D2Di (Device-to-Device Interoperability)	
Opportunities	Risks
Education for end users	**Reliability** Issues
Having interoperable products that **work as expected and meet customer expectations**	Systems that **do not work as expected or advertised** prevent future adoption of the technology, bring us back to where we started (expensive on/off switches)
Workforce **training and education** on benefits of lighting controls with a focus on utility, prop mgrs and ESCOs	DLC **direction not consistent with market need or direction**
Simpler system operation	**Lack of direction**
HVAC system connectivity + high density sensors	**Diluted responsibility**. Cost/ROI
Increasing market adoption	**misinformation** and a one size fits all mentality
Adoption	**Stranded saving**
To ensure customer satisfaction to drive efficient systems. Systems need to **play nice at the top level** to allow utility programs to build out incentive programs resulting in installations of the most efficient.	Failure of connectivity causes **finger pointing** – who's is responsible - and opens door for risks such as security breaches

Room Controls	
Opportunities	Risks
Simplicity	**Complication**, especially related to vocabulary
Simplifying the controls buying process equals selling more controls	Asking info of contractors/installers that they may not have, **overcomplicating**
New customers increase adoption. Fills gap for some customers.	Too **complicated** and end up like NLCs. Could be a turn off if too complicated
Crazy, mad, wild **energy savings and ease of use**	People **lack awareness on space/room based approach**
Market size	**Education**
Increased **adoption**	**Lack of scalability and potential conflict with code**
Installers don't have to know the strategies or do any custom settings to achieve savings - **set it and forget it**	Some control strategies **not utilized once installed**
Further **adoption** of controls and allows accessibility for customers to install controls	**One size might not fit all** -- smaller businesses = more specialized systems -- still does not work, overly complicated therefore driving people away.

Efficacy	
Opportunities	Risks
App based tools for application efficacy	**Program adoption and manufacturer participation**
Looking outside of the luminaire	Distraction from the actual goal of increasing controls adoption
None + utilities could still incentivize products. LAE - Brings in NEBs and tunable platforms. Would enable incentives around tunable and grow markets	**Chaos throughout lighting supply chain** (mfr staff resources, marketing, education). **Efficacy increase trumps innovation**. Every 3 years, no sooner (Mfrs, test labs, implementers)
Increased energy savings	**Product cycle development and utility program implementation**
Stop half measures (tubes and lamps) and **open door for more controls**	**Manufacturers walk away**
Expanding the list of factors considered in updates to efficacy requirements	**Increasing the cadence of DLC spec changes**
Enable innovation in products by creating flexible PUDs	Creating further **disruption to supply chain** (delisting, stranded products)
New fixture designs and reducing overall energy usage	**Diminishing return**. Can't squeeze anymore out.