

AGV Safety

Practical Considerations

Sponsored by:



Presented
by:

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Safety Statement

When *compliant* with
regulations, machines and tools
are considered *safe*.

Safety Statement

Any machine or tool can be
unsafe when used *improperly*.

The Actors

Three key elements to AGV Safety:

- The user
- The environment
- The machine



The User

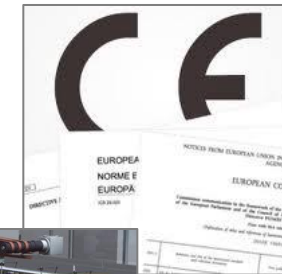


The Environment

	Lift Truck	AGV
Speed	7.5 mi/hr	2.5 mi/hr
Safety Equipment	Driver Training	Safety towards environment
Travel Path	Random Paths	Defined Repetitive Path
Visual Travel Indicators (Blinkers, Beacons, etc.)	Varying	Standard
Audible Travel Indicators (FWD/REV Tones, Alarms)	Varying	Standard
Restricted Areas	Driver Training	Known

The Machine - AGV

- USA B56 Standard
- European Machine Directive + CE Label = EN 1526



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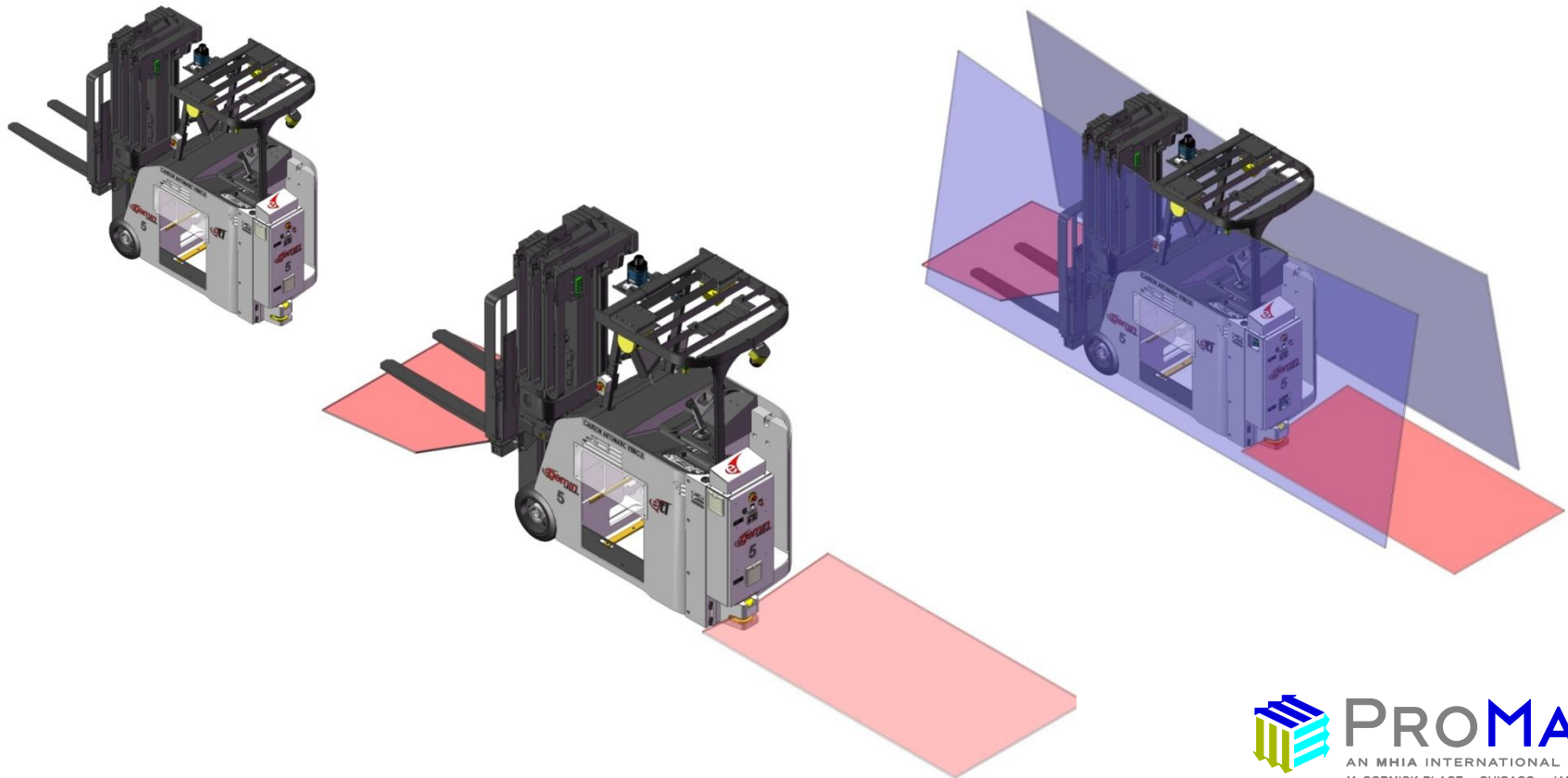
Safety Statement

