

The Canadian Vehicle Market by Age of Model Sold

In my previous *Observations*, I discussed 'platforms' and platform ages. I am emphasizing the need to understand the role of platforms - and the models they underpin - because I am convinced that an OEM's attitude towards platforms will ultimately determine the fate of its vehicles in the marketplace.

Briefly, the term 'platform' is a catch-all that describes a vehicle's core engineering: frame, suspension, drivetrain, and proportional relationships. Automakers are vocal about the naming of certain 'important' platforms (e.g., GM's Epsilon, Nissan's F-Alpha, Ford's C1), but all vehicles are based on a platform of some stripe, often only identified by an obtuse corporate code. Modern cars and trucks rarely ride on unique platforms, as development costs are usually spread across several model lines.

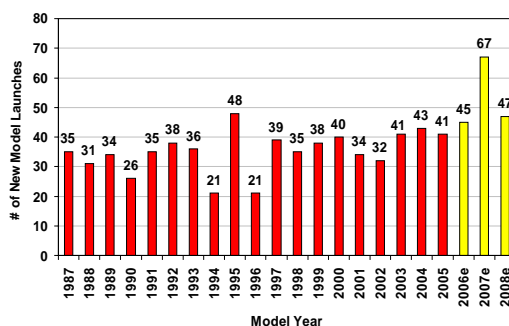
Many people have asked me how a particular vehicle's age is calculated; from the model

year of the vehicle's introduction, or from the debut year of the platform upon which that vehicle is based. Our analysis takes both factors into account, since you can look at the age of a vehicle through the skin (model) or the mechanicals (platform).

For instance, the Chevrolet Blazer/GMC Jimmy twins were introduced in 1982 and have been evolving ever since. These models were updated in 1995 with new bodywork and interior designs, but the same frame, suspension, powertrain, and design "hard points" remained. In this way, the 1995 Blazer was a new model based on an old platform. The same can be said of the 2005 Ford Five Hundred (based on a Volvo platform first available in 1999) or the 2000 Hyundai Accent (a revised version of the 1995 original). This is not to say that revision - instead of clean-sheet redesign - is without merit. The 1995 Blazer embodied great improvements in ride, handling, and noise/vibration/harshness characteristics, but the patina of an aging platform was difficult to hide and forced the new model into an early role as 'price leader' rather than 'segment buster.' In contrast, Japanese automakers have been very successful avoiding the pratfalls associated with aging platforms, as their new models are invariably based on "New & Exciting" chassis components.

This analysis indicates that vehicle companies make a major compromise when spinning new

New Model Launches by Model Year



Source: Merrill Lynch

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Models - Passenger Car & Light Truck - Market Shares by Ages

	New & Exciting		Tried & True		Long in the Tooth		War Horses	
	Market Share	Total Sales	Market Share	Total Sales	Market Share	Total Sales	Market Share	Total Sales
1990	44.2%	567,747	24.9%	320,379	23.3%	299,316	7.6%	97,341
1991	33.2%	420,462	37.7%	477,019	20.6%	261,377	8.5%	106,972
1992	40.5%	487,401	31.8%	383,339	19.9%	240,133	7.7%	93,006
1993	45.4%	527,693	16.7%	194,383	27.4%	318,283	10.5%	122,530
1994	47.7%	583,633	14.7%	179,471	29.7%	363,196	8.0%	98,161
1995	50.3%	568,101	30.3%	342,542	16.7%	188,946	2.7%	30,050
1996	54.4%	637,268	27.4%	321,763	14.8%	173,634	3.4%	39,724
1997	68.4%	949,034	17.1%	237,641	7.2%	99,321	7.3%	101,629
1998	52.7%	731,374	31.2%	433,386	9.4%	131,106	6.7%	92,957
1999	55.1%	827,676	36.2%	543,917	8.6%	128,839	0.0%	438
2000	50.3%	779,823	31.7%	491,384	17.9%	277,916	0.0%	44
2001	57.8%	907,143	25.3%	397,215	15.8%	248,623	1.1%	17,518
2002	47.0%	800,243	27.4%	466,913	24.4%	415,002	1.2%	20,448
2003	43.0%	685,264	30.9%	492,779	23.4%	372,069	2.7%	42,678
2004	47.7%	732,326	28.9%	443,558	15.7%	240,498	7.7%	117,429

