Executive Summary

This survey was conducted by ISO and Earnix to help insurance executives get a measure of how data acquisition is used throughout the industry.

Survey responses were collected online from 55 insurance professionals from companies that provide personal lines coverage in the UK.

Some of the key findings of the survey include:

- **The use of external data for modelling is expected to grow significantly over the next 1-3 years.** As many as half of the respondents anticipate the number of external data sources used by their companies will grow 3-5 times over the next 3 years. Another 35% believe they will double the number of external data sources over this period.

- **Some of the emerging data types that are expected to see high growth in use over the next three years** include social media data (182% growth), building permit data (150%), 3rd party telematics data (137%), and shopping behaviour data (108%).

- Insurance carriers use an average of 10.1 external data types for modelling. **The majority of insurance carriers** (65%) **regard the use of external data as a “must have” in order to keep up with the competition.** Brokers are still somewhat behind in terms of the number of data sources used (6.2 on average), and **most of the brokers surveyed** (67%) **view the use of external data as a source of competitive advantage.**
• A large majority of the respondents intend to significantly grow their investment in external data over the next few years. In 3 years, 75% of the companies intend to at least double their investment in external data. In 5 years, 43% of the respondents expect their investment to grow 3-10x or more.

• As expected, the most common use of external data is in pricing models. At the same time, product design and marketing are the areas where significant growth in the use of external data for modelling is expected over the next three years.

• Incorporating new data types into the different models is still a major challenge that is only expected to grow as more data types are adopted. Across all areas, the majority of companies take more than three months to incorporate new data types into their models. As many as 48% of the carriers require more than six months to make use of new data types in their underwriting models.
# Table of Contents

UK Modelling Data Acquisition and Usage Trends .................................................................................................................. 1
Executive Summary ........................................................................................................................................................................ 2
How Insurance Carriers and Brokers Use External Data for Modelling ............................................................................ 5
Use of External Data across Functional Areas ............................................................................................................................. 6
Consumer Data Used for Modelling ........................................................................................................................................... 7
Use of Consumer Data by Carriers vs. Brokers ............................................................................................................................. 8
Vehicle and Driver Data Used in Motor Insurance .................................................................................................................... 9
Use of Motor Data by Carriers vs. Brokers ................................................................................................................................. 10
Property and Geographical Data Used in Home Insurance ......................................................................................................... 11
Use of Property Data by Carriers vs. Brokers ............................................................................................................................... 12
Tracking Competitor Prices ......................................................................................................................................................... 13
Purchasing Data from Insurance Aggregators ............................................................................................................................ 14
Sources for Acquiring 3rd Party Data ........................................................................................................................................ 15
Who is In Charge of Data Acquisition? ..................................................................................................................................... 16
Greatest Challenges to the Adoption of New Data Types ........................................................................................................... 17
Time to Incorporate New Data Types into Functional Areas .................................................................................................... 18
Time to Incorporate New Data by Carriers vs. Brokers ................................................................................................................ 19
Areas in which Data Delivers the Greatest Benefit .................................................................................................................... 20
View of External Data Usage ....................................................................................................................................................... 21
Growth of External Data Use over the Next 3 years ..................................................................................................................... 22
Future Investment in External Data ............................................................................................................................................... 23
Respondent Demographics: Book Size ....................................................................................................................................... 24
Respondent Demographics: Product Offered ............................................................................................................................... 25
Respondent Demographics: Role in Company ............................................................................................................................... 26
The survey was completed by representatives of personal line insurance carriers and brokers operating in the UK.

69% of the survey respondents represent insurance carriers while 31% come from insurance brokers.

On average, insurance carriers use a significantly higher number of external data sources (10.1 sources on average) than brokers (6.2 average).

A breakdown of these data sources follows on the next pages.
Use of External Data across Functional Areas

The most common use of external data is in pricing models, where current use is 86% and expected to reach as high as 97% in three years.

Another area with substantial use of external data is underwriting, where 78% of the respondents use it now and another 5% plan on using it in the next 1-3 years.

Product design and marketing are still lagging in the use of external data, but these are the areas of significant growth expected over the next 3 years.

Figure 3: Use of external data across functions (Respondents could select more than one option)
The most commonly used consumer data today is claim & loss data (81%), followed by consumer segmentation data (e.g., Experian’s Mosaic, Callcredit’s CAMEO) (67%) and private credit reports (e.g. Equifax) (64%).

