

Capex Proposal - Northeast Lab Capacity (Khon Kaen Regional Lab)

Classification: Internal - DEMO / FICTIONAL. Synthetic figures for an Amazon Quick demonstration.

Prepared by: Operations & Network Planning | **Decision needed by:** Executive Committee, November 2026

1. Problem statement

Northeast demand grew faster than any other region in FY2026. Khon Kaen Regional Lab now runs above its rated single-shift capacity, relies on overtime, and misses the 24-hour routine TAT SLA for a growing share of samples. Two Northeast key accounts have escalated service complaints.

2. Options

	Option A - Expand Khon Kaen	Option B - Hub and spoke to Bangkok	Option C - Partner lab
Description	Add 2nd automation line + 60% more floor space	Keep Khon Kaen for STAT only; courier routine samples overnight to Bangkok Central Lab	Revenue-share with a provincial hospital lab for routine chemistry and hematology
Capex	THB 185 million	THB 18 million (cold-chain + sorting)	THB 6 million (LIS integration)
Added opex / year	THB 32 million (42 staff)	THB 41 million (courier, logistics)	22% revenue share on routed tests
Time to effect	9-11 months	2 months	3-4 months
Added capacity	+95,000 tests / month	Uses Bangkok spare capacity	+45,000 tests / month
Effect on TAT	Best long-term	Routine TAT ~26-30 h (courier time) - may breach SLA	Depends on partner QA
Key risk	Build delay; demand forecast	SLA breach for routine; customer perception	Quality control, data sharing, brand

3. Recommendation from Operations

Option A, with a stated payback of **3.1 years**.

Payback assumptions:

- Khon Kaen utilisation stays at **95%** from month 1 after expansion.
- Northeast revenue continues to grow **+20% per half-year** for three years.
- No price reduction in Northeast government tenders.

4. Items not yet analysed

- Interim plan for the 9-11 months before Option A is live.
- Impact on the two escalated Northeast key accounts during the build period.
- A combination (e.g., Option C now as a bridge, then Option A).