



STiNO

INCREASE YOUR DIGITAL SHOPPING EXPERIENCE





Digital Signage has become an indispensable technology for brand owners in the car dealership, yet there are still brands in various vertical markets that are not or just in the beginning of using this technology. Besides Digital Signage there are way more technologies evolving to bring the online and offline shopping experience together. Brands and retailers with a true omni-channel shopping environment present a consistent view wherever their customer, or potential customer, makes contact to the brand at digital touch points.

This white paper is focusing on car industries with technologies such as iBeacons, customer loyalty Apps, camera face tracking, WiFi tracking and usage of interactive touch devices. This is just a discussion paper and does not carry all information and aspects of all technologies and methodologies nor does it claim to be complete or yet fully supported or implemented by STiNO.

Digital Signage is all about customer engagement in the offline world based on visual communication technologies. Beacons, Camera Tracking, Touch and Mobile App technologies is all about connecting customers to the brand. A combination of these technologies can unleash the next generation of the physical Internet and generate innovative applications for retailers and brand owners.

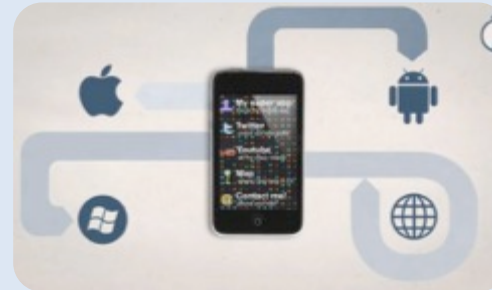
The following technologies could be part of an omni-channel concept and expanding Digital Signage technologies:



Introduce Proximity Marketing with Beacon Technology



Allow Customer Journey Measurement (CJM) with face tracking and WiFi tracking



Increase Brand Loyalty with Rewards thru Customer Loyalty Apps on Mobile Devices



Increase User Experience with Interactive Touch Technologies

One of the biggest opportunities in location based marketing and beacons in particular happens to be for car dealers. With foot traffic and numbers for some declining it is imperative to reach customers in new ways. It is also needed to get the customer back to the dealership for regular maintenance and other services to continue to capitalize off of the relationship. Digital Signage with location based or proximity marketing in conjunction with a omni-channel approach is the best way to make this happen.

Brands are spending high budget on TV and Radio ads that give little to no attribution unless the customer is directed to a customer loyalty App. This is a golden opportunity to start leading customers into a showroom and then into a loyalty program after the sale is made. But the awareness must be there, that to attract customers there is a definite need for offering exclusive deals, content, or other type of promotion. You can gamify it or use an entry form to capture information about the visitor to register them for rebates, prizes and more. Once they have done this if they want to see more about specific models or meet the dealerships team lead them to the dealership to redeem the incentives, prizes or other call to action.



Pros

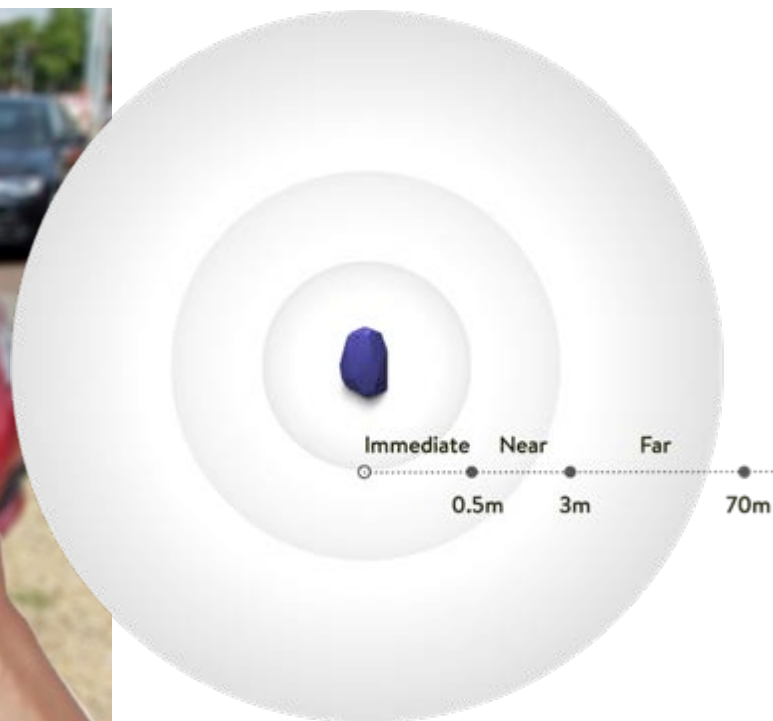
- Trigger content on mobile device by beacon proximity
- Trigger content on displays in the location by mobile phone proximity
- Personalized motion tracking in the location
- Personalized counting of number of location re-visits
- Precise proximity inside buildings
- Total dwell time at the location and dwell time at the store areas during the visit
- Low cost hardware solution
- No specific hardware infrastructure required

Cons

- Works only for the audience who carries Smart Phones with them during their store visit
- Requires a local installed customer loyalty App and the customer has approved the usage to run in the background

PROXIMITY MARKETING WITH BEACON TECHNOLOGY

Beacon technologies are Bluetooth (BLE) enabled transmitters that are used to interact with mobile devices such as iBeacon from Apple or Eddystone from Google. Usage of Beacon technologies works perfectly in combination with customer loyalty apps if the audience is using mobile devices.



