**Model 1**

Determinants of Business Success

Logistic regression was used to identify the determinants of business success. The dependent variable was Business Success (“Comment se porte votre entreprise ou business actuellement ?”). Business Success initially had 5 possible outcomes (Figure 1), but was recoded to 2 outcomes (High or Low Business Success, Figure 2) to obtain a balanced sample with a sufficient number of observations in each category.

Figure 1

Proportion of outcomes of Business Success (N = 1,952)

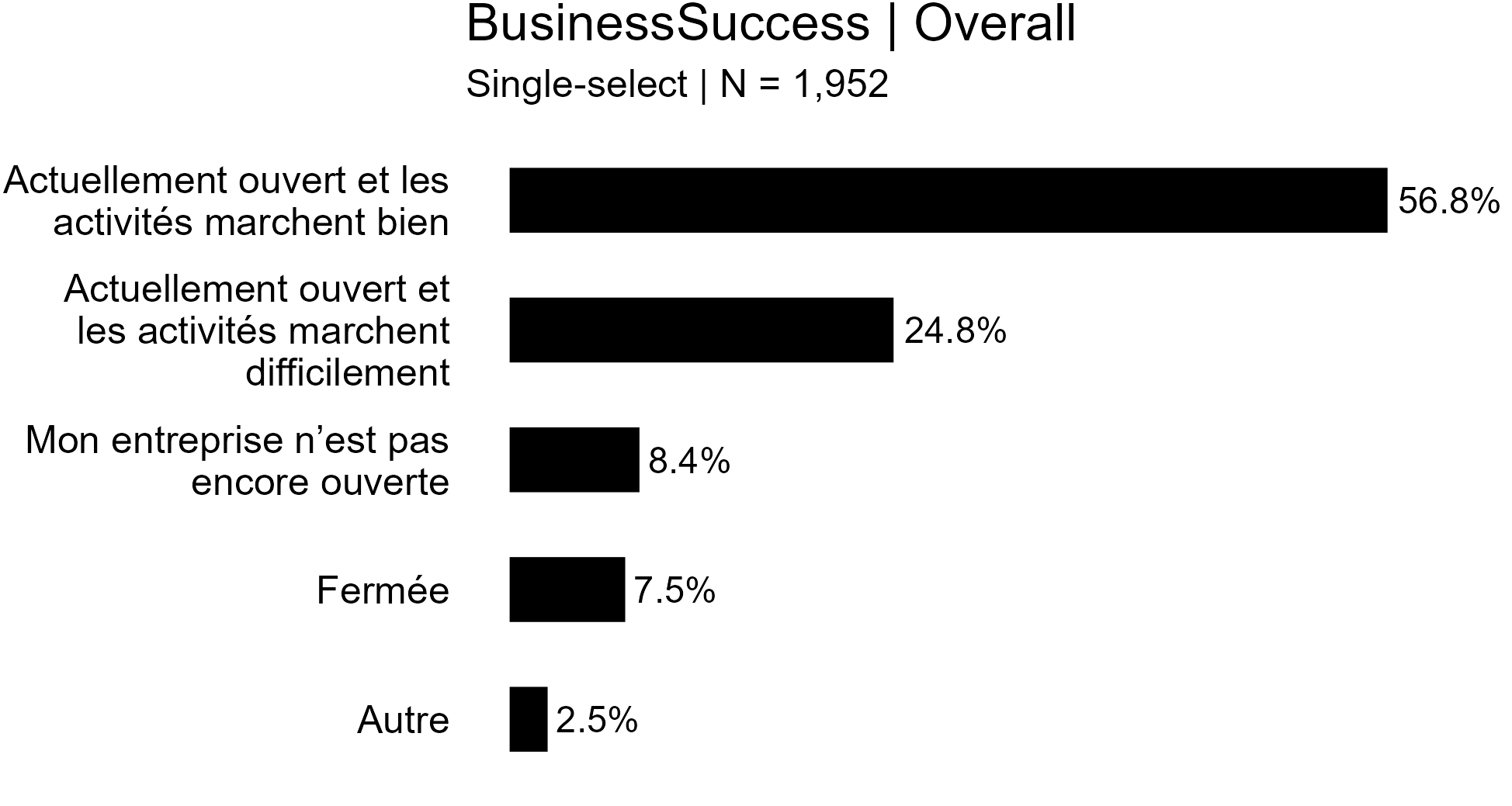


Figure 2

Proportion of outcomes of Business Success (recoded, N = 1,917)

A picture containing black, darkness

Description automatically generated

Fourteen variables were used as predictors of Business Success. These predictors are listed in the Set of Tables 1. One variable, Business Has Employees, was not used due to collinearity with Employee Number (VIF = 3.600; Tolerance = 0.278).

