrons. This opportunity provides organizations, including libraries themselves, with a powerful new tool to obtain the same benefits as large companies using market segmentation.

Organizations use market segmentation to 1) gain insight into their customers and use that knowledge to enhance their profitability, revenue growth, and growth in the number of customers; and 2) to become a customer-centric organization; that is, to make the customer an integral part of their organization's strategy and decision-making.

Public and academic libraries can use market segmentation to achieve growth in the number of customers; realize a higher return on investment (ROI) in materials and services; and increase the utilization of their resources (e.g., books, DVDs, etc.) across a higher number of people (in business terms to amortize or leverage their "sunk" investment in assets). Public and academic libraries can specifically use market segmentation in two use cases:

- Customer service use case:
  - To offer their small businesses, entry-level entrepreneurs, and non-profits a tool to find new customers, retain existing customers, improve profitability, find the best location for their business, and develop new products and services appropriate to their market.
    - > See Appendix for Case Study: Start-Up Yoga Studio, Los Angeles, California
  - For use by students to support research and class projects and to prepare students to use market segmentation in their chosen profession.
    - > See Appendix for Case Study: Student Advertising Campaign Project, Pellissippi State Community College, Knoxville, Tennessee
- Strategic planning use case:
  - For use by the public library itself to improve services by better engaging library users and those who don't yet use the library.
    - > See Appendix for Case Study: Strategic Plan: Topeka and Shawnee County Public Library (TSCPL), Kansas

For public and academic libraries, market segmentation is applicable both as a customer service (to businesses, entrepreneurs, non-profits, students, and faculty) and as an indispensable tool for the library's own strategic planning process. Recognizing these different use cases, this white paper will use business terminology and library terminology interchangeably. We encourage the reader to think broadly about the applications for market segmentation in his or her library environment.

## 3.0 Market Segmentation Basics

Most segmentation systems are off the shelf (OTS). Very large companies sometimes develop their own internal segmentation systems by mining their proprietary customer data. The decision by a business or organization to use an OTS segmentation system or to develop their own segmentation system (or to use some combination of them) depends upon their business objectives, available data, and budget. OTS segmentation systems can be general in nature or specific to an industry, such as health care or financial services.

The following are the three most widely used OTS segmentation systems:

- Tapestry Segmentation by ESRI
- Prizm by Claritas
- Mosaic by Experian

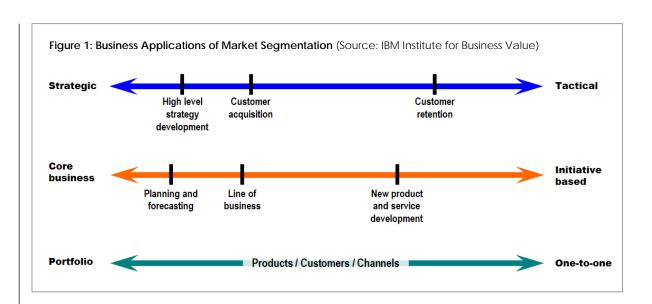
All segmentation systems share certain principles of utilizing data and analytical techniques such as the use of multiple variables, complex mathematical formulas, and the incorporation of spatial analysis utilizing geographic information systems (GIS).

"Today, segmentation is no longer a simple, or static, marketing technique; it is core to the way successful companies run their business."

- IBM Institute for Business Value

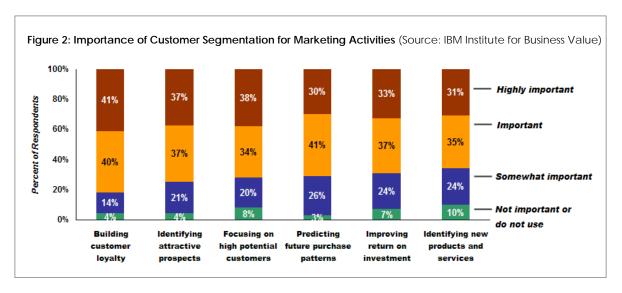
Market segmentation is best known for its use in marketing: customer acquisition, retention, and migration to higher value; and choosing the right location for a given facility, be it a retail store, library, or other type of outlet. Over the last decade, however, the success of market segmentation has expanded its application across other business functions. Market segmentation can be applied to a range of business or organizational functions (see Figure 1: Business Applications of Market Segmentation) including:

- Strategic and tactical functions ranging from strategy development to customer acquisition and retention
- Core business practices and initiative-based activities including planning and forecasting and development of new products and services
- Customer management at the portfolio level and in one-to-one sales and services, including media and distribution choices



Businesses are successfully using market segmentation to better reach profitable customers; libraries are successfully using market segmentation to better reach prospective underserved and underprivileged patrons. More importantly, all types of organizations are weaving market segmentation into their business model and the range of business activities in order to improve top line and bottom line performance. As a result of this, opportunities have been identified which virtually all organizations can apply and from which they have the potential to derive benefits.

The following figure is from a survey of companies conducted by the IBM Institute for Business Value, ranking the importance of segmentation through various types of marketing activities, shown on the bottom of the figure.



## 4.0 Differentiation through a Customer-Centric Approach

Markets are either product driven or customer driven. In the mature U.S. market, which includes extensive use of mass-customization manufacturing techniques, the supply of goods and services is moving more and more toward a customer driven approach. Customers themselves are always learning, changing, and adapting. Changing expectations, lifestyles, life stages, access to ever increasing information, and competition providing new products and services mean there is little constancy in customer behavior. Customer preferences and buying decisions change from month to month and year to year.

"A robust segmentation system reveals the differences between how customers appear and how they act."

Smart enterprises use segmentation to continually monitor, quantify, and qualify the changing customer, in part to stay ahead of the competition. Segmentation data provides organizations with information to develop timely goods and services that profitably serve customers, thereby sustaining the organization's growth and ability to compete with the development of new products and services. Companies must be able to discern the difference between how customers appear and how they act; while some customers may look alike, they behave quite differently, as shown in the example below.

