

# Advanced Communication Design, Inc.

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A WHITE PAPER

# The Changing Facets of Communication in the Retail Environment

*Defining the Evolution of Targeted Communication  
Technology in the 21<sup>st</sup> Century*



The Right Message  
to the Right Audience

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## Introduction

It has been said that communication, like gravity, is recognized by everyone yet fully understood by no one. However, if there is a useful truism in the business and political mainstream today, it is that nothing can be accomplished without effective communication. No products can be bought or sold, no services dispensed, no candidates elected. Communication is the lifeblood of our society, serving to keep alive our system of commerce and government while providing the means to competitive advantages. A failure to communicate successfully can be devastating to an organization. Businesses and politicians live or die by the skill and ways with which they manipulate the communication process. More importantly, as we move deeper into this information age, the need for organizations to master appropriate techniques of communication increases as these techniques become more sophisticated and complex in this information-rich culture. More precisely, for businesses today, the capacity to instruct, to persuade, to market a product, or just to differentiate itself to targeted audiences is not a means to an end, but an end in itself.

## Company in Brief

Soon after its founding in 1986, Advanced Communication Design, Inc. (ACD) quickly emerged as a leading developer and manufacturer of digital audio/video related technologies. The core of ACD technology is an extensive suite of multi-media tools (hardware & software) skillfully developed to conform to the varied, integrated communication needs of a physical retailer. Its inimitable design offers optimized multi-channel delivery of rich audio and video content using central control. ACD holds a number of US Patents specifically related to varied means of digital audio & video distribution, digital media decoding processes, consumer controlled content manufacturing, digital marking, remote compression and storage, etc.

## Core Objective

Today, the traditional principle of "one-size-fits-all" method of in-store communication is on the quick decline, being replaced by more focused and customized channels of communication. The significance of this change served as the principle foundation in the creation of Targeted Communication Technology (TCT), designed by ACD to deliver the right message to the right audience.

TCT is an integrated process of developing and implementing audio visual techniques of persuasive marketing communication amongst the targeted retail audience. The core objective of TCT involves disseminating clear and precise promotional messages regarding a particular product or service to targeted consumers. The critical element of such objective includes the use of advertising, sales promotion, public relations and entertainment.

This white paper outlines a new strategy, including priorities and approaches to TCT in the retail market. This is addressed in the context of ACD's solution, designed to bring

about fully integrated, consumer-centric marketing/sales messages through in-store communication services.

ACD's strategic priorities and approaches are: to provide the most technically advanced targeted in-store communication in the marketplace; to help shoppers gain a better appreciation of a "fair" deal; and to consolidate multiple channels of digital media communication into a unified platform.

### Targeted Communication Technology (TCT) as Applied to the Retail Market

After three years in the making, TCT is a multifaceted, multi-channel communication media source designed to deliver a multiplicity of targeted messages to targeted groups of shoppers within targeted retail spaces. To achieve this, ACD developed a one-of-a-kind, fully-integrated technology, capable of disseminating audio visual information through a broad range of communication devices. This is achieved through an assortment of delivery channels that will target selected audiences within specific areas of the retail space.

Furthermore, TCT is a multi-dimensional design composed of fixed and/or mobile information delivery points. Each point can be configured to be either shopper-interactive and/or non-interactive. Equipped with such a range of possibilities, new and more creative marketing opportunities can be deployed.

At the heart of TCT lies a firm recognition that the shopper is the foremost factor in this communication equation. First, what has to be identified is the shopper's needs and interests at each predefined point of the "shopping process". After identifying these specific needs and interests, one must then choose the most appropriate messages and means of delivering them. It is critical to determine what our targeted shopper most connects with in our message and what type of media source will trigger the greatest influence on the shopper. Using this information with properly configured TCT allows for organizing and then portraying the desired communication in a way that truly maximizes the impact on the selected shopper audience. One also needs to be cognizant about the shopping habits of the targeted shopper(s) in order to determine which communication media should be used. It is commonly recognized that most target shoppers' activities/behavior will closely correlate to a department or part of the store (isles, etc.) where they shop. As such, there will be a need to organize a communication strategy that provides a separate channel for each area of the store.