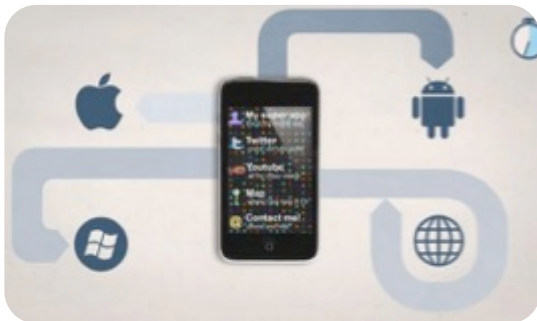
This example could be used for showing more information of each car while walking outside the building of a car dealership in the proximity of the cars whether its new or second hand vehicle. The beacons which are placed in each car have a unique ID and are linked to the data of the particular car. The customer loyalty app is automatically showing the relevant information of the car only when standing in front of the car.



This example could be used for automatically showing dedicated information about products, services, accessories linked to the customers standing in front of the screen. The customer is identified by the customer loyalty app running in the background on his Smart Phone. For example while the customer is passing the screen it will show special accessory offerings e.g. wheels which fits the car model the customer owns.

Customer loyalty app is the ultimate marketing channel and customer engagement tool to offer vehicle-specific incentives and coupons and is a perfect combination with beacon based proximity marketing at the car dealer for cars inside and outside the building.

- Improve Customer Experience and Satisfaction
- Up-to-date Service History
- Built-in Service and Maintenance Reminders
- Schedule Service Appointments
- Service-driven Updates and Sales-based Mobile Advertising
- Includes notifications from social networks even if the customer not actively using them
- Vehicle-specific Incentives and Coupons
- Search Current Dealership Inventory, Appraise Trade and Submit Buying Offer
- Increase Customer Retention, Service Revenue and Profits



Pros

- **Aggregating personalized information with customer permission during installation of customer loyalty App**
- **Proximity marketing in combination with beacons**
- **Perfect communication channel for online and offline sales support**
- **Does not require the customer to be member of social networks to get information via facebook or twitter**

Cons

- **Requires customer to install and give permission for personal data usage**
- **Only works in combination with smart phones**
- **Only works if the App is running in the background**
- **Does not work with all types of smart phones**

CAMERA BASED FACE TRACKING WITH PROS AND CONS

Camera sensor based tracking systems is a software and hardware based technology, detecting various marks of captured face images from high resolution cameras. Because of privacy protection no videos will be recorded and there is no gathering of personalized data possible – only statistical analysis can be accumulated. Campaigns can be triggered based on the audience criteria standing in front of the screen.



Pros

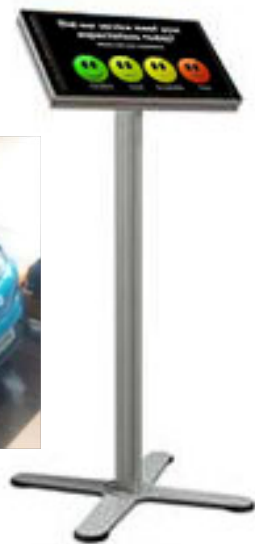
- No need for any special customer device or approval by the audience
- Only possible way to detect if and how long content is viewed by the audience eyeballs
- Only possible way to detect age group of the audience
- Only possible way to detect gender of the audience
- Only possible way of content triggering by gender and age group
- Dwell time at each sensor

Cons

- Non-personalized information
- Requires bright lighting for higher precision
- No personalized tracking in the location
- No total dwell time per visitor in the location
- Requires space for camera mounting to capture the audience
- No counting of location re-visits possible
- Will count visitors and employees equally
- Costly hardware required

INTERACTIVE DEVICES WITH PROS AND CONS FOR TRACKING

Using interactive touch devices is a perfect way to engage the audience with the content to integrate the existing web based car configurator, implement electronic catalogs from existing PDF, or open any content of playlists by defining various kind of interactive menus. Touch tracking is integrated in any kind of interactive touch devices and aggregate reports of what content is how often shown and which device is more frequently used. Interactive touch devices can be used from 7" up to 65" screen size.



Pros

- No need for any special customer device and usage permission by the customer
- The only possible way to detect what and how often content is requested
- Number of how frequently a device is used
- The only possible way to detect how long device is used by the audience
- Cost efficient as no additional hardware or software required

Cons

- Non-personalized information
- Works only with interactive touch devices
- No support for audience tracking in the location
- No support for visitor counting
- Will count visitors and employees equally
- No support for measurement of audience proximity of the device

WIFI TRACKING WITH PROS AND CONS

WiFi tracking technologies are using Smart Phone WiFi pings and tracking these devices by its unique MAC address (non-personalized information) and can detect the position in a store using triangulation with installed a larger number of WiFi nodes in a grid pattern within the location.



Pros

- Does not require any approval by the audience
- Semi-personalized motion tracking in the location
- Semi-personalized counting of number of location re-visits
- Total dwell time at the location and dwell time at store areas during the visit
- Total working device counting (only the ones where Smart Phones are switched on)

Cons

- Works only for the audience that carries Smart Phones with them during their shop visit
- Requires customer to be connected with local WiFi network
- Semi-personalized information as there is no linkage between device hardware ID and the visitor name

1. Camera based Face Tracking

- Number of viewers
- Dwell time in front of the camera/screen
- Duration of how long content is viewed
- Male and female detection
- Age group detection

2. Interactive Device Tracking

- Frequency of device usage
- Time of usage per device
- Number and type of requested content

3. Beacon Tracking

- Personalized motion profile
- Personalized dwell time
- Personalized number of location re-visiting attendance
- Very precise position localization

4. WiFi Tracking

- Semi-personalized motion profile
- Semi-personalized dwell time
- Semi-personalized number of location re-visiting attendance