Wealth rating mechanic (drawing from Rogue Trader):

Whether in the latter days of the Mage Imperium or the modern age of mercantile empires, power and wealth are inextricable. Mere enumerations of princeps or crecibles are inadequate to represent the prodigious and diffuse wealth of the great organizations and magnates that orchestrate high intrigue. Rather, at a scale where wealth is often illiquid, utilizing wealth is less a matter of spending cash than it is a complicated function of income streams, legal and personal obligations and strange, often-difficult to value assets. To approximate this process, we heavily modify the "profit factor" mechanic of the Rogue Trader system, adapting it with a title more accurate to the Aeldrum setting: "wealth rating."

This system is not normally meant for typical adventurers (though lower wealth ratings on our scale offer reasonable approximations) but rather for highly affluent characters, especially in high intrigue campaigns (e.g. the Mage Imperium trilogy). Such characters have a wealth rating which is used to modify 1d100 "acquisition" rolls. The following scales are suggested:

Wealth Rating	Examples
0	Destitute laborer living payday to payday
5	Modest Artisan
10	Well-to-do professional
15	Country squire, prosperous merchant, senior military officer, veteran adventurer
20	Knight Mercantile of a moderately prosperous chapter, lesser noble house
30	Industrialist, Fialta Grand Captain
40	Successful ATC governor of a large colony
50	Aeldman noble house, major industrialist
60	Lesser Saldanese academic department, Yakuza boss
70	Greater Aeldman noble house, titan of industry, the Genoese Mafia
90	The Triad, Major ATC Shareholders, Great Knights Mercantile
100	Saldan Occult Department
120	The Fialta Emperor
150+	The Bank of Valdos

To acquire a good or service, characters make a 1d100 acquisition roll against a target of 100, modifying their roll by their wealth rating and the availability and scale modifiers detailed in the following table. If the modified roll meets or exceeds 100, the character can acquire the desired good or service (at individual and trivial scales, this will typically also include any needed supply for that item (so for instance acquiring an automobile means also fueling it indefinitely).

If the total modifier to a roll is 100 or greater, there is no need to roll. **If the modifier is 0 or less, the acquisition cannot be made.** In cases where characters do not have a total modifier greater than 100, they may make acquisition rolls a number of times per week given by Wealth Rating / 10 (rounded to the nearest whole number).[1]

Guaranteed Acquisition:

[1] Thus, by construction, characters with a wealth rating less than 5 cannot make acquisition rolls of any kind.

When an acquisition roll is feasible but not guaranteed to succeed, characters may instead allocate acquisition rolls over time, **not rolling to acquire**, and be guaranteed a completion of the acquisition when $Acquisitions\ Allocated \geq \frac{1}{P(Success\ per\ allocation)}$. Thus, a character with a 10% chance of success acquiring a desired item could allocate one acquisition roll per week and be guaranteed the item after ten weeks. This is suboptimal in expectation relative to rolling, but may be desirable if predictability is at a premium or as a mechanism to save players' time.

Acquisition Modifiers	Modifier	Example
Availability		
Ubiquitous	+80*	Gruel
Abundant	+60*	Worker's clothes
Plentiful	+40*	Fine meal
Common	+20*	Simple pocket watch
Average	+10*	Unskilled labor~
Scarce	0	Portable radio
Rare	-10 (scale adjustment 1)	Hydrogen Pistol
Very Rare	-20 (scale adjustment 2)	Light Cavalry Horse
Extremely Rare	-40 (scale adjustment 3)	Difference machine
Near Unique	-60 (scale adjustment 4)	Adamantine Armor
Unique/Artifact	-80 or less (scale adjustment 5)**	Eye of Falamar
Scale* **		
Individual	+30	One unit
Negligible	+20	3-9 units
Trivial	+10	10-50 units
Minor	+0	51-100 units
Moderate	-10	101-1000 units
Major	-20	1001-5000 units
Significant	-40	5,001-20,000 units
Vast	-60	20,001-100,000 units
Vaster	Further -20 per order of magnitude	

Scale adjustment: beyond individual scale, increase scale progression by X (e.g. with scale adjustment 1, treat negligible scale as trivial scale)

*At scales greater than trivial, the availability benefit is capped by wealth rating (e.g. a WR 50 character wanting to acquire a significant quantity of ubiquitous goods would only get a +50 availability bonus).

