Package 'GmptzCurve'

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Type Package

Title Gompertz Curve Fitting

Version 0.1.0

Description A system for fitting Gompertz Curve in a Time Series Data.

License GPL-3

Encoding UTF-8

RoxygenNote 7.1.2

NeedsCompilation no

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R topics documented:

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gmptz | *Gompetrz Curve Fitting*

Description

This function fits the Gompertz Curve in Time Series Data along with estimates of the parameters and predicted value.

Usage

```
gmptz(y)
```

Arguments

y   a numeric vector

Details

The Gompertz curve is a type of mathematical model for a Time Series. It is a sigmoid function which describes growth as being slowest at the start and end of a given time period. The equation of Gompertz curve is given by , Y=k*a^(b^x)

Taking Logarithm on both sides we get, LogY=Logk+(b^x)*Loga ; OR, Z=A+B(C^x) , where Z=LogY , A=logk , B=loga ,C=b; It is a form of Modified Exponential.So ,now we can apply Method Of Group Average.

Value

a.hat , b.hat , k.hat : the estimated values of the parameters a,b and k.

predicted.value : the predicted values of y

Author(s)

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Examples

```
p=c(12,15,16,18,16,21,25,27,29,30,35,36)
gmptz(p)
```

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