As for the dependent variable, most independent variables were recoded to a smaller number of categories to achieve a sufficient number of observations in each category (see Appendix I on how these were recoded).

Results showed that the best predictors of Business Success are the country of interview, the number of employees in the business, the business type, whether the assistance type received was the first choice of the respondent, and whether the respondent received business advice from IOM (all *p* < .001). The full results are in Set of Tables 1.

For example, respondents in Ghana are more likely to report a High Business Success than respondents in any other country, after controlling for the effect of all other variables. Furthermore, respondents who had employees are at least 2.4 times more likely to report a High Business Success than those who do not have employees, and respondents who have a business in transport are more than 4 times more likely to report a High Business Success than those in agriculture or aviculture.

Other significant predictors of Business Success were age, gender, and business members (*p* < 0.05), with the country of return being borderline significant (*p* = 0.07). In contrast, the kind of support received (cash vs. materials), disability, and how long the respondent was a migrant, do not seem to determine Business Success.

This model has an accuracy of 69% (pseudo R-squared = 0.151), meaning that it correctly predicts whether respondents will have a High or Low Business Success in 69% of all cases (an improvement of 11 percentage points over the baseline).

Set of Tables 1

Binomial Logistic Regression for Business Success

| Model Fit Measures | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | **Overall Model Test** | | | | | |
| **Model** | | **R²McF** | | **χ²** | | **df** | | **p** | |
| 1 |  | 0.146 |  | 381 |  | 26 |  | < .001 |  |
|  | | | | | | | | | |

| Omnibus Likelihood Ratio Tests | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
| **Predictor** | | **χ²** | | **df** | | **p** | |
| Country |  | 110.1203 |  | 5 |  | < .001 |  |
| EmployeeNumber |  | 44.0700 |  | 2 |  | < .001 |  |
| BusinessType |  | 41.2070 |  | 4 |  | < .001 |  |
| FirstChoice |  | 30.2756 |  | 1 |  | < .001 |  |
| ReceivedIOMBusinessAdvice |  | 13.1366 |  | 1 |  | < .001 |  |
| AgeGroup |  | 9.7909 |  | 1 |  | 0.002 |  |
| CountryOfReturn |  | 8.4372 |  | 4 |  | 0.077 |  |
| BusinessMembers |  | 8.3377 |  | 1 |  | 0.004 |  |
| Gender |  | 7.0912 |  | 1 |  | 0.008 |  |
| ReceivedSupportAs |  | 2.6113 |  | 2 |  | 0.271 |  |
| Disabled |  | 2.2887 |  | 1 |  | 0.130 |  |
| InterviewType |  | 0.6815 |  | 1 |  | 0.409 |  |
| MigrationDuration |  | 0.2600 |  | 1 |  | 0.610 |  |
| CoronaImpactOnBusiness |  | 0.0447 |  | 1 |  | 0.832 |  |
|  | | | | | | | |

