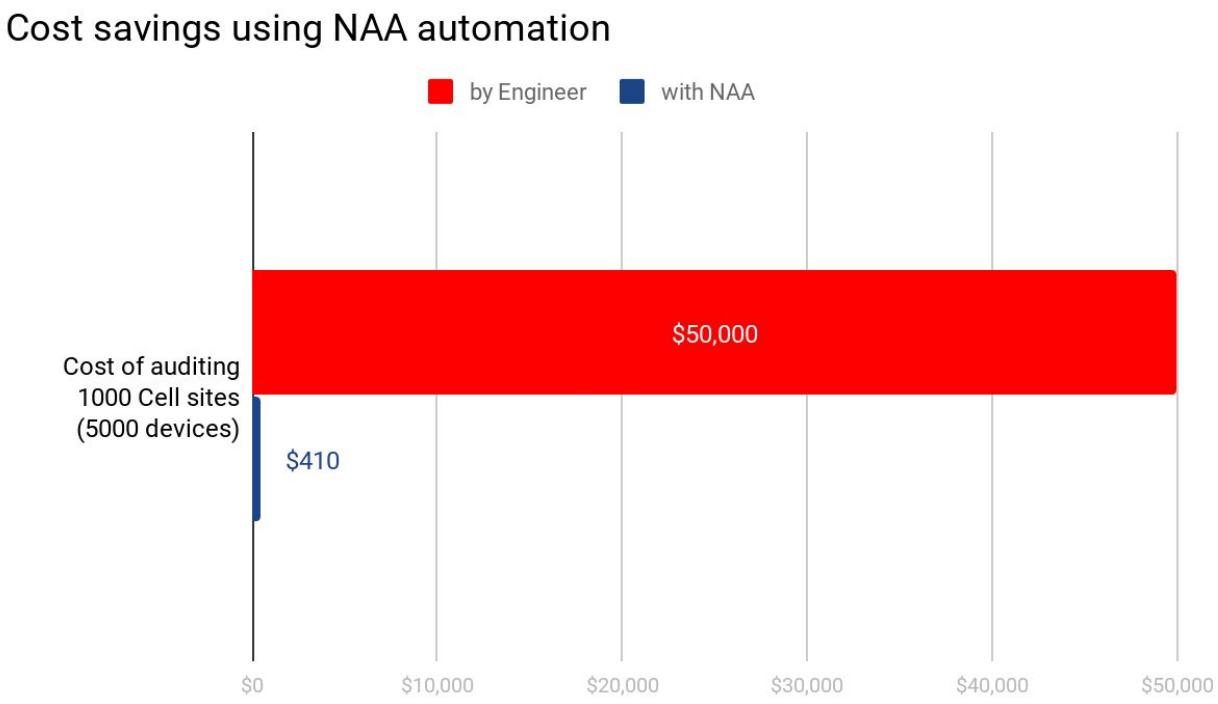
Case Study - City Cell Site Deployment

The Project

Deploy 1000 cell sites into a metropolitan city. Each cell site includes at least 5 devices (such as a base station, edge routers, switches, and a console server). The cell site can only be commissioned into service when it has met all the commissioning standards including hardware, software, security patches, configurations, and operational status.

Before using NAA, the audit was costly and takes a long time to complete, which is not even accounting for human mistakes. After using NAA, the audit is completed quickly, cost almost nothing, and yields accurate audit results every time.



How it used to be done ...

The cell sites used to be verified manually by a number of engineers who went through a spreadsheet-style checklist. On average, a field engineer spends 0.2 hours to audit one device. The average cost for this audit is shown below.

1 Time Audit Cost = (1000 cell sites x 5 devices/cell site) x 0.2 man-hr/device x $50 (Network Engineer hourly cost)

The 1 time cost in this case is **$50,000** for **1000** cell sites (Total **5000** devices).

The problem is that since this is done by a person, there is no guarantee of audit quality. Often engineers need to re-audit the site as mistakes are found months after the site is in-service or when an outage occurs. Also, resources are tied up working on the audit instead of working on deploying new sites.

Now with Ironwood Networks' Network Automation Assistant ...

With NAA, the same commissioning task is completely off-loaded to automation. The audit takes only minutes to complete per cell site and is free of human error.

1 Time Audit Cost = (1000 cell sites x 5 devices/cell site) x $0.082/device per audit*

The 1 time cost in this case is **$410** for **1000** cell sites (Total **5000** devices).

* Assume customer paid $150k for 1 yr 5000 device license. So $150k / 5000 / 365 days = $0.082.

The cost of auditing is virtually eliminated once the audit templates are established. Engineer resources are free to work on more important tasks.

MTTR is reduced and network stability improves dramatically since all sites are now adhered to the same standard; the network behaviour is now remarkably consistent.

The most powerful benefit is that the audit is repeated daily which provides continuous standard compliance assurance even months after deployment. In addition, the commissioning team can provide objective KPI data that shows their job quality to the CTO.

In conclusion, in this project NAA helps

- Dramatically reduce cost and MTTR
- Shorten commissioning time and guarantee accuracy
- Ensure network deployment consistency
- Ensure golden standard compliance continuously