Breaking Path Dependence Under Institutional Pressures: An Ambidextrous Approach to Knowledge Integration and Business Renewal

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ABSTRACT

Research on path dependence usually explains a new path as a reaction to pressure on the old one: an outside shock, a shift that makes old routines harmful, or managers deciding the path no longer works. It says little about what happens when the old path is protected, still profitable and kept. We ask how excess capacity built up inside a protected core business becomes a new path.

Using process tracing on a single case, we follow PT PLN (Persero), Indonesia's state electricity company, from 1994 to 2025, drawing on press reports, regulations and audited financial statements. Grid expansion left PLN with a fibre-optic network it could use only for itself, and state protection carried that network through the 1997–1998 crisis. A new telecommunications law, rather than any trouble in the electricity core, opened a market for it.

The network turned into a new path through separation, harnessing of increasing returns and external anchoring, while the electricity core kept feeding it with demand, loans and rights of way.

Keywords: ***path dependence; path emergence; excess capacity; resource redeployment; state-owned enterprises; process tracing***

INTRODUCTION

In path-dependence theory, the longer a firm stays on one course, the more that course pays and the less reason it has to look elsewhere, until it ends up locked in (Sydow et al., 2009). Most studies therefore ask how to break a path once it starts to hurt (Fortwengel & Keller, 2020).

Indonesian state-owned enterprises (SOEs) sit awkwardly in this story. The state shields their core business with mandates, subsidies and regulated tariffs, so the market pressure that normally forces a break seldom arrives (Kornai, 1986). Yet these firms keep forming subsidiaries and moving into fields far from their original mandate (Kim, 2018).

Protection lets the core keep collecting returns, and with them assets such as infrastructure that often hold more capacity than the core needs (Penrose, 1959). Earlier work shows that firms can run several paths side by side (Bergek & Onufrey, 2014; Bohnsack et al., 2021), but in those cases the new path grows out of pressure on the old one or ends up replacing it. We know little about an old path that is kept, stays profitable and helps the next one along.

RESEARCH QUESTION

How does the excess capacity generated by self-reinforcing mechanisms in a protected core business become a new path?

Where this case sits

	Usual account	This case (PLN)
Trigger	A shock or rationality shift hits the core	**A new telecoms law opens a market for its assets**
Old path	Broken or replaced	**Kept, profitable, and feeding the new path**

RESEARCH METHOD

We used a qualitative, longitudinal single-case design (Yin, 2018) and followed the logic of process tracing (Bennett & Checkel, 2015). The case is PLN's telecommunications business, later PT Indonesia Comnets Plus (Icon Plus), from 1994 to 2025. We relied on documents written at the time rather than interviews, because people tend to retell strategy with hindsight (Golden, 1992).

88	22	15	14
press reports 1994, 1998–2002	**regulations** 1985–2025	**Icon Plus annual reports** 2010–2025	**PLN financial statements** 2011–2025

Figure 1a. Documents analysed (n = 139).

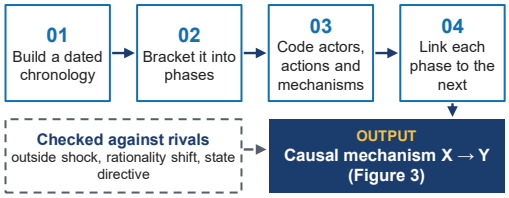


Figure 1b. Analysis flow (process tracing).

RESULT AND DISCUSSION

1. The core built more than it needed

In the 1990s PLN expanded the Java–Bali grid and laid fibre to coordinate it. The 1997–1998 crisis turned that growth into surplus: by January 1999 Java–Bali had about 16,000 MW of capacity against peak demand of 10,400 MW. PLN swung from profit to heavy losses (Figure 2). The state stepped in with subsidies, then converted Rp 28.78 trillion of debt into equity (approved 2000, formalised 2001). The fibre network came through intact, but the law let it serve PLN only and charge nobody for its use.

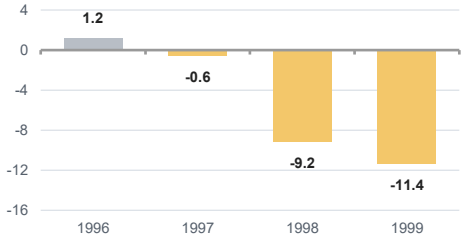
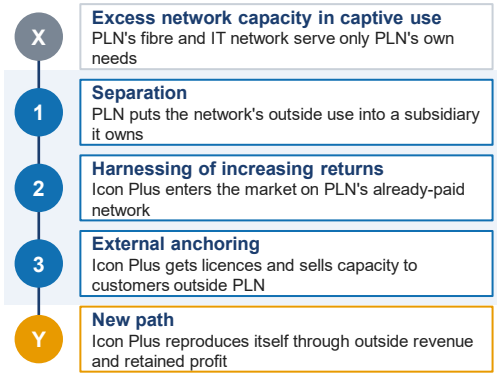


Figure 2. PLN net profit (loss), 1996–1999, Rp trillion. Source: Kompas; Bisnis Indonesia.

2. Three steps turned spare capacity into a business

Law 36/1999 let an SOE enter telecoms only through a legal entity set up for that purpose. Its implementing rule took effect on 8 September 2000, and PLN founded Icon Plus 25 days later. PLN had already paid for the network, so Icon Plus could enter at a fraction of the incumbent's cost and sell leased capacity to buyers outside PLN (Figure 3).

25 days	US$350	62%
from the new rule to the founding of Icon Plus	per subscriber, vs ~US$1,000 per line at Telkom	of Icon Plus revenue from outside PLN by 2010



Scope conditions: state protection of the core; Law 36/1999 and PP 52/2000; PLN's majority ownership.

Figure 3. Causal mechanism from excess capacity (X) to a new path (Y).

3. The new path grew, and the core kept feeding it

Revenue from outside the PLN group rose every year, from Rp 302 billion in 2010 to Rp 3,767 billion in 2024. Icon Plus kept almost all its profit, and from 2014 to 2021 its operating cash covered investment every year except 2017 (Figure 4).

PLN stayed involved: its group paid for 38–55% of Icon Plus's revenue, it was the only lender after 2013, and it supplied the poles and rights of way. After 2019, retail broadband pulled the two closer again.

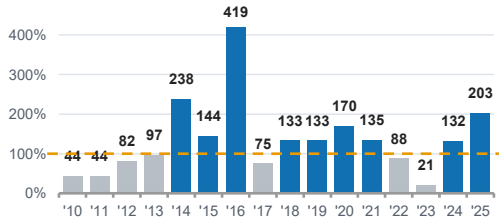


Figure 4. Icon Plus operating cash flow as % of investment, 2010–2025. Source: Icon Plus annual reports.

CONCLUSION

PLN's spare fibre became a new path while the electricity core stayed intact, once a neighbouring field opened a market for it and the capacity went to a firm that had to sell it to survive.

P1	Outside change can create a new path by opening a market for assets an old path has built up, without disrupting that path.
P2	A redeployed resource starts to form a path once it sits with an actor whose survival depends on it and whose returns come from outside demand.
P3	A retained core path can support, rather than compete with, the path it gave rise to.

The new path reproduces itself but has not locked in; cases with market competition still need testing.

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