Automatic Guided Vehicles
*Are safer today than at any time
in their history of use.*



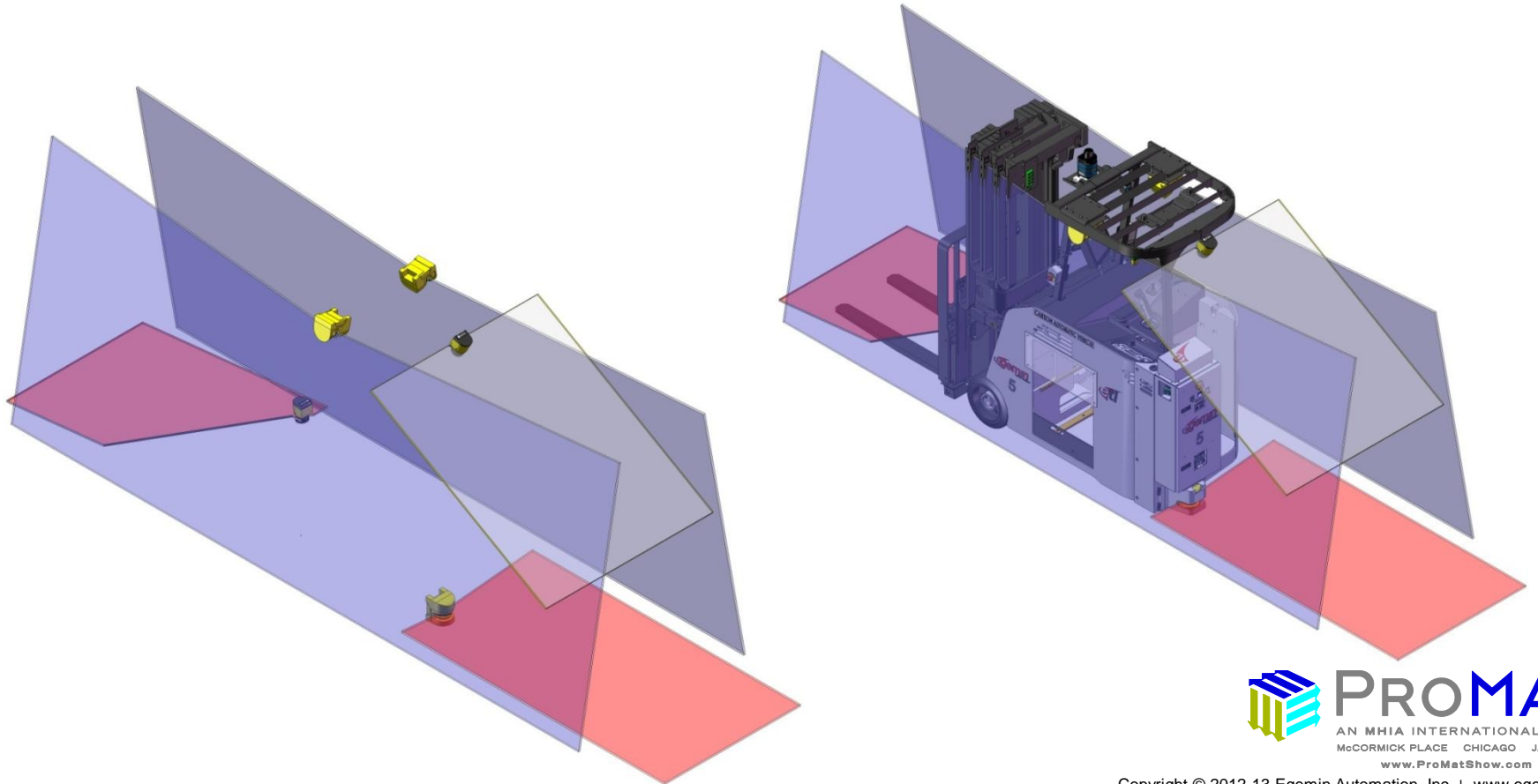
The Machine – AGV

■ Equipment Specific Additions



The Machine – AGV

- Equipment Specific Additions