**No bonus for individual scale, higher scales may be impossible (i.e. if only one item exists).

*** For scale matters related to capacity (e.g. a vehicle), treat units as the capacity of interest (possibly to be capped). [For instance, a typical automobile has negligible capacity and is scarce, giving it a +20 acquisition modifier. An etheric vessel is a rare item and begins at a minor scale (up to 50 people crammed like sardines), giving a -20 acquisition modifier (-10 for rare, scale adjustment 1 meaning -10 for scale) (though the soul who boards such a tub surely takes his life into his own hands). Housing is an average good, but the quality of a great Aeldrum manse is very rare, and such a home surely needs space for some servants (minor scale), making it a -40 acquisition.]

~Labor goods represent one week of work, but labor can be acquired for longer contracts using the scaling mechanic (e.g. a 50-week labor contract is of trivial scale).

Quality adjustments: high quality or masterwork goods decrease the availability rank by 1, and each additional quality improvement reduces availability rank by 1. Hence, a masterwork +3 hydrogen pistol goes from being Rare to "Near Unique."
If an acquisition check fails but a lower scale of acquisition would have passed, a character may always acquire the lower scale. (This is equivalent to allowing characters to roll without the scale modifier, then checking the scale table to see *how much* they can acquire).

Scaling Adjustments:

If a desired scale is infeasible or improbable, a character may choose to "stock up" on that good by spending acquisition rolls to acquire it a smaller, more feasible scale over time. This cannot make a good instantaneously acquirable (i.e. by raising the acquisition modifier to 100+) at the original scale however, however: instantaneous acquisitions cannot be rescaled. An intuition for this is that the "instantaneous acquisition" reflects owning the good already or having immediately at hand up a quantity: going out and acquiring more is an activity.

Straining wealth to its limits (Burning Wealth):

Characters may wish to acquire an item that is simply beyond their normal means. If a character wishes to do so, they may *double* their effective wealth rating after rolling an acquisition check if doing so would push them above a modified roll of 100. However, doing so permanently reduces their wealth rating by 1. A character may choose to increase their wealth modifier again by reducing their wealth rating by another 2, then doubling the marginal loss of wealth rating for each additional increase.

This approach may also be used to raise an effective acquisition modifier above 0 to attempt an acquisition roll in the first place (the attempt does not reduce wealth rating except in special cases (e.g. dispatching agents to scour a ruined city for a lost artifact)).

This approach may also be used to increase the number of acquisitions checks allowed (thus, a character with wealth less than 5 could burn a point or more of WR to make an acquisition): as above, the attempt does not reduce wealth rating except in special cases.

Gaining wealth:

Income from investments and other assets is already factored into wealth rating, so wealth rating does not naturally change over time unless a character's income and assets become significantly more valuable (e.g. a farmer's wealth rating might increase if his crop survives a blight that destroys the local food supply). However, characters may increase their wealth rating by acquiring (and perhaps selling) assets (e.g. a factory) that satisfies the following equation:

$$100 - (Scale + Availability) > max(2 * Wealth\ Rating, 10)$$

In calculating the WR equivalent for goods that produce value continuously (e.g. a factory), calculate the weekly scale of production and increment it by 3. If the "WR Equivalent"
$100 - (Scale + Availability)$ is more than twice $max(2 * Wealth\ Rating, 10)$, increase WR by 1, subtract $Wealth\ Rating$ from $100 - (Scale + Availability)$ and repeat the operation with the new Wealth Rating.

This equation is almost symmetric with the conditions for losing wealth through acquisition, except that the good must have a minimum value. For example, this constraint prevents a destitute character who by chance comes into an individual, abundant good from selling it to become wealthy, buying it again, selling it again etc. but would allow this destitute character to do precisely that with a trivial quantity of the abundant good, up to a very limited point (reflecting a hardscrabble street-side business that is nevertheless slightly more lucrative than unskilled labor).

