



## ePVM Impact Evaluation: Meta-Analysis Summary

### **Background**

This paper compares and contrasts different studies conducted by LPRC to understand the effectiveness of the public view monitor (PVM) and the enhanced public view monitor (ePVM) in reducing shrinkage. This paper also describes of shopper, employee and offender perceptions on the ePVM as an effective (and employee/customer friendly) crime prevention intervention. This paper employs quantitative and as well as qualitative analysis.

The quantitative analysis from experimental or randomized controlled trial (RCT) research results shows the implementation of PVMs in selected high-theft product categories can be both impactful and cost-effective. LPRC RCTs have shown both shrinkage reductions and sales increases in a majority of the tested or treated stores between pretest period (before the e/PVM is put in) and in the posttest period (after the e/PVM has been installed). A summary of these studies can be found in Table 1.

**Table 1: A comparison of e/PVMs over multiple RCTs**

	IMPACT			% Change in Shrink	
	Efficacious	Positive ROI	% Change in Sales	Unit	Cost / Retail
Study 1 (asset protected – Razor Blade)	YES	YES	5% $\Delta$	45% $\nabla$	35% $\nabla$
Study 2 (asset protected – Razor Blade)	YES	YES	1% $\Delta$	26% $\nabla$	23% $\nabla$
Study 3 (asset protected - Auto parts)	YES	YES	8% $\nabla$	16% $\nabla$	12% $\nabla$
Study 4 (asset protected –Premium Spirit)	YES	YES	37% $\Delta$	30% $\nabla$	30% $\nabla$
Study 5 (asset protected- Infant Formula)	YES	YES	16% $\nabla$ (Ret. 1); 17% $\Delta$ (Ret. 2)		79% $\nabla$ (Ret.1) ; 215 % $\Delta$ (Ret.2)

In addition to the quantitative analyses of impact of e/PVMs on ROI and shrinkage, the LPRC also conducted numerous small qualitative projects to understand customer, employee and active shoplifter perceptions on current or enhanced asset protection devices, including ePVMs.

LPRC studies have found the majority of customers were oblivious to e/PVMs, where many of them walked by the e/PVMs without noticing them. More than 80% of customers in all studies said the presence of PVMs did not adversely affect their shopping experiences. Customers

usually acknowledged they feel safer in store with the e/PVMs. Customers also noted their shopping experience was not affected by the in store e/PVMs, and they would buy the items protected by e/PVMs. A summary of these findings can be seen in Table 2.

**Table 2: Customer reactions to the e/PVM in multiple areas of deployment in multiple stores**

ePVM location and store type	See it	Understand the purpose of the PVM	Feel the PVM is effective in preventing crime.	Feel More Secure at store with PVM	Does not impact shopping behavior
DIY Store 1 – self checkout 1	31%	84 %	79%	27%	97%
DIY Store 1-in aisle	45%				
DIY Store 1- customer service	21%				
DIY Store 1- self checkout 2	42%				
Supermarket Chain 1 (ePVM near infant formula)	100%	85%	90%	81%	86%
Supermarket Chain 1 (ePVM near premium Sprit)	100%	90%	76%	60%	100%

The results from the employee survey show the majority of employees interviewed about the e/PVMs were positive about its effectiveness. All employees in every study were aware of the PVM and felt PVM works to deter shoplifters in the store. Employees also pointed out the ease of use of PVMs compared to point loss prevention techniques like fixtures, spiders, and boxes.

The results from various offender surveys show there is wide variation in the likelihood an offender will notice an ePVM. Enhancements such as sounds and flashing lights can increase the chances an offender will notice the ePVM. Once the shoplifter’s attention is drawn to the ePVM, LPRC studies have shown most shoplifters understand why the ePVM was there. Nearly 65% agreed the presence of PVMs deters them. In one study, it was found an ePVM with a Picture-in-Picture box (PIP) displaying a “security guard” deterred 30% more offenders than ePVM without PIP. A summary of these results can be found in Table 3.

**Table 3: Results for See It, Get It, Fear It over multiple areas of deployment and stores**

ePVM position	See it	Get it	Fear it
Entryway ePVM in store 1 (n=10)	100%	100%	60%
In-aisle non-PIP ePVM in Store 1 (n=10)	90%	100%	60%
In-aisle PIP ePVM in store 2 (n=38)	97%	100%	79%
In-aisle ePVM in Store 2 (n =48)	96%	92%	50%
In-aisle ePVM store 3 protecting razor blade packs (n=49)	42%	99%	72%
In-aisle ePVM Store 3 protecting whitening strips (n=49)	41%	100%	67%

In every study, shoppers, offenders and employees indicated ePVMs are an effective crime prevention intervention. While looking at oneself on screen can be slightly concerning to shoppers, it is significantly more concerning to shoplifters. Over time, ePVMs have emerged from our research as a consistently reliable and effective theft deterrent.