

## CURVE FITTING MODEL ANALYSED IMPACT OF IPHONE FILM MAKING IN INDIA

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### Abstract

The admirable advancements in quotidian technology have led us to force professional-steady appease on the go. The camera on iPhones has made many filmmakers interspace the fancy camera equipment and use their mobile cameras to create expanded feature films. Because the camera lenses in iPhones are so progressive we can bear kind sort videos without the penury for professional accouterment. An iPhone is skillful enough to deliver shots comparable to an entire curdle of cameras. Apple's responses to the film business's necessarily have overpowered filmmakers of all horizontal to ponder using their iPhone for their projects. The device can perform many combinations of digital operations, conclude breakdown of the image data, perform algorithmic vary, connexion to other data spaces, and store appearance line. The iPhone camera sincere onto indiscriminate new existential territories, extending beyond the right idol capture, and into instant digital manipulation, pattern acknowledgment, augmented reality, and many more. Curve Fitting Model analyzed iphone Film Making In India. Description Model in Dependent Variable are Theatrical release , Ott release, Success of iphone films , Process and style , Cost factor , Game changer and Promotion of films. Equations are Linear , Cubic, Powera, S and Growth. Independent Variable Iphone filming Constant Included Variable Whose Values Label Observations in Plots Model of iphone Tolerance for Entering Terms in Equations 0.0001. The model requires all non-missing values to be positive.

**KEY WORDS:**Curve Fittiing Model, Iphone Film Making, Social media platforms. Theatrical release and Ott release

### Introduction

When the iPhone 3G was released in 2008, it had a 3G, 2MP camera. While it may not seem impressive by the standards of the day, it was one of the best smart phone cameras of its time. Since then, Apple has attracted attention and in its subsequent releases began to focus their development efforts on the camera

An iPhone is capable of delivering scenes comparable to full cameras. With the great advancement in everyday technology, they have made great movies using the cameras in the iPhones.

They believed that the camera lens in iPhones was so advanced that we could make good quality

videos without the need for expensive equipment

Over the past decade, filming on the iPhone has become popular as the quality has been refined. Now iPhone filmmakers choose to use a variety of models to help them create their own projects, especially when filming on iPhones attracts many creators. With the new iPhone 13 series coming to market, the quality of the camera has been greatly improved. In fact, many filmmakers and video makers use iPhones to make movies and capture good quality videos.

Schleser described the 'social' nature of mobile filmmaking in a chapter on collaborative mobile filmmaking published in the Guide to Participatory Video, which is the only work that analyzes mobile filmmaking as a new branch of participatory video. The compactness and technological integration of smartphones offers a wide range of opportunities for subscribers and students to film evidence that meets their needs. By using iPhones and upgrading with special effects, the boundaries between user-created content and corporate product became porous. The iPhone has been going on as a shooting device for the past decade.

Using the Curve Estimation procedure, you have compared Linear and Quadratic models for the relationship between the advantages of iPhone filmmaking with digital technology and marketing. This study found the Linear model to be inadequate because its coefficients do not make practical sense, and residuals are not independent of the fit values. The Quadratic model did not have these problems, so this study recommends the Quadratic model as a promising technology for upcoming filmmakers.

However, the retailer is concerned that the Quadratic model may not be appropriate because it suggests that increased advantages of iPhone filmmaking with digital technology will eventually decrease marketing. In order to explore an alternative model, this study uses the Nonlinear Regression procedure.

### **Aim of the study**

This study has analyzed impact iPhone Film Making in India with Curve Fitting Model.

### **Objective of the study**

- To visualize the potential of iPhone filmmaking in the Indian film industry.
- To know how it can be used as a promising technology for upcoming film makers.
- To explore the various pros and cons of iPhone film making.

## **METHODOLOGY**

The research methodology is ways to systematically solve the research problem, which may be understood by scientific analysis of how the research is done scientifically. This research survey method has been used for collecting samples of targeted from Industries of Film makers by questionnaire method. It will help of holding to know the expert perception of the iPhone Filmmaking. Impacts of iPhone Filmmaking and empirical study of samples have taken 100 samples in India. The collected data will be processed and analyzed with relevant statistical methods which will be used to substantiate the objectives.

**RESULT:**

The sample of 100 has analyzed by The regression variables which will be studied the following factors of Theatrical release, OTT release, Success of iphone films, Process and style, Cost factor, Game changer and Promotion of films.