While several data types are expected to grow at a rate of 30-45% over the next two years, the areas representing the highest growth potential over the next two years are social media (182% growth) and shopping behaviour data (108% growth).

Another emerging data type mentioned by some respondents is mobile usage and location data. It is still in the early adoption stage, but given the explosive surge of mobile we can expect the use of such data by insurers to grow rapidly over the next few years.
Almost all of the carriers surveyed (92%) use previous claim/loss data. It is followed by consumer segmentation data (70%), public records (70%), private credit reports (62%), and previous insurance quotes and purchase data (61%).

For brokers, the most common data used is credit reports (69%), followed by consumer segmentation data (60%), previous claim/loss data (59%), previous insurance quotes and purchase data (47%), and previous coverage data (44%).

When it comes to new data types, carriers are the ones leading the charge in the use of shopping behaviour data (32% vs. 7% for brokers), while both carriers and brokers show similar levels of using social media data (21% vs. 19%).
Generic vehicle data is used by 80% of the respondents, certainly a mainstream component of modelling for motor insurance these days.

Other commonly used data types are expected to grow 30-50% over the next couple of years. These include driver records and traffic violation history (currently used by 60% and projected to reach 83% in two years), road safety data (55% growing to 73%) and vehicle data specific to the insured vehicle (51% to 78%).

3rd party telematics data is a high growth area. While currently used by only 29% of the respondents, it is expected to more than double over the next two years and reach as many as 68% of the respondents.

Figure 6: Vehicle and driver data used for modelling in motor insurance (Respondents could select more than one option)
On average, insurance carriers use almost double the number of external data types for motor insurance (2.7 on average) compared to brokers (1.4 average).

The most common data type used by carriers is generic vehicle data (86%), followed by road safety data (63%) and driver records and violation history (60%).

For brokers, generic vehicle data (64%) is followed by driver records and violation history (60%) and insured vehicle data (36%).

Figure 7: Use of motor data by company type (Respondents could select more than one option)
Catastrophe models are commonly used in home insurance, led by flood (77%) and windstorm (65%) models. While little growth is expected in the use of these models (7-9%), the use of prior property losses and replacement cost estimation data is expected to surpass the 80% mark over the next two years.

Permit data is only used by a small number of early adopters today (13%), but is expected to grow by 150% over the next two years.

Another area of significant growth is property market value data, which is anticipated to leap from 42% today to 75% in two years.

Figure 8: Property and geographical data used in home insurance (Respondents could select more than one option)
The most common data type used by home insurance carriers is flood models (85%), followed by prior property losses (72%) replacement cost estimations (71%), and windstorm models (68%).

For brokers, the most common type of data used is prior property losses (63%), followed by flood and windstorm models (56% each), and then replacement cost estimations (44%).

The average number of external data sources used by insurance carriers in home insurance is 2.9, compared to 1.6 sources used by insurance brokers.

Figure 9: Property and geographical data used in home insurance by company size (Respondents could select more than one option)
Tracking Competitor Prices

Almost half of the respondents (46%) track competitor prices at least once a week, with 14% of the companies tracking it daily and 9% in real time. 28% of the respondents track these prices monthly, 18% quarterly or annually, and 7% never track competitor pricing.

The majority of the respondents (88%) use competitor price information in price modelling, 56% in underwriting, 42% in marketing and 39% in product design.

Figure 10: Frequency of tracking competitor prices

Figure 11: Use of competitor pricing in different functional areas (Respondents could select more than one option)
Over half (53%) of the insurance carriers purchase pricing data from insurance aggregators. Given that brokers have access to different carrier prices, only 9% of them purchase such data.

Click-through data (36%) and response data (36%) are the most common data types purchased by insurance brokers.
Sources for Acquiring 3rd Party Data

81% of the companies surveyed purchase data from credit reference agencies.

Other common sources for 3rd party data include insurance aggregators (64%), industry bodies such as MIB and CUE (62%), UK census from the ONS (55%), data.gov.uk (50%), and private data providers such as Solera/HPI, LexisNexis, and Business Insight (50%).

Figure 13: Sources for acquiring 3rd party data (Respondents could select more than one option)
Who is In Charge of Data Acquisition?

In most companies (91%), each business function is responsible for data acquisition for its own models.

In 13% corporate IT is responsible for data acquisition and 9% have a centralized corporate function (other than IT).

