

## **O·P·E·N Triad: The Future Success for Individuals, Institutes, and Industries**

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### **Abstract**

This study proposes the **O·P·E·N Triad** framework as a future set of tools and perspectives for individual members and institutes to further their professional and academic potential as well as prospect and vitalize the future of the Korean Clothing and Textiles discipline through a global perspective. The millennial generation desires On-demand, Personal, Engaging, and Networked (O·P·E·N) experiences effecting cultural change for creative and influential interaction in transactions, communication, and education. **O·P·E·N Individuals** offers a *WebSphere* model as a holistic learning system that has a synergizing value of education across academic courses, industries, and cultures. Through a digitalized and virtualized class, it complements relevant technologies already familiar to the student population. By employing environmental scanning approaches, the most influential and viable future global issues related to the clothing and textiles discipline are identified and dialogued within **O·P·E·N Institutes**. For future clothing and textiles institutes, this scanning allows them to be open to new ideas, to focus on inter-engagements, to collaborate among individuals, to associate as a part of web of people, organizations, and ideas, to personalize an institute's curricula, and to dialogue generative knowledge. **O·P·E·N Industries** reveals three dominant future issues that cross academia and industry, sustainability, supply chain management, and social networking. In-depth interviews with U.S. industry experts identified interdependent gaps in global consumer experience practices and suggested the following gaps as future research areas: a standardized business model to the entrepreneurial model, strategic management to a sustainable competitive advantage, standardized to differentiated products, services and operations, market segmentation to global consumer clusters, business-driven marketplaces to consumer-engaged marketspaces, and excellent services to optimal experience. This **O·P·E·N Triad** framework empowers millennial students, universities, and industries to anticipate and prepare for a radically changing world.

**Key words:** Clothing and textiles, Future, O·P·E·N individuals, O·P·E·N industries, O·P·E·N institutes

### **I. Introduction: Why Study Future?**

The future is the only time frame we have the power to influence. Projecting to the future encourages us to view the world systematically by connecting present choices, actions, and decisions to long-term outcomes. This offers us the opportunity to

develop the attitudes and tools necessary for navigating this changing world and to emphasize research questions that require problem solving and decision-making (Burchsted, 2003). Integrating a future dimension into education, research and practice provides a framework for sifting through the wide range of economical, ethical, and social issues that will surely be encountered such as predictions about consumer demographic changes. It includes aging of consumers, increasing numbers of women in the workforce, a larger dichotomy between rich and poor, growth of

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the grey market, and increasing cultural diversity (Peterson, 1997). Along with these demographic changes, resource shortages, climate change, new technologies, and seismic shifts in the global economy will affect businesses, consumers, and the world in ways we find hard to anticipate. All areas, from suppliers of raw materials to designers, manufacturers, big brands and niche retail outlets, of the vibrant clothing and textiles industry in every region will be affected. These profound changes will call into question how we educate our future students. However, these changes offer exciting opportunities. If we understand what the future may hold we can prepare for it, spot promising new ventures and even help shape the direction it takes.

Upon projecting the contemporary and future academia and industry paradigms changes, educators, researchers and practitioners need to know about the new generation of consumers and students. This millennial generation grew up while technological convergence was making its way across giant industry sectors and small digital devices alike. The millennial generation desires OPEN experiences in transactions and communication such as; ‘On-Demand’ experience stirred by digital competence seeking individuals; ‘Personal’ experience enabling individualized interactions; ‘Engaging’ experience developed by emotional attachment linked to social identities; and ‘Networked’ experience effecting cultural change for creative and influential interaction. Whereas this OPEN perspective (i.e., an acronym of on-demand, personal, engaging and networked) was originally generated for the effective branding strategy by Mooney and Rollins (2008) in their book “The Open Brand: When Push Comes to Pull in a Web-Made World,” it inspires us to create a unique set of tools and perspectives for individuals, institutes and industries within the clothing and textiles (hereafter C & T) field as illustrated in <Fig. 1>. As the C & T discipline moves into an era characterized by increased globalization, consumption, and communication, we are more connected than separated by time and space (Darmhorst & Hodges, 2007). To establish the value of education with a global perspective, **O·P·E·N Triad** can create a synergy that crosses academic programs, industries, cultures, and market places and empowers each

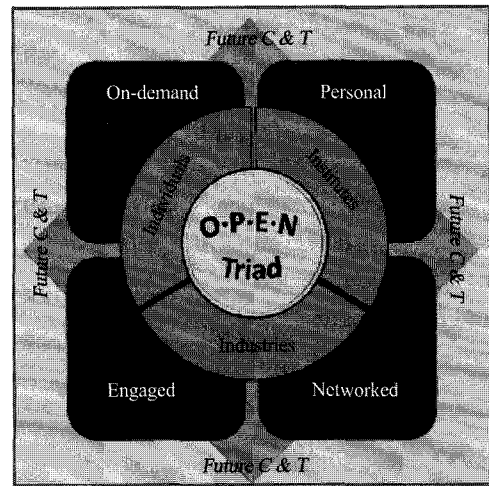


Fig. 1. O·P·E·N Triad.

participant to anticipate and prepare for our changing world.

