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The Logan Epic

**New trajectories
for innovation**

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DUNOD

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FOREWORD CARLOS GHOSN

CEO of Renault-Nissan

This book tells the story of a project that has become a programme and, above all, a pillar of the strategy that the Company and the Alliance are pursuing.

The project had been launched by my predecessor at the head of Renault, Louis Schweitzer, and the success story that this book traces is rooted first and foremost in the grand idea that he was able to see through in the face of entrenched behaviour and received wisdom. It is also embedded in Renault's genes, specifically in its unusual aptitude for innovation and reinventing the automobile.

Logan is a major innovation that has often been underestimated despite having contributed greatly to Renault's success over the past decade.

Innovating does not simply mean adding more technology to a vehicle. It also involves listening to the market, knowing how to identify emerging tendencies and ensuring that customers are well served by technological or other forces of innovation. The Logan has had unprecedented success specifically because it is in sync with the big trends affecting the automobile business—and, to a certain extent, because it has anticipated them. The Logan has been able to respond to new needs, different ones depending on the country where the product was being sold. The strength of its Entry range resides precisely in this ability to respond with one and the same product offer to motorists' expectations in both emerging and mature countries.

In Europe, where our Entry range is sold under the Dacia brand name, the automobile market has been declining and its image deteriorating. 43% of young French consider that the automobile has more shortcomings than advantages. In terms of personal mobility, real needs have become more important than the projection of social status. Against this background, Dacia's modernity comes from its decision not to compete by over-equipping its car like everyone else is doing. Instead, it had the intelligence to concentrate on what was necessary. Dacia's transparent promise to

customers is that they would have a bigger, more reliable, simpler and less expensive car. Its main focus has been on motorists who only bought used cars previously, with two-thirds of our customers accessing a new car for the first time ever with this purchase. Over the past eight years, Dacia has been the fastest growing automobile brand in Europe, proof that it satisfies previously unfulfilled needs.

However, there has been a very different dynamic in emerging countries where accessing personal mobility remains a major aspiration for social climbers. The Global South has an enormous need for mobility, including over short distances, due to the general mediocrity of the public transportation infrastructure. The end result has been an extremely rapid growth in automobile sales once the price matched households' greater purchasing power. The growing market for automobiles in emerging economies has been felt across all segments, including for midrange or luxury vehicles. It remains that the main growth driver has been locally manufactured affordable cars.

Thanks to its Entry models, Renault possesses a vehicle range that is perfectly adapted to this international dynamic. These are global cars assembled in seven countries across the world. They are also local cars that have evolved in response to the specific needs of the markets where they are being sold, with examples ranging from the specific design of the Sandero ph 2 sold in Brazil to the Duster's rear air conditioning system in India.

Between 1999 and 2011, the share of Renault cars sold outside of Europe rose from 11% to 47%. This would have been impossible without the Logan and its successors, with more than half of our sales outside of Europe involving this line. All in all, more than 1 million Entry range cars will have been sold within eight years after its launch.

In sum, vehicles in our Entry range are a foundation of the Group's ambitions and strategy. They reflect Renault's goal of making mobility both sustainable and accessible to all. Accessible mobility means offering products that are affordable both at purchase and also throughout their operational lifecycles. Sustainable mobility means equipping models with the latest mechanics, avoiding over-sophistication and focusing on performance. Lastly, mobility for all means responding to personal mobility needs in both developed and emerging countries.

In addition, Entry vehicles are a pillar of our growth strategy. Before the Logan, Renault profits mainly depended on the Mégane range. Today the

Entry range is the Group's most profitable line with a global reach that allows it to smooth out the effects of any regional crises.

Its contribution to the French activities of Renault and the Company's subcontractors has also been positive. Despite its international reach, the Entry still generated €630 million of value added in mainland France in 2011, notably through knock-on effects benefitting our mechanical plants and engineering operations. The profits generated by these vehicles have also made a major contribution to our investments in France and the rest of the world, helping to prepare Renault's future.

Above and beyond the initial idea of making a €5,000 car, the Entry range's performance can be explained by its rigorous and frugal implementation—and by the fact that eight years after the first Logans came on the market, the competition has not been able to reproduce our business model.