| Model Coefficients - Business Success | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |
| **Predictor** | | **Estimate** | | **SE** | | **Z** | | **p** | | **Odds ratio** | |
| Intercept |  | -3.2050 |  | 0.3866 |  | -8.291 |  | < .001 |  | 0.0406 |  |
| Country: |  |  |  |  |  |  |  |  |  |  |  |
| Autre – Côte D'Ivoire |  | -0.2318 |  | 0.2226 |  | -1.041 |  | 0.298 |  | 0.7931 |  |
| Burkina Faso – Côte D'Ivoire |  | 0.1684 |  | 0.2555 |  | 0.659 |  | 0.510 |  | 1.1834 |  |
| Ghana – Côte D'Ivoire |  | 2.3385 |  | 0.3183 |  | 7.347 |  | < .001 |  | 10.3655 |  |
| Guinée – Côte D'Ivoire |  | 0.7207 |  | 0.2183 |  | 3.301 |  | < .001 |  | 2.0559 |  |
| Sénégal – Côte D'Ivoire |  | 0.1726 |  | 0.2097 |  | 0.823 |  | 0.411 |  | 1.1884 |  |
| EmployeeNumber: |  |  |  |  |  |  |  |  |  |  |  |
| 1 – 0 |  | 1.0152 |  | 0.1837 |  | 5.527 |  | < .001 |  | 2.7598 |  |
| 1+ – 0 |  | 0.8882 |  | 0.2073 |  | 4.284 |  | < .001 |  | 2.4308 |  |
| BusinessType: |  |  |  |  |  |  |  |  |  |  |  |
| Autre – Agriculture/aviculture |  | 0.4893 |  | 0.2090 |  | 2.341 |  | 0.019 |  | 1.6311 |  |
| Commerce – Agriculture/aviculture |  | 0.9207 |  | 0.1874 |  | 4.912 |  | < .001 |  | 2.5110 |  |
| Elevage – Agriculture/aviculture |  | 0.6233 |  | 0.2182 |  | 2.857 |  | 0.004 |  | 1.8650 |  |
| Transport – Agriculture/aviculture |  | 1.4307 |  | 0.2592 |  | 5.519 |  | < .001 |  | 4.1815 |  |
| FirstChoice: |  |  |  |  |  |  |  |  |  |  |  |
| Oui – Non |  | 0.8219 |  | 0.1515 |  | 5.425 |  | < .001 |  | 2.2748 |  |
| ReceivedIOMBusinessAdvice: |  |  |  |  |  |  |  |  |  |  |  |
| Oui – Non |  | 0.4314 |  | 0.1195 |  | 3.611 |  | < .001 |  | 1.5393 |  |
| AgeGroup: |  |  |  |  |  |  |  |  |  |  |  |
| 14-35 – 36+ |  | 0.4418 |  | 0.1419 |  | 3.115 |  | 0.002 |  | 1.5556 |  |
| CountryOfReturn: |  |  |  |  |  |  |  |  |  |  |  |
| Algerie – Autre |  | 0.2154 |  | 0.2068 |  | 1.041 |  | 0.298 |  | 1.2404 |  |
| Lybie – Autre |  | 0.5149 |  | 0.2028 |  | 2.539 |  | 0.011 |  | 1.6734 |  |
| Maroc – Autre |  | 0.3685 |  | 0.2057 |  | 1.791 |  | 0.073 |  | 1.4456 |  |
| Niger – Autre |  | 0.3860 |  | 0.2129 |  | 1.813 |  | 0.070 |  | 1.4711 |  |
| BusinessMembers: |  |  |  |  |  |  |  |  |  |  |  |
| Moi uniquement – Moi et d'autres |  | 0.4521 |  | 0.1572 |  | 2.877 |  | 0.004 |  | 1.5716 |  |
| Gender: |  |  |  |  |  |  |  |  |  |  |  |
| Masculin – Féminin |  | 0.4903 |  | 0.1851 |  | 2.649 |  | 0.008 |  | 1.6328 |  |
| ReceivedSupportAs: |  |  |  |  |  |  |  |  |  |  |  |
| En nature – En espèces |  | -0.2489 |  | 0.1806 |  | -1.378 |  | 0.168 |  | 0.7797 |  |
| Mixte – En espèces |  | -0.2799 |  | 0.1996 |  | -1.402 |  | 0.161 |  | 0.7558 |  |
| Disabled: |  |  |  |  |  |  |  |  |  |  |  |
| Oui – Non |  | -0.3616 |  | 0.2401 |  | -1.506 |  | 0.132 |  | 0.6966 |  |
| InterviewType: |  |  |  |  |  |  |  |  |  |  |  |
| Terrain/bureau OIM – Par téléphone |  | 0.1103 |  | 0.1337 |  | 0.825 |  | 0.409 |  | 1.1166 |  |
| MigrationDuration |  | -0.0124 |  | 0.0243 |  | -0.510 |  | 0.610 |  | 0.9877 |  |
| CoronaImpactOnBusiness: |  |  |  |  |  |  |  |  |  |  |  |
| Oui – Non |  | 0.0298 |  | 0.1407 |  | 0.212 |  | 0.832 |  | 1.0302 |  |
| Note. Estimates represent the log odds of "Business Success = High" vs. "Business Success = Low" | | | | | | | | | | | |
|  | | | | | | | | | | | |