Safety Statement

Most accidents happen as a result of *behavior*.

- Distractions
- Habituation (complacency)
- Shortcuts

An Example



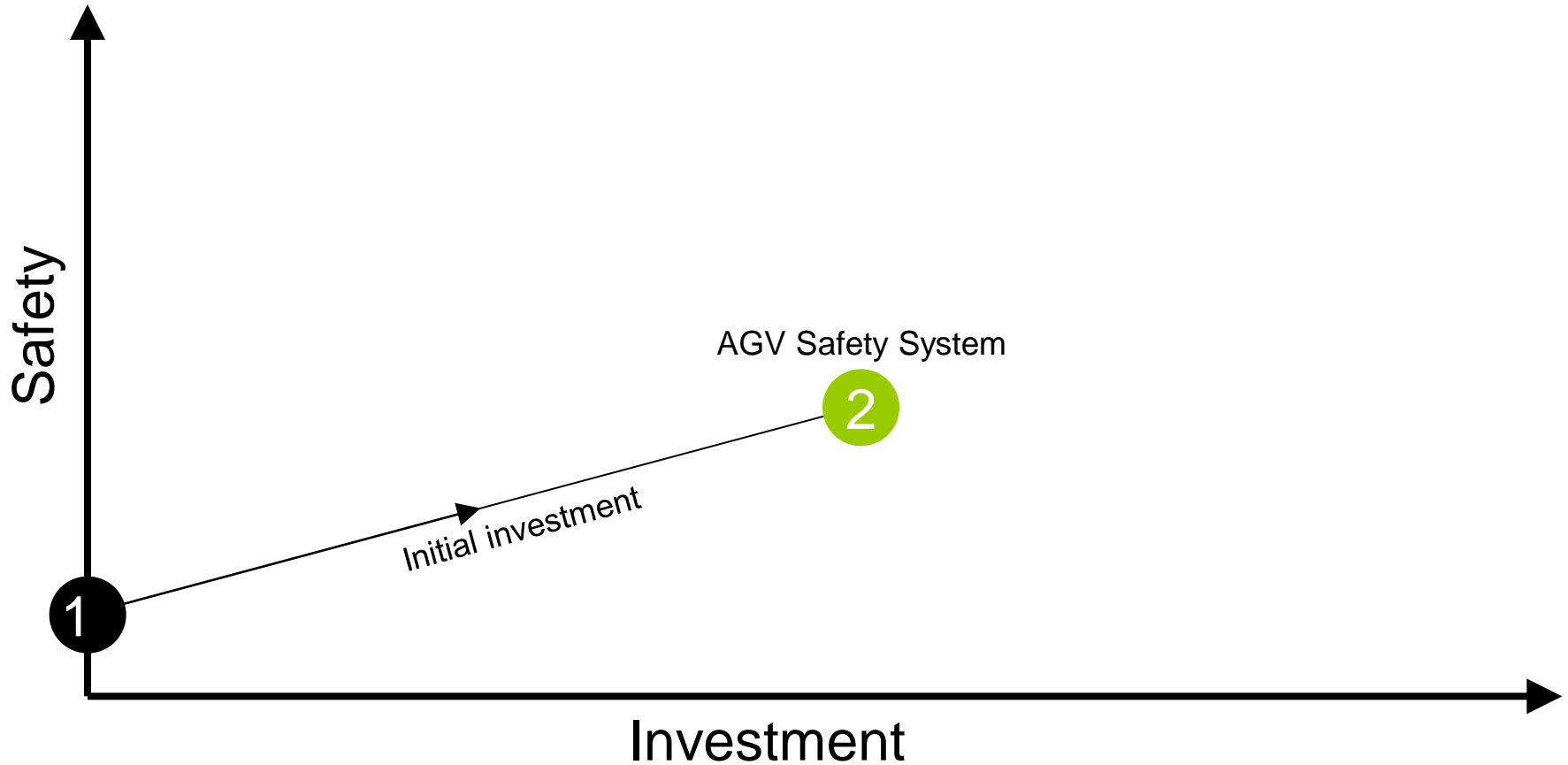
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An Example