In summary, the most vital elements of TCT are first to obtain shopper information, and then to define ways to interpret and integrate this information into a smart, multi-dimensional shopper-centric communication program.

The following are the fundamental channels of communication of TCT:

- ✧ **Audio**
  - On Target Audio™

## ✧ Video

- On Target Video™
- On Target Interactive™

## Audio

### History

In the late 19<sup>th</sup> century, when Thomas Edison first recorded and played back the human voice, the mechanical sound was of poor quality and to some, down right offensive. But the concept of hearing pre-recorded sound was as appealing then as it is today.

Advances in audio technology, coupled with distribution technologies, have changed our lives forever. Audio media continues to be an essential force driving the entertainment and communication industries. In the traditional retail market of the past, audio was the first electronic in-store communication media, primarily used for overhead music and paging, referred to as Public Address (PA) systems. Today, the purpose of the traditional PA systems has not changed. As a matter of fact, with the proliferation of video technology in the retail market, many perceive in-store audio communication as antiquated. With the renewed benefits of ACD's On Target Audio™ marketing capability, we will see a resurrection of audio as a vital media component of the total in-store communication mix.

### On Target Audio™

The general concept behind On Target Audio™ is a multi-channel audio communication solution designed to precisely disseminate dedicated audio messages to a targeted audience in a visually aggressive retail environment.

In simple terms, On Target Audio™ is a technological makeover of traditional PA systems into a more effective and powerful means of one-way audio communication. An appropriate number of overhead speakers are installed, creating a storewide grid of audio delivery points. At its core, each overhead (directional or semi-directional) speaker is driven by its own independent audio source, all supported by a single computer and managed by Speaker Grid Controller (SGC) software.

With this audio delivery concept in place, the consumer's hearing senses come into play as a secondary activity to visual stimuli, whereby audible messages are served as a background communication channel. Audio is targeted to shoppers who are pre-occupied with visual stimulants generated by merchandise and/or an otherwise bustling retail environment. In this passive listening scenario, the retailer is able to more effectively reach the shopper with pertinent audible communication/messages with the least intrusion into his/her shopping activities.

Considering the limited capabilities of traditional PA and/or overhead audio delivery systems of today, one can easily point out the obvious benefits of video technology. However, comparing the capabilities of On Target Audio™ technology with today's video

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delivery systems, such obvious distinction no longer exists. As a matter of fact, where some elements of the video technology offer obvious advantages over audible communication, there are an equal number of obvious advantages to On Target Audio™ communication over video communication.

On Target Audio™ offers the least interruptive means of communicating with shoppers. From a single point of audio delivery channel to multiple channels of synchronized audio, to store-wide audio narrowcasting, On Target Audio™ is the most economical, yet most flexible, fixed in-store message delivery system available anywhere.

Some of the unique features of On Target Audio™ include:

- ✧ Audio Volume Equalizer (eliminates audio spikes and losses)
- ✧ Automatic volume adjustment relative to ambient noise level
- ✧ Automated amplification of special announcement: promotions, emergency alerts, etc.
- ✧ Automatic ducking of music/audio level during special announcement (no premixing)

## Video (Digital Visual Media)

### Introduction

Today, many retailers clearly understand the benefits of supplementing their traditional in-store communication strategies with the emerging digital visual media technologies. In recent years, almost every major retailer revealed some degree of propensity to undergo such investment.

Even now, there is considerable research being conducted in order to learn how this emerging digital technology will impact retailers, advertisers and consumers as a whole. It is a generally agreed among retailers that in-store digital communication is pertinent to the retail market and it is here to stay. It is not as obvious however, about how to integrate the multiplicity of various media communication channels with the environment and/or culture of a specific retail space. Challenged by the mandated diversity of such applications, the retailers will have to invest in highly integrated technology to allow for central management of all communication channels, while keeping overall cost down.