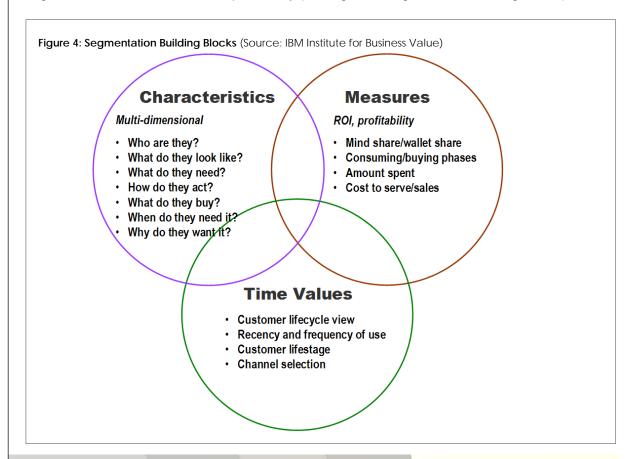
Figure 3: Example	of Customers Who Lool	k Alike but Behave Diffe	rently (Source: IBM Insti	tute for Business Value)
	Demographics	Lifestage	Needs	Attitudes
Å	Woman, early 40's married, household income of \$125,000	Two kids under 10, working mom	Menu planning advice (low fat and value oriented), cooking club	Value shopper, prefers low fat products, enjoys cooking
<b>14</b>	Woman, early 40's married, household income of \$125,000	Two kids under 10, working mom	Ready-to-eat products, pre- cooked entrees, home grocery delivery services	Convenience shopper, prefers organic foods, does not like to cook

A robust segmentation system like Tapestry reveals these key differences. The comprehensive customer picture provided by segmentation informs pivotal, organizational decisions. Segmentation is instrumental in enabling organizations to manage a diverse and growing portfolio of customers, leading them to discover, for example:

- Highly profitable or high-use customers: What can we do to keep these customers and keep them spending or using the library? How can we attract more like them?
- Profitable or moderate-use customers: How do we get more of these customers to adopt the habits (spending or use) of our highly profitable or high-use ones?
- Unprofitable or low-use customers: From the perspective of a small business, how can we
  phase out these customers and, in the meantime, serve them economically? From the
  perspective of a library, how can we increase use?

## 5.0 Building Blocks of Tapestry Segmentation

The dynamic interaction of three key variables makes full use of a segmentation system's potential: segment characteristics, time, and profitability (see Figure 4: Segmentation Building Blocks).



## Segment Characteristics

The core strengths of a segmentation system are the robust methodologies and diverse data sets that create penetrating insights into the personalities, needs, capabilities, and limitations (e.g., financial, age, education) of each segment. In this respect, characteristics should be viewed multi-dimensionally utilizing diverse data sets and empirically validated methodologies. Segment characteristics should generally be able to answer such questions as:

- Who are they?
- What do they look like?
- What do they need?
- How do they act?

- What do they buy?
- When do they need it?
- Why do they want it?

Tapestry is a profiling model that classifies households (and persons) into 65 segments by geographic level (see Sample List of Tapestry Segments). Tapestry is developed by ESRI, the world's leading geographic information systems (GIS) software and data provider. ESRI's business information group has over 30 years of experience in the preparation, development, and support of business related data, software, and information systems. Tapestry is used by thousands of organizations (businesses, non-profits, public agencies, universities, etc.) across a range of industries and disciplines.

## Sample List of Tapestry Segments

Midlife JunctionGreen AcresTop RungExurbanitesLas CasasPrairie Living

Urban Chic Salt of the Earth Wealthy Seaboard Suburbs

Urban VillagesSocial Security SetSuburban SplendorPacific HeightsYoung and RestlessRustbelt RetireesRural Resort DwellersThe EldersTrendsettersMetro RentersHeartland CommunitiesConnoisseursIn StyleHome TownMilk and CookiesSilver and GoldInternational MarketplaceCity Dimensions

Tapestry analyzes and sorts over 60 data attributes for each neighborhood in the U.S. These attributes are organized into four primary categories:

- 1. Demographic characteristics
- 2. Socio-economic characteristics
- 3. Residential characteristics
- 4. Consumer buying preferences

Some of the data attributes used in Tapestry include the following:

- Population by Age and Sex
- Population by Race and Ethnic Origins
- Household Composition, Marital and Living Arrangements
- Patterns of Migration, Mobility, and Commutation
- General Characteristics of Housing
- Economic Characteristics of Housing
- Educational Enrollment and Attainment
- Employment, Occupations, and Industrial Classifications
- Household, Family, and Personal Incomes

Based on an in-depth statistical analysis, Tapestry's 65 segments were determined to be the optimal number to describe the diversity, subtleties, and complexities of the U.S. market and to provide statistical stability. Data sources that comprise the segments include Census 2000 data, ESRI proprietary demographic updates, the InfoBase-X consumer database from Acxiom Corporation, and other sources. Data is available by neighborhood at census block group level and up, including census tract, ZIP Code, and ZIP Code + Four levels.

A distinguishing factor of Tapestry is the way data is analyzed geographically, or geodemographically. By correlating diverse data sets at small geographic levels (e.g., census block groups), powerful, insightful, predictive, and robust results are achieved. Neighborhood level analysis is a chief component in Tapestry.

"By correlating diverse data sets at small geographic levels (e.g., census block groups), powerful, insightful, predictive, and robust results are achieved."

Neighborhoods are natural formations of people drawn together by their common need for a "place"—for security and acceptance. Neighborhood tangibles are housing, land values, available labor, infrastructure, transportation, school system, and other factors that remain stable over decades. Intangibles are elements such as economic opportunities, race, lifestyles, and overall ambience that separate and characterize neighborhoods. The most compelling feature about neighborhoods is the ability to attract or repel residents and shape their living standards and tastes. People need to feel that they belong and will seek places where their lifestyles and behaviors fit.