To continue the factory example: suppose a character with WR 15 (let's call him Hans) has acquired a factory through dubious means. After paying the right bribes, scavenging and repairing some broken machinery and hiring some moderately sober dockhands (all requiring some mix of expenditure and good old-fashioned ~~violence~~ entrepreneurial grit), Hans has a small production operation underway that generates a supply of pistols. Pistols are scarce items, but these are of rather poor quality, being mass-produced on old steamship equipment, making them an average good. The factory puts out 80 units per week, which is a minor scale but, because this is a continuous process, is incremented by 3 to significant scale in our calculations. Thus, the WR equivalent of the factory is $100 - (-40 + 10) = 130$. We repeat the operation as displayed in the following table:

WR Equivalent	Wealth Rating	Operation
130	15	Increment Wealth
115	16	Increment Wealth
99	17	Increment Wealth
82	18	Increment Wealth
64	19	Increment Wealth
45	20	Increment Wealth
25	21	Increment Wealth
4	22	Stop Incrementing Wealth

Thus, having satisfied the algorithmic conditions seven times, Hans' modest pistol production operation increases his wealth rating from 15 to 22.

If by a series of unlikely events our friend Hans should end up as a preferred arms dealer to a grateful monarch, sell his factory for shares in a state trading company and move to a new site that puts out 2000 normal-quality pistols each week (major production scale), the effective wealth rating of the factory would be $100 - (-80 + 0) = 180$, and repeating our operations would leave the industrious Hans with a wealth rating of 29. Suppose the monarch also grants Hans a title of nobility and a modest attendant income, pushing his wealth rating to 30. Hans can enjoy the fruits of his labor by trivially acquiring any plentiful goods for himself and quite easily obtaining finer goods: for example, using only one of his three acquisition checks per week, Hans could use the acquisition guarantee mechanic to obtain a new, very high-quality automobile for himself every two or three months without breaking the bank.

The story of Hans also helps give an interpretation of just what high wealth ratings mean: if the owner of a major arms factory and a titular annuity has a WR of 30 and can build a fleet of fancy cars, a character with a WR of 70 could spend a fraction of their wealth (WR -1) to commission a fine warship on the spot, and a character with a WR of 90 could slowly raise a war-fleet without denting their wealth.

Losing Assets: Losing Wealth

If a valuable asset is lost (such as a factory being destroyed in a sudden and unaccountable of arson), calculate its equivalent wealth rating and repeat the algorithm above to subtract iteratively from character wealth rating (i.e. subtract first if the asset's equivalent wealth rating is at least twice the character' wealth rating, then iterate). This is not quite symmetric with wealth rating gained from an asset (though the difference in wealth rating change will be nonexistent or very small), as the iterations get tighter, not wider (because wealth rating declines rather than increases): this may be seen as a disproportionate loss from the sudden removal of an income source and the scrambling of remaining wealth to cover various expenses. Clever characters might consider acquiring insurance at some fraction of output value…

Another example: Raising an Army in 6 steps

A warlord wishes to raise an army. To this end, he chooses to call up a regiment of 1000 men each for a contract of 50 weeks (soldiers will not accept a week-to-week contract in a warzone): suppose these men are not conscripts or feudal troops who might be summoned by the warlord's authority or mercenaries who come with their own equipment. These men are not hardened veterans, but they are held to a standard slightly above the common rabble and will expect a measure of hazard and hardship pay: let us consider them as low-skill labor (increment availability from average for unskilled to scarce for low-skilled).[2]

One thousand men on a 50 week contract represent 50,000 week-units, putting the acquisition at a "vast" scale and make the scale and availability modifier -60.[3] Thus, the warlord must have a WR of at least 61 to attempt to recruit such a force. Suppose he has a WR of 51:[4] the warlord chooses to burn a point of his WR to give himself an acquisition-specific wealth modifier of 102, which gives him a net modifier of 42 and leaves him with a WR of 50. Using the guaranteed acquisition mechanic, he could spend three of his five weekly acquisitions to raise the regiment within a week.

Before raising men, the warlord also needs to acquire arms, ammunition, armor, equipment and food.