All in all, the Logan's epic adventure has been central to Renault's success. A visionary managerial decision to pilot an exemplary project based on a pragmatic lifecycle management—these mechanics are all adroitly detailed in this book, with special focus on decision-making processes, major changes in the automobile business and the people without whom none of this would have been possible—namely, the men and women of Renault who have carried this innovation to its successful conclusion.

INTRODUCTION

Lessons from an epic adventure

From the Ford Model T and Fordism to Toyotism, just-in-time methodologies, the Twingo and project management—in more than a century of history, the automotive industry has been a permanent exemplar of business theories and even of models of capitalism. Not that the sector invented everything—far from it—but it has been able to appropriate innovative concepts and give them life through emblematic cases that have helped theory to transcend obscure circles of professional academics.

The question is what characteristics a good exemplar must possess to be considered a fully-fledged school of thought. Clearly, it must be original and embody a theory or model that breaks with the past. It must also be a success. In management like other disciplines, scholars are aware that there is much to learn from failure. Yet failures are difficult to analyse and even harder to talk about with any transparency. Moreover, imitation may be criticizable but it does constitute a powerful vector for the deployment of new ideas. In addition, the new thinking must also be rooted in realities that are easy to perceive. With this in mind, what we can say is that the automobile has driven the global notoriety of the challenges that big industry faces today.

Above and beyond these management issues, it has been clear since Chandler that the main attributes characterising our economies have been at least partially developed within companies or—at the very least—that a modicum of coherency must connect organisations endowed with such attributes, the markets where they operate, the wealth that they distribute and the institutional environments within which they operate. Once again, over the course of the 20th century the automobile has willingly and frequently served as an exemplar, with some of its key topics (“Fordism”, “Post-Fordism” or “Toyotism”) touching on economic issues requiring much deeper analysis than is customary, and which have been more or less successfully resolved by managers working for leading carmakers. In addition to the ease with which automobile-related illustrations can be turned into rhetoric, the industry has also been crucial to employment,

trade, growth and technological capabilities in many countries. This also justifies its use as an example, as does the fact that automotive spending accounts for a significant share of many household budgets and, more broadly, plays a major role in the organisation of social life.

For the authors of this text, the Logan example is worth examining both on its own merits and also because of what it represents, illustrates or suggests on a further level. This is because the Logan combines exemplary aspects of an original business problem (which some might call a model) that is interesting to analyse.

The Logan is noteworthy first and foremost because of the scale of its success. Originally launched as a particularly risky bet—because such small volumes (initially 60,000 units annually out of the Romanian factory) had been predicted, the programme has constantly upgraded its forecasts, expanding markets and production capacities until it exceeded 900,000 units in 2011, more than 15 times the original goal. It remains that the most spectacular and unexpected success of this vehicle programme—which the public is familiar with because of its exceptionally low prices—cannot be attributed to rising sales but to the fact that it has been extremely profitable for the Renault group, something that has been especially precious since a crisis broke out in the late 2000s.

Another reason for the importance of this example is its deviation from “business as usual”. The changes involved have been both coherent with one another (explaining why the Logan might be equated with a “model”) and covered a wide range of activities. What we are facing here is the kind of case study found in many business or economics modules, including strategic marketing classes, where the Logan perfectly embodies Christensen’s “low-end disruption” strategies; project management classes, where it helps to explain why dedicated and autonomous project teams are so effective, while highlighting the efficiency of modern “design to cost” methodologies; theories of growth classes, focused on innovative firms and their management of product families, involving generations of differentiated products and the decades-long conquest of different markets (without this extension’s complexity impeding the concept’s coherency or the programme’s profitability); corporate internationalisation classes, by resuscitating the construct of a “world car”; or management production classes, revealing the issues and problems associated with the delocalisation of manufacturing and the complexity of globalized procurement. All illustrate the originality of a kind of geographic deployment where

innovation no longer spreads outwards from a firm's country of origin towards more exotic destinations but targets first and foremost distant customers before (potentially) reselling the products designed in this way in traditional Western markets.

