



interview to **Luis Peña**

Head of Analysis and Research Department
forming part of the MAPFRE FAMILIAR
Strategic Planning and Innovation Division



Luis Peña was born in Madrid on 20 June 1971. He is married and has three children.

He is a law graduate and an ICADE graduate in business sciences. He holds the INESE master in motor insurance degree and an MBA executive degree from the University of Alcalá de Henares.

He has spent his entire professional career in MAPFRE FAMILIAR, where he started to work in 1995.

He is currently Head of the Analysis and Research Department within the MAPFRE FAMILIAR Strategic Planning and Innovation Division.



“Until now we Insurers had paid more attention to the claims history in our tariffs than to what are called psycho-physical factors”

The objective of the YCAR product of MAPFRE FAMILIAR, a modality known as pay per use is to incorporate the driver's habits behind the wheel in the price of the insurance, according to the results of a never-ending study. This is the first time that an innovation like payment per use in motor insurance has been introduced in Spain, which could revolutionize the entire system of current rating. For the time being, as the pioneers, MAPFRE FAMILIAR have reached some conclusions although three more years will be required for greater reliability. This interview brings us closer to knowing the objectives, strategies and steps that are being taken.

In a continuous process of innovation such as the one you are developing what is the prevailing philosophy?

There are many tools and a large amount of intuition. In addition we are looking for innovations that have a strategic projection, in other words, best for today but with a vision of the future. The starting philosophical point is always the strategic plan. The client has been placed in the centre of the entire MAPFRE company structure and therefore in the middle of all those areas that make up MAPFRE FAMILIAR. We are now all rowing in the same direction, we know the priorities. All our activity is focused on client satisfaction. The client gains advantages from our ceasing to be a single branch entity and becoming a multi-branch company. For example we are implementing discounts for integrating various policies, something that was not possible before, because each unit, each company, had its own results account to protect.

Does this involve massive innovation?

Yes, but it is not specific to the insurance sector. For some years now the banking sector has been refining its product matrices and knows which are the ones that better bind the clients and on the basis of this knowledge it establishes the offers. This is that we are applying now. A client value matrix exists, not all clients are the same, because some are profitable and others unprofitable, and in this case who are we going to treat better? Undoubtedly the most profitable ones. What is true is that it is ever harder to grow in personal lines business and therein lays the importance of policies aimed at reducing the rates of non-renewal. We have more than seven million clients in Spain and are well aware that we can grow from inside, enhancing the offer of products for our existing clients without prejudicing the incorporation of new clients.

One of the creations of the MAPFRE FAMILIAR Innovation Division is the product aimed at

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young drivers known as “Generation Y”, which has evolved and become a star product – YCAR. What objectives were being sought and how was it born?

After a market study and a very rigorous analysis phase the conclusion was reached: that it was worthwhile experimenting with the possibility of incorporating new risk factors related to road safety in the premium calculations, such as the type of roads used and the driving time bands. Until now insurance companies had taken little account of these factors because in the current rating system the claim history carries more weight than the psycho-physical factors; in other words, we know in the context of other variables on what day of the week the client drives, the routes that are followed, whether the client drinks and drives. This is important because for example in the field of road safety we know that

70% of the fatal accidents at weekends occur on secondary roads.

To transfer this experience that is already in progress in Spain we suppose that the way others functioned was examined. In addition we have the problem of privacy, ensuring that the user’s behaviour does not transcend beyond this objective of adjusting the premium according to the vehicle’s use.

Indeed, before the experience of Great Britain where this system is fairly extended we have the Progressive system in Texas in 1998. The American experience revealed two defects: privacy problems that obliged the Americans to abandon the GPS and the cost / benefit ratio. If we go back to the roots this is an idea of the Canadian Economics Nobel Prize winner William Vickrey, who criticised the inefficiency of rating



Pay per use - a pioneering experiment in Spain

What is the objective of the study of your insurance habits behind the wheel?

We are looking for experience on these new risk factors that we do not know and that road safety tells us have an influence on the causes of accidents. We are handling data that is not contained in the General Directorate of Traffic statistics and we aim to compare the data. This involves a pioneering experiment and one of the premises is that the study is never-ending; it has no expiry date even though we will have to wait at least three years to reach valid conclusions.

Are new Insureds being incorporated in the sampling?

Yes. Our YCAR product is aimed at drivers aged up to 30 but the purpose is that it is maintained throughout the policy's life. To encourage it we offer substantial discounts on contracting the insurance and in addition we give away fuel cards, exchangeable at petrol stations that can reach more than Euros 600 in the event of the profiles defined as good driving being met.

Since the study and the derived conclusions constitute a long and complex process what is your initial assigned budget? Will other companies in the market follow your footsteps?

The official figure is Euros 10 million and in answer to your second question the truth is that we want the market to copy us because in this way the concept will be generalised even though we are the first. The competitive advantage lies in tariff refinement and the company that will have the advantage is the one that has the best statistical base, the one that can personalise more.

systems because they did not take into account the intensity of use. If one turns the lights off one pays a lower electricity bill but if you leave the car at home you do not pay less for the insurance. Two approximations were made; one was paying at the petrol pumps, in other words insurance as an added price on petrol to take into account the use intensity: more use, more petrol and more premium. The same happened with tyres which became known as "insured tyres". Vickrey was quite a visionary but he did not get it right because at that time there were no applied technologies. His considerations can be taken up again when satellite technology devices are incorporated in the vehicle, be it GPS, Glonass or Galileo, which allow measurement of the use intensity variables in an objective way: kilometres driven, speed, night time or daytime driving, for example.