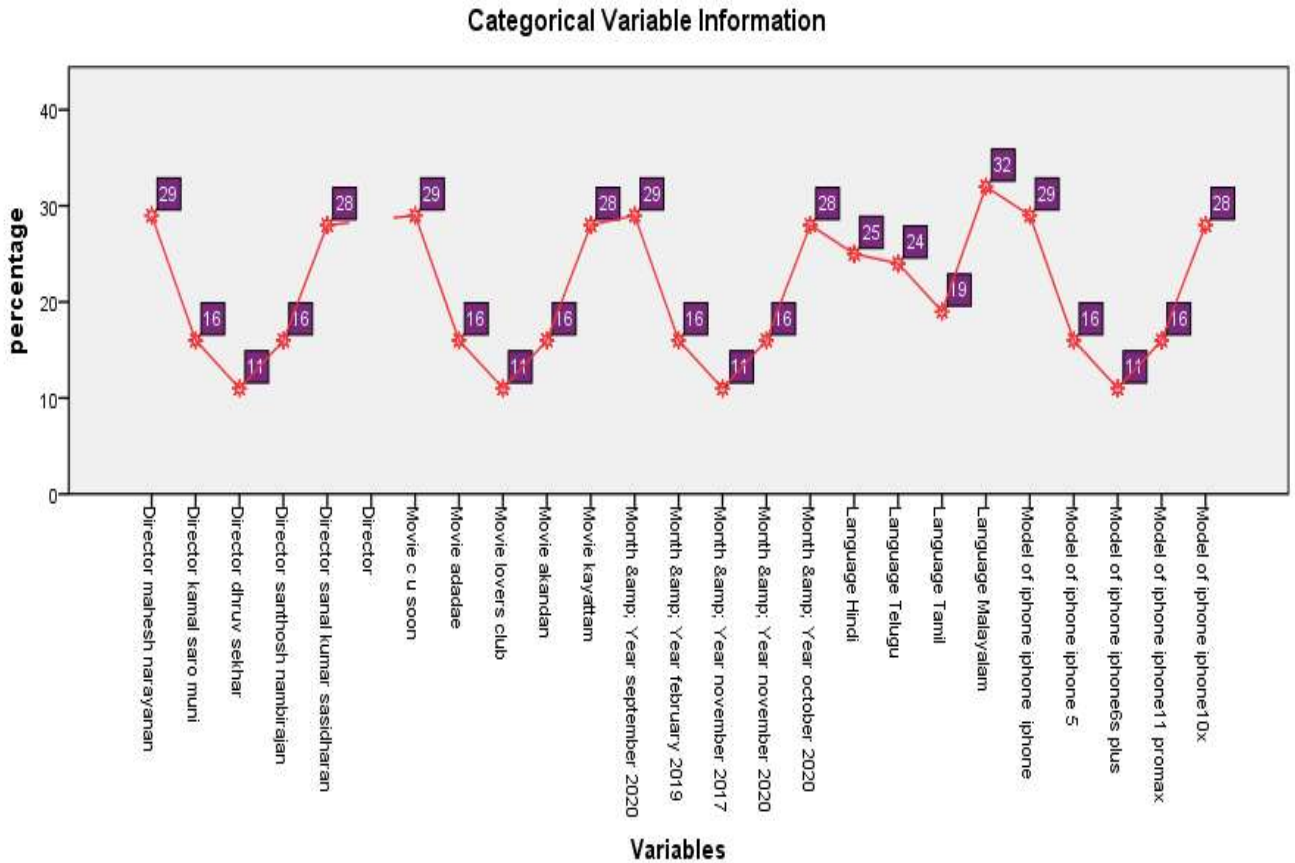


Figure -1

Categorical Variable Information (Figure -1) about Directors, Film Industrial people has known Mahesh Narayanan 29.0%, Kamal Saru Muni 16.0%, Dhruv Sekhar 11.0%, Santhosh Nambirajan 16.0%, and Sanal Kumar Sasidharan 28.0%. Movie of Cu Soon has known 29.0%, Adadae 16.0%, Lovers Club 11.0%, Akandan 16.0% and Kayattam 28.0%. Month & Year has known September 2020 %, February 2019 16.0%, November 2017 11.0%, November 2020 16.0% and October 2020 28.0%. Language of Hindi film has known 25.0%, Telugu 24.0%, Tamil 19.0% and Malayalam 32.0%. Model of iphone has known 29.0%, iphone 5 16.0%, iphone6s plus 11.0%, iphone11 promax 16.0% and iphone10x 28.0% .

**Curve Fit**

Notes n of rows in working data file 100 missing value handling definition of missing user-defined missing values are treated as missing. Cases used cases with a missing value in any variable are not used in the analysis. Syntax curvefit / variables.



Description Model in Dependent Variable 1 Theatrical release, 2 Ott release, 3 Success of iphone films, 4 Process and style, 5 Cost factor, 6 Game changer and 7 Promotion of films Equation are 1 Linear, 2 Cubic, 3 Powera, 4 Sa and 5 Growtha. Independent Variable is Iphone filming. Constant Included Variable Whose Values Label Observations in Plots Model of iphone Tolerance for Entering Terms in Equations 0.001\*\*. The model requires all non-missing values to be positive.

**Table -1: ANOVA- Theatrical Release**

Measures		Sum of Squares	df	Mean Square	F	Sig.
<b>Linear</b>	Regression	15.451	1	15.451	33.359	.000
	Residual	45.389	98	.463		
	Total	60.840	99			
<b>Cubic</b>	Regression	20.116	3	6.705	15.806	.000
	Residual	40.724	96	.424		
	Total	60.840	99			
<b>Power</b>	Regression	5.786	1	5.786	39.971	.000
	Residual	14.186	98	.145		
	Total	19.972	99			
<b>S</b>	Regression	5.544	1	5.544	37.654	.000
	Residual	14.428	98	.147		
	Total	19.972	99			
<b>Growth</b>	Regression	5.312	1	5.312	35.508	.000
	Residual	14.660	98	.150		
	Total	19.972	99			

The independent variable is Iphone filming.

The ANOVA tests table:1 shows that the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by your model. The Residual row displays information about the variation that is not accounted for by your model. The regression sum of squares is considerably larger than the residual sum of squares, which indicates that most of the variation in the proportion is explained by the model. ANOVA- Theatrical release Linear Regression of Sum Mean Square 15.451 F-value 33.359 Significant value: 0.001 \*\* Cubic Regression of Sum Mean Square 6.705 F-value 15.806

Significant value: 0.001 \*\* Power Regression of Sum Mean Square 5.786 F-value 39.971  
 Significant value: 0.001 \*\* S Regression of Sum Mean Square 5.544 F-value 37.654  
 Significant value: 0.001 \*\* Growth Regression of Sum Mean Square 5.312 F-value 35.508  
 Significant value: 0.001 \*\* The independent variable is Iphone filming. The independent variable is Iphone filming. While the ANOVA table is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.