For users to derive value from a market segmentation system, access to segment characterizations is a key issue: how easy is it to access, understand, and apply segment characterizations. In

Tapestry, access is made easy because each segment is described by a one page narrative with relevant facts based upon certain data categories (see Figure 5: Sample Tapestry Segment Descriptions). In addition, a chart provides easy cross-segment comparisons (see Figure 6: Chart of All 65 Tapestry Segments).



## 35 International Marketplace

Segment Code	.35
Segment Name	. International Mai
LifeMode Group	. L8 Global Roots
Urbanization Group	. U1 Principal Urba

#### Demographic

Demographic

Located primarily in cities in "gateway" states on bu
U.S. coasts, International Marketplace neighborhoos
developing unban markets with a rich blend of cultu
household types. The population is young, with a m
of only 30 3 years. Approximately 70 percent of hou
are occupied by families. Married couples with childs
single parents with childre represent 4d percent of
households. Of all the Community Tapestry segmen
International Marketplace is one of the top file mos
markets. A little more than half of the population is One in nine residents is Asian (nearly three times the level), and 7 percent of residents are two or more ra-than three times the U.S. percentage). This market h proportion of immigrants, many of whom are recent

#### Socioeconomic

One in five International Marketplace households is cally isolated (household members do not speak Eng well). Labor force participation is at 62 percent, just well). Labor force participation is at 62 percent, just the national average. Employed recidents work; job it tries such as manufacturing, retail trade, health care, other senices. Unemployment is high at 10 percent, mately 82 percent of households derive income from some households recieve Supplemental Security incorpubilic assistance income. The median household incide in household incide in Subscience in Stafe, 380; the median net worth is 561,566. Colleg graduate school enrollment is a bit above the U.S. as but educational attainment levels are below U.S. leve

#### Residential

\$355,024. Most of the housing units were built before

## 17 Green Acres

Segment Code..... ... Green Acres ... L2 Upscale Avenues Urbanization Group........... U10 Rural I

#### Demographic

Married couples, with and without children, comprise 71 percent of the households in Green Acres. Many families are comprised of blue-collar baby boomers, many with children aged 6-17 years. With more than 10 million people, Green Acres represents the third largest population of all the Community Tapestry markets, currently more than 3 percent of the U.S. population, and growing by 1.6 percent annually. The median age is 40.6 years. This segment is not ethnically diverse; 93 percent of the residents are white.

#### Socioeconomic

Green Acres residents are educated and hardworking; more than half who are aged 25 years and older hold a degree or attended college. Labor force participation is approximately 69 percent, with higher employment concentrations in the manufacturing, construction, health care, and retail trade industry sectors. Seventeen percent of households derive income from self-employment ventures. Occupation distributions are similar to the United States. The median household income is \$63,922, and the median net worth is \$163,372.

Green Acres neighborhoods are located throughout the country but mainly in the Midwest and South. The highest state concentrations are found in Michigan, Ohio, and Pennsylvania. A little bit country, *Green Acres* residents live in pastoral settings of developing suburban fringe areas. Homeownership is at 88 percent. Eighty-seven percent of the household inventory is dominated by single-family dwellings. These newer homes carry a median value of \$205,460. Typical of rural residents, Green Acres households own multiple vehicles: 78 percent own two or more vehicles

#### Preferences

Country living describes the lifestyle of Green Acres residents. Pet dogs or cats are considered part of the family. These do-it-yourselfers maintain and remodel their homes; projects include painting, installing carpet or insulation, or adding a deck or patio. They own all the necessary power tools, including routers, welders, sanders, and various saws, to finish their projects. Residents maintain their lawns, flower gardens. and vegetable gardens, again with the right tools. They own riding lawn mowers, garden tillers, tractors, and even sepa-rate home freezers for the harvest. Fitting in with the do-ityourself mode, it is not surprising that Green Acres is the top market for owning a sewing machine. A favorite pastime is using their ice cream maker to produce homemade ice cream They prefer motorcycles and full-size pickup trucks.

For exercise, Green Acres residents ride their mountain bikes and participate in water sports such as waterskiing, canoeing, and kayaking. Other activities include bird-watching, power boating, target shooting, hunting, and attending auto racing events. They prefer to listen to college football, auto racing, and news-talk programs on the radio and read fishing, hunting, and motorcycle magazines. Accommodating the country lifestyle, many households watch TV by satellite dish instead. of cable. Events they enjoy watching on TV include alpine skiing, ski jumping, motorcycle racing, equestrian events, and bicycle racing. A favorite station is the Speed Channel.



Tapestry segments are combined into LifeMode Groups and Urbanization Groups. These groups allow the segments to be rolled up to a higher level to allow for time sequence analysis, generalizations, high level analysis, and for users wishing to work with fewer categories.

There are 12 LifeMode Groups each of whose segments represent similar consumption and demographic patterns that reflect shared lifestyle and life stage characteristics. For instance, Group L1, High Society, consists of the seven most affluent segments whereas Group L5, Senior Styles, includes the nine segments with a high presence of seniors.

- L1 High Society
- L2 Upscale Avenues
- L3 Metropolis
- L4 Solo Acts
- L5 Senior Styles
- L6 Scholars and Patriots

- L7 High Hopes
- L8 Global Roots
- L9 Family Portrait
- L10 Traditional Living
- L11 Factories and Farms
- L12 American Quilt

## LifeMode Groups

Each LifeMode Group has a description. The following sample is the description for Group L9 Family Portrait:

"The Family Portrait LifeMode Group is a fast-growing population. The growth is driven primarily by the rapid increase in the Up and Coming Families segment. Youth, family life, and the presence of children are the common characteristics across the five markets in Family Portrait. The group is also ethnically diverse: nearly 30 percent of the residents are of Hispanic descent. The neighborhoods are predominantly composed of homeowners who live in single-family homes. The majority of households include married couples with children who contribute to the group's large household size averaging more than 3.11 persons per household. Their lifestyle reflects their youth and family orientation—buying infant and children's apparel and toys. Visits to theme parks and zoos are popular. Their vehicle of choice is typically a minivan or a full-size SUV."

