1. Introduction/Headline
2. Smart IT organizations now measure performance by dollars for a workload. Some companies minimize dollars by locating servers where electricity is cheap. Lopoco’s unique technology reduces electricity consumption at any data center.
	1. From companies with modest data centers, say 1000 servers, on up to companies where data center OpEx is a huge drain on their margins, the effect on corporate valuation by even small increases in profit margins cannot be over estimated. In data centers, the largest single component of operating expenses is electricity. High speed computers have been adding more and faster CPU’s that consume ever increasing power. Once the electricity is burned on the computers, facility must use more electricity to cool the data center. For a few years now, many companies have been working hard to lower their data center expenses by making their facility and their HVAC (Heating, Ventilation and Air Conditioning) systems more efficient to reduce the power bill. Lowering the power consumed by the IT equipment itself has usually been overlooked because IT departments are under pressure to increase data storage and compute capacity. Facilities and finance teams have been far removed from IT purchase decisions, so optimizing dollars per workload has not happen. Lately though, the industry has started to think more and more about somehow lowering the footprint of the IT equipment itself, where in fact OpEx reductions by as much as 50% are possible. Successful projects in this category usually require finance and IT teams working together, and managed from an authority high enough to get results from both.
3. Description of problem/pain
4. \*\*\*\* I think you described the pain – you are not describing why Lopoco has special sauce to maximize $ per workload. No one cares if a new light bulb uses less power unless the light is good.
5. How do you get IT and facilities to work together – do you put HVAC expenses in the IT department, charge for electricity, put a separate meter on the data center??
	1. The ever increasing compute capacity required by companies has caused an equally increasing bill from the electric company. The main culprit is the IT equipment itself, but managing corporate OpEx or trimming the power consumption of the data center can often be very low on the todo list of an IT manager. Now, the explosion of cloud applications and desire by companies to employ big data analytics to achieve a variety of business goals is putting more pressure on data centers to provide even more compute capacity. But the operating expenses involved in this growth are themselves causing corporate problems, and the physical power consumption is sometimes also a problem. Companies are finding themselves squeezed between these two milestones and needing relief.
6. Description of product and benefit
	1. Servers that consume less power while providing equivalent capacity.
7. Table/chart showing electricity savings

|  |  |  |  |
| --- | --- | --- | --- |
| Servers/yr | 100 | 1,000 | 50,000 |
| Conventional | $42,500 | $425,000 | $21,250,000 |
| Lopoco | $10,500 | $105,000 | $5,250,000 |
| Savings | **$32,000** | **$320,000** | **$16,000,000** |

1. Description of overall savings
	1. Reduction of electricity consumption is just the start of
2. Table/chart showing overall (3 year savings)

|  |  |  |
| --- | --- | --- |
| 20k Servers | $50/watt | $75/watt |
| Conventional | $175,000,000 | $262,500,000 |
| **Lopoco** | $50,000,000 | $75,000,000 |
| Savings | **$125,000,000** | **$187,500,000** |

1. Summary/Conclusion