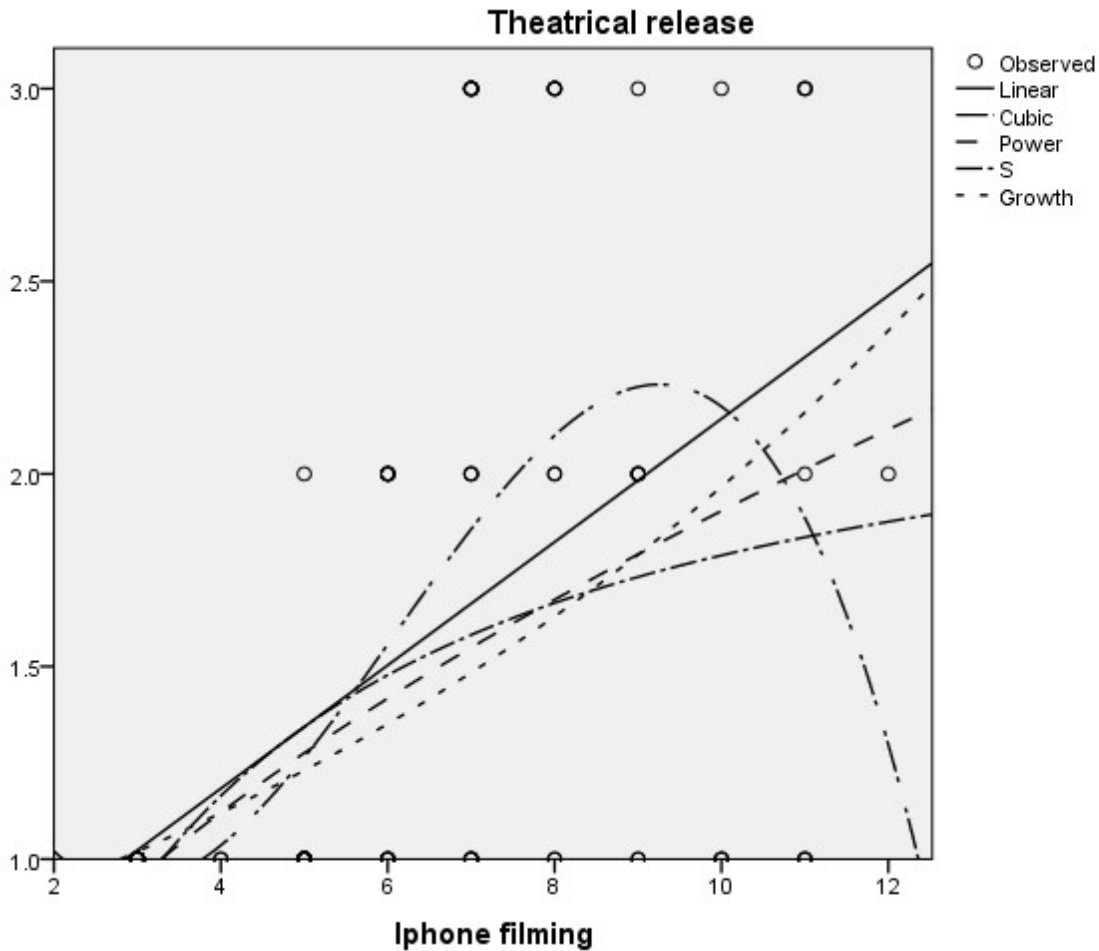


Figure -2

The curve fit chart (Figure -2) gives you a quick visual assessment of the fit of each model to the observed values. From this plot, it appears that the Equations are Linear , Cubic, Powera, Sa and Growth models better follows the shape of the data. In particular, the linear model seems to overestimate sales for cases with small or large values of Iphone filming and Theatrical release with medium values of Iphone filming. As a further visual check, it should look at plots of the residuals versus predicted values for each model in Significant value. 0.001\*\*..

**Table -2 ANOVA- OTT Release**

Measures		Sum of Squares	df	Mean Square	F	Sig.
<b>Linear</b>	Regression	812.321	1	812.321	1753.878	.000
	Residual	45.389	98	.463		
	Total	857.710	99			
<b>Cubic</b>	Regression	816.986	3	272.329	641.962	.000
	Residual	40.724	96	.424		
	Total	857.710	99			
<b>Power</b>	Regression	15.053	1	15.053	2929.484	.000
	Residual	.504	98	.005		
	Total	15.556	99			
<b>S</b>	Regression	14.439	1	14.439	1266.651	.000
	Residual	1.117	98	.011		
	Total	15.556	99			
<b>Growth</b>	Regression	14.391	1	14.391	1209.808	.000
	Residual	1.166	98	.012		
	Total	15.556	99			

The independent variable is Iphone filming.

Table:2 shows that the ANOVA tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by this model. The Residual row displays information about the variation that is not accounted for by your model. The regression sum of squares is considerably larger than the residual sum of squares, which indicates that most of the variation in the proportion is explained by the model. ANOVA- OTT release Measures Mean Square F Sig. Linear In Regression Mean Square 812.321 1753.878 Significant value .000 .463 F-value Cubic Regression 272.329 641.962 .000 Mean Square .424 F-value Significant value Power Regression 15.053 F-value 2929.484 .000 Mean Square .005 Significant value S Regression 14.439 F -value 1266.651 .000 Mean Square .011 Significant value Growth Regression 14.391 F-value 1209.808 Significant value .000 Mean Square .012 The independent variable is Iphone filming. While the ANOVA table is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.