There are 11 Urbanization Groups which represent shared settlement patterns and income levels. These 11 groups are based on geographic and physical features such as population density, size of city, location in or outside a metropolitan area, and whether or not it is part of the economic and social center of a metropolitan area. For example, U1, Principal Urban Centers I, includes eight segments that are mainly in densely settled cities within a major metropolitan area. The "I" or "II" appearing after each group name designates the relative affluence within the group, with I being more affluent than II.

- U1 Principal Urban Centers I
- U2 Principal Urban Centers II
- U3 Metro Cities I
- U4 Metro Cities II
- U5 Urban Outskirts I
- U6 Urban Outskirts II

- U7 Suburban Periphery I
- U8 Suburban Periphery II
- U9 Small Towns
- U10 Rural I
- U11 Rural II

## **Urbanization Groups**

Each Urbanization Group has a description. The following sample is the description for Group U4 Metro Cities II:

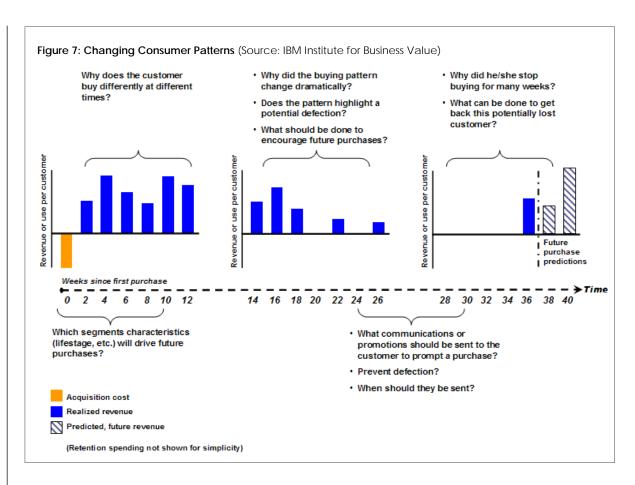
"The Metro Cities II Urbanization Group segments are found in larger cities and in densely populated neighborhoods, ranking third in population density behind Principal Urban Centers I and II. The eight markets in Metro Cities II are neighborhoods in transition including young, starter households; retirees; single-person households; and families. Most householders rent in multiunit buildings. The young population remains mobile. Many are enrolled in college; most are still trying different jobs. The median household income of this group is \$41,272. But household wealth varies from \$10,235 (Dorms to Diplomas) to \$170,490 (Retirement Communities), reflecting the wide range of age and lifestage in Metro Cities II. Consumers in this group share a neighborhood with an emphasis on economy and convenience. Their preferences include compact or subcompact cars, fast food, and convenience stores. With the high concentration of renters, tenant insurance is common while home improvement projects are not."

#### *Time*

Time-based characteristics describe how customers and their consumption patterns change over time, and how this information can impact an organization's relationship with the customer. Time-based characteristics should answer questions such as:

- How recently did a customer make a purchase?
- How frequently do customers make purchases?
- What is the customer lifestage?
- What is the preferred channel for purchases?
- What is the customer's motivation for purchasing?

Time-based characteristics address the motivational aspects of why customers consume what they do during various periods of their lifetime (frequently referred to as "lifestage"); how frequently and how recently they consume; and what marketing and sales channels they purchase through. All of these elements -- motivation, lifestage, frequency, and channels -- are built into Tapestry either at the segment level or the LifeMode Group level (see Figure 7: Changing Consumer Patterns).



It is important to capture the point at which a customer's consumption patterns change (their "points of choice"), usually when there are lifestage changes such as age, income, family structure, interests, and so forth. This period of change represents an opportunity for the organization to gain traction with the customer or for a business to drop them. Gaining traction means to reconsider its offering of goods and services and marketing and sales tactics. Not paying attention to changing patterns could result in an organization wasting time and money targeting a customer who is no longer (or never was) interested or profitable. If an organization decides to continue selling the same goods and services and therefore no longer will cater to customers moving out of the organization's sphere of business, then the organization must plan a specific effort to attract new customers including the time needed to rebuild the customer base and establish loyalty, and the higher monetary costs to obtain new customers, frequently one of the highest costs a business has.

Few organizations put in place strategies and plans to reach customers at their points of choice (when their purchase or use habits change), thereby missing a prime opportunity to win business (ahead of their competitors).

## Life Stages in Tapestry

"The Solo Acts LifeMode Group includes five segments (Laptops and Lattes, Trendsetters, Metro Renters, Old and Newcomers, and Young and Restless). These are singles who prefer city life. Many are young, startup households located in America's more densely populated neighborhoods; some are well established singles who have eschewed homeownership and childrearing responsibilities. Contrary to modern migration patterns that flow away from the largest cities, Solo Acts' residents are moving into major cities. With considerable discretionary income and few commitments, their lifestyle is urban, including the best of city life—dining out, attending plays, and visiting museums—and, for a break from constant connectivity, extensive travel domestically and abroad."

"The Global Roots LifeMode Group includes eight segments (International Marketplace, Industrious Urban Fringe, Urban Melting Pot, Las Casas, Inner City Tenants, NeWest Residents, City Dimensions, and High Rise Renters). The common thread among the markets in Global Roots is ethnic diversity. Households are young with modest incomes and tend to rent in multiunit dwellings. The youth of this group reflects recent immigration trends; half of all households have immigrated to the United States within the past 10 years. The households range from married couples, typically with children, to single parents to individuals who live alone. Because households with children dominate this marketplace, it is not surprising that spending for baby goods, children's apparel, and toys is higher here. Residents of Global Roots are less likely to have home PCs but just as likely to use cell phones. They maintain ties with friends and relatives in their countries of origin with foreign travel."