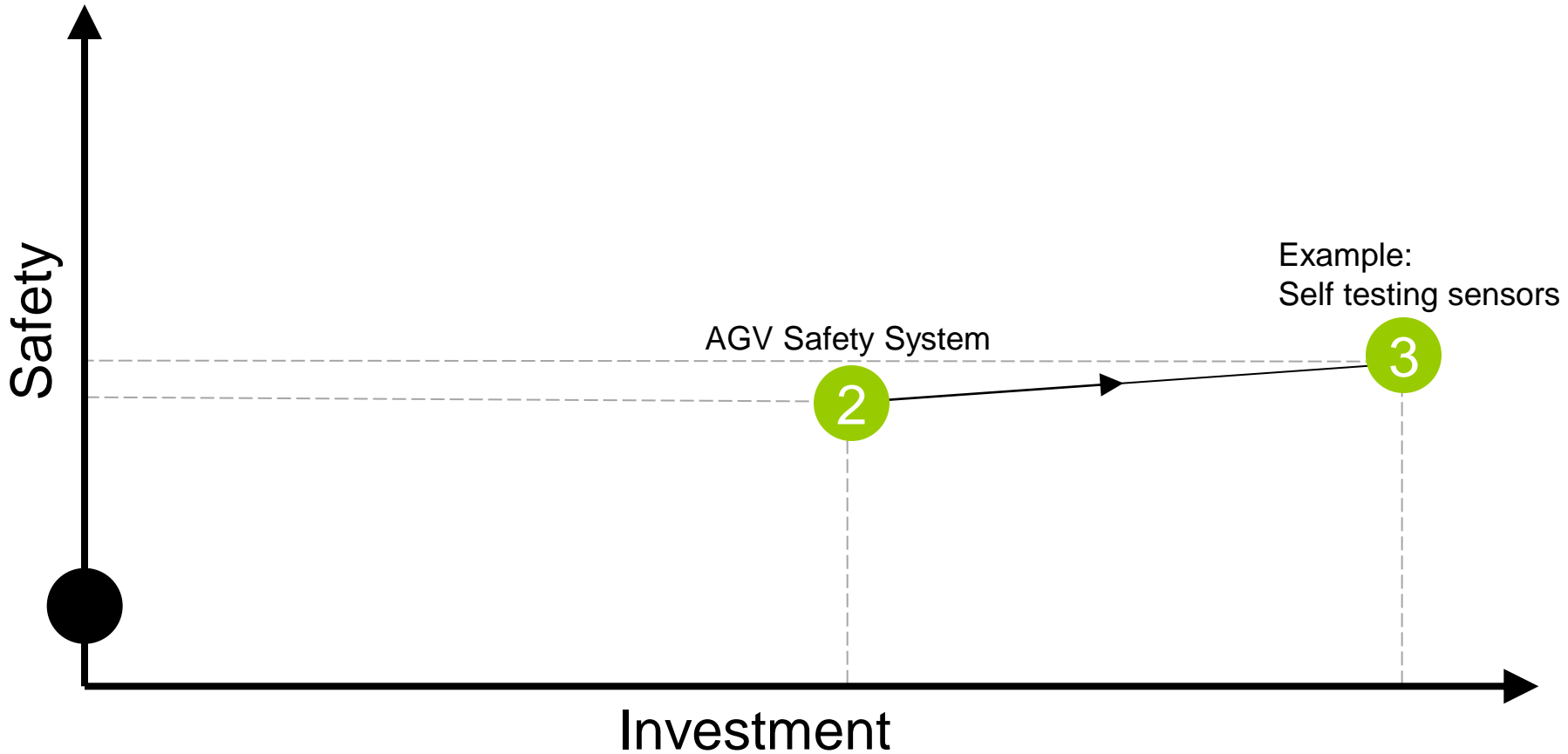


Respect the machine and employ
safe practices.