Suppose that the warlord chooses to supply his men with a pair of scarce arms (bayoneted-rifle, auto-pistol) and wants a 50% surplus to cover inevitable battle damage: he thus needs 3000 scarce arms, placing him at major scale and an acquisition modifier of 31: he can guarantee the weapons supply with four acquisitions. Arms acquisitions at this scale do not include ammunition supply, but ammunition is plentiful (+40): assuming 2000 weapons under active use in a warzone, the warlord needs 100,000 war-weeks of ammo:[5] thus his acquisition rating is 31: he can guarantee the ammo stock with four more acquisitions.

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[2] A conscript might be paid as a low-skilled laborer week-to-week, making him considerably cheaper for the warlord to hire.

[3] One might ask why the Fialta warlord would not optimize and hire two thousand men (hence 100,000 unit-weeks, capping out at vast scale): this could be limited by recruitment laws or local population capacity (after all, at this scale, there may be an adventure just in recruiting such a force, even if the warlord can afford it). The assumption of the wealth rating system is that once the funds are mobilized, a factor of two difference is fairly trivial: the inertia of the warlord's assets is the greater challenge.

[4] Note that if the 1000 men were conscripted and treated as unskilled labor (basically paid subsistence), the warlord's net acquisition modifier would be +51 and he could spend two of his weekly acquisition rolls to keep them on-hand indefinitely.

[5] The warlord is gambling that lost or damaged ammo will be made up for with time spent not firing: e.g. transit, lulls in fighting.

Food of decent quality and low perishability is plentiful (+40): the warlord needs 1000 rations per week for 50 weeks, so 50,000 units of rations. He can build this stock in four acquisitions.

The warlord decides that his men need decent equipment, which is scarce, but each man only needs one piece of kit (the assumption is that the men can scavenge and cannibalize these better than weapons). He can build this stock (scarce, moderate) in three acquisitions.

Suppose the warlord only wants his men to have the most basic padded armor: they're here to soak up bullets, not deflect them. Such armor is common (+20) and at a moderate scale: the warlord can obtain the armor he needs in two acquisitions.

Thus, the essential supplies for the men can be he had in 17 acquisitions, and the regiment can be raised with a wealth-burn in three. Thus, the warlord can have his army raised and equipped in four weeks.

Raising an Army: Technical Note

The warlord could choose to instead raise ten companies of 100 men over time, in a more staggered fashion: this would give him a scale and availability modifier of -40 and hence a modifier on his acquisition roll of 11. Thus, spending all of his acquisition rolls, he could raise a company in two weeks, and in 91 acquisition rolls (just over 18 weeks), he could have his regiment. Of course, the men hired in the first weeks won't just wait around without pay, and if (as a somewhat generous simplifying measure) we assume that the warlord shuffles contracts around so that all men serve the same amount of time, he will ultimately set out on his march with:

$$10\ co's.\ \ *\ 50\ weeks\ -\ 85\ idle\ weeks\ =\ 415\ company\ weeks$$

This means that the "regiment" will serve 41.5 weeks, not 50. Of course, the warlord could increase service time to 585 company-weeks without going over into a new scale tier, and a as a simplifying assumption, the DM may choose to assume away all idle time under this logic even where not mathematically correct. The value of burning a point of wealth rating then becomes having men for a regiment within one week rather than within 19, which may make the difference in seizing the initiative.

Week	Fractional Companies	New Company?	Weeks Inactive	Cumulative Idle Weeks
1	0.550055	0	18	0
2	1.10011	1	17	17
3	1.650165	0	16	17
4	2.20022	1	15	32
5	2.750275	0	14	32
6	3.30033	1	13	45
7	3.850385	0	12	45
8	4.40044	1	11	56
9	4.950495	0	10	56
10	5.50055	1	9	65
11	6.050605	1	8	73
12	6.60066	0	7	73
13	7.150715	1	6	79
14	7.70077	0	5	79
15	8.250825	1	4	83
16	8.80088	0	3	83
17	9.350935	1	2	85
18	9.90099	0	1	85
19	10.45105	1	0	85