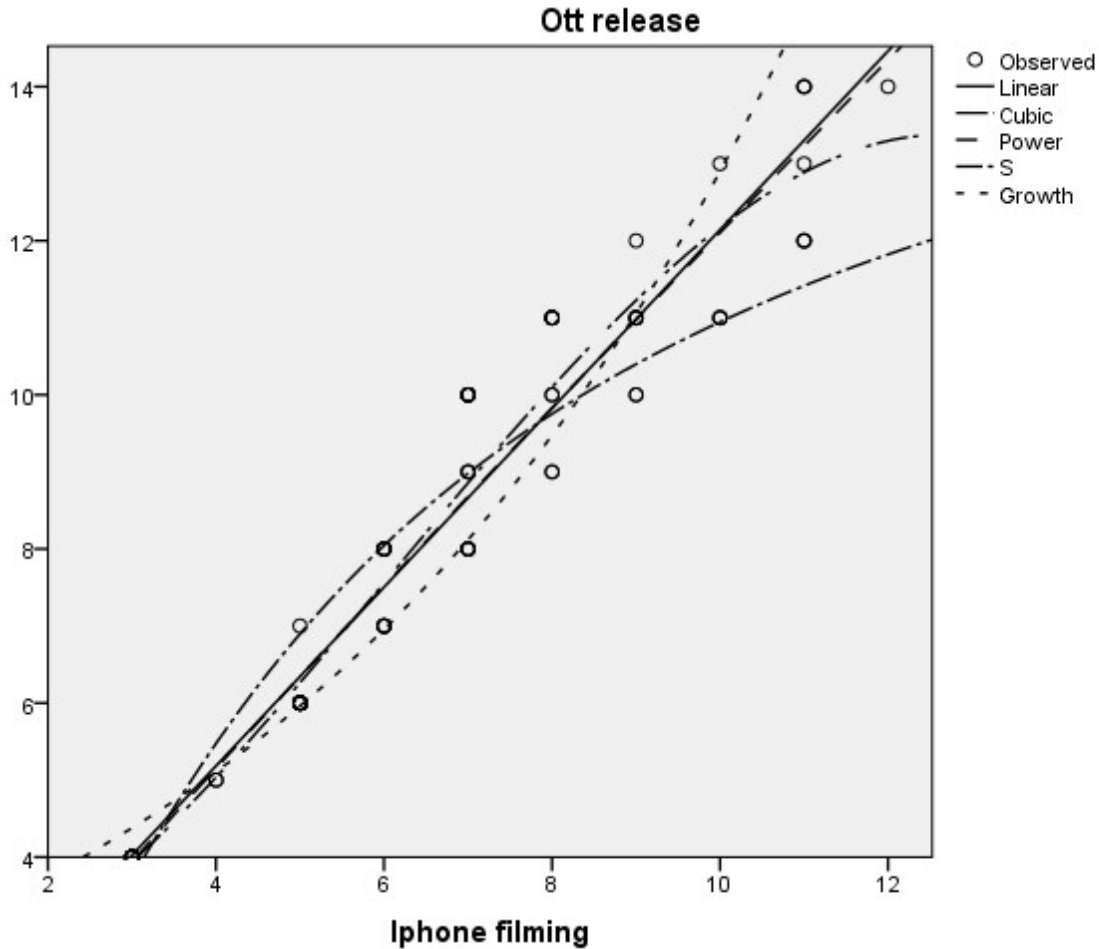


Figure -3

The curve fit chart (Figure -3) gives you a quick visual assessment of the fit of each model to the observed values. From this plot, it appears that the Equations are Linear, Cubic, Power, S, and Growth models better follow the shape of the data. In particular, the linear model seems to overestimate sales for cases with small or large values of iPhone filming and Ott release with medium values of iPhone filming. As a further visual check, you should look at plots of the residuals versus predicted values for each model in Significant value. 0.001\*\*..

**Table -3: ANOVA- Success of Iphone Films**

Measures		Sum of Squares	df	Mean Square	F	Sig.
<b>Linear</b>	Regression	3.146	1	3.146	.589	.445
	Residual	523.694	98	5.344		
	Total	526.840	99			
	Regression	8.171	3	2.724	.504	.680



<b>Cubic</b>	Residual	518.669	96	5.403		
	Total	526.840	99			
	Regression	.593	1	.593	1.162	.284
<b>Power</b>	Residual	49.968	98	.510		
	Total	50.561	99			
	Regression	.800	1	.800	1.576	.212
<b>S</b>	Residual	49.760	98	.508		
	Total	50.561	99			
	Regression	.385	1	.385	.752	.388
<b>Growth</b>	Residual	50.176	98	.512		
	Total	50.561	99			

The independent variable is Iphone filming.

Table:3 shows that the ANOVA table tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by your model. The Residual row displays information about the variation that is not accounted for by your model. The regression sum of squares is considerably larger than the residual sum of squares, which indicates that most of the variation in the proportion is explained by the model. ANOVA- Success of iphone films Measures Mean Square F Sig. Linear Regression Mean Square 3.146 F-value.589 Significant value .445 Cubic Regression Mean Square 2.724 F-value .504 Significant value .680 Power Regression Mean Square .593 F-value 1.162 Significant value .284 S Regression Mean Square .800 F- value 1.576 Significant value .212 Growth Regression Mean Square .385 F-value .752 Significant value .388 The independent variable is Iphone filming. While the ANOVA table is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.