Source: DesRosiers Automotive Consultants Inc., CVMA and AIAMC

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models from older platforms. Today's educated consumers appear to be able to see through the smoke and mirrors. This is most-vividly illustrated by the dramatic industry-wide decrease in sales of models based on "War Horse" platforms (i.e., platforms that were introduced nine or more model years ago). Whereas vehicles derived from "War Horse" platforms owned nearly 40 percent of the total market in the early-1990s, such

vehicles account for about sixteen percent of today's new

This analysis indicates that vehicle companies make a major compromise when spinning new models from older platforms.

vehicle mix. Similarly, sales of "War Horse" models (i.e., vehicles which have not been

substantially revised or redesigned for nine or more model years) make up a very small percentage of the current market (typically 1 or 2 percent) compared to the situation in the early-1990s (typically 8 to 10 percent).

One of the interesting trends borne out by age-categorized sales numbers is that the mix of "New & Exciting" models produced by all passenger car

Platforms - Passenger Car & Light Truck - Market Shares by Ages

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	New & Exciting		Tried & True		Long in the Tooth		War Horses	
	Market Share	Total Sales	Market Share	Total Sales	Market Share	Total Sales	Market Share	Total Sales
1990	30.3%	389,348	15.2%	195,478	18.6%	238,461	35.9%	461,496
1991	21.0%	265,473	25.1%	318,216	17.7%	224,487	36.2%	457,654
1992	19.5%	234,668	23.7%	285,892	17.5%	211,239	39.2%	472,080
1993	24.6%	286,480	13.0%	151,610	24.8%	288,778	37.6%	437,372
1994	24.7%	302,769	11.7%	142,835	24.2%	296,353	39.4%	482,504
1995	28.7%	324,105	16.6%	187,726	18.3%	207,112	36.4%	410,696
1996	34.1%	399,405	15.3%	179,035	24.3%	284,746	26.4%	309,203
1997	42.7%	591,849	15.6%	216,815	13.1%	181,657	28.6%	397,304
1998	38.6%	536,677	19.0%	263,984	16.4%	227,216	26.0%	360,946
1999	40.1%	623,256	29.2%	452,970	12.0%	185,792	18.8%	291,695
2000	27.4%	424,726	33.5%	518,943	22.5%	348,962	16.6%	256,536
2001	30.2%	474,951	26.9%	423,223	26.1%	410,551	16.7%	261,774
2002	28.8%	490,049	21.1%	359,233	33.4%	569,116	16.7%	284,208
2003	28.0%	446,545	22.6%	359,680	35.6%	567,100	13.8%	219,465
2004	33.1%	507,693	23.0%	352,555	27.0%	413,551	17.0%	260,012

Source: DesRosiers Automotive Consultants Inc., CVMA and AIAMC

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and light truck manufacturers has fallen in recent years. This contradicts the assumptions of many in this industry. New models garnered 50 to 60 percent of sales in the late 1990s, whereas today they account for only 40 to 50 percent of sales. OEMs who expect a big 'lift' in sales because they have a number of new models coming to market may be in for a rude surprise. The record number of new models introduced in Canada over the last five years absolutely did not result in higher market share. We suspect this was because the heavy

discounting of models three and four years old undermined the sales potential of these new models.

Indeed, the most fundamental change witnessed over the past fifteen years has been in the "Tried & True" segment (vehicles introduced three to four model years ago), where market share has stabilized around 30 percent. Prior to this decade, "Tried & True" models erratically oscillated between share points in the mid-teens to the high-thirties, but recent stabilization in this area indicates that automakers have generally

discovered the profitability of shorter, more consistent product cycles.

The record number of new models introduced in Canada over the last five years absolutely did not result in higher market share.