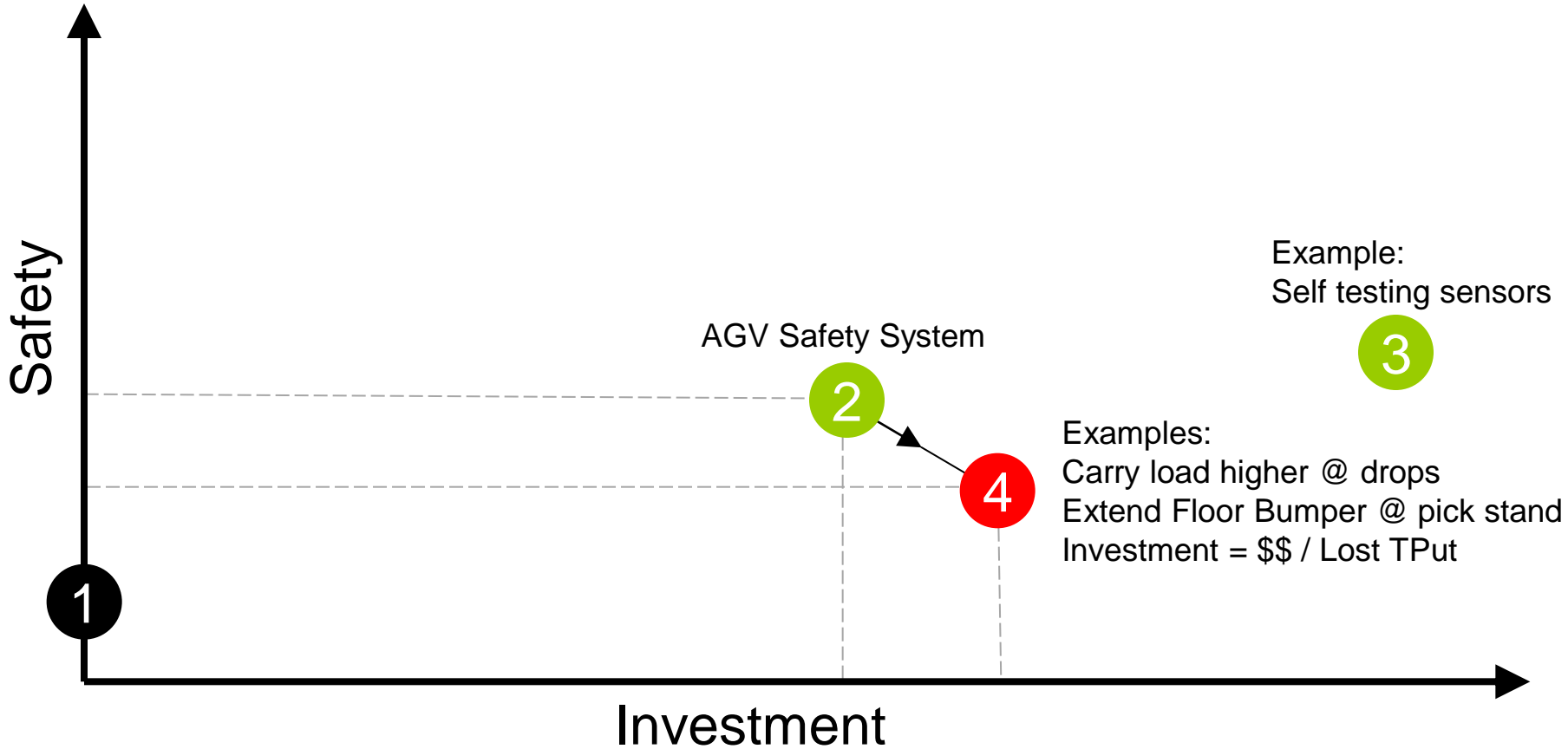
Case study – Initial Investment



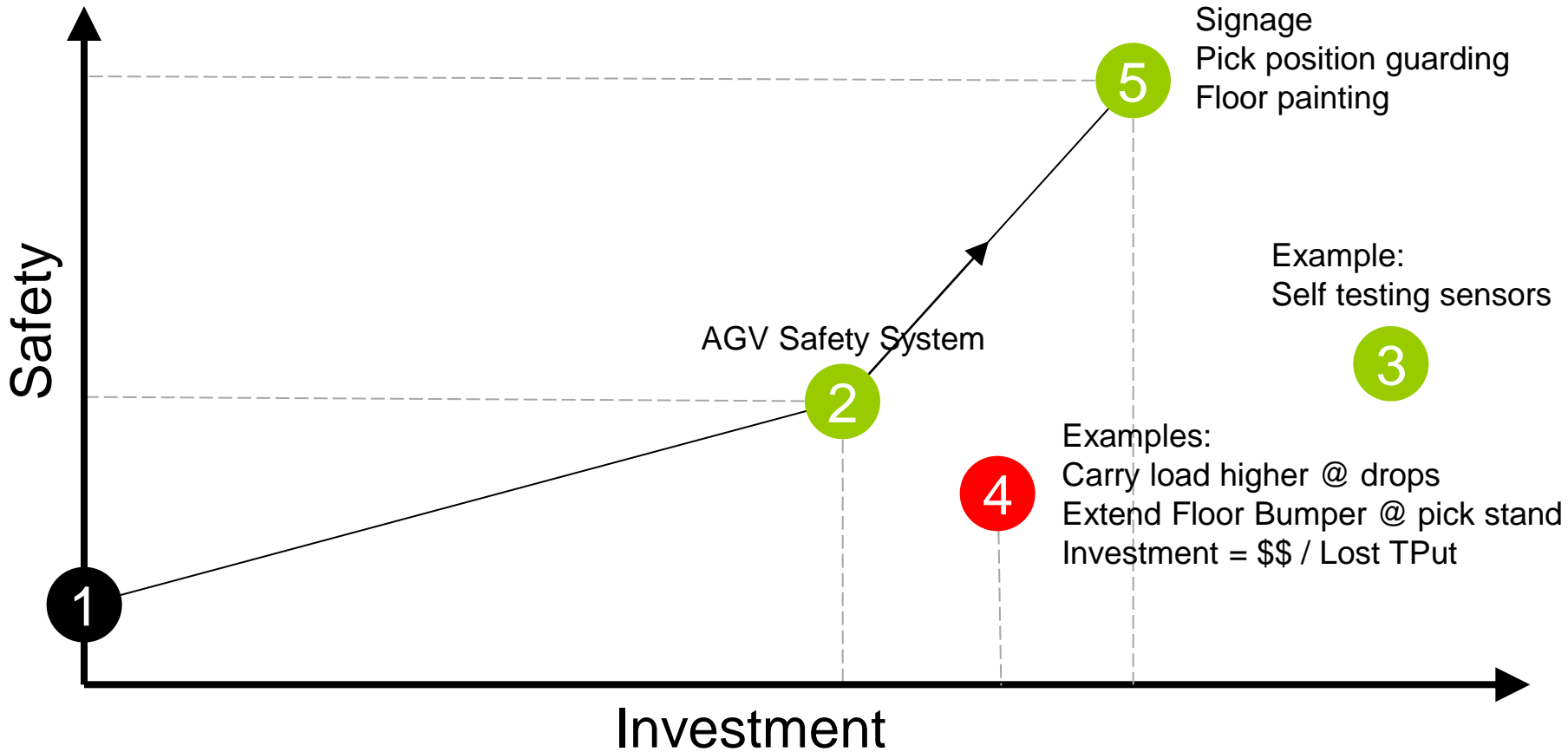
Case study – Diagnostic Improvement



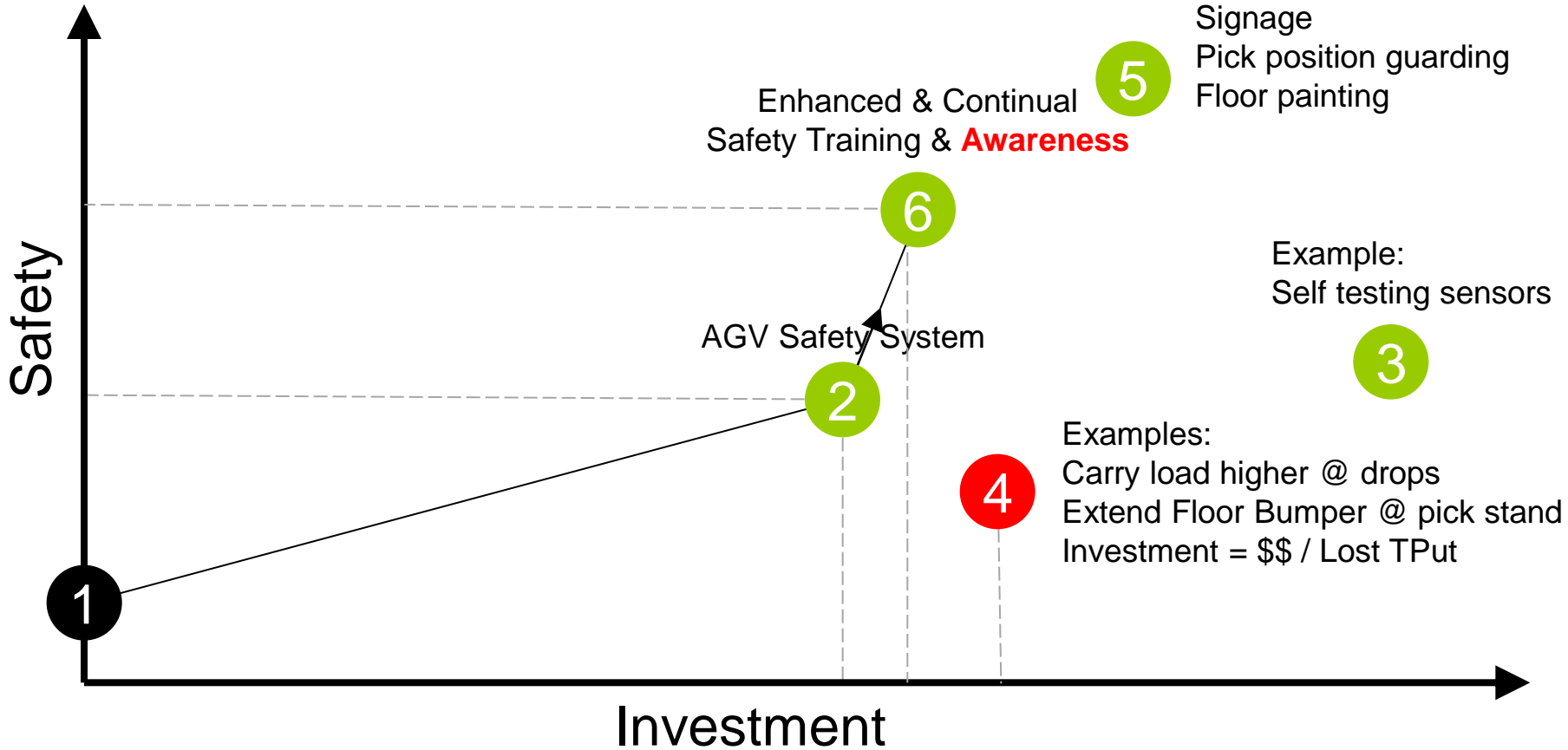
Case study – Station Routine



Case study – Environmental Updates



Case study – Training & Awareness



Conclusion

Safety has **3 key** elements:

- The user
- The environment
- The machine

Conclusion – AGV Specific

- AGVs are **safer** than they have ever been, and getting **safer**
- AGVs are a **safe solution**
- **Safety** requires **constant awareness**

AGV Safety – Practical Considerations



For More Information:

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