## MRU's HOW-TO SPECIAL GUIDES (FOR BEGINNERS)

## How to order a Dell notebook online saving (a lot of) money just following three simple rules-of-thumb of smart navigation

This short briefing will also advise you properly on how not to jump into the hidden pitfalls of implusive purchases on the Internet, using simple but effective navigation tricks. It is meant also to provide the wider audience with a good time, for carefully reflecting on what dangers await the unwary customer in the Open.

When you buy a PC, you want it to be made by a good, reliable brand, you want it fast and long-lasting, and it is always better if it comes cheap for your pockets. Impossible, you say? Think again. After comparing market prices of several different manifacturers, and carefully selecting the configurations of a dozen or so of notebooks and desktop PCs, we concluded that computers from Dell are really a good value for the money, and they offer unmatched flexibility of choice.

Although we never sold any of those ourselves, and neither we ever asked special bonuses for that service (of very modest business volume indeed), nonetheless we have been very price- and quality- sensitive in our selections of the past two years or so. In fact, most private Italian customers tend to be picky even for a 20-euros difference in the final cost, since our state economy is getting tighter, especially for the younger generations, and moreover the economic outlook has been recently downgraded.

Our task was to advise and instruct the hardware purchases without sacrificing any of the core hardware characteristics, in the end the only things important for value and performance. Now that we are moving on to new servicing tasks, we decided to pass over to the Internet Community what we have learnt from that experience.

## Experiment

The example we want to present to exemplify the issue is the purchase of a Dell Notebook Model XPS 1330 from the Private Customers section on the online Dell.it store (Italian site, 28/10/2007 circa h10:00). On the website, you are presented with a range of notebook model families and product numbers. Clicking on the product number XPS 1330, three suggested configuration options pop up. They are usually in a price range from cheapest/less equipped to more expensive/more equipped, as a quick and handy preselections for very time-constrained customers.

The three standard choices were respectively 949,00 euros, 1199,00 euros, and 1599,00 euros (excl. VAT and shipping), for substantially different hardware specs. Further configuration options are offered to better tailor the specifications to the user's needs and finances.

We have selected ourselves two arbitrary reference configurations, controlling as variables just the main hardware characteristics, and leaving the remainder equal (including servicing options). We came up with two complete configurations that we were in the condition to build online when starting from at least two of the three suggested starting points. In fact, due to limitations in the available choices on Dell's website, not all options are always available, and, more specifically, it is not usually possible to downgrade the hardware of an initially more expensive configuration, while the reverse is often true.

The two selected configurations are termed as "Top" and "Mid", where "Top" has the best options permitted, while the "Mid" is something in between. They are listed in Table1.

| Inspiron XPS1300 - Mid configuration | Inspiron XPS1330-Top configuration |
| :--- | :--- |
| CPU: Core 2 Duo T7500 2.2 Ghz | CPU: Core 2 Duo T7500 2.2 Ghz |
| OS: Windows Vista Home Premium | OS: Windows Vista Ultimate |
| SCREEN: 13.3" UltraSharp WXGA TrueLife | SCREEN: 13.3" UltraSharp WXGA TrueLife |
| RAM: 2048 Mb of RAM | RAM: 4096 Mb of RAM |
| HD: 160 Gb SATA 5400 RPM | HD: 200 Gb SATA 7200 RPM |
| VIDEO: nVidia GeForce 8400M GS | VIDEO: nVidia GeForce 8400M GS |
| OPTICAL: DVD+-RW 8X | OPTICAL: DVD+-RW 8X |
| BATTERY: 6 Cells | BATTERY: 9 Cells |
| NO OPTION | OPTION: Biometric Reader |
|  |  |

Table 1: Selected configurations for comparisons - in boldface, distinguishing features
We quickly "built" the two configurations, once selecting the least expensive starting point, and once selecting the most expensive starting point. The middle-level starting point resulted useless in this study, because the available options did not allow us reaching the two reference configurations with an exact match.

We produced four completely identical products in our shopping carts: 2 for the "Top" model, one starting from a low starting cost and the other from the higher starting cost, and similarly other 2 for the "Mid" model. The final print-outs were so identical that we were about to mix them up, but we managed not to. The resulting prices, instead, were very different, as they are illustrated in Table 2.

| Mid configuration achieved |  | Top configuration achieved |  |
| :---: | :---: | :---: | :---: |
| Entry price | Final price | Entry price | Final price |
| $€ 959$ | $€ 1945$ | $€ 949$ | $€ 2639,80$ |
| $€ 1599$ | $€ 1599$ | $€ 1599$ | $€ 2293,80$ |

Table 2: Final pricing dependent on entry option
Identical products, with identical family name and model number, with $100 \%$ identical hardware characteristics, resulted in the final, pre-payment shopping cart in a variation in net pricing of $21,6 \%$ in the case of the Mid configuration, and $17 \%$ in the case of the Top configuration, varying only the starting weblink you click when you open Dell's Website. It is really HTML's power: hypertext concept founders must have moved to business!