- **Lifestage:** this represents the period of a person's lifetime that dominates their basic lifestyle: young adult in college or just graduated high school, just married, just starting a family with children, middle age, senior citizen, etc. The concept of lifestage is captured by Tapestry LifeMode Groups which organize individual segments (see Life Stages in Tapestry).
- Motivation: this represents the reason that people engage in purchasing. By understanding
  the purchasing motivation an organization will have a handle on consumers' state of mind.
  Purchasing motivations are exemplified by new parents needing to buy items for the
  newborn; senior citizens traveling; wealthy couples purchasing a second home; and so
  forth.
- Recency: this represents how recently a customer made a purchase. This aspect is not built into Tapestry because it is unique to the business or organization that makes the sale. Recency data should be kept as part of the organization's customer relationship management (CRM) system and integrated with Tapestry segmentation. For a library, this

equates to the integrated library system (ILS) or cardholder database. By combining these data sets an organization can benchmark its customer reach and connection, and then measure effectiveness of its marketing and sales campaigns.

- Frequency: this represents how often or frequently customers make purchases. This is a key element in a business being able to forecast revenue and its investment in marketing and sales including the use of segmentation. Increasing purchasing (or, in the case of the library, borrowing) frequency by understanding customer lifestage and motivation through segmentation is essential to building the customer relationship. By utilizing the latest consumer expenditure survey data, Tapestry is able to distinguish consumer spending patterns and related lifestyle choices.
- Channels: these are the methods and media through which organizations market and/or sell goods and services to the segments. These channels include print, television, radio, and web-based methods, as well as direct and indirect marketing. Organizations must actively choose and consider the best channels to reach each segment for the type of marketing or sales campaign they are undertaking.

## **Evaluating Success**

Effective segmentation must be both qualitative and quantitative. To make accurate, segmentation-driven decisions, companies need to evaluate success (including, for companies, measuring profitability) at multiple levels, including the individual, sub-segment, segment, and the total customer portfolio level. Companies must figure out measures of value – the success or profitability variables that work best for them. Research at IBM indicates that these measures vary by industry and by company, from recency, frequency, and monetary indices (RFM), to customer-value indices, and revenue per customer versus cost to serve. IBM notes one caution in selecting profitability measures: make sure the measure chosen provides an accurate, comprehensive view of performance. Relying on per-customer revenue numbers only, for example, could be misleading; customers at the same sales levels could be profitable in a low-rent retail location but unprofitable in a high rent retail location. Make sure measures are comprehensive.

## Pulling it Together: Interaction of the Three Segmentation Building Blocks

The interaction of these three segmentation building blocks (segment characteristics, time, and profitability) is the continual tracking of customers. Tracking customers and prospective customers on an annual basis or even a quarterly basis will not work in a marketplace in which customers have the upper hand because so much potential information is available to inform their purchasing decisions. Organizations must move away from infrequent tracking to always tracking and in turn create an on-going relationship with the customer. In this sense the business networking relationship is parallel to the social networking relationship. The organization that intentionally tracks customers to understand current and future profitability and risk, likelihood of defection, channel preference, propensity to purchase additional products, and lifestage has the competitive edge. An

organization can use segmentation data, industry data, and its own data to predict changes in the marketplace and interpret the direction its business and its industry are moving.

## 6.0 Tapestry Library Applications

There are two library applications in which Tapestry is presented: BusinessDecision and LibraryDecision.

## **BusinessDecision**

BusinessDecision and BusinessDecision Academic (both hereinafter referred to as "BusinessDecision") are database services that enable end-users, through a library's subscription, to access Tapestry segmentation data. (Two case studies shown in the Appendix were prepared using BusinessDecision – Case Study 2: Start-Up Yoga Studio, Los Angeles, California and Case Study 3: Student Advertising Campaign Project, Pellissippi State Community College, Knoxville, Tennessee).

BusinessDecision integrates Tapestry market segmentation data with other data sets including demographic forecasts, consumer spending data, housing forecasts, and thematic maps to support the individual, customized queries of any authorized end-user.

BusinessDecision is a consumer market database, reporting, and mapping service that targets small business, entrepreneur, and non-profit patrons at public libraries; and students, faculty, and staff at academic libraries. With BusinessDecision libraries can empower local businesses, non-profits, and students with most of the same data, reports, and maps that are used by America's best and most successful companies. BusinessDecision is wizard-driven and easy to use; the interface is designed so that anyone can create Tapestry segmentation reports and maps without having to be trained to use native geographic information systems (GIS) software.

Because BusinessDecision embeds Tapestry, the end-user has the ability to utilize powerful data and analytical tools to:

- Create and analyze trade areas
- Perform competitive analysis
- Evaluate market penetration
- Identify new site locations
- Target media buys and direct mail campaigns

- Find new customers
- Reveal untapped markets
- Select the right merchandise mix
- Expand into appropriate new markets

BusinessDecision includes the use of powerful thematic maps. Thematic maps represent and display data, including Tapestry data, consumer expenditure data, and demographic data. Maps are designed and customized by the end-user including the location of the site studied and the study

area around each site. The study area can be overlapping rings, donut rings, drive times, or a hand-drawn shape. Map data can be presented at a range of geographic levels including census block groups, census tracts, and ZIP Codes, among others.

As a subscription service, BusinessDecision offers many user support features including an unlimited number of reports and maps; can be used by an unlimited number of simultaneous users; and any registered library user can access BusinessDecision through any desktop computer's web browser or through the library's website.

## LibraryDecision

LibraryDecision is a comprehensive suite of planning, marketing, and development services that employs Tapestry market segmentation data to assist public libraries better connect with their community. LibraryDecision utilizes Tapestry data to characterize the local populous and merges the Tapestry data with selected patron, checkout, and program information from the library's integrated library system (ILS) to understand library use patterns and plan strategic initiatives. LibraryDecision services are delivered and displayed using CommunityConnect, as described below. Case Study 4: Strategic Plan: Topeka and Shawnee County Public Library (TSCPL), Kansas (see Appendix) was prepared using LibraryDecision.

Library Decision includes four services that employ Tapestry:

## SnapShot

SnapShot is a brief eye-catching report that analyzes Tapestry market segments, demographic trends, socio-economic data, and consumer interests. SnapShot is a situational analysis of the market in which the library is located. SnapShot provides hard data about the library's service area and is particularly useful as a top level analysis.