When MAPFRE FAMILIAR implements the pay per use system in Spain in an experimental way as the basis for a wide study, what steps are taken and how many drivers are involved?

In principle the product is aimed at young drivers. Between 5 November 2007 and the first week of September 2008, 10,000 young drivers of between 18 and 27 years old subscribed to the experiment. Today there are more than 16,000. The segment of the population was deliberately limited to make the conclusions more valid. This group covers all types of vehicles and all geographic locations. The greater the diversity the better it is for the study phase. This is why we substantially subsidise these new young Insureds, even with discounts of 20% on the standard young drivers' premium in MAPFRE. We will need three years to reach solid conclusions.

Does the installation of a satellite based moni-

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toring device, in exchange for cheaper insurance entail a loss of confidentiality where the person's habits are concerned?

We use the GPS system but the data that we receive are always aggregated and we cannot access detailed information. Knowing exactly where the vehicle is located would add nothing where the payment for use tariff is concerned. There are only two times when the information on the exact position of the vehicle is collected: in the event of theft (to be able to recover the vehicle) and in the case of an accident (to be able to send emergency medical services).

Exactly what types of controls are exercised?

The terminal transmits data that go to the server of an external computer system provider and the provider has the data associated to a PIN, an identification code that contains no data of a personal nature. When the computer system provider sends the data to MAPFRE FAMILIAR within an automated process, it is done without the details of the vehicle's exact position defined by the GPS longitude and latitude coordinates. This is what we call the privacy firewall and this is what AENOR (Spanish Standards Institute) certifies.

I would stress again that in the YCAR insurance MAPFRE FAMILIAR do not know the exact position of the vehicle except in the case of impact or theft. At these times the advantage of having the GPS terminal installed in the vehicle is most appreciated. In the case of impact, to say a very sudden reduction of speed, it is the car that transmits the signal to the system provider, which in turn alerts us.

Have lives been saved thanks to the installation of this system?

The first thing we do on receiving an impact alarm signal is a phone call to the Insured's mobile number. If we do not manage to speak to the Insured a basic protocol is initiated. From a certain detected impact intensity and in the absence of telephone communication we call 112 and this is an added value that we provide. The 112 emergency services have validated the credibility of our system and above certain thresholds we know that a serious accident has occurred with injuries and therefore the 112 emergency medical treatment service is automatically notified. We have concrete experience in this sense.

And in the case of theft?

We can know the exact position of the vehicle but as a guarantee for initiating monitoring we require that the owner has reported the disappearance to the police. We have recovered practically all stolen vehicles with few exceptions.

What are the characteristics of the GPS device installed in the vehicles?

It is small, about the size of two packets of cigarettes and it is equipped with three peripherals: a GPS aerial to recognise the position; a GSM GRPS aerial to transmit the data by mobile telephony and the sudden speed reduction meter that reports a possible collision. This is all hidden in the vehicle.

Could the installation of this device distort behaviour behind the wheel when the driver thinks he is being watched? Does the monitoring extend to other countries in the European Union?

It is perfectly fine when somebody modifies their habits to improve them. This effect is diluted over time. Regarding monitoring in other countries it continues to function in principle and in fact we also provide the vehicle recovery service in the case of theft in France and Portugal.





What are the first conclusions reached through the implementation of the YCAR product?

First of all not all young drivers are the same. There is a predominance of single drivers of the most powerful cars and this effect is multiplied when we speak of weekends. From Monday to Thursday women drive more than men; at weekends the man predominates with powerful vehicles, above all in the evening or night. Men start to use their car in the mornings before women, between 6.30 am and 7 am. Women use their cars in the mornings between 8 am and 9 am. We have analysed three driving groups by use of vehicles; the constant, the active, in other words the working days and leisure days and those that only use the vehicle at weekends. There are large differences in the maximum speeds and in the distances travelled. We have noted that the leisure drivers travel larger distances because they drive on Saturdays and Sundays, as compared to the constant drivers even though they use the vehicle on more days. This takes the myth out of certain aspects of road safety. There is no relation with age; the relation is with the journey. The day of most vehicle use is Friday.



<http://www.mapfre.com/portal/generacion-young/generacion-young.shtml>

What feelings does this product generate when it is the price that varies most?

The price is not the only variable. You can compete on price but added value services exist. A father values the importance of having a system that guarantees medical treatment when an impact of a certain intensity occurs. When a company like MAPFRE FAMILIAR puts all its efforts in promoting a project like this one something positive must be behind it - advantages for all the parties. We are sure that the future of motor insurance will follow this path and that times of crisis are the most propitious for innovation. We hope to have as much success as possible although I would not dare to give an estimate of the number of policies that we are going to achieve with this product.

Are you going to incorporate the satellite based device in motorcycles?

Yes. In fact in July 2009 MAPFRE FAMILIAR started marketing "eBike10", an insurance for motorcycles of 125 or more cc, linked to the installation of the satellite based device to help the motorcyclist at all times: it allows locating the motorcycle in the case of theft, identification of attempted sabotage, falling over when parked or loss of battery. With eBike 10 MAPFRE FAMILIAR have betted heavily on innovation and safety for motorcyclists, because the device will provide help in emergency situations. According to recent data the risk of dying in a road accident when driving a motorcycle is 17 times higher than that

of when driving a saloon car and that 41% of motorcyclists' deaths are due to leaving the road. Given these figures reducing the time of treating the injured motorcyclist thanks to eBike10 in many cases will prove vital.



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