Package 'ADP'

October 12, 2022

Type Package

Title Adoption Probability, Triers and Users Rate of a New Product

Version 0.1.6

Date 2021-08-13

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Description Calculate users prevalence of a product based on the prevalence of triers in the population. The measurement of triers is relatively easy. It is just a question of whether a person tried a product even once in his life or not. On the other hand, The measurement of people who also adopt it as part of their life is more complicated since adopting an innovative product is a subjective view of the individual. Mickey Kislev and Shira Kislev developed a formula to calculate the prevalence of a product's users to overcome this difficulty. The current package assists in calculating the users prevalence of a product based on the prevalence of triers in the population. See for: Kislev, M. M., and S. Kislev (2020) <doi:10.5539/ijms.v12n4p63>.

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Encoding UTF-8

RoxygenNote 7.1.1

NeedsCompilation no

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Repository CRAN

Date/Publication 2021-08-13 10:50:02 UTC

R topics documented:

ADP	*How many people use my product*

Description

A data base of adoption probability by triers and users user_p - a vector of percentage (0<users<1) of users. triers_p - a vector of percentage (0<triers<1) of triers ADP - vector of predicted percentage (0<ADP<1) of the adoption probability of an innovative product in the population.

Usage

```
ADP
```

Format

An object of class `data.frame` with 100 rows and 3 columns.

Details

The measuring of triers is relatively easy. It is just a question of whether a person tried a product even once in his life or not. While measuring the rate of people who also adopt it as part of their life is more complicated since the adoption of a product is a subjective view of the individual. Mickey Kislev and Shira Kislev developed a formula to calculates the prevalence of users of a product to overcome this difficulty. The current dataseet assists in calculating the users of a product based on the prevalence of triers in the population.

For example, suppose that a candy company launched a new chocolate bar. A candy company can collect data on the number of people who tried their chocolate bar and know from the rate of triers how many people decided to consume the new chocolate bar regularly. It should be noticed that the model was proved only on consumer behaviour of adults above the age of 21 years old and above.

Author(s)

Mickey Kislev and Shira Kislev

Source

Kislev, Mickey M. & Kislev, Shira, (2020). The Market Trajectory of a Radically New Product: E-Cigarettes. IJMS 12(4):63-92, DOI:10.5539/ijms.v12n4p63

See Also

ptriers, pusers, adp.t, and adp.u

adp.t	*Calculates the predicted adoption probability according to the triers' rate*

Description

#' This function develops a prediction of the adoption rate of an innovation in the market, according to the number of triers

Usage

```
adp.t(triers)
```

Arguments

triers   a vector of percentige (0<triers<1) of known triers

Details

This function calculates the adoption probability in the population of a certain innovation according to known triers rate measured in a survey.

Value

a vector of predicted percentige(0<ADP<1) of the adoption probability of a innovative product in the population.

Author(s)

Mickey Kislev and Shira Kislev

Source

Kislev, Mickey M. & Kislev, Shira, (2020). The Market Trajectory of a Radically New Product: E-Cigarettes. IJMS 12(4):63-92, DOI:10.5539/ijms.v12n4p63

See Also

pusers, ptriers, and adp.u

Examples

```
# 50% rate of triers
adp.t(0.5)
0.4910082
# means that every second person who tries the product will adopt it, in case
# that 50% of the population already tried it.
```

---

adp.u   *Calculates the predicted adoption probability according to the users'*
                         rate

Description

This function develops a prediction of the adoption rate of an innovation in the market, according to the number of users.

Usage

```
adp.u(users)
```

Arguments

users   a vector of percentige (0<users<1) of known users.

Details

This function calculates the adoption probability in the population of a certain innovation according to known users rate measured in a survey.

Value

a vector of predicted percentige(0<ADP<1) of the adoption probability of a innovative product in the population.

Author(s)

Mickey Kislev and Shira Kislev

Source

Kislev, Mickey M. & Kislev, Shira, (2020). The Market Trajectory of a Radically New Product: E-Cigarettes. IJMS 12(4):63-92, DOI:10.5539/ijms.v12n4p63

See Also

pusers, ptriers, and adp.t

Examples

```
# 50% rate of users
adp.u(0.5)
0.6773232
# means that two out of three people who try the product will adopt it,
# in case that 50% of the population already uses it.
```

---

ptriers	*Calculates the predicted prevalence of triers according to the users' rate*

Description

This function develops a prediction of the triers' rate of an innovation in the market, according to the number of users.

Usage

```
ptriers(users)
```

Arguments

users   a vector of percentige (0<users<1) of known users.

Details

This function calculates the rate of triers in the population of a certain innovation according to known users rate in that population and measured in a survey.

Value

a vector of predicted percentige(0<triers<1) of triers in the population of a certain innovation according to known users rate

Author(s)

Mickey Kislev and Shira Kislev

Source

Kislev, Mickey M. & Kislev, Shira, (2020). The Market Trajectory of a Radically New Product: E-Cigarettes. IJMS 12(4):63-92, DOI:10.5539/ijms.v12n4p63

See Also

pusers, adp.t, and adp.u

Examples

```
# 50% rate of users
ptriers(0.5)
0.7382
# means that 74% of the population tried the product, in case that 50% of
# the population are using it.
```

pusers	*Calculates the predicted prevalence of users according to the triers' rate*

Description

This function develops a prediction of the users' rate of an innovation in the market, according to the number of triers

Usage

```
pusers(triers)
```

Arguments

triers   a vector of percentage (0<triers<1) of known triers

Details

This function calculates the rate of users in the population of a certain innovation according to known triers rate in that population and measured in a survey.

The measuring of triers is relatively easy. It is just a question of whether a person tried a product even once in his life or not. While measuring the rate of people who also adopt it as part of their life is more complicated since the adoption of a product is a subjective view of the individual. Mickey Kislev and Shira Kislev developed a formula to calculates the prevalence of users of a product to overcome this difficulty. The current function assists in calculating the users of a product based on the prevalence of triers in the population.

Value

a vector of predicted percentage (0<users<1) of users in the population of a certain innovation according to known triers rate

Author(s)

Mickey Kislev and Shira Kislev

References

Kislev, Mickey M. & Kislev, Shira, (2020). The Market Trajectory of a Radically New Product: E-Cigarettes. IJMS 12(4):63-92, DOI:10.5539/ijms.v12n4p63

See Also

ptriers, adp.t, and adp.u

Examples

```
# 50% rate of triers
pusers(0.5)
0.2455041
# means that 24.5% of the population uses the product regularly, in case
# that 50% of the population already tried it.
```

Index