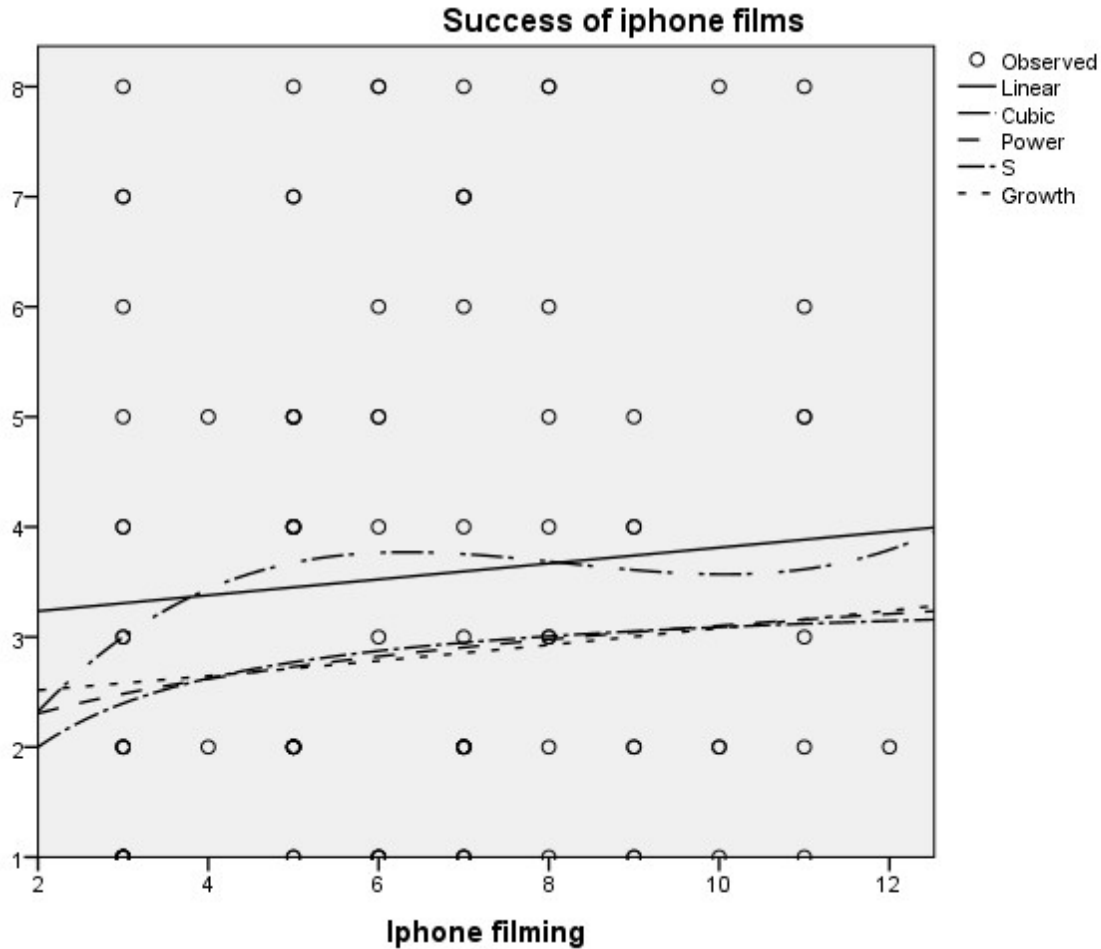


Figure -4

The curve fit chart (Figure -4) gives you a quick visual assessment of the fit of each model to the observed values. From this plot, it appears that the Equations are Linear, Cubic, Power, S, and Growth models better follow the shape of the data. In particular, the linear model seems to overestimate sales for cases with small or large values of Iphone filming and Success of iphone films with medium values of Iphone filming. As a further visual check, you should look at plots of the residuals versus predicted values for each model.

**Table -4: ANOVA- Process and style**

Measures		Sum of Squares	df	Mean Square	F	Sig.
<b>Linear</b>	Regression	212.009	1	212.009	91.710	.000
	Residual	226.551	98	2.312		
	Total	438.560	99			
	Regression	214.562	3	71.521	30.652	.000

<b>Cubic</b>	Residual	223.998	96	2.333		
	Total	438.560	99			
	Regression	12.189	1	12.189	87.735	.000
<b>Power</b>	Residual	13.615	98	.139		
	Total	25.804	99			
	Regression	10.734	1	10.734	69.809	.000
<b>S</b>	Residual	15.069	98	.154		
	Total	25.804	99			
	Regression	12.789	1	12.789	96.298	.000
<b>Growth</b>	Residual	13.015	98	.133		
	Total	25.804	99			

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The independent variable is Iphone filming.

Table:4 shows that the ANOVA table tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by your model. The Residual row displays information about the variation that is not accounted for by your model. The regression sum of squares is considerably larger than the residual sum of squares, which indicates that most of the variation in the proportion is explained by the model. ANOVA- Process and style Measures Linear Regression Mean Square 212.009 F-value 91.710 Significant value .000 Cubic Regression Mean Square 71.521 F-value 30.652 Significant value .000 Power Regression Mean Square 12.189 F-value 87.735 Significant value.000 S Regression Mean Square 10.734 F-value 69.809 Significant value .000 Growth Regression Mean Square 12.789 F-value 96.298 Significant value .000.The independent variable is Iphone filming. While the ANOVA table is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.