Without trying to equate “Loganism” with Fordism or Toyotism, we consider that our case study epitomises broader industrial, economic and geopolitical issues affecting the whole of the automotive industry and, beyond this, economic organisation. Taking just one example, the constraints and opportunities that the big developed countries face as a result of the emerging economies' growing power have been wilfully tolerated for more than a decade because people believed in the manifest destiny of the knowledge economy, which was supposed to help the leading developed countries to maintain their primacy by using innovation to perpetuate a top-down division of cognitive labour. Implicitly, behind the famous “Lisbon agenda” that the European Union created for itself, there was also the idea of a division of labour that would make it possible to delegate manufacturing phases to the emerging economies without the Global North having to worry about its own leadership role. In part, the automotive industry—and the forms of sourcing and relocalised assembly that developed in the 1990s and 2000s—seems to be rooted in these hypotheses. By trying to expand local contents and share design tasks between France, Romania and (increasingly) other sites such as Brazil, Russia or India, the Logan family has evoked a more balanced form of the international division of design tasks, while possibly reversing the sources of innovative concepts.

Similarly, the demonstration made by the Logan and its family that it is possible to achieve more than satisfactory profitability at the bottom-of-the-range, breaks with the past by contradicting today's widespread belief in the industry that profitability equates to the ability to sell expensive products. This credo, shared by managers in the sector's largest companies, analysts and politicians with an ongoing interest in the automobile business, constitutes a new “one best way” that has ostensibly been confirmed by the Volkswagen group's undeniable success. The Logan questions the way that this credo affects perceptions of (and efforts to appropriate) “value” in the automotive sector. In Europe and beyond, the Logan and its family—whose successes have been surprisingly discreet—deserve special analysis to bring to light the meaning of contemporary developments and the trajectories being

imposed on the industry. In turn, this makes it increasingly possible to conjure up alternatives.

Examining the Logan case study from this perspective, the book is broken down into three sections.

The first one recaps the emergence and conduct of the Logan project, which has been the seminal act in this epic adventure. The first chapter focuses on product and market strategies. It is followed by an interview with Louis Schweitzer, the project's father. The second chapter analyses product design management and the industrial developments associated with this. It is followed by an interview with Jean-Marie Hurtiger, who brought the project to completion from March 1999.

The second section analyses the expansion dynamic underlying Renault's Entry programme, involving both a broadened product range and expanded target markets globally. This story concludes in late 2011. The 2012 inauguration of a new factory in Morocco and launch of the Lodgy minivan clearly constitutes a new expansion phase that we have not wanted to discuss for reasons of confidentiality and because it is too early to have an overview of the outcomes. The second section ends with an interview with Gérard Detourbet, Entry programme Director during this entire expansion phase.

The third section is more theoretical and forward-looking, focusing on the lessons that the Company (and the automotive economy) should learn from this epic adventure. It also contains reflections on our industrial model and, more broadly, on society as a whole, ensuring an "intellectual" link-up between the perspectives opened by another ongoing Renault programme involving electric vehicles.

The book's three authors are all automotive industry experts. They have relied specifically on a 2010-2011 Renault survey that allowed them to meet all key Logan programme actors and consult relevant internal documentation.

The authors would like to thank all of the managers they met at Renault and Dacia for their kindness and availability for interviews, documentary research, site visits, etc. The book would also have been impossible without the support and confidence placed us by Gérard Detourbet, Entry Programme Director, who spent a great deal of time with the three of us, university academics seeking to conduct an in-depth study on the Logan's success, discussing his experience and providing us with unfettered insight into the specific universe that has been created within the Renault group.

As is customary in this kind of partnership, the only demand expressed by the Company was to verify that no information deemed strategic would filter out. Besides from this one constraint, the authors were given full freedom to develop their own analyses and interpretations. They remain entirely responsible for any errors or omissions in the text.

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SECTION I

FROM THE X90 PROJECT TO THE LOGAN

The epic adventure that we will be analysing here starts with a suggestion from Renault's CEO, Louis Schweitzer, regarding growth strategy scenarios. It also relates the history of the X90 project that would ultimately give shape to this idea. Like other emblematic projects, the X90 became a real challenge for the Company, as did the goal of making a profitable €5,000 car aimed at emerging economies' middle classes. At first, the challenge seemed impossible given the 50% gap between the cost of the cheapest car that Renault was producing at the time (in Turkey) and X90 project's own aims.

