Chapter	Section	Points			
Intro	Networks = Most powerful force in the tech industry	The most powerful force for the most powerful new industry on the planet			
		However, we are stuck at the conceptual level - not a lot of empiricism, measurement, etc			
		People get network effects wrong - they aren't a binary yes/no			
		Network effect curves can be measured as S curves - it's not just conceptual			
		When you have network effects your direct competitors usually have them too. Network competition is totally different			
	The Network Effects Curve is shaped as an S	The Launch			
		The Orbit			
		Falling to Earth			
		The Slingshot			
		But how do you get there?			
Liftoff	Networks have to fight the gravitational pull that causes the	Metcalfe's Law is flawed			
		There are positive network effects, and negative ones			
		Early networks, by default, collapse - that's why they are so hard to build			
		The goal is to hit escape velocity and reach orbit, when things are self-sustaining			
	Defining escape velocity	Escape velocity is the moment when your network is default alive, not dead			
		Define the network to find the right strategy			
	Getting to escape velocity is counter-intuitive	Not iterative: why a countdown / true launch event can be useful - bring both sides together			
		Not analytical: Doing something fun/cool - Killer product. Rider Zero, Uber Ice cream / Kittens			
		Not large: Pick a niche (geo, vertical) and establish liquidity first			
		Not the direct path: Come for the tool stay for the network			
		Not scalable: Manually get everyone onto the network - don't need to automate/scale			
		Not profitable: Subsidies that are unit economic negative :(			
		Not real: Might need to use fake users (reddit, going "full stack") to prop up the network			
	What fish ecologists have to tell us about network effects	Fish population models are a better way to think of networks than Metcalfe's Law			
		More importantly, you have to measure things from the user's point of view			
		Demand-side KPI: "Zeroes"			
		Supply-side KPI: Breakeven rate (versus expected wage, and subsidies)			
Orbit	When network effects kick in, you'll know	Getting to orbit means you are effortlessly circling the Earth - an apt metaphor...			
		... bc the underlying structure of a network effect is a loop			
		Acquisition loops increase new signups			
		Engagement loops lower churn			
		Your cohorts improve over time, in quantity and retention			
		Net MAU = new + reactivated - churned			
	Viral growth = network effects for acquisition	Your network "surrounds" unconverted nodes, increasing their chances			
		Viral growth is a science, not just cool marketing stunts			
		you can think of virality as loops that live on existing platforms			
		esports produces video, people seeing each other use scooters, social networks built on email, rideshare built on IRL			
		loops generate many casual users, which you convert to engaged users			
		network effect = more density = more engagement = more virality			
		This supercharges "new" in your growth accounting			
	Network density = network effects for engagement	Growth of network density increases core engagement			

		more nodes in a communication network means more people to talk to (and who will talk to you)			
		more nodes in a marketplace means there's more listings, and higher transaction %			
		Fewer "zeroes"			
	Your exponential growth curve is a bunch of lines, stacked	Your hockey stick isn't actually an exponential growth curve. It's a bunch of linear curves added together			
		increasing geography			
		increasing product lines (and revenue!)			
		increasing automation			
		increasing conversion			
		increasing frequency and engagement (via new use cases?)			
		consolidation of networks			
Slingshot	Your distribution is a defensive moat, but also an offensive	Always be the big guy			
		Your network co-exists with a collection of adjacent S-curves, some are going better than others			
		Use one side to move onto another side			
		Use high frequency to cross-sell lower frequency			
	Big companies actually have an advantage	Become the platform for your own apps			
		Buy smaller players			
		Cross-sell from adjacent industries			
		Commoditize one side (Android)			
		M&A can work. Interoperability and consolidation of networks			
	If you don't slingshot, then your network will stagnate	Metcalfe's Law is also wrong, once a network is at scale			
		More new nodes start to matter less			
		Acquisition costs trend up over time			
		Saturation effects			
		Run out of new geos, new product lines, etc.			
		Global network versus local network - when you surround but can't take over a stronghold			
		Disintermediation			
		Quality, trust, customer churn			
		There's often a "supply crisis" as they professionalize			
		The network grows the wrong way			
	What success looks like	Marketplaces			
		Social/comms platforms			
		Developer platforms			
Competition	Networks can lose value exponentially	Metcalfe's Law in reverse mean networks can lose value fast			
		Even worse, if you get pushed out of orbit, you can crash			
		When you have network effects your direct competitors usually have them too. Network competition is totally different			
	Competition favors the Goliath	Competition in the network effects world looks different as the big guy versus the small guy			
		New entrants: Reshape the S-curve and make it harder to hit escape velocity			
		Existing entrants: Two self-sustaining networks will automatically bounce back from small competitive moves			
		Incumbents / big companies often have an advantage			
		Increase frequency and hang additional products			
	When you're David, you have to do it different	Big guy educates, small guy gets you to multi-tenant			
		Competitive wins are better than creating new market			
		Small guy subsidies cost less - asymmetric advantage			

		Big guy is horizontal, small guy can cherry pick (use case, segment, route)			
		Viral growth happens on pre-existing networks			
	Defining success	Why competitive benchmarking of networks is important			
		Defining the network - by geo? team size? company?			
		Size of network, correlations to user value?			