| Collinearity Statistics | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | | **VIF** | | **Tolerance** | |
| Country |  | 1.30 |  | 0.770 |  |
| EmployeeNumber |  | 1.08 |  | 0.922 |  |
| BusinessType |  | 1.13 |  | 0.888 |  |
| FirstChoice |  | 1.05 |  | 0.949 |  |
| ReceivedIOMBusinessAdvice |  | 1.17 |  | 0.854 |  |
| AgeGroup |  | 1.05 |  | 0.952 |  |
| CountryOfReturn |  | 1.08 |  | 0.924 |  |
| BusinessMembers |  | 1.15 |  | 0.866 |  |
| Gender |  | 1.09 |  | 0.920 |  |
| ReceivedSupportAs |  | 1.32 |  | 0.757 |  |
| Disabled |  | 1.03 |  | 0.972 |  |
| InterviewType |  | 1.24 |  | 0.808 |  |
| MigrationDuration |  | 1.04 |  | 0.960 |  |
| CoronaImpactOnBusiness |  | 1.19 |  | 0.837 |  |
|  | | | | | |

| Predictive Measures | |
| --- | --- |
|  |  |
| **Accuracy** | |
| 0.687 |  |
| Note. The cut-off value is set to 0.5 | |
|  | |

**Model 2**

Determinants of Business Profitability

Logistic regression was used to identify the determinants of business profitability. The dependent variable was Business Profitability (“L’entreprise vous permet -elle de gagner assez d’argent pour subvenir à vos besoins et à celle de votre famille ?”). Business Profitability initially had 4 possible outcomes (Figure 3), but was recoded to 2 outcomes (High or Low Business Profitability, Figure 4) to obtain a balanced sample with a sufficient number of observations in each category.

Figure 3

Proportion of outcomes of Business Profitability (N = 1,952)

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Description automatically generated

Figure 4

Proportion of outcomes of Business Profitability (recoded, N = 1,917)

A picture containing black, darkness

Description automatically generated

Fourteen variables were used as predictors of Business Profitability. These predictors are listed in the Set of Tables 2. One variable, Business Has Employees, was not used due to collinearity with Employee Number (VIF = 3.940; Tolerance = 0.254).

As for the dependent variable, most independent variables were recoded to a smaller number of categories to achieve a sufficient number of observations in each category (see Appendix I on how these were recoded).

Results showed that the best predictors of Business Profitability are the country of interview, the business type, the number of employees in the business, whether the respondent received business advice from IOM, whether the business is run by the respondent or by the respondent and associates, and whether the assistance type received was the first choice of the respondent, and (all *p* < .001). The full results are in Set of Tables 2.

These results are in line with those of Model 1, with respondents in Ghana, who run a business in transport, who received business advice from the IOM, who run their business on their own, and who received support of their first choice, more likely to report a High Business Profitability than their counterparts.

That said, there were also interesting differences. For example, men and younger respondents were *not* more likely to report a High Business Profitability compared to women and older respondents, contrary to what was found in Model 1.[[1]](#footnote-1)

This model has an accuracy of 70% (pseudo R-squared = 0.174), meaning that it correctly predicts whether respondents will have a High or Low Business Profitability in 70% of all cases (an improvement of 12 percentage points over the baseline).