More profound is the fact that the "Tried and True" age group is the only segment where a degree of relative parity exists between platform age and model age. Very rarely has there been more than a ten percent variance between sales-weighted model and platform groups. Manufacturers sell the

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- New and Exciting** **New to Two Years Old**
- Tried & True** **Three to Four Years Old**
- Long in the Tooth** **Five to Eight Years Old**
- War Horses** **Nine Years and Older**

GM, Ford & DCX - Passenger Car & Light Trucks - Market Shares by Age of Models

	New & Exciting Market Share % Within Category	Tried & True Market Share % Within Category	Long in the Tooth Market Share % Within Category	War Horses Market Share % Within Category	Total Sales Volume
1990	59.4%	70.6%	83.9%	94.6%	906,572
1991	52.8%	71.7%	79.2%	95.1%	872,593
1992	58.4%	75.3%	75.8%	94.8%	843,345
1993	65.7%	52.1%	89.8%	95.2%	850,781
1994	67.5%	73.0%	83.8%	95.8%	923,347
1995	71.3%	80.1%	84.5%	80.1%	863,338
1996	74.4%	67.1%	93.8%	90.0%	888,555
1997	75.8%	48.7%	85.5%	94.5%	1,016,452
1998	60.5%	80.5%	66.3%	94.5%	965,953
1999	64.1%	71.5%	79.6%	0.5%	1,021,831
2000	55.0%	69.8%	90.7%	0.0%	1,023,955
2001	54.8%	60.6%	84.4%	99.2%	965,349
2002	50.3%	45.6%	93.9%	95.1%	1,024,279
2003	40.0%	56.8%	84.8%	91.5%	908,839
2004	52.9%	48.0%	63.8%	96.6%	867,436

Source: DesRosiers Automotive Consultants Inc., CVMA and AIAMC

Japanese Nameplate - Passenger Car & Light Trucks - Market Shares by Age of Models

	New & Exciting Market Share % Within Category	Tried & True Market Share % Within Category	Long in the Tooth Market Share % Within Category	War Horses Market Share % Within Category	Total Sales Volume
1990	37.5%	24.1%	4.3%	2.3%	305,163
1991	42.0%	25.6%	8.6%	2.6%	323,648
1992	37.1%	23.1%	11.2%	3.1%	299,059
1993	26.4%	44.7%	7.4%	1.5%	251,755
1994	24.6%	22.8%	13.5%	1.0%	234,376
1995	21.2%	16.1%	13.4%	9.5%	204,037
1996	21.7%	21.5%	4.8%	5.9%	218,230
1997	21.3%	35.7%	6.2%	4.3%	297,059
1998	34.7%	15.2%	3.6%	5.2%	329,450
1999	25.4%	25.8%	10.7%	64.2%	364,677
2000	30.2%	26.3%	6.6%	18.2%	383,173
2001	30.0%	33.5%	10.3%	0.0%	430,678
2002	35.6%	39.2%	4.2%	0.2%	485,915
2003	47.4%	26.1%	10.0%	8.1%	493,983
2004	42.5%	33.1%	14.1%	2.6%	495,030

Source: DesRosiers Automotive Consultants Inc., CVMA and AIAMC

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same percentage of three-to-four-year-old models as they do vehicles based on three-to-four-year-old platforms.

On the other hand, great disparities exist in the other segments - especially the last, "War Horses." Where the industry-wide "models" chart shows diminishing volumes in each successive segment, its "platforms" counterpart shows a more uniform spread, with sales rarely rising over 500,000 or falling below 200,000. Thus, it is clear that there is less revolution and more evolution than the marketing departments of major vehicle manufacturers would have the consumer believe.

Automakers have also discovered how to maintain

interest in aging products. BMW continues to be the exemplar of this field, introducing new variants of existing models on a year-by-year basis. Consider the case of the recently-

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discontinued E46 3-Series: the vehicle lineup began with sedans in 1999, but soon expanded to coupes, convertibles, wagons (2000), and performance specials (2001). Available AWD (2001), power upgrades (2001), a mild exterior freshening (2002), new sports editions

(2003), an available navigation system (2003), new transmissions (2004), and a club-sport special (2005) followed. The 3-Series arc is a case-study in maintaining product freshness.

In addition, content changes appear to revitalize a vehicle's sales, rather than simply bolster them. The Chrysler Pacifica, for example, did lukewarm business during its first year, and it wasn't until the vehicle was de-contented and made available at lower price points that its sales began to rise. In other cases - namely those of small luxury cars and VW diesels - the market "finds" a vehicle in mid-cycle and latches onto it. Volkswagen has offered diesel variants since the late-1970s, but sales of diesel-equipped Golfs,

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Jettas, and Passats have surged only recently. Uncontrollable external trends (e.g., fuel prices, pop culture) can drive interest in a vehicle, and manufacturers are often quick to react when such situations become apparent.