The purpose of this study was to initiate a dialogue for futuring the success of individuals, institutes and industries toward a global C & T milieu. Within the **O·P·E·N Triad** framework, this study suggests the sub-triad constituents including **O·P·E·N Individuals**, **O·P·E·N Institutes** and **O·P·E·N Industries**. By using a qualitative approach which consisted of environmental scanning, industry interviews and transdisciplinary analysis, this conceptual paper offers insights into (1) building student-centered education that meets rapidly changing workforce demands from the global C & T industries; (2) stimulating cross-institutional program interactions within Korea, and with global constituencies in research, scholarship, and creative activity; and (3) advancing the vision of the Korean Society of Clothing and Textiles to a future and global context.

## II. Conceptual Framework

This section is organized by the respective sub-triad perspectives. First, for each sub-triad, a review of the relevant literature and background are introduced which leads to the proposed model. Next, the research methodology and the proposed model are illustrated and discussed. Finally, the study findings are discussed in line with academic and practical implications.

## 1. O·P·E·N Individuals: Preparing Students for Success in the Future Profession

### 1) Background

Recently U.S. students predicted a global C & T future where: (1) technology would be the prominent force for changes across all levels of the apparel industry; (2) specialized fibers and fabrics for specific functions and apparel styles would emphasize function, practicality, comfort, and individuality; (3) production would use total automation and a wide adoption of mass customization; and (4) consumers would use multi-channel stores in conjunction with the Internet (Kim & Johnson, 2007). Likewise in his book 'Futuretainment' Walsh (2009) envisions a future that is not simply about producing the next technology but a whole new relationship with technology. Digital distribution has taken on familiar formats of media, such as music, movies, television and games, and turning them into a fluid futuretainment. He forecasts how the new generation resets, plays and empowers their future by envisioning 23 insights such as: Revolution (change always appears incremental until too late); Factory (mass produced media must make way for media produced by the masses); Mediajack (you can't stop the music); Ubiquity (anywhere, anything, anytime); Crowd (we are smarter together); Social (who you know is what you know); Discovery (we will watch what others will see); Viral (one becomes many); Avatar (we are what we want others to see); and Lifecast (we desire to live each other's lives) (Walsh, 2009).

The millennial generation has grown up with technological convergence blending once-separate spheres of private and public, consumption and production, entertainment and education, community and creativity, shopping and self-actualization (Mooney & Rollins, 2008). With a keen sense of self-entitlement, self-worth and high future aspirations, the millennials truly demand an OPEN experience in their future. Adapting into education supply chain, O·P·E·N Individuals will prepare students for success in their future academic and industry profession, and it serves as an educational framework interwoven with individual students' demands from culture, industry, tech-

nology and a global perspective. It advances the value of education by expanding domestic education to global education and transforming residential space to virtual space.

### 2) Methods

In the 2005 special issue of the Clothing and Textiles Research Journal (CTRJ), U.S. scholars emphasized the diverse scholarship of teaching in our interdisciplinary field including design, history, social/psychological aspects of dress and appearance, textiles, merchandising, marketing, and product development. All eighteen papers from this special issue represent faculty commitments to enhancing the learning environment in real and electronic classrooms, plus the creativity to develop challenging and beneficial educational experiences. The variety of teaching-related subjects includes classroom innovations and efficiencies, curriculum development, linkages using traditional research in a class-room setting, presentation methods (large and small group discussion techniques), problem-based learning, active and interactive learning, project-based learning, team-centered techniques, Web-based instruction, computer-aided instruction, and deep learning techniques. To envision O·P·E·N Individuals, the following conclusions were drawn from this review: (1) Boyer's (1990) four components of scholarship (discovery, integration, application, and teaching) enhances communication, content, and leadership skill in both teaching and research; (2) 'problem-based learning' pedagogy improves knowledge retention and skills in exploring solutions for an existing problem; (3) students' career exploration through collaborative and networked 'career exploration projects' helps students learn about diverse and evolving careers in global C & T industry fields; and (4) students' learning style preferences from different cultures inspires future curriculum design. An evolving breed of O·P·E·N Individuals suggests a need for future-orientated curriculum with an agile infrastructure, whose governance and arrangement allow for the flexibility necessary for interdisciplinary education.