#### **Patron**

Patron is an in-depth analysis of patron use patterns put in the framework of the Tapestry market segmentation system. Selected ILS data is merged with Tapestry data to develop profiles of patrons and non-patrons. These profiles look at who uses the library and where they live; and more importantly, who doesn't use the library and how to connect with them. Patron is particularly useful for strategic and facilities planning. Patron results can be used to develop marketing campaigns, collection development, and planning facility locations.

## **Planner**

Planner helps library administrators plan branch service areas and locate new outlets. Planner utilizes Tapestry market segmentation and other tools such as population forecasts, library service indicators, and thematic maps to identify underserved populations and develop plans of service to meet local needs.

## Voter

Voter helps library administrators to win library-related ballot elections. Voter compares historical library use patterns, voting patterns and market segments to assist libraries in winning funding support at the ballot box. Through the use of Tapestry segmentation, Voter helps libraries in two ways: 1) strategically by predicting which voters will help win library funding campaigns; and 2) tactically by developing the election campaign focused on key segments and messages.

## **Consulting Services**

Consulting services utilize Tapestry segmentation for special projects and other assignments that do not fit the services described above.

## CommunityConnect

CommunityConnect is an interactive website that enables public libraries to understand their community by integrating market segmentation data with library statistics including patron, checkout, and materials data from SnapShot, Patron, Planner, and Voter. With CommunityConnect libraries have a powerful tool to deliver more effective services to meet the specific needs of local communities and neighborhoods (see <a href="https://www.tscplcommunityconnect.com">www.tscplcommunityconnect.com</a>). CommunityConnect can be customized to reflect a library's strategic planning initiatives and can include data updates from the library's integrated library system (ILS) to measure results and manage services, campaigns, and unique programs.

# 7.0 Conclusion: Market Segmentation and the 21st Century Library

While market segmentation is new to the public and academic library market, its widespread adoption by large businesses over a long period of time is testimony to its robust and reliable predictive capabilities. With the affordability and ease-of-use of services such as BusinessDecision and LibraryDecision, libraries are beginning to adopt market segmentation to meet a variety of needs, including their own strategic planning.

Market segmentation can be used broadly or narrowly. In its broadest use, market segmentation is strategic in nature and can help change the way an organization (e.g., library or business) conceptualizes its business model to become customer-centric. Used narrowly, market segmentation can be applied in a more traditional manner to marketing campaigns and sales programs.

Because market segmentation is now an affordable commodity, public and academic libraries can engage customers with a service that specifically meets their needs. Academic libraries are using market segmentation to support the research needs of students and faculty; public libraries are

supporting the economic growth and development of their communities by providing market segmentation tools to small businesses, entrepreneurs, and non-profits as well as using the tools for strategic planning by the library itself.

## 8.0 References

Driving an Operational Model that Integrates Customer Segmentation with Customer Management, IBM Institute for Business Value Executive Brief, IBM Consulting Services, 2003

Community Tapestry Handbook, ESRI, 2007-2009

Finding the Underserved: Close Examination Using Market Segmentation Can Reveal Useful Surprises About the People Your Library Is Leaving Behind, Marc Futterman, Library Journal, October, 15, 2008. http://www.libraryjournal.com/article/CA6602835.html

## **Appendix: Case Studies**

Background

Use of

**Results** 

Segmentation

## Case Study 1: Customer Prospecting

DS Waters, Atlanta, Georgia

Type Large corporation

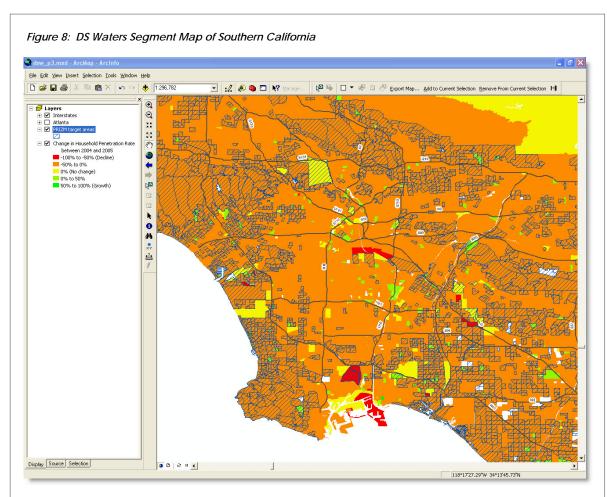
**Objective** Inform a national advertising campaign to target potential customers whose characteristics best match the company's most profitable customers.

Created in 2003, DS Waters is the producer and distributor of home, office and retail bottled water products across the United States under the brand names Alhambra, Belmont Springs, Crystal Springs, Hinckley Springs, Kentwood Springs, Nursery Water, Sierra Springs, and Sparkletts. The Company is the U.S. leader in home and office water delivery, focusing on five-gallon, one-gallon and single-serve bottled water products. DS Waters employs approximately 4,500 Associates in more than 40 states.

We identified the top 20 percent of 2.3 million customers by profitability and determined their market segments at the block group and zip code levels. Ten segments accounted for these top earning customers. Then we identified the average number of customers within each block group. Block groups with lower than average number of customers (low penetration rate) were identified as the most likely locations to solicit potential customers whose profile closely matched proven, highly profitable customers.

DS Waters undertook a multi-million dollar national advertising campaign targeting the ten market segments that represent the highest profitability customers, focused in under-performing census block groups.

**Credits** Project by CIVICTechnologies in association with DDB



Market segments are mapped in relation to growth or decline in the customer base, indicating locales for targeted marketing and sales.

## Case Study 2: Start-Up Yoga Studio Los Angeles, California

#### Type

Entrepreneur

#### Objective

There were two objectives: 1) use BusinessDecision Tapestry segmentation data to find the best possible site for locating a start-up yoga studio; and 2) use BusinessDecision demographic and market potential data to inform the business plan revenue model.

#### **Background**

A first time entrepreneur is starting up a yoga studio and needs reliable and accurate data for preparing a business plan and obtaining a bank loan.