In terms of the age-grouping performance of the four major auto-producing regions (the U.S., Japan, Europe, and Korea), the sales-weighted figures are stark and disturbing. GM, Ford, and DaimlerChrysler are virtually alone in offering "War Horse" models. An incredible 96.6 percent of all "War Horses" sold in 2004 were products of the Detroit-based automakers, while the "Long in the Tooth" segment is similarly dominated by American-branded vehicles (80 to 90 percent through most of the decade).

GM, Ford, and DaimlerChrysler presently retain roughly 50 percent of the "New & Exciting" and "Tried & True" segments, but those shares have been sliding since the mid-1990s, when they were consistently above 70 percent of the market. It is not coincidental that this corresponded with their loss of market share in the total market. If new models do not sell, the OEM will ultimately lose share. The relationship appears to be one-to-one.

The current incentive-rich sales climate only entrenches the dependence of American manufacturers on middle-aged vehicles. By providing deep and enduring discounts on "Tried & True" and "Long in the Tooth" models, sales of "New & Exciting" vehicles are

cannibalized. Management is then provided with mistaken justification for cutting much-needed development dollars, since the new vehicles

If new models do not sell, the OEM will ultimately lose share.

are ostensibly lagging behind the old ones in absolute sales. Thus, the cyclical and destructive nature of deep discounting is legitimated and sustained. This is like "eating your seed corn" - you survive in the short term, but die over the long run.

Japanese automakers have managed to expand and diversify their vehicle lineups while maintaining a consistent

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European Nameplate - Passenger Car & Light Trucks - Market Shares by Age of Models

	New & Exciting Market Share % Within Category	Tried & True Market Share % Within Category	Long in the Tooth Market Share % Within Category	War Horses Market Share % Within Category	Total Sales Volume
1990	1.7%	0.9%	11.5%	3.1%	49,593
1991	2.7%	0.4%	11.9%	2.2%	46,693
1992	2.9%	0.4%	9.9%	2.1%	41,099
1993	5.1%	3.2%	0.9%	1.9%	38,214
1994	5.9%	3.1%	0.9%	1.0%	44,444
1995	5.2%	2.1%	1.9%	5.1%	41,985
1996	1.4%	11.0%	1.4%	0.1%	46,733
1997	1.0%	15.1%	8.3%	0.0%	53,480
1998	3.5%	1.4%	29.2%	0.0%	70,038
1999	7.3%	1.3%	9.7%	35.4%	80,074
2000	9.6%	1.7%	0.9%	81.8%	85,619
2001	6.9%	4.4%	3.0%	0.8%	87,726
2002	4.2%	12.2%	1.1%	4.7%	96,078
2003	4.8%	9.8%	3.5%	0.4%	94,067
2004	3.4%	4.3%	17.2%	0.6%	86,270

Source: DesRosiers Automotive Consultants Inc., CVMA and AIAMC

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level of product freshness on their showroom floors. Japanese share of the "New & Exciting" age segment has jumped from the low-twenty percent range in the mid-1990s

now full-line vehicle companies - and yet, even with so many models to juggle, the Japanese share of "War Horse" models only amounts to 2.6 percent of the market.

of the new-to-two-year-old pie, rising from a consistent two percent through the 1990s to a record 9.9 percent in 2002. On the other hand, European automakers are losing "New & Exciting" market share, while their middle-aged numbers are erratic. Both European and Korean companies have been very successful in clearing out older, uncompetitive vehicles from their lineups.

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to the mid-40 percent range today, while their "Tried & True" shares have increased incrementally. The Japanese have generally shown a remarkable resistance to longer product cycles. With the addition of credible full-size light trucks, Toyota and Nissan are

European and Korean manufacturers still represent a much smaller segment of the overall marketplace, but it is revealing that the greatest spikes in their respective charts occur in the two middle-aged categories, "Tried & True" and "Long in the Tooth." Korean automakers, represented in Canada by Hyundai and Kia, took a record 14.6 percent of the "Tried and True" segment in 2004, indicating a good post-introduction success strategy. Similarly, new Korean models are taking a larger piece

What lessons can the informed observer take from this analysis?