By integrating the idea of futuretainment and student predictions of an agile education supply chain, the O·P·E·N Individuals concept proposes a Web-

Sphere model based on Boyer's (1990) four components of scholarship that include discovery, integration, application of internal and external factors, and teaching. Not only is it important for students to have a foundation for working with diverse customers and corporate entities worldwide, it is critical that they understand the global nature of the C & T industry. WebSphere offers a plausible, coherent and challenging educational model for transforming current ideas and inspiring future opportunities. The WebSphere model frames diverse assignments, projects, workshops, and courses in a global e-learning system and transforms place-bound learning to virtual learning. By applying discovery, an element of Boyer's (1990) scholarship, place-bound learning such as a distinguished lecture series highlighting C & T industry issues could expand through a web-based course to include diverse local, regional, and national perspectives. Integration and application of virtual learning is supported through international workshops and a blogsphere. International workshops integrate the digital contents delivered from the distinguished lecture series into relevant class projects across the curricula. Through a blogsphere faculty create socially networked Vlog, webinar and virtual projects which can be powered by relevant technologies already familiar to the student population. The blogsphere enhances classroom experiences for students who need to understand global consumers and to expand their visions to global marketspaces. Altogether from a teaching perspective, the Web-

Sphere model will produce a holistic learning system that creates synergistic value across academic classes, industries, and cultures (Fig. 2).

### 3) Discussion

Students, as digital natives, have become more skilled using new technology and information sources. They can be more engaged in the e-learning process (Goldenberg, 1999) with active, sensory, visual, and sequential learning style preferences (Crutsinger et al., 2005). E-learning allows students to investigate specific areas that interest them; ultimately, they begin to accept responsibility for their learning (Bernard et al., 2000). Moreover e-learning facilitates collaboration on assignments, critical reflections, and problem-based learning, all competencies necessary in a rapidly changing and increasingly complex global community (Weigel, 2000). Thus the Websphere model can augment a student's creative performance by pedagogical innovations. Creativity is best conceptualized as a behavior resulting from particular constellations of personal characteristics, cognitive abilities, and social environments (Amabile, 1983). Drawn from Amabile's (1983) 'Componential Creativity Perspective' that includes domain-relevant skills, creativity-relevant skills, and task motivation as components of creativity, WebSphere allows O·P·E·N Individuals to receive new ideas; to focus on inter-engagements; to collaborate and associate as a part of a web of people, organizations and ideas; to personalize curricula; and

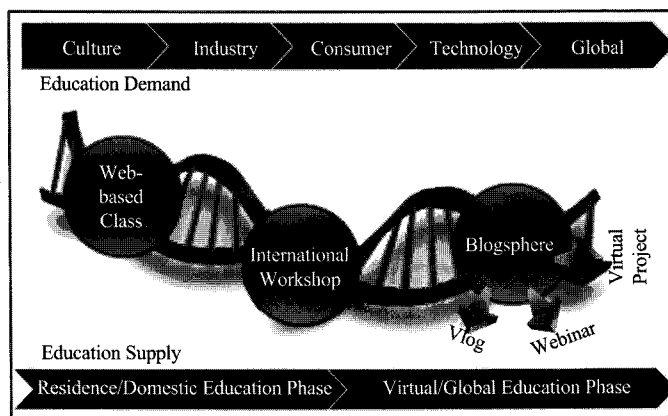


Fig. 2. The WebSphere model.

to dialogue generative knowledge. Thus it transforms Web consumers into Web content producers who employ a wide range of cultural interests and social affiliations with tech-based interaction (Karger & Quan, 2004).

## **2. O·P·E·N Institutes: Changing Universities to Thrive as Future Institutes**

### **1) Background**

Creativity and willingness to enhance teaching are demonstrated by pedagogical innovation throughout the C & T field. Although it has been less than a century since C & T was first taught at institutions of higher education in Korea (Rhee, 1996), the C & T discipline in Korea has advanced its educational goals and content in response to social needs (Moon et al., 1993). Evolution of Korean C & T as an independent academic discipline from the 1960s to the 1980s is aligned with expectations for this field to meet industry needs and to mediate this change between society and academia. In order to better prepare students to be competitive professionals in the global marketplace and institutes to survive, sustain, and thrive as academic discipline in higher education, the Korean C & T education recently emphasized instituting more balanced perspectives. These perspectives draw from both: (1) vocational training and academic knowledge; (2) specialization and integration of curricula; (3) basic and applied sciences in C & T research with a sound grounding and significant theories; and (4) academic and practical value (Rhee, 2008).