Set of Tables 2

Binomial Logistic Regression for Business Profitability

| Model Fit Measures | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | **Overall Model Test** | | | | | |
| **Model** | | **R²McF** | | **χ²** | | **df** | | **p** | |
| 1 |  | 0.174 |  | 454 |  | 26 |  | < .001 |  |
|  | | | | | | | | | |

| Omnibus Likelihood Ratio Tests | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
| **Predictor** | | **χ²** | | **df** | | **p** | |
| Country |  | 116.768 |  | 5 |  | < .001 |  |
| BusinessType |  | 62.118 |  | 4 |  | < .001 |  |
| EmployeeNumber |  | 33.653 |  | 2 |  | < .001 |  |
| ReceivedIOMBusinessAdvice |  | 20.817 |  | 1 |  | < .001 |  |
| BusinessMembers |  | 17.348 |  | 1 |  | < .001 |  |
| FirstChoice |  | 13.107 |  | 1 |  | < .001 |  |
| CountryOfReturn |  | 8.639 |  | 4 |  | 0.071 |  |
| Disabled |  | 3.760 |  | 1 |  | 0.053 |  |
| Gender |  | 2.533 |  | 1 |  | 0.111 |  |
| CoronaImpactOnBusiness |  | 1.567 |  | 1 |  | 0.211 |  |
| AgeGroup |  | 1.432 |  | 1 |  | 0.231 |  |
| InterviewType |  | 1.291 |  | 1 |  | 0.256 |  |
| MigrationDuration |  | 1.086 |  | 1 |  | 0.297 |  |
| ReceivedSupportAs |  | 0.765 |  | 2 |  | 0.682 |  |
|  | | | | | | | |

| Model Coefficients - BusinessProfitability | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |
| **Predictor** | | **Estimate** | | **SE** | | **Z** | | **p** | | **Odds ratio** | |
| Intercept |  | -2.8723 |  | 0.3975 |  | -7.225 |  | < .001 |  | 0.0566 |  |
| Country: |  |  |  |  |  |  |  |  |  |  |  |
| Autre – Côte D'Ivoire |  | -0.8114 |  | 0.2342 |  | -3.464 |  | < .001 |  | 0.4442 |  |
| Burkina Faso – Côte D'Ivoire |  | -0.6062 |  | 0.2869 |  | -2.112 |  | 0.035 |  | 0.5454 |  |
| Ghana – Côte D'Ivoire |  | 1.4433 |  | 0.2725 |  | 5.298 |  | < .001 |  | 4.2347 |  |
| Guinée – Côte D'Ivoire |  | 0.7150 |  | 0.2147 |  | 3.331 |  | < .001 |  | 2.0442 |  |
| Sénégal – Côte D'Ivoire |  | 0.3143 |  | 0.2146 |  | 1.465 |  | 0.143 |  | 1.3693 |  |
| BusinessType: |  |  |  |  |  |  |  |  |  |  |  |
| Autre – Agriculture/aviculture |  | 0.1991 |  | 0.2108 |  | 0.944 |  | 0.345 |  | 1.2203 |  |
| Commerce – Agriculture/aviculture |  | 0.5811 |  | 0.1893 |  | 3.070 |  | 0.002 |  | 1.7881 |  |
| Elevage – Agriculture/aviculture |  | -0.5390 |  | 0.2351 |  | -2.293 |  | 0.022 |  | 0.5833 |  |
| Transport – Agriculture/aviculture |  | 1.1347 |  | 0.2467 |  | 4.599 |  | < .001 |  | 3.1102 |  |
| EmployeeNumber: |  |  |  |  |  |  |  |  |  |  |  |
| 1 – 0 |  | 0.5942 |  | 0.1670 |  | 3.557 |  | < .001 |  | 1.8116 |  |
| 1+ – 0 |  | 1.0079 |  | 0.1979 |  | 5.092 |  | < .001 |  | 2.7397 |  |
| ReceivedIOMBusinessAdvice: |  |  |  |  |  |  |  |  |  |  |  |
| Oui – Non |  | 0.5726 |  | 0.1263 |  | 4.535 |  | < .001 |  | 1.7729 |  |
| BusinessMembers: |  |  |  |  |  |  |  |  |  |  |  |
| Moi uniquement – Moi et d'autres |  | 0.6414 |  | 0.1560 |  | 4.111 |  | < .001 |  | 1.8991 |  |
| FirstChoice: |  |  |  |  |  |  |  |  |  |  |  |
| Oui – Non |  | 0.6170 |  | 0.1740 |  | 3.545 |  | < .001 |  | 1.8533 |  |
| CountryOfReturn: |  |  |  |  |  |  |  |  |  |  |  |
| Algerie – Autre |  | 0.4462 |  | 0.2170 |  | 2.056 |  | 0.040 |  | 1.5623 |  |
| Lybie – Autre |  | 0.1542 |  | 0.2127 |  | 0.725 |  | 0.468 |  | 1.1668 |  |
| Maroc – Autre |  | -0.0302 |  | 0.2140 |  | -0.141 |  | 0.888 |  | 0.9703 |  |
| Niger – Autre |  | 0.3419 |  | 0.2212 |  | 1.546 |  | 0.122 |  | 1.4076 |  |
| Disabled: |  |  |  |  |  |  |  |  |  |  |  |
| Oui – Non |  | -0.5176 |  | 0.2736 |  | -1.892 |  | 0.058 |  | 0.5959 |  |
| Gender: |  |  |  |  |  |  |  |  |  |  |  |
| Masculin – Féminin |  | 0.3056 |  | 0.1936 |  | 1.578 |  | 0.115 |  | 1.3574 |  |
| CoronaImpactOnBusiness: |  |  |  |  |  |  |  |  |  |  |  |
| Oui – Non |  | 0.1712 |  | 0.1366 |  | 1.253 |  | 0.210 |  | 1.1867 |  |
| AgeGroup: |  |  |  |  |  |  |  |  |  |  |  |
| 14-35 – 36+ |  | 0.1719 |  | 0.1440 |  | 1.193 |  | 0.233 |  | 1.1875 |  |
| InterviewType: |  |  |  |  |  |  |  |  |  |  |  |
| Terrain/bureau OIM – Par téléphone |  | -0.1541 |  | 0.1357 |  | -1.136 |  | 0.256 |  | 0.8572 |  |
| MigrationDuration |  | -0.0259 |  | 0.0249 |  | -1.040 |  | 0.298 |  | 0.9744 |  |
| ReceivedSupportAs: |  |  |  |  |  |  |  |  |  |  |  |
| En nature – En espèces |  | -0.0863 |  | 0.1867 |  | -0.462 |  | 0.644 |  | 0.9173 |  |
| Mixte – En espèces |  | -0.1898 |  | 0.2171 |  | -0.874 |  | 0.382 |  | 0.8272 |  |
| Note. Estimates represent the log odds of "BusinessProfitability = High" vs. "BusinessProfitability = Low" | | | | | | | | | | | |
|  | | | | | | | | | | | |