There are two Digital Visual Media (DVM) solutions available from ACD. These are On Target Video and On Target Interactive™. Even though they function differently, there are common elements under each of these applications. The following describes each in detail:

### On Target Video™

On Target Video™ is a multi-channel DVM delivery technology designed to disseminate digital content to assignable *non-interactive* video points for shoppers' viewing. Such communication is most appropriate when non-interactive video assisted information is required, or for general video narrowcasting.

Unlike the audible communication model described earlier, the DVM communication requires shopper's visual concentration to receive a communicated message. As such, a targeted DVM communication channel has to be perceived by the shopper as an added value to his/her shopping experience, and *not* as a visual obstruction or interruption to the shopping event.

### On Target Interactive™

On Target Interactive™ is an all-in-one, highly flexible solution, which involves a DVM delivery system designed in such a way that it responds to choices made by the shopper, commonly referred to as "interactive technology". The degree of interactivity or what is referred to as the "intelligence" of the system, can vary widely. Depending on the application of the desired objective, following are some of the triggering components of ACD's On Target Interactive™ solution:

- ✧ Touch screen, button membrane
- ✧ Barcode reader
- ✧ RFID
- ✧ Motion detector
- ✧ Sound detector

On Target Interactive™ can manage and manipulate large quantities of information, provide immediate feedback, actively involve the shopper, motivate, individualize instruction, simulate both natural and artificial phenomena, and flexibly perform many other tasks. When properly implemented, On Target Interactive™ becomes a potent multimedia educational/selling tool.

Similarly to the above mentioned non-interactive DVM, an interactive DVM requires careful analysis of where and how they should be used, so they will add value to the shoppers' purchasing choices, and not unnecessarily impede on the shopping experience.

## **Conclusion**

In today's competitive global marketplace, retailers *must* bring new technologies, integrated with creative merchandising concepts to meet the challenging expectations of information-hungry consumers. To succeed in this undertaking, the retailer must also recognize the necessity of acquiring the essential tools in order to conceive, develop,

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organize and ultimately implement the most effective in-store communication campaigns.

It is widely recognized in the retail market today that “people have more choices than ever and much less time to shop”. As such, the retail marketplace is becoming increasingly competitive. It is more challenging than ever before to gain the attention of shoppers’ and tap into their spending budgets.

Not only does competition intensify among retailers, but an onslaught of new products, services and promotions bewilders the average consumer. While some consumers are intuitive enough to keep up with the onslaught, the majority are not. As a result, many retailers have recently been attempting to close the communication divide by applying various types of single-threaded applications or one-size-fits-all solutions. For example, a PA system is traditionally designed to operate independent of any, and all, TV network functions or single “kiosk” is used to do all. This invariably results in some level of success, but is in no way comparable to the more desirable “commingled” multi-channel audio and video communication solution. On the other hand, TCT meets the diverse application criteria required to achieve effective audio visual multi-channel in-store communication.

The multi-dimensional elements of TCT are as follows:

### **Choice Of Fixed Or Mobile Points Of Communication**

It is important to understand the dimensions of each option in order to make the right choice for the right solution.

**Fixed** - Technically speaking, the fixed point of TCT is a DVM communication device networked (hard-wired or wireless) via Local Area Network (LAN) to an in-store server. It is firmly mounted in a designated area of the retail floor. Using LAN, all digital content is distributed to each display independently. Such configuration offers the greatest flexibility to manage each device without the need for human interface.

Results are optimal when used in an open area of the store, on end caps or near checkout counters, delivering store-wide general messages, or product-specific messages to influence desired traffic patterns.

**Mobile** - The mobile point of DVM communication is a “plug & play” solution for all available ACD devices. It is an all-in-one design with built-in internal storage (hard drive, compact flash, etc.). As such, all required software and programs, including DVM scheduler, are resident within the device. The main design objective of the removable mounting option is to allow the device to be provisionally mounted anywhere in the store.