Evolution of C & T as a discipline is common among U.S. institutions where advanced educational structures provide predictability and control, and great achievements are based on scientific discipline. Generally, the C & T discipline has based problem solving on linear, cause and effect rationality and the scientific method (Darmhorst & Hodges, 2007). Such an approach has served us well in the past since assumptions underlying society and institutions experienced change over many years. Lecturing using a standard curriculum served institutes well (Smyre, 2000). However, there is a demise of some academic

programs in our field and the reconfiguration of others. Also, some programs in the U.S. worry about less-than-secure positions in their institutions (O'Neal, 2007). If the future context has emerged as a key concept for education, how can universities begin to create a learning environment where issues are considered within an evolving futures context? One solution is to create separate and parallel structures for envisioning future trends which can be attached to existing educational structures (O'Neal, 2007). O·P·E·N Institutes put forward a framework for changing universities to become thriving institutes in the future.

### **2) Methods**

To generate a future direction for O·P·E·N Institutes, we employed a meta-scientific approach using environmental scanning in conjunction with industry interviews. Environmental scanning is used to identify emerging trends, situations, and obstacles that may affect an organization's future. Data is collected and analyzed from a variety of information sources regarding external social, economic, competitive, technological, and political/regulatory influences (H. Kim et al., 2007). According to Stoffels' (1994) model such as gathering, generating, synthesizing, evaluating, extracting and producing procedure, this study gathered input and generated information that evaluated and synthesized emerging issues and extracted key forces influencing the future. The scanning process sampled the Clothing & Textile Research Journal and the Journal of Fashion Marketing & Management to reflect scholarly perspectives. In addition, a scanning of Kurt Salmon Associates (KSA) and Retail Systems Research (RSR) research integrated industry issues with academic concerns. A total of 364 articles published from 2005 to 2010 were scanned. Issues with high exposure and significant impacts on C & T and retail industries were examined as representative of where there were high priorities for viable future directions. In total, 139 abstracts were indexed and categorized by different subjects. An analysis of abstracts through environmental scanning resulted in six categories of mainstream trends in C & T and retailing research. The six categories were labeled as: textiles/design (n=12); e-tailing (n=19); consumer (n=6); social

(n=46); retailing (n=26); education (n=16); and others (n=14). Subcategories for e-tailing were comprised of e-commerce (n=8) and technology (n=11). The social category contained industry trends (n=10), social issues (n=11), social responsibility (n=22), and cultural influences (n=3). Retailing included manufacturing (n=8), supply chain management (n=10), and marketing (n=8). Based on the substantial interest for social subjects followed by retailing, e-tailing, education, textiles & design, and consumer, five categories were identified as key issues for O·P·E·N Institutes.

To determine the opportunity for future success of O·P·E·N Institutes in the global milieu, industry interviews were conducted to provide the greater breadth of data desired in exploratory studies. This method allows participants the opportunity to express in-depth predictions, views, and ideas (Fontana & Frey, 2000) and is appropriate to capture industry experts' perspectives on their experiences (Wengraf, 2001). An interview instrument composed of eleven open-ended questions was developed by the researchers to verify the gaps between practice and research and to predict the skills and competencies needed for upcoming professionals in global C & T and retail industries. Specifically the interviewer, one of the authors, has over 25 years' experience in department stores, specialty retail, travel retail, and entertainment retail with some of the most iconic brands in the world. She has served in a multitude of roles at all levels including operations, merchandising, product design and development, sourcing, brand management and marketing in the U.S, Europe, Japan, Mexico and South America. Based on her diverse experience together with her understanding of challenges of the C & T industry in multiple disciplines, she conducted industry interviews using phone and e-mail contacts. Input was received from twelve experts in United States C & T and retail industries and represented position including senior executives, company principals, licensees, manufacturers and retail consultants. In an exploratory study of firm issues, twelve to twenty interviews are generally considered sufficient to attain the level of saturation necessary to address the exploratory research questions posed (Cavusgil

& Zou, 1994; Souchon & Diamantopoulos, 1997).

The constant comparative method and the open coding were used to complete a content analysis of the interview data. Within each answer, broad themes were identified, and then subthemes were traced and analyzed to create a unit of meaning. Upon eliminating superfluous phrases and sentences, themes and subthemes were coded. After coding each response, relationships between themes and subthemes for each question across participants were analyzed and conceptually labeled. To verify the coding accuracy and reliability, each researcher reviewed the industry experts' answers that coded by another researcher. A total of 163 responses were generated with a sufficient inter-coder reliability of 0.93.