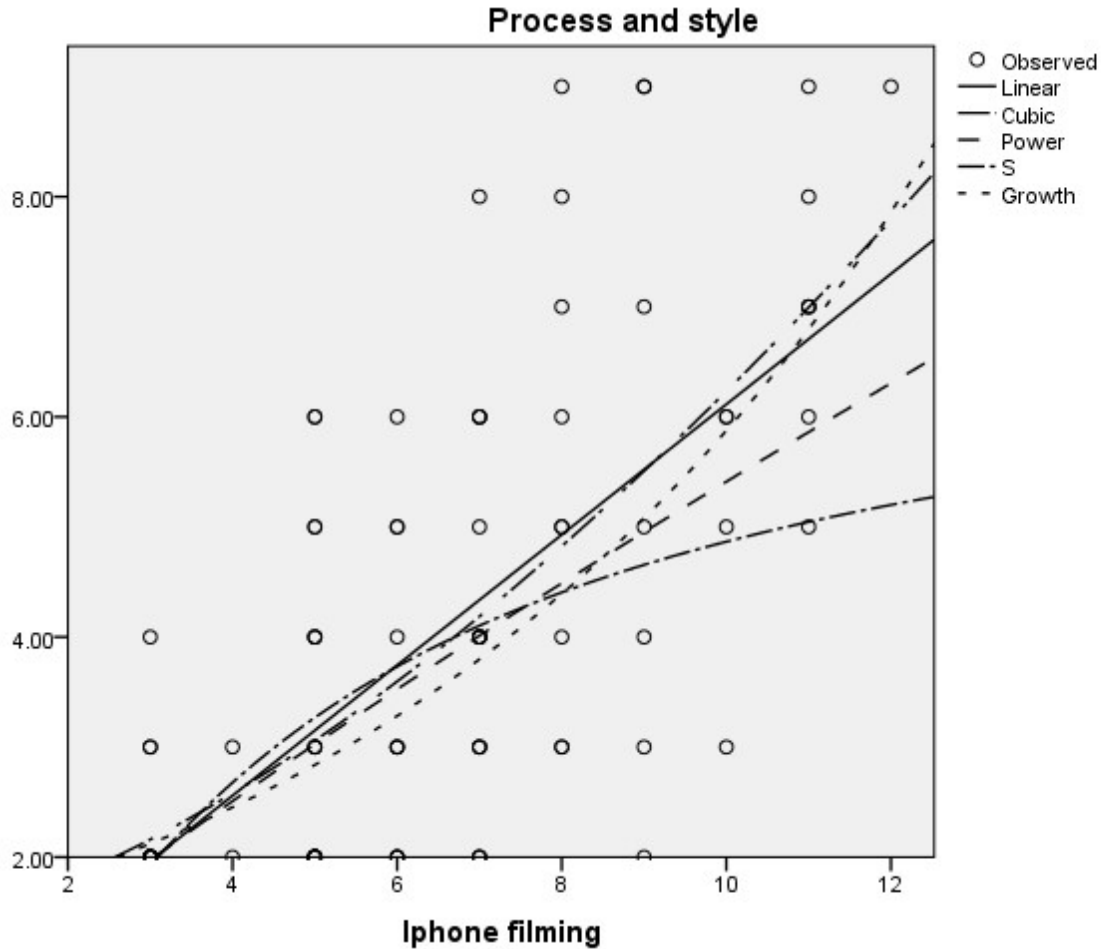


Figure - 5

The curve fit chart(Figure - 5) gives you a quick visual assessment of the fit of each model to the observed values. From this plot, it appears that the Equations are Linear, Cubic, Power, S and Growth models better follow the shape of the data. In particular, the linear model seems to overestimate sales for cases with small or large values of Iphone filming and Process and style with medium values of Iphone filming. As a further visual check, you should look at plots of the residuals versus predicted values for each model in Significant value. 0.001\*\*.

**Table -5: Anova- Cost factor**

Measures		Sum of Squares	df	Mean Square	F	Sig.
<b>Linear</b>	Regression	97.681	1	97.681	155.204	.000
	Residual	61.679	98	.629		
	Total	159.360	99			

<b>Cubic</b>	Regression	107.017	3	35.672	65.425	.000
	Residual	52.343	96	.545		
	Total	159.360	99			
<b>Power</b>	Regression	18.320	1	18.320	123.853	.000
	Residual	14.496	98	.148		
	Total	32.816	99			
<b>S</b>	Regression	14.789	1	14.789	80.393	.000
	Residual	18.028	98	.184		
	Total	32.816	99			
<b>Growth</b>	Regression	20.803	1	20.803	169.705	.000
	Residual	12.013	98	.123		
	Total	32.816	99			

The independent variable is Iphone filming.

Table:5 shows that the ANOVA table tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by your model. The Residual row displays information about the variation that is not accounted for by your model. The regression sum of squares is considerably larger than the residual sum of squares, which indicates that most of the variation in the proportion is explained by the model. Anova- Cost factor Measures Mean Square F Sig. Linear Regression Mean Square 97.681 F-value 155.204 Significant value .000 Cubic Regression Mean Square 35.672 F-value 65.425 Significant value .000 Power Regression Mean Square 18.320 F-value 123.853 Significant value .000 S Regression Mean Square 14.789 F-value 80.393 Significant value .000 Growth Regression Mean Square 20.803 F-value 169.705 Significant value .000 The independent variable is Iphone filming. While the ANOVA table is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.

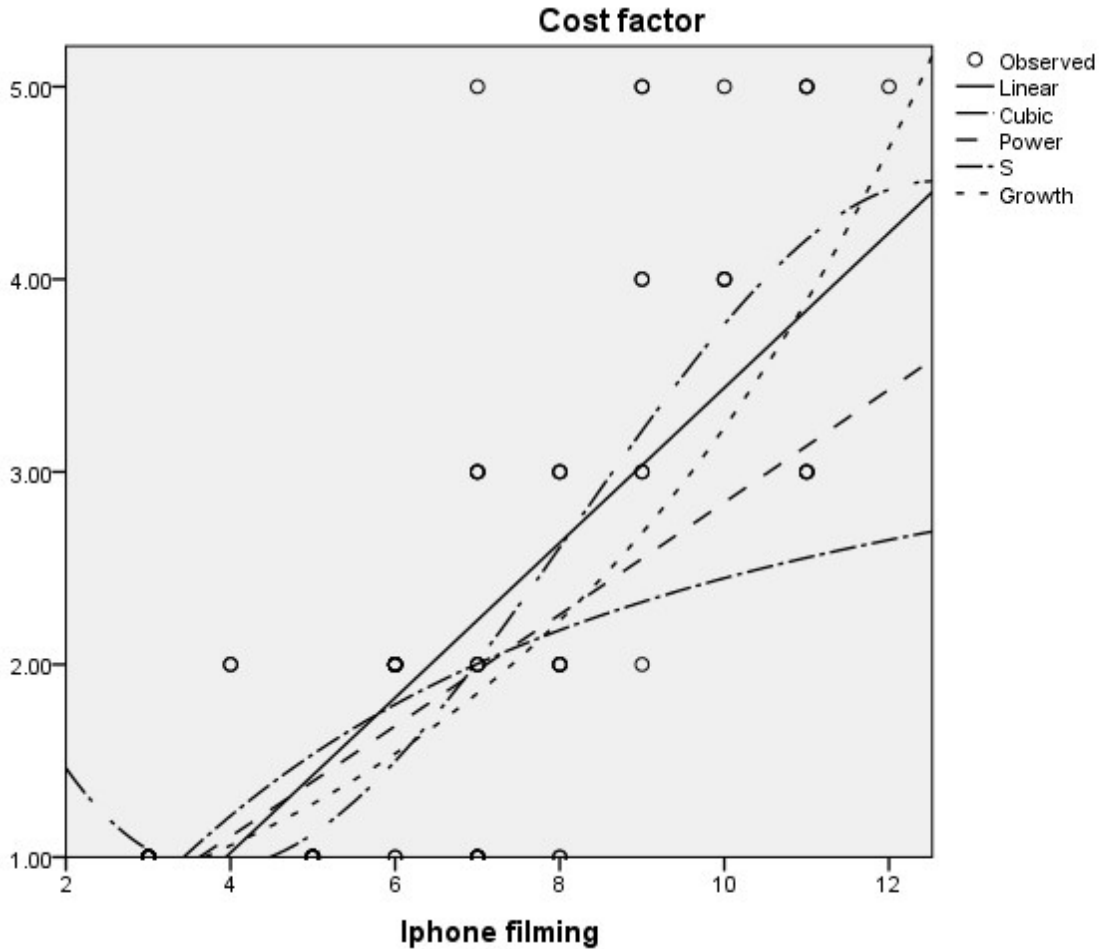


Figure -6

The curve fit chart( Figure -6) gives you a quick visual assessment of the fit of each model to the observed values. From this plot, it appears that the Equations are Linear , Cubic, Powera, Sa and Growth models better follows the shape of the data. In particular, the linear model seems to overestimate sales for cases with small or large values of Iphone filming and Cost factor with medium values of iphone filming. As a further visual check, you should look at plots of the residuals versus predicted values for each model in Significant value. 0.001\*\*.