## Use of Segmentation

Upon discovering BusinessDecision on her public library's website, the entrepreneur prepared a Tapestry analysis of successful nearby yoga studios. They each have between one and four dominant segments. These segments have similar characteristics such as high disposable income, well-educated professional women between 25 and 40, equal number of married-couple families and families with children, and high home or condo ownership.

The entrepreneur prepared a Tapestry analysis of her market area to identify same-segment locations. She then selected three alternative sites upon which to pursue lease negotiations.

The entrepreneur prepared a revenue model for her business plan. Using BusinessDecision demographic data she calculated that 23,606 people live in a one mile radius around her preferred site. Using BusinessDecision market share data, she found that 5.9 percent of the people purchase yoga services (5.9 percent x 23,606 people = 1,392 customers). Knowing her price per class, she calculated projected core business revenue (1,392 customers x \$15 per lesson at two lessons per month = \$501,120).

## Results

The bank reviewing the business plan validated the data provided by BusinessDecision. The bank and entrepreneur decided that the first phase of implementation would be opening a national franchise juice bar so she could gain operational business experience. She has been profitably running that franchise since January 2008 and plans to open the yoga studio soon.

#### **Testimonial**

"I found BusinessDecision through the local public library website. I was amazed at the detailed information accessible to me, information I could not find elsewhere and, as it turns out, couldn't have afforded on my own. BusinessDecision let me take my business concept and test it through in-depth demographic and Tapestry segmentation reports. The data I've gathered through BusinessDecision has given me the proof I needed to develop my business plan and the confidence to seek financing to realize my dream. The library is providing an incredible service to entrepreneurs like me by offering BusinessDecision."

Alexia Cirino, Public Library Patron

## Credits

Data provided by BusinessDecision

Figure 9: Start-Up Yoga Studio Comparison of Competitor Segments

## Segments most likely to practice yoga



- Trendsetters
- Urban Chic
- Laptops & Lattes
- Pacific Heights

	Connoisseurs	Laptops &	Urban	Pacific	Trend-	Metro	Int'l	Young &	Urban	NeWest
Yoga Studio		Lattes	Chic	Heights	setters	Renters	Mktplace	Restless	Melting Pot	Residents
Alternative Site 1	7.9%		0.9%	9.2%	6.2%		24.9%			
Alternative Site 2	4.5%		13.0%	17.2%	56.7%					
Vital Yoga	9.8%		18.8%							
Yoga Squared	4.8%		6.7%				11.7%			23.3%
Absolute Yoga	21.0%		27.4%				21.4%			
In Town Yoga	14.4%		0.2%	17.6%	12.0%		11.6%		41.4%	
Yoga Center	2.9%	9.7%	3.2%	4.0%	10.6%		22.6%		25.2%	12.7%
Iris Yoga		11.1%	16.5%		48.7%	10.7%		11.6%		
Brown Horse Yoga		14.3%	4.9%		62.3%	12.0%				
Yoga Village	9.8%	27.3%	3.4%		32.0%	14.0%				
Regen Yoga		26.1%	39.5%		26.0%					
Elm Street Yoga	6.6%	5.9%	33.2%	1.8%	48.1%		3.5%			
Mountainside Yoga	8.7%	8.8%	20.6%		42.4%	19.4%				
Segment Average	9.0%	14.7%	14.5%	10.0%	34.5%	14.0%	16.0%	11.6%	33.3%	18.0%

The segments most likely to practice yoga were identified through an analysis of segments living close to competitors. Those same segments were compared in relation to alternative sites for the start-up studio. The preferred site, Alternative 2, was selected because it most closely matched segments that attend classes at competitor locations.

# Case Study 3: Student Advertising Project Pellissippi State Community College, Knoxville, Tennessee

## Type

College/University class project

#### Objective

As part of a comprehensive course, students develop an advertising campaign for local businesses. The objective is for students to apply learning concepts to a real client. In addition to the client, a group of local advertising agency, media, and public relations professionals help evaluate the campaign's effectiveness.

#### **Background**

The March of Dimes of East Tennessee needed help developing promotional materials for two fund-raising events: the Signature Chefs' gala which brings 20 local restaurant chefs together to sample their signature dish at a black tie gala that includes a live and a silent auction; and a real estate breakfast designed to honor an outstanding industry member. Both events support efforts to minimize the risk of premature births. Developing promotional materials requires a thorough understanding of the target market's client profile and the concentration of particular segments in the East Tennessee area.

## Use of Segmentation

Using Tapestry profiles enables students to target people who are interested in attending the March of Dimes gala event. Student teams focus on segments composed of professional and community volunteers who have or want to have children and/or grandchildren. Tapestry segment descriptions paint an accurate picture of the target audience so students can develop effective communication strategies. Mapping selected segments allows effective and efficient use of limited media funds to reach the most likely prospects.

#### Results

Using BusinessDecision students learn how the different segmentation variables work together to better understand the complexities of customer profiling. They learn how to research a target market from many perspectives and choose the approach that best works for the client. Having a database as powerful and multifaceted as Business Decision dramatically increases students' understanding of complex relationships and demonstrates student skills. Critical thinking skills are sharpened, the ability to use library resources is enhanced, and the projects are professionally completed.

#### **Testimonial**

"BusinessDecision is one of the most useful tools for teaching business I've ever used. Students can investigate demographic, geographic, lifestyle and behavioral dimensions of a target market on one site with minimal instruction on the software. From a teaching perspective, this is phenomenal. As more and more content is packed into the discipline, having a sophisticated product like BusinessDecision allows me to demonstrate market segmentation in a content rich manner without spending time I don't have doing so."

Lisa Bogaty, Associate Professor, Business Computer Technology and Director of Technology Programs, Pellissippi State Community College

## Credits

Data provided by Business Decision

Case Study 4:	Strategic Plan: Topeka and Shawnee County Public
	Library, Kansas

#### Type

Public library planning

#### Objective

The library wants to better understand the unique needs of the diverse people in the library's service area, find a better way of connecting with potential library users, and provide staff with tools that enable them to grow professionally.