### **3) Discussion**

Drawn from industry interviews, five premises were recognized to achieve institutes value in future education. These premises were based on the student's ability to: understand C & T and retailing through experience and education; understand the consumer; develop communication skills; exhibit enthusiasm and attitude; and focus on relevant personal characteristics. In addition, five subjects were identified for future college curriculum to prepare students for C & T and retail careers: communication skills; data handling skills; understand consumer behavior; understand different retailing models; and understand importing/exporting.

Specifically in relationship to global market change, the industry experts indicated that sustainability would play a role in the future business model (n=5). Integrated execution of globalization vs. localization and movement toward giant retailers, and digital innovation were predicted to be major change agents in the future business model (n=6). Students were encouraged to consider web-based retailing, outsourcing, and investment in individual human capital among different areas of C & T and retailing (n=14). Sustainability, lean supply chain management, innovation, and ethical sourcing were other future demands that will characterize a global market (n=12). Finally, social networking phenomena, communication skills, and the demand for in-depth analysis of consumer

needs and wants were future imperatives (n=9). Other responses (n=7) were also revealed.

Predictions by industry experts regarding the C & T and retail industry centered on sustainability and technology advancement as primary future topics for fabrics, fibers and other materials for apparel (n=16). Fast fashion, technology, practicality were emphasized for the future of apparel design, technology, and practicality in design (n=15). For future apparel production, vertically integrated systems, globalization, sustainability, and mass customization were acknowledged (n=12). The future of apparel retailing encompassed five dominance characteristics including customer experience, direct-to-consumer sales, new channel development, global markets, and competitive pricing (n=19). The inclusive issues in relationship to C & T and retail industry predictions are illustrated in <Table 1>.

### 3. O·P·E·N Industries: Transforming Reality Through an Experiential Economy

#### 1) Background

We live in a time of historical transformation that requires new ways of thinking and uses new concepts for perceiving reality. As society moves away from hierarchies to webs, broad social participation becomes possible. Moreover, with high speed telecommunication connections, top down decision making becomes inefficient with the explosion of information innovative thinking replaces standard answers (Smyre, 2000). With a society in transformation, the C & T field must design innovative pedagogy that parallels industry's capacity to create new proficiencies in meeting the needs of a constantly changing, interconnected and increasingly O·P·E·N society.

The C & T industry constitutes one of the essential business sectors in most countries and will continue

Table 1. Content analysis of industry interviews

Theme	Predictions about Fibers, Fabrics, and Other Materials for Apparel products (n=16)
Sustainability (n=6)	<ol style="list-style-type: none"> <li>1. Development of environmentally conscious material.</li> <li>2. Natural fabrics including cotton, silk, hemp, flax, bamboo, leather and wool: Sustainable fabrics renewable sources.</li> <li>3. Using recycled materials in creating fabrics (e.g., bottles into yarn – started in carpets). Manipulating processes used in other industries to make a malleable yarn to make polyester and performance fabrics.</li> <li>4. Use of natural resources: take a cue from farming. There are many cast-offs that can be used to make fabric including chicken feathers, rice, straw, and bamboo. These can be transformed to create fabrics that resemble wool, linen and cotton helping to reduce the use of petroleum-based synthetic fibers like polyester.</li> <li>6. Organic material.</li> </ol>
Technology Advancement (n=8)	<ol style="list-style-type: none"> <li>1. Fabrics with performance components e.g. “protective” elements: - wicking, heating/cooling, nanotech products, high abrasion, heat and chemical resistance, UV protection, anti-bacterial, etc.</li> <li>2. Hybrid textiles i.e. woven and non woven combined, paper and polyamide (for warp and weft), will be more popular.</li> <li>3. More breathable fabrics: silicon textiles (thermal stability), fabrics with charcoal to control odors and recycled fabrics.</li> <li>4. Advanced conductive fabrics can carry energy with flexible batteries. A jacket can heat itself. There are products in making can use a person's energy to create electricity to charge an MP3 player. There is something to be said for taking an ordinary garment and giving it extraordinary characteristics. This has broad application (e.g. the military, sporting industries travel)</li> <li>5. There are huge advancements in anti-microbial technology. There are self-cleaning fabrics that could be used in underwear, swimwear, uniforms (for sports), kids that can go without washing. The nano particles in this technology repel water, bacteria, oil, odor, etc.</li> <li>6. Fabrics need to be developed that don't fade, shrink or itch. Especially in children's apparel. This could add significant value to the end-user.</li> <li>7. Comfort and care will be important based on lack of time and busy lives.</li> <li>8. Fashion has to keep one eye on the future. Understanding the science that goes into development.</li> </ol>
ETC. (n=2)	<ol style="list-style-type: none"> <li>1. A need for more variety and differentiation in “details” i.e. hardware.</li> <li>2. Fast fashion</li> </ol>