Figure 14: Who is in charge of data acquisition? (Respondents could select more than one option)
When asked to rate the top challenges to the adoption of new data types, respondents pointed out to the following top challenges:

1. Integration into existing systems
2. Cost of data
3. Data quality
4. Data preparation effort
5. Data warehouse limitations

Figure 15: Greatest challenges to the adoption of new data types (Ranked on a scale of 1 [no challenge] to 5 [major challenge])
Across all areas, the majority of companies take more than 3 months to incorporate new data into their models. Over a third of the companies take more than 6 months to incorporate new data in most areas, with product design (49%) and claims (48%) most commonly exceeding the 6-month mark.

Figure 16: Time to incorporate new data types into functional areas
As many as 63-79% of the carriers responding to the survey take longer than 3 months to incorporate new data types into the various models.

Over a third to half of the carriers take longer than 6 months to do that.

Brokers are quicker to incorporate new data into their models, with two-thirds (67%) taking less than 3 months in most areas (claims being the exceptions).

Figure 17: Time to incorporate new data by carriers vs. brokers
Areas in which Data Delivers the Greatest Benefit

Respondents ranked the areas in which data has delivered the greatest benefit so far in the following descending order:

1. Better pricing
2. Better risk selection
3. Better fraud detection
4. Better product design
5. Better claims handling
6. Better marketing ROI

Figure 18: Areas in which data has delivered the greatest benefit so far (Ranked on a scale of 1 [lowest value] to 6 [highest])
There is a significant difference between the way carriers and brokers view the use of external data.

While the majority of insurance carriers (65%) regard the use of external data as something they must do to keep up with the competition, the picture is reversed among brokers, where 67% view it as a competitive advantage.

Figure 19: How companies view the use of external data
Expectations for external data growth are high.

As many as half of the respondents anticipate the number of external data sources used by their companies will grow 3-5 times over the next 3 years.

Another 35% believe they will double the number of external data sources over this period.

*Figure 20: Number of external data sources used in next 3 years*
Future Investment in External Data

A large majority of the respondents intend to significantly grow their investment in external data over the next few years.

39% believe they will double their investment in external data sources in the next year. In a 3-year timeframe, this number jumps to 75% of the respondents.

In 5 years, 43% of the respondents expect their investment to grow 3-10x or more.

Figure 21: Investment in external data sources
55% of the survey respondents come from companies with up to £500M of personal line insurance Gross Written Premium (GWP), while 26% are from companies writing over £1B in premiums (2014 figures).

Figure 22: Personal line insurance Gross Written Premium (2014)
82% of the respondents offer motor insurance and 75% write home insurance. Additional products offered include travel (33%), pet (27%), and other (15%).

Figure 23: Product offered
(Respondents could select more than one option)
38% of the survey respondents are in pricing and 27% hold actuary positions. 14% are executive managers.

Figure 24: Respondent roles
# Table of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1: Company type</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Figure 2: Number of external data sources used by data type</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Figure 3: Use of external data across functions</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Figure 4: External data acquired and used for modelling</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Figure 5: External data acquired and used for modelling by company type</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Figure 6: Vehicle and driver data used for modelling in motor insurance</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Figure 7: Use of motor data by company type</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Figure 8: Property and geographical data used in home insurance</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Figure 9: Property and geographical data used in home insurance by company size</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Figure 10: Frequency of tracking competitor prices</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Figure 11: Use of competitor pricing in different functional areas</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Figure 12: Purchasing data from insurance aggregators by company type</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Figure 13: Sources for acquiring 3rd party data</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Figure 14: Who is in charge of data acquisition?</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Figure 15: Greatest challenges to the adoption of new data types</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Figure 16: Time to incorporate new data types into functional areas</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Figure 17: Time to incorporate new data by carriers vs. brokers</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Figure 18: Areas in which data has delivered the greatest benefit so far</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Figure 19: How companies view the use of external data</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Figure 20: Number of external data sources used in next 3 years</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Figure 21: Investment in external data sources</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>Figure 22: Personal line insurance Gross Written Premium (2014)</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Figure 23: Product offered</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Figure 24: Respondent roles</td>
<td></td>
<td>26</td>
</tr>
</tbody>
</table>
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Earnix integrated customer analytics software empowers financial services companies to achieve optimal business performance through data science and predictive analytics. The Earnix analytical solutions drive superior product, pricing and marketing decisions, while ensuring alignment with changing market dynamics. Earnix combines predictive modelling and optimization with real-time connectivity to core operational systems, bringing the power of analytics-driven decisions to every customer interaction.

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