Cost-Effective Rainfall Monitoring

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Background & Current Practice

✓ Limited suitable sites for installing rain gauges → nearest rain gauges are too far to give representative readings in certain areas

✓ Convective nature of weather →rainfall can vary significantly (spatially and temporally)

Areas of Opportunity

- ✓ Increase the density of our rain monitoring network

- ✓ Sensors that can be more flexibly and widely deployed onto more densely located public infrastructure e.g. lamp posts, bus stops, moving buses, HDB flats

Key Considerations

- ✓ Appropriate size for proposed public infrastructure
- ✓ Minimal maintenance
- ✓ Self-powered
- ✓ Real-time wireless rainfall data transmission
- ✓ Approved by a professional engineer & relevant government agencies
- ✓ Timely rectification when data is inaccurate
- ✓ Calibration and preventive/ corrective maintenance
- ✓ Rainfall measurements should be benchmarked with rain gauges for accuracy and minimally within +/- 15% of rainfall measurements by rain gauges

Expected Outcomes

✓ Integrated system of cost-effective rain sensors

✓ Mounted on public infrastructure

✓ Dashboard interface

✓ Leasing model

PUB

Thank You