Table 1. Contined

Predictions about Design (n=15)	
Technology (n=4)	<ol style="list-style-type: none"> <li>1. Fit is critical including consistency in fit. Fit and “feel” (aka “hand”) important.</li> <li>2. More from computer design – in addition to hand skills. New students HAVE to understand computerized design, patternmaking &amp; yield.</li> <li>3. Technology to predict yield, fabric drape, color matching and three-dimensional body scanning to improve fit.</li> <li>4. Innovation and differentiation: “details”. Creativity without the added cost.</li> </ol>
Practicality in Design (n=5)	<ol style="list-style-type: none"> <li>1. There seems to be a trend toward practicality – beyond “high fashion” and resting with wearable clothing that lasts longer and looks good for a longer period of time (“day-to-night”, during travel, etc.) Considerations: fabrication, wrinkle resistance, color fastness, etc.</li> <li>2. Simpler, flattering silhouettes. We live in a mobile world. Apparel needs to be simplified for easy go, wash-and-wear.</li> <li>3. Limit the need for dry-cleaning and special washing instructions, as there is a deterrent – both buying and re-buying for the consumer.</li> <li>4. Consider more anti-microbial, conductive apparel, clean manufacturing and recycling waste to produce cost-effective yarns.</li> <li>5. Be creative and be inexpensive.</li> </ol>
Fast Fashion (n=4)	<ol style="list-style-type: none"> <li>1. The U.S. is lagging behind Europe – have to bring more of the European Design process to the global process</li> <li>2. Speed to the market, vertical integrations etc. (e.g. Mango, Zara, etc).</li> <li>3. Disposable fashion a la Forever 21 and H&amp;M's of the world.</li> <li>4. Cost-efficiency: achieve “the look” but revise the structure and process to increase viability and self-through at retail.</li> </ol>
Others (n=2)	<ol style="list-style-type: none"> <li>1. Open-minded thinking with the consumer in mind. What does the mass market want/need? We can never lose sight of who is spending their money on the product (the consumer). Always consider what has worked in the past – the business is cyclical and fashion repeats itself.</li> </ol>
Predictions about Production (n=12)	
Vertically Integrated System (n=5)	<ol style="list-style-type: none"> <li>1. The ability to be more flexible and agile: reduce production runs and improve speed-to-market. Ability to fill the pipeline quickly based on sales.</li> <li>2. Vertically integrated systems to address above.</li> <li>3. Demand based: fill the pipeline quickly, faster introductions, reduce development time, more breath, less depth.</li> <li>4. Supply chain and production processes have to get ahead of the curve to achieve faster turnaround while allowing higher profit returns for all.</li> <li>5. Faster production to stores. Stores can no longer wait months or write orders months in advance anymore. Open-to-buy comes into season and suppliers must be able to react, supply, and respond to hot sellers with a quick turnaround etc.</li> </ol>
Globalization (n=4)	<ol style="list-style-type: none"> <li>1. Seek viable options outside of China. There is the potential for production to return to the U.S. if cost structures can be controlled. Also North America and South America. Customers may buy less but will want value.</li> <li>2. Majority of production will be achieved overseas especially in China. As well as the capability and breadth of resources. China has the logistics of delivery down to a science. Direction and design inspiration will continue to come from Europe.</li> <li>3. Different countries with core competencies will emerge and it is worthwhile for retailers to consider development of an alternate supply base. However, this requires dedicated time to truly nurturing relationships while “teaching” new suppliers about requirements and working with them to develop delivery logistics. This effort could take at least two seasons or production cycles to develop. Potential countries with capability and base-infrastructure including: the Philippines, South Africa, Korea, Vietnam, Cambodia, and South America.</li> <li>4. Look outside of China.</li> </ol>
Sustainability (n=2)	<ol style="list-style-type: none"> <li>1. Scrutiny on process of waste disposal.</li> <li>2. Lean manufacturers and sustainable manufacturing have more potential for growth. Leaders in the industry are moving towards recycling clothing and fabrics.</li> </ol>
ETC. (n=1)	<ol style="list-style-type: none"> <li>1. More customization of jeans, sneakers, limited editions.</li> </ol>