There are also questions about the thinking underlying this project. One is to ask how the Company shifted from its motivational but simplistic strategic intent to the concrete but complex realities of a high-performance marketable vehicle. Another question involves the resources (and processes) that helped a seeming impossibility become a reality. Answering these questions is the goal of our first section, which covers the period from 1995—when Renault's senior management first began grappling with the idea of expanding into the emerging markets—to 2005, which saw the commercial launch of the Sandero, clearly marking the transition from the initial project (the design and sale of the Logan) to the development of the diversified Entry range.

THE INVENTION OF A NEW MARKET

Before taking charge at Renault, Louis Schweitzer had helped the Company prepare the Skoda bid. This was ultimately unsuccessful, with the Czech government opting for VW, Renault's German competitor, in December 1992. What Schweitzer learnt from this experience was the usefulness of having a "second brand" positioned lower than Renault itself, giving the original brand an opportunity to pursue its goal of improved quality and image without losing out on commercial opportunities emanating from the emerging markets, with their focus on increasingly affordable products.

Hence Schweitzer's decision, announced to his team in 1995, that Renault would internationalise its production and sales henceforth, starting with its investments in Brazil. Renault had just spent long months working through its merger with Volvo and before this operation fell apart, company executives were all more or less fixated on the idea of a top-of-the-range brand. So it was a surprise when Schweitzer asked them to do a serious analysis of his potential scenario and help him to structure it. The executive team initially ignored this request but Schweitzer persisted, never abandoning his vision of something akin to the VW-Skoda model and seeking ways of materialising this. It was in trying to understand how Renault might take advantage of growing automobile use in Russia and Eastern Europe that Schweitzer had his eureka moment. In late 1997, he launched a plan to build a "modern, robust and affordable" car that would cost \$6,000. The opportunity offered by the acquisition of Dacia, first mooted in 1998 before being finalised in 1999, became the definitive trigger for this project.

The initial commercial hypotheses already existed when Renault took over Dacia, as witnessed by the transcript of a meeting between Radu Vasile¹ and Schweitzer that took place on 3 November 1998:

1. Radu Vasile was Romanian Prime Minister from 1998 to 1999.

“Renault’s strategic plan, in its current form, involves three major deployment phases:

Improving Dacia products (1999-2001),

Creating a range comprised of existing Renault vehicles or models in the pipelines (2001-2003),

Building a specific car for Dacia, one that is modern and affordable aimed at emerging market customers (2003 onwards).”

The trick is to be modern while remaining affordable. There is no point in building a \$15,000 car that will struggle to sell. This will be a major challenge, however, given the longstanding presence of certain very inexpensive vehicles (Dacia, Maruti, Lada...) and total absence anywhere in the world of cars retailing at \$6,000.”¹

The project was therefore positioned from the very outset as an “Entry” range initiative, a reference to the idea that the new vehicles would provide many people with their initial access to the automobile market and generally focus on the cheapest segments. This being the case, the Logan project largely concentrated on the emerging markets, especially Central and Eastern Europe, including Russia. Its goal was to rival existing entry-level vehicles that were past their sell-by date yet continued to dominate their markets (Lada, Dacia...). The positioning adopted aimed to achieve better value for money by offering this category of buyers an alternative. This was the initial intuition, coming after VW had acquired Skoda and preceding the acquisition of Dacia or the negotiations associated with this deal.

Even before Schweitzer, Renault had already developed in the early 1990s, under the tutelage of Raymond Lévy, a similar project called the W75.² The habit at the time was to deal with emerging markets by “downgrading” and marginally modifying models that were part of the existing product range. W75 started with premise that a better way of dealing with the emerging markets’ cost and performance requirements would be to build a specific model integrating local market and production conditions from the outset. The model underlying this effort was supposed to be the R19, with Bursa in Turkey supposed to be Renault’s anchor site. The project never materialised, however, due to the fact that Western

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1. Cited by D. Debrosse, *La reprise de Dacia par Renault 1998-2003. Histoire d'une aventure humaine, industrielle et commerciale*, PhD in History thesis, University Evry-Val de l'Essonne, 2007.
 2. J. Dieudé, J. Corviole, J.P. Reynier, “Le W75, précurseur de la Logan”, *Renault Histoire*, No. 20, July 2008.