| Collinearity Statistics | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | | **VIF** | | **Tolerance** | |
| Country |  | 1.29 |  | 0.778 |  |
| BusinessType |  | 1.10 |  | 0.908 |  |
| EmployeeNumber |  | 1.08 |  | 0.925 |  |
| ReceivedIOMBusinessAdvice |  | 1.21 |  | 0.830 |  |
| BusinessMembers |  | 1.14 |  | 0.875 |  |
| FirstChoice |  | 1.04 |  | 0.961 |  |
| CountryOfReturn |  | 1.09 |  | 0.916 |  |
| Disabled |  | 1.03 |  | 0.973 |  |
| Gender |  | 1.07 |  | 0.931 |  |
| CoronaImpactOnBusiness |  | 1.18 |  | 0.849 |  |
| AgeGroup |  | 1.06 |  | 0.941 |  |
| InterviewType |  | 1.18 |  | 0.844 |  |
| MigrationDuration |  | 1.05 |  | 0.953 |  |
| ReceivedSupportAs |  | 1.28 |  | 0.780 |  |
|  | | | | | |

**Prediction**

| Predictive Measures | |
| --- | --- |
|  |  |
| **Accuracy** | |
| 0.699 |  |
| Note. The cut-off value is set to 0.5 | |
|  | |

1. Although respondents who have 1 employee were more likely to report Business Success than respondents who have more than 1 employee, but less likely to report Business Profitability than respondents who have more than 1 employee, this difference was not statistically significant. [↑](#footnote-ref-1)