First, it is apparent that the Japanese vehicle companies' unalloyed success has forced their Western counterparts to adopt shorter product cycles in order to remain competitive. Short four-or-five year redesign

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Korean Nameplate - Passenger Car & Light Trucks - Market Shares by Age of Models

	New & Exciting Market Share % Within Category	Tried & True Market Share % Within Category	Long in the Tooth Market Share % Within Category	War Horses Market Share % Within Category	Total Sales Volume
1990	1.5%	4.4%	0.0%	0.0%	22,533
1991	2.5%	2.4%	0.0%	0.0%	22,011
1992	1.6%	1.3%	2.6%	0.0%	18,920
1993	2.7%	0.0%	1.9%	0.0%	20,286
1994	2.0%	1.2%	1.8%	0.0%	20,182
1995	2.2%	1.6%	0.2%	0.0%	18,424
1996	2.5%	0.4%	0.0%	0.0%	17,176
1997	1.9%	0.5%	0.0%	0.0%	19,285
1998	1.3%	2.9%	0.9%	0.0%	23,136
1999	3.2%	1.4%	0.0%	0.0%	34,288
2000	5.2%	2.2%	1.8%	0.0%	56,420
2001	8.3%	1.5%	2.3%	0.0%	86,746
2002	9.9%	3.0%	0.7%	0.0%	96,334
2003	7.9%	7.2%	1.7%	0.0%	95,901
2004	1.2%	14.6%	4.9%	0.1%	85,075

Source: DesRosiers Automotive Consultants Inc., CVMA and AIAMC

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cycles appear to be an integral component of the Japanese engineering culture, and the high profitability of Asian automakers has allowed this practice to continue unabated as their lineups - and sales volumes - expand. The fact that American engineering habits have changed is evidenced by the precipitous drop in "War Horse" platform volumes: from 461,496 units in 1990 to 260,012 in 2004.

The second conclusion one can draw is that General Motors, Ford, and DaimlerChrysler continue to lose market share in the segments that count. The Detroit-based automakers have seen their share of "New & Exciting" model sales slide from 75.8 percent in 1997 to just 40 percent in 2003. The results for 2004 look slightly brighter (52.9 percent), but all indications are that this is a false peak - an oasis in the desert. With "War Horse" shares that have dipped below 90 percent only three times in the past fifteen years, it will take a sustained change of direction to convince many in the market.

Third, it has become increasingly difficult to draw the market's attention through simple re-skins of existing products. Every major full-line vehicle manufacturer has made an obvious effort to put lots of new (or new-looking) products in their showrooms on a timely schedule, so the consumer has been forced to look beneath the surface to see what's truly new.

It is clear that introducing new models on old platforms is not as good as introducing new models on new platforms. The success of Japanese automakers in Canada is a direct result of their practice of bringing new platforms to market with the same frequency as their model introductions.

The barrage of new models about to hit the Canadian market may not be as successful as hoped for by the OEMs.

Fourth, it is clear that the Japanese automakers' custom of frequent and complete re-engineering has paid dividends, both objectively in sales numbers and subjectively in customer perceptions. The Honda Accord, a family-oriented midsize sedan, has had consistent nameplate branding since 1977. In that nearly-thirty-year period, Chevrolet has cycled through a litany of overlapping sub-brands for its family sedans, including Caprice, Celebrity, Corsica, Impala, Lumina, Malibu, and Epica. Of those seven, four have faded into the ether, unloved and unattended. They were replaced by other cars because, after years of inattention, there remained little brand equity in their model names.

There are examples where U.S.-based automakers have allowed models to languish for

such long periods of time that their nameplates become publicly unredeemable. This, if anything, is the most obvious manifestation of Detroit's love-hate relationship with "War Horse" models and platforms. How can a brand build loyalty - or maintain a reputation - if it treats its nameplates as disposable commodities? How can a brand remain profitable if it is perennially playing in the bargain leagues, content to populate its showrooms with a higher percentage of old models than new ones?

Finally, the heavy discounting of the last few years is seriously undermining GM, Ford, and DaimlerChrysler's ability to compete in the long term. It robs them of product development capital for new platforms, erodes brand value, lowers re-sale value of all similar vehicles in the used vehicle market, and takes away sales of the "New & Exciting" products upon which they are counting to revive their organizations. The barrage of new models about to hit the Canadian market may not be as successful as hoped for by the OEMs. Caution is in order. **DAR**