#### Background

TSCPL serves approximately 175,000 people with one facility. TSCPL sought to identify underserved segments, assess their needs, develop appropriate resources to meet those needs and deliver those services, and implement marketing campaigns targeted at selected segments.

# Use of segmentation

TSCPL began the process by mapping the relationships between patrons and non-patrons and between patrons, checkouts, material types, and Tapestry segments. The library found that the top six market segments account for 53% of the population, with the remaining 47% fragmented across some 24 other segments. Each segment was ranked for its potential to add patrons and increase checkouts. This gives TSCPL a tool for identifying needs and for developing and managing its service delivery and marketing.

The library learned important lessons: 1) they thought that customers living farthest from the library use the mailing service the most but they learned that distance is not a good predictor for how this service is used; 2) they thought that people in rural Shawnee County prefer films over books but they learned that people living in rural areas check out more books than films; and 3) they thought that people who live in east Topeka are generally underserved and are not big library users, but they learned that 77% of one local segment, "Inner City Tenants" are library customers and have the 5th highest check out per customer...they are receiving exceptional service.

## Results

To implement the strategic plan the TSCPL CommunityConnect website was created at <a href="www.tscplcommunityconnect.com">www.tscplcommunityconnect.com</a>. This website is a tool that supports library staff's initiatives to deliver services that target the unique needs and interests of each of the 30 segments present in the county.

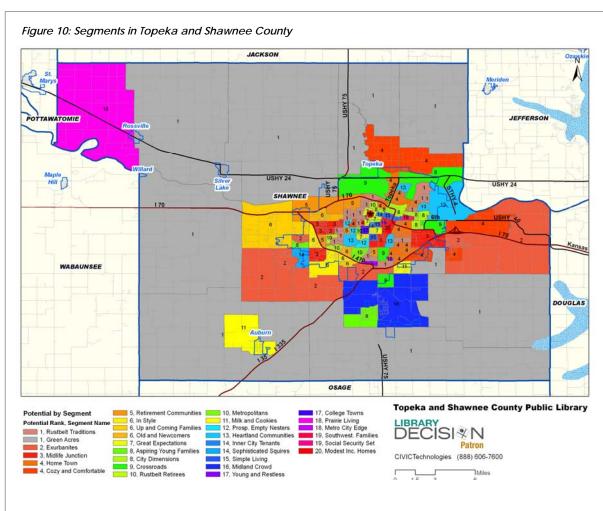
## Testimonial

"My own epiphany about planning after working for more than 30 years as a professional librarian is that the line between a library's strategic plan and its marketing/communications plan has begun to blur and merge. It is really all about connecting with people and building relationships built on real knowledge about each other. And the data that drives that is the GIS (geographic information system) and market segmentation analysis."

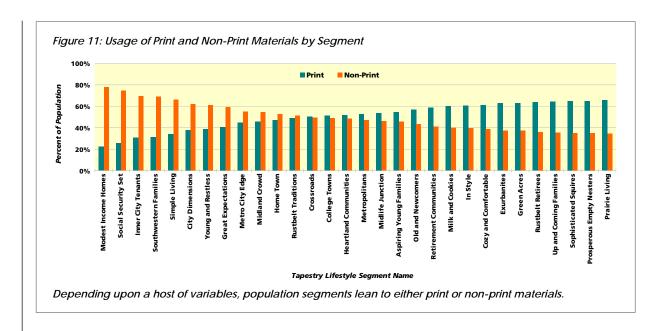
Gina Millsap, Executive Director, Topeka and Shawnee County Public Library

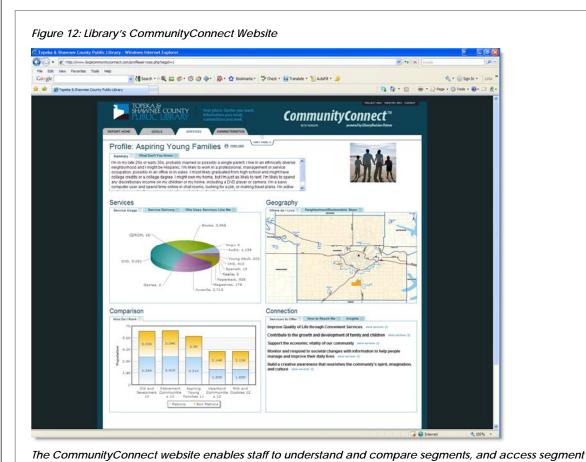
## Credits

Data including Tapestry segmentation provided by ESRI



Market segmentation for the Topeka and Shawnee County Public Library lets the library know its community better.





data in planning and implementing library development programs and activities.

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## About BusinessDecision

BusinessDecision is a business database offered through public libraries that helps small businesses succeed by increasing their market share and growing their clientele, and that helps public libraries promote economic sustainability in their local community by meeting the needs of small businesses, entrepreneurs, and non-profits. BusinessDecision Academic is a business database offered through academic libraries to help students and faculty undertake classroom and research projects. For more about BusinessDecision visit <a href="www.businessdecision.info">www.businessdecision.info</a> or contact Julie Peterson toll free at (888) 606-7600 or by email at <a href="Julie@businessdecision.info">Julie@businessdecision.info</a>.

## About CIVICTechnologies

CIVICTechnologies provides a full suite of web services, customized applications and consulting services to meet the complete geographic information systems (GIS) needs of libraries and businesses—from small and medium enterprises to Fortune 500 companies—across a diverse range of industries. CIVICTechnologies enables its customers to visualize data in new and innovative ways in order to deliver more effective products and services, make better informed decisions, build consensus faster, allocate resources more wisely, and implement organization-wide solutions more effectively. For more information, call Marc Futterman toll free at (888) 606-7600 or email him at <a href="mailto:maf@civictechnologies.com">maf@civictechnologies.com</a>; or visit <a href="mailto:www.civictechnologies.com">www.civictechnologies.com</a>;