Table 1. Contined-1

Predictions about Retailing (n=19)	
Customer Experience (n=4)	<ol style="list-style-type: none"> <li>1. Retailers need a clear point of differentiation including core offer, customer experience etc. Their line has to fit their stores.</li> <li>2. Retailers will have to work to improve their differentiation for the end-user. Customer experience – largely ignored – could become a major point of differentiation for retailers to promote loyalty.</li> <li>3. The shopping experience hasn't changed in the last 10 yeras. Whoever finds the breakthrough idea will win big.</li> <li>4. Breaking the paradigm of shopping online.</li> </ol>
Direct-to-consumer (n=3)	<ol style="list-style-type: none"> <li>1. Direct-to-consumer will continue to grow. Brands who go direct via bricks-and-mortar or internet will have to be able to respond to viral reaction to product offered.</li> <li>2. Consolidation is likely including need for easy shopping environments. Brands with standard fits will look to do more on line and direct-to-consumer sales.</li> <li>3. Education has to become part of process: how to relay information to the customer. A connection has to be built between the sales team and the consumer to build confidence in the product and the decision to purchase.</li> </ol>
Development of New Channels (n=5)	<ol style="list-style-type: none"> <li>1. New channels will continue to emerge offering new touch points and opportunities for sales including auction, electronic, recycled, Pop-ups, etc.</li> <li>2. The future will continue to be E-commerce and Bricks-and-Mortar. Retailers have to be able to do both. The apparel industry is slow to embrace and embark into e-commerce model (due to fit and feel?) but on-line access could enable time-pressed consumers to shop on line and buy in stores.... The notion on replaces the other is proven to be outdated.</li> <li>3. Many brands are going into their own retail stores based on necessity (e.g. Fossil, Coach, Polo) and some are selecting singular distribution partners (e.g. Liz Claiborne at JC Penny). Retail consolidation has prompted this, as has the advent of department stores reducing space allocated to brands in favor of "house" brands and proprietary products.</li> <li>4. Traditional retailers will become challenged with alternative selling space and different retail models including private sales, video conference, mobile commerce and "pop-ups".</li> <li>5. Mass market will get smaller with fewer department stores. Specialty stores will make a comeback.</li> </ol>
Growing Markets (n=2)	<ol style="list-style-type: none"> <li>1. Traditional growth model of adding stores does not give ROI. Retailers will need to reflect the face of market: i.e., ages 50-70 market will grow and has special needs and more services. Hispanics will go from less than 15% to over 25% in the next 10-20 years. Product has to reflect the cultural universe and be sized and styled to suit market demographics.</li> <li>2. Bilingual labeling will be a requirement and a necessity.</li> </ol>
Price (n=3)	<ol style="list-style-type: none"> <li>1. Price will continue to be a consideration in non-luxury.</li> <li>2. Price is critical for consumer and business.</li> <li>3. More "disposable" fashion. Achieve and deliver "the look" to suit trends but at a competitive price. Clothes aren't always needed to last long time particularly in juniors and young men's market. Example: Zara, H&amp;M, Uniqlo, Forever 21.</li> </ol>
ETC. (n=2)	<ol style="list-style-type: none"> <li>1. Front line workers will be harder to find. Retailers will have to work harder for workers.</li> <li>2. The U.S. is over-retailed. Winners are those who address what we have covered in these topics. Others will fall out. The value equation for the customer has to be at the forefront of thinking.</li> </ol>

to proliferate, which have an enormous impact on global economies. The global market for apparel, accessories and luxury goods was estimated to be worth \$ 1,217 billion in 2006 and is expected to grow to approximately \$ 1,800 billion by 2011 (Easey, 2009). Among the world's largest employers, the retail industry employs about 20 percent of the U.S. population overall ("ARTS announces", 2008). In Korea, fashion products account for 60% of the entire sales in department stores (Samsung Fashion Institute, 2005), and occupy a good portion of retail space (Rhee, 2008). However, the Korean C & T industry is faced with

challenges of increasing labor cost and decreasing productivity while the Korean economy advanced (Ha-Brookshire & Lee, 2010). These challenges call for a major transformation of the Korean C & T industry that focuses on value-added activities such as branding, marketing and designing (Korean Federation of Textiles Industries, 2008).

The C & T industry is transforming to an experiential paradigm where purchase motivators are characterized by tangible, emotional, and symbolic aspects of "shopper-tainment" and "fashion-tainment" (Hirschman & Holbrook; 1982; Y-K. Kim et al., 2007;

Oliver et al., 1997). If future winners center on spectacular consumption and experiential behavior, retailers will shape their stores as sites for multi-sensorial consumption experiences where entertainment and active recreation are combined with retailing (Peñaloza, 2001). The macro/micro impact of the consumer experience in transforming global marketspaces is even more phenomenal when the cyber delineators of place, time, and distance reduce consumer-to-business transactions to instantaneous interactions. This implies that there are gaps in understanding the consumer experience as a global phenomenon and its impact on business success such as: (1) standardized business model to entrepreneurial model (Global Entrepreneurship Monitor, 2008); (2) strategic management to sustainable competitive advantage (Barney, 1991); (3) standardized to differentiated products, services and operations (Pine & Gilmore, 1999); (4) market segmentation to global consumer clusters (Borgman, et al., 2008; Javed, 2009); (5) business-driven marketplaces to consumer-engaged marketspaces (Douglas & Craig, 1997); and (6) excellent service to optimal experience (Y-K. Kim et al., 2007). These gaps make it difficult to advance intellectual inquiry and to provide guiding principles that can support future industry practices. To transform C & T industries to an experiential economy, this study proposes O·P·E·N Industries.