Europe was still Renault's priority in the early 1990s. This was an era when the Company was still very dependent on the French market and only held significant market share in a very few countries outside of Europe. Before "intercontinentalising", Renault's strategic objective has been to "Europeanise" and advance in commercial terms, notably in Germany.

Yet something had to be done for those emerging markets where Renault had already started selling cars. Because of the need for "true hatchback sedans" offering "maximum size" for minimal cost, the decision was made to add a boot onto the Renault Clio 1, which was Europe's leading car in the early 1990s, alongside the Volkswagen Golf. This pre-project was launched in 1995 with project itself coming online in 1996. One manufacturing contract signed in June 1997 applied to Bursa in Turkey, with another applying to Curitiba in Brazil. The actual launch occurred year-end 1999 with cars sold under the name of the Symbol in Turkey and the Sedan in Brazil. A little later, Nissan would use the same model to replace its Tsuru in Mexico (90,000 annual sales), subsequently manufacturing its Platina in the country's Aguascalientes plant. A little later, the Thalia went on offer in both Eastern Europe and France's overseas territories.

This product had a modicum of success with annual sales of around 110,000, half of which were car badged as Nissans. Yet this "European product adapted for constrained markets" was also considered quite elitist in many markets. This is because despite certain "decontenting" and "re-engineering" efforts, manufacturer return costs were at best 30% lower than rival products in the same markets. In a sense, the numbers didn't add up due to the fact that the product no longer qualified as entry-level. This explains why Renault's international presence remained so marginal, with products that had no hope of featuring at the core of its target emerging economy markets. It was the need to address this problem that would later become the Logan's key objective. Unlike W75, which can be analysed *ex post facto* as having failed because of a lack of clarity about Renault's international commitment (and because of its vague objectives), the people responsible for the Logan project—called the L90 at the time¹—relied on the

1. The L90 corresponded more specifically to the notchback version. The project included this model as well as an estate, pickup and hatchback version, with people at Renault referring to the whole range as the X90 project. Following the planning stage (i.e. once the first model was launched and the others planned), the project became a full-blown "programme" set on an equal footing with other Renault programmes and the ranges associated with them (Twingo, Clio, Mégane...).

fact that Schweitzer had already said in 1995 that he wanted Renault to grow outside of Europe and set sales (hence manufacturing return) costs as clear and quantifiable objectives.

Internal presentations post-2003 would highlight the following strategic thinking:

- For Renault, profitable growth meant significant overseas expansion;
- In markets that were economically more constrained than Western Europe;
- Although half of the volumes involved Renault products, for the other half the Group needed a specific range of cheap adapted products;
- In bottom-of-the-range segments characterised by a range of prices and products.

In short, the commercial intent with emerging markets was never to offer the cheapest car possible but to create a product that would be positioned at the heart of its market. Schweitzer later said that it was during a trip he took in autumn 1997 accompanying President Chirac to Russia that he started thinking about the W75 again,¹ returning to “the need for a car with the same sales tag as the Lada but reliable and modern.”

By so doing, he was confirming two principal considerations.

- The Logan was first and foremost a commercial innovation that consisted of inventing—in the range of local low-cost products and “imported” cars—a vehicle and category of vehicles enabling buyers in these markets to access a “modern” alternative with the same retail price or a lower one. Implicitly, Schweitzer was also offering an alternative to the used cars that were households’ natural way of offsetting carmakers’ inadequate product offer.² In emerging markets characterised by a relatively limited stock of automobiles, used cars were often imports, intimating that Schweitzer’s intuition was all the more relevant in countries where used car imports were prohibited or limited.
- Initially, the innovation corresponded to a commercial “window of opportunity” that was quite narrow due to its focus on Russia and

1. See interview with Louis Schweitzer at the end of Chapter 1.

2. B. Jullien, “Used Cars Markets as Signs of Resistance of Consumers to the Car Manufacturers Conceptions of Demand: a Usage Analysis of Automobile Systems” in L. Fontaine, *Alternative Exchanges: Second-Hand Circulations from the Sixteenth Century to The Present*, Berghahn, Oxford, 2008.