The absolute numbers are more scary in the context of the aforementioned contingencies of the Italian private market: a net difference of 346 euros in the Mid case, and 346 euros in the Top case. Considering $20 \%$ VAT (which is unrecoverable for private customers), the absolute numbers rise to 415,2 euros. If you consider shipping cost, the absolute numbers go further high, but sometimes a free shipping option is offered, and thus the issue is dropped altogether as an experimental confound.

At this point, any Archimedean mind would find the exactness of this absolute figure (excl. VAT) a sign of the fundamental justness of the Worlds above, against the chaos of irrational relative proportions, which was then driving civilization crazy. A very long time ago, when computers already existed but not as boxes under office tables, the Italian thinker thought really a lot about linear segments and their Golden proportions. In today's world, we may similarly speak of (Market) Segments and their analogous Golden value (although nowadays Cash is usually preferred). Or rather, may we speak about it in the same way?

## Pricing causes independent of one's own free will

But why is the price different? The single thing that makes the pricing jump up enormously when you upgrade a low cost starting point, is the processor. The upgrade in our case is from a Core 2 Duo T5250 (really disgraceful with just 1.5 Ghz of clock speed and a barely sufficient 2 Mb of high-speed Level 2 cache), to a sporty, fully-featured, higher clocked T7500. Same CPU family, same dual core, probably born on the same original silicon wafer (although the smaller the cache, the humbler and poor the actual origins).

This upgrade alone from Dell costs the hefty sum of 606 euros + VAT (a total of 727,2 euros incl. VAT, since Italian VAT is at $20 \%$ value).

Although notebook processor pricing is harder to know in detail than that of desktop processors (as the wise man's saying goes: "it is always harder to assemble a laptop on your own than a desktop"), we found the following price tag on our favourite free-access USA-based hardware retailer (Compuvest.com):

T7500 Core 2 Duo Processor: \$267,69 (USD),
That is the equivalent to 184,61 euros (we use here an MRU- internal, upwardlyrevised estimate of EURO-to-USD exchange rate equal to 1.45 dollars per euro).

We did the math, you do the thinking.

## Rules of thumb

In conclusion, see Illustration 1 for a visual summary of how to behave in these circumstances. The rules are verbalized in the caption.

There is a saying in Italy that goes: "Chi più spende meno spende", which is a motto used by affluent entrepeneurs when they want to encourage investment. In English it would be rendered as: "Those who spend the most, in truth they spend the least".

Today's new motto evinced from Dell's website is instead: "Chi vuole spendere di meno, spende di più", that in English would be rendered: "Those who less want to spend, the more they spend". It is a simple and melodic riddle, very easy to break once it is know, as all riddles are.

We strongly suggest to avoid buying online from Dell, also for the distress of tracking irregular changes and the waste of time, expecially when you know exactly what you want. You may opt instead for buying from Dell on the phone, as for personal experience the sales agents support network is efficient, at least here in Italy. They have better control on prices and offers, and they really try hard to make you avoid those invisible pitfalls (honest).

## Conclusions

This How-To guide ends here. You are strongly encouraged to put these experimental results to the test, by trying on your own. If you want to contribute to this (private)-consumer-oriented scientific quest, you may work out on your own the way these marketing-related features change according to product type, family, model, costumer target, time of the year and also time of the day, as the site is always changing - I wonder if they update it on Sunday mornings, but at least this time they did not.

An investigation on intercultural differences might also lead to the preparation of a comparison chart documenting whether and how Dell's websites, located in different countries, behave on these respects. I suspect that on Dell's marketing experts' spreadsheets such analyses are not always explicit, and they are hard and leghty to extract from sales data indexes alone. This is also a way to help them out continuing the good job of making more and better computers, as the market is in constant evolution, and it needs them.

Finally, a take-home message: the main lesson learned here is that numbers, even when manipulated, do not lie: the magic number of today is... 346 ! It is exactly the money
we make you save, if you buy from Dell when you are really time-constrained, or if you are a kind of person that tends to defy inherently marketplace-related Risks.


Illustration 1: Rules of thumb for surviving on Dell's online store - upgrading from a lower base point is always more expensive, while downgrading a higher cost configuration is not allowed online. The best "value for the money" anchor point singularity is found precisely where the idea of the product you desire buying actually is.