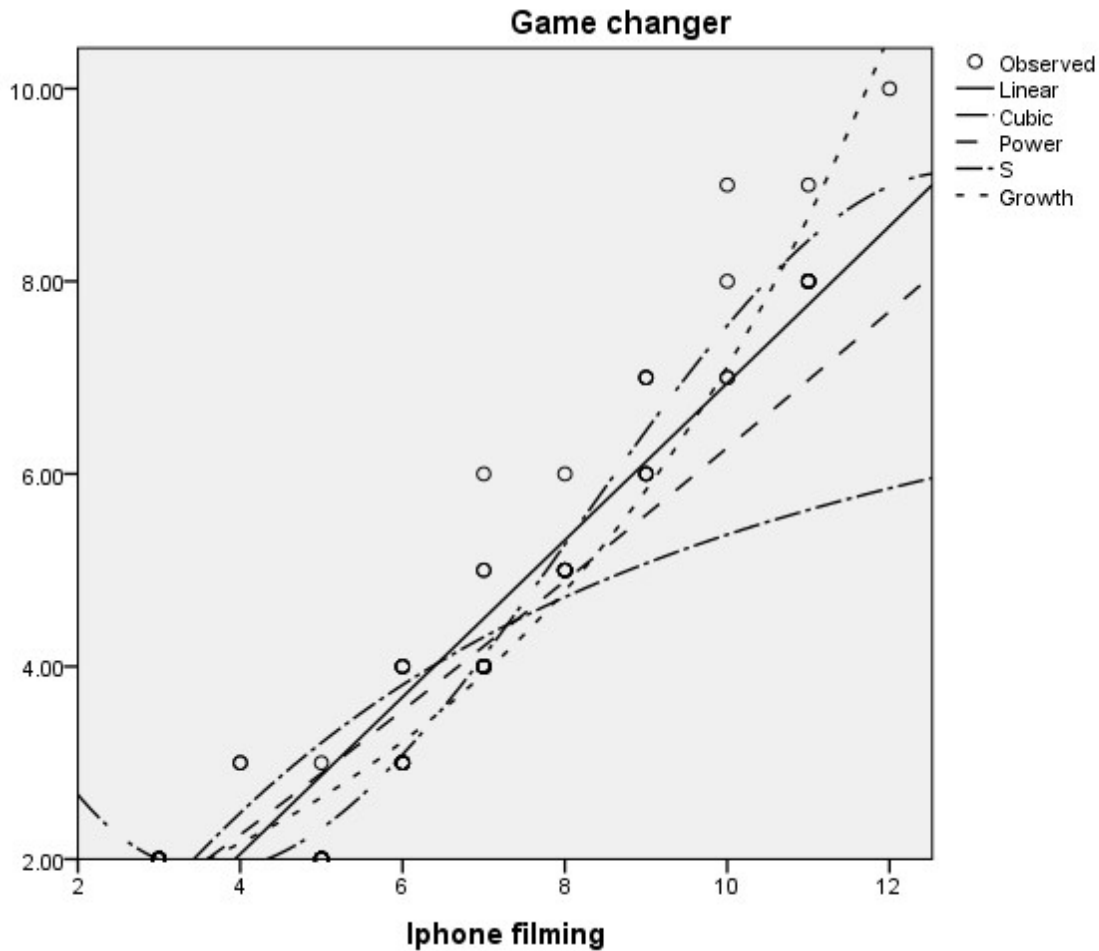
**Table -6: ANOVA- Game changer**

Measures		Sum of Squares	df	Mean Square	F	Sig.
<b>Linear</b>	Regression	400.944	1	400.944	750.351	.000
	Residual	52.366	98	.534		
	Total	453.310	99			

<b>Cubic</b>	Regression	431.474	3	143.825	632.304	.000
	Residual	21.836	96	.227		
	Total	453.310	99			
<b>Power</b>	Regression	21.608	1	21.608	420.924	.000
	Residual	5.031	98	.051		
	Total	26.638	99			
<b>S</b>	Regression	17.948	1	17.948	202.416	.000
	Residual	8.690	98	.089		
	Total	26.638	99			
<b>Growth</b>	Regression	23.686	1	23.686	786.141	.000
	Residual	2.953	98	.030		
	Total	26.638	99			

The independent variable is Iphone filming.

Table:6 shows that the ANOVA table tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by your model. The Residual row displays information about the variation that is not accounted for by your model. The regression sum of squares is considerably larger than the residual sum of squares, which indicates that most of the variation in the proportion is explained by the model. ANOVA- Game changer Measures Mean Square F Sig. Linear Regression Mean Square 400.944 F-value 750.351 Significant value .000 Cubic Regression Mean Square 143.825 F-value 632.304 Significant value .000 Power Regression Mean Square 21.608 F-value 420.924 Significant value .000 S Regression Mean Square 17.948 F-value 202.416 Significant value .000 Growth Regression Mean Square 23.686 F-value 786.141 Significant value .000 The independent variable is Iphone filming. While the ANOVA table is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.



**Figure - 7**

The curve fit chart gives you a quick visual assessment of the fit of each model to the observed values. From this plot, it appears that the Equations are Linear, Cubic, Power, S and Growth models better follows the shape of the data. In particular, the linear model seems to overestimate sales for cases with small or large values of Iphone filming and Game changer with medium values of Iphone filming. As a further visual check, you should look at plots of the residuals versus predicted values for each model in Significant value. 0.001\*\*..