## **2) Methods / Discussion**

Functioning within and across disciplines is a way to shape the future. Brown (1993) calls this process transdisciplinarity, a process of boundary-crossing that affects knowledge production at the very root. This study employed transdisciplinary analysis between two constituents of environmental scanning and industry interview. Findings of the environmental scanning revealed extensive interest in social subjects that focused on social responsibility such as sustainability (n=22), supply chain management in retailing (n=10), and the emerging trend of social networking among consumer (n=11). Parallel topics across educational pedagogy and industry predictions emerged from the finding of industry interviews: sustainability and technology advancement (n=16); fast fashion, technology, practicality (n=15); and vertically integrated system,

globalization, sustainability, and mass customization (n=12).

First, in alignment with previous literature reviews, all interview respondents acknowledged that sustainability initiatives need to receive more attention and resources. Industry experts emphasized the importance of sustainability in procurement of raw materials and production while scholars have focused on social responsibility in a retailing domain. The consulting service firm (RSR) suggested that scholars focus on sustainability as a consumer-driven demand of social responsibility, whereas industry experts regarded it as a new revenue opportunity. Although fair trade was not included in industry predictions, fair labor management has received a positive evaluation from consumers. Second, supply chain management received mutual recognition. Insights of industry experts were aligned with several articles that reported vertically integrated systems could facilitate strategic supply chain management. Specifically, KSA highlighted the broaden definition of supply chain over the past decade as well as the growth of mutual profitability resulting from bottom-line productivity and cost control. With the advancement of strategic systems and processes, more trading partners can obtain access to broader information sources in supporting collaborative supply chain operations. As customers increase demand for unique product offerings, personalization, and retail experiences, a new operating model is needed that will deliver greater value to customers and shareholders. Third, social networking was linked to researchers and industry executives. Both recognized the unprecedented impact of social networking on industries, cultures, and marketplaces and the need to leverage the growing universe of social networking options for future applications.

## **III. Conclusion And Implications: The Future of KSCT**

Over the last two decades fashion has become a truly global business. Fashion professionals no longer work necessarily within manufacturing facilities and, as part of the knowledge industry, they need to be mobile and have the ability to communicate across

cultures and business disciplines (Easey, 2009). In accordance with the current mission of the KSCT, this study envisions the O·P·E·N Triad framework to transform scholarly research, industry practices and educational curricula for the future Korean C & T field.

With an O·P·E·N Institutes and O·P·E·N Industries approach, this study reveals that sustainability, supply chain management, and social networking are the dominant future key issues across the academia and the industry. However, with the experiential aspects of social networking behavior, global markets in retailing and consumer-oriented e-commerce are underserved. Industry experts predict that different countries with core competencies will emerge, and it is worthwhile for C & T and the retail industry to consider developing an alternate supply base. Although business trends and design inspirations continue to originate from Europe, potential trading countries are also equipped with capability and basic infrastructure. However, there is a lack of empirical evidence in the C & T literature to support global industry practices. Although technological aspects of C & T discipline discussed extensively, the psychological aspects of online consumer experiences are largely ignored in the literature. Industry experts note that 70 to 80 percent of consumer decisions are emotionally driven, which means the C & T industry will be driven by emotion even in online settings. Academic researchers need to address this gap in their future studies. To transform to the future C & T discipline, this study emphasizes six gaps where intensive research is needed for understanding the future C & T industry: (1) standardized business model to entrepreneurial model; (2) strategic management to sustainable competitive advantage; (3) standardized to differentiated products, services and operations; (4) market segmentation to global consumer clusters; (5) business-driven marketplaces to consumer-engaged marketspaces; and (6) excellent service to optimal experience.

For O·P·E·N Individuals, future curricula need to generate student dialogue regarding observations of the future C & T industry. Transforming classrooms through a WebSphere model provides a holistic e-learning system that produces synergy across academic classes, institutes and industries. This transfor-

mative learning prepares students to become active participants and change agents in what has become a global a workforce.

O·P·E·N Triad is an imperative and timely suggestion for the Korean C & T discipline. It can stimulate cross-institutional program interactions within Korean and with other foreign constituencies. When millennial individuals, institutes and industries apply dynamic processes to discern their possible futures, they will gain a sense of empowerment about the future and the role they can play in creating better futures for themselves and future generations.

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