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Among the many ways to allow for content updating of mobile devices (including wireless), a six or 12 port docking station is least expensive and most practical. The docking station needs to be placed near the store's Wide Area Network (WAN) access point for easy hook-up. Each port of the docking station (1-12) is assigned its own ID number, as well as a unique designated store number. After the device(s) is plugged into any port of the docking station, it registers its presence with ACD's remote Data Management Center. Depending on the application needs, the device can be refreshed with new content and operation instructions. When the update process is completed, the device will clearly identify itself by displaying a newly installed application name, location of placement and date range for running the program.

This technology option guarantees unfettered mobility on an as needed and where needed basis. Having the ability for scheduled placement of mobile devices in targeted areas of the store may substitute the need for a larger number of fixed video communication devices for covering all areas of the store (whether the application calls for interactive, non-interactive, shelf-edge, etc.).

### **Choice Of Foot Print Of DVM Device**

Since there are a large number of variables in configuring efficient and most effective DVM campaigns, ACD offers a wide range of device sizes for each and every application. Depending on the technical requirements of a specific application, they start from a 4" LCD, to all other sizes of LCDs, and including all sizes of TVs.

### **Targeting Area Of The Store For DVM Communication**

Whether the application calls for fixed or mobile points of communication, or for small or large display sizes, the placement of the most fitting devices will be extremely important. Since ACD's concept of Targeted Communication Technology encompasses multiple media communication channels and points, a careful consideration should be given as to when and how to use the most suitable technology. It needs to be highly scalable to meet the varied condition of desired objectives, such as what is communicated, what product or service, the complexity of information, what part of the store, who's the audience, etc.

### **Choosing The Targeted Audience**

It is common knowledge that shopper's moods change as they travel through different parts/departments of the store. Different elements of a store's stimulants and/or environment will also alter the shopper's state of mind. It is safe to conclude that with shopper's alternating moods, their visual and audible perceptive senses will adjust accordingly. For example, it is a given that shopper's audible senses will be more receptive to receive audible messages in a visually stimulating cosmetic department. On the other hand, a shopper's visual senses will be more receptive to video messages when in the isles, food courts, open spaces, checkout counters, or during waiting or idling periods.

## Choosing Targeted DVM Communication

To select the most suitable DVM communication, it is important to understand shoppers' attitudes or interests, and then correlate appropriate messages with defined communication objectives.

## **In the End**

As previously stated, for businesses in the 21<sup>st</sup> century, the capacity to instruct, to persuade, to market a product, or just to differentiate itself to targeted audiences is not a means to an end, but an end in itself.

Thinking outside the proverbial box, one can visualize the concept of Targeted Communication Technology from the perspective of an orchestra conductor. In this analogy, a maestro's ultimate objective is to communicate the intended message of the composer to a captive audience. The concert hall must be configured to optimize both sight lines and sound so the audience can experience the full impact communicated by the orchestra's performance of the music. Prior to the performance, the concert maestro must assure that all the instruments within each section are in tune with each other, as an out-of-tune orchestra will cause the audience to "tune out" and inevitably, many will leave before the end. During the concert, individual concert goers will react to individual movements of the piece differently, based on personal preference, but in the end, if the maestro has accomplished the ultimate objective, the performance will have moved the audience to respond with a rousing ovation.

Like the concert hall, the retail environment must be configured to optimize line-of-sight as well as audio delivery in order to realize the full impact of Targeted Communication Technology. The content creators are the composers, the content itself is the symphony, the retailer is the conductor and the various departments within the store are the sections of the orchestra. The ultimate objective is, of course, to lift sales, but to accomplish that, the message has to reach its intended audience. The retailer must assure that all the departments are "in tune" with each other to avoid the cacophony of sight and sound that is typical of current retail environments.

In the end, if the retailer, like the maestro, has accomplished the ultimate objective, TCT will have motivated the shopper to respond with his/her own form of rousing ovation - more purchases. That sounds like beautiful music to any retailer's ears.