David Hickson "ST - The Nominal Model"

Hurst's Cyclic Theory states that the movement of financial market prices is the result of the combination of an **infinite number** of harmonically related cycles.

Fortunately we do not have to consider all of them (which would be impossible in any case), but only as many as we possibly can, given the amount of data that we are analyzing. Hurst recommended a collection of 11 cycles (for EOD analysis). He did extensive research and discovered 11 cycles between the length of 5 days and 18 years which were found in a great number of US stocks. The average wavelength of each of these cycles he published in the *Cycles Course* (note that he published slightly different average lengths in the *Profit Magic of Stock Transaction Timing*, which was written several years before the *Cycles Course*).

These 11 cycles are called the **Nominal Model**. Nominal Cyclic Model is actually the full term, but it is shortened to Nominal Model for ease of use. The word nominal is used because the **names of the cycles** are defined by the Nominal Model. We often refer to the *nominal* 80-day (or any other) cycle, which means that we are discussing the cycle which has been **given the name**: *80-day*. The cycle is not actually 80 days long, but it has been given the **name** *80-day* cycle. Why? Because of the **Principle of Variation**, we know that cycles are constantly varying in wavelength, and so describing a cycle by its current, or most recent wavelength is often confusing. It is better to have a term that we can use to describe that cycle. The wavelength is the natural name for a cycle, and so instead of describing the cycle by its constantly varying current wavelength, we describe it by the name it has been given, and make it clear that we are using this name instead of the current actual wavelength of the cycle by saying "the ***nominal*** 80-day cycle".

A nominal model consists of more than the names given to the cycles, it also defines the actual **average** wavelength of that cycle.

Here is the Nominal Model defined by Hurst, and used by Sentient Trader for EOD analysis (different nominal models are used for Intraday analysis)

Name of cycle (nominal)	Average wavelength in days	Average wavelength
18 year	6547.2	17.93 years
9 year	3273.6	8.96 years
54 month	1636.8	53.77 months
18 month	545.6	17.93 months
40 week	272.8	38.97 weeks
20 week	136.4	19.48 weeks
80 day	68.2	68.2 days
40 day	34.1	34.1 days
20 day	17.0	17 days
10 day	8.5	8.5 days
5 day	4.3	4.3 days

Why does Sentient Trader use a 40-year old Nominal Model?

The answer to this question is simple, and extraordinary at the same time: Sentient Trader uses the Nominal Model that Hurst defined 40 years because it still applies to the markets today. When development was started on Sentient Trader extensive research work was conducted into the Nominal Model that should be used, and the results of this research were a powerful confirmation of the validity of Hurst's Cyclic Theory: the same cycles are still active in the market today.

Intraday Nominal Model

Here is the full Nominal Model used by default by **Sentient Trader Intraday**
(of course Custom Nominal Models can be created as well):

Name of cycle (nominal)	Average wavelength in days	Average wavelength
18 year	6547.2	17.93 years
9 year	3273.6	8.96 years
54 month	1636.8	53.77 months
18 month	545.6	17.93 months
40 week	272.8	38.97 weeks
20 week	136.4	19.48 weeks
80 day	68.2	68.2 days
40 day	34.1	34.1 days
20 day	17.0	17 days
10 day	8.5	8.5 days
5 day	4.3	4.3 days
2 day	2.2	2.2 days
1 day	1.11	26.67 hours
5 hour	0.22	5.3 hours
160 minute	0.11	160 minutes
1 hour	0.037	53.3 minutes
30 minute	0.018	26.67 minutes
15 minute	0.009	13.3 minutes
7 minute	0.0045	6.6 minutes
3 minute	0.0023	3.3 minutes