**Table -7: ANOVA- Promotion of films**

Measures	Sum Squares	of df	Mean Square	F	Sig.	
<b>Linear</b>	Regression	20.674	1	20.674	38.691	.000
	Residual	52.366	98	.534		
	Total	73.040	99			



<b>Cubic</b>	Regression	51.204	3	17.068	75.037	.000
	Residual	21.836	96	.227		
	Total	73.040	99			
<b>Power</b>	Regression	10.159	1	10.159	87.846	.000
	Residual	11.333	98	.116		
	Total	21.492	99			
<b>S</b>	Regression	12.952	1	12.952	148.633	.000
	Residual	8.540	98	.087		
	Total	21.492	99			
<b>Growth</b>	Regression	6.953	1	6.953	46.868	.000
	Residual	14.539	98	.148		
	Total	21.492	99			

Table:7 shows that the ANOVA table tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by your model. The Residual row displays information about the variation that is not accounted for by your model. The regression sum of squares is considerably larger than the residual sum of squares, which indicates that most of the variation in the proportion is explained by the model. ANOVA- Promotion of films Measures Mean Square F Sig. Linear Regression Mean Square 20.674 F-value 38.691 Significant value .000 Cubic Regression Mean Square 17.068 F-value 75.037 Significant value .000 Power Regression Mean Square 10.159 F-value 87.846 Significant value .000 S Regression Mean Square 12.952 F-value 148.633 Significant value .000 Growth Regression Mean Square 6.953 F-value 46.868 Significant value .000. While the ANOVA table is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.

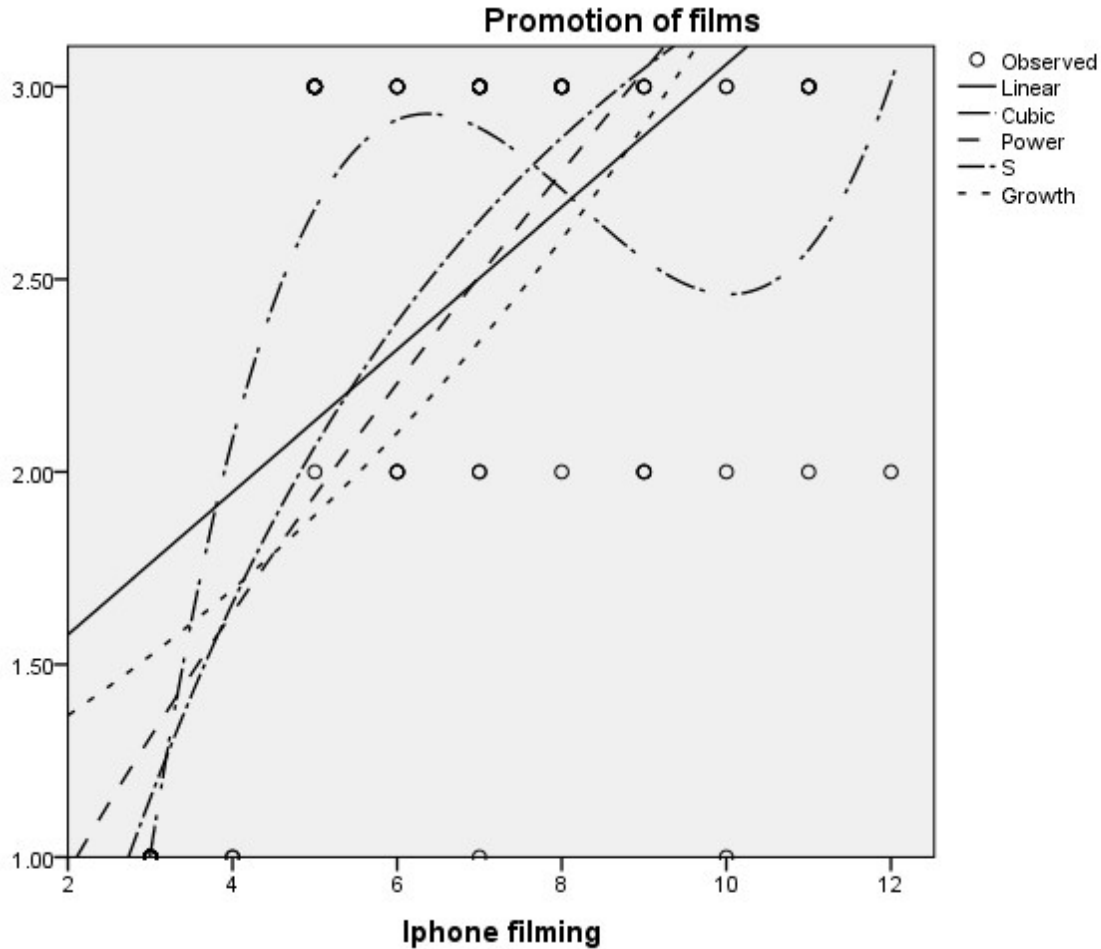


Figure - 8

The curve fit chart (Figure - 8) gives you a quick visual assessment of the fit of each model to the observed values. From this plot, it appears that the Equations are Linear, Cubic, Power, S and Growth models better follow the shape of the data. In particular, the linear model seems to overestimate sales for cases with small or large values of iPhone filming and Promotion of films with medium values of iPhone filming. As a further visual check, it should look at plots of the residuals versus predicted values for each model in Significant value. 0.001\*\*.

### Conclusion

iPhone technology has had an undeniable impact on photography and film making. The iPhone technology has revolutionized the film industry because of their camera features and the easiness to use for many filmmakers even with just a little filmmaking knowledge. Independent Filmmakers dominate the group of iPhone filmmakers. In specific within the past five years, the iPhone filmmakers have been increased. With improve and techniques, iPhones will become more attractive way for creators to express their stories and explore their creativity. In India few films only have been shot on iPhones in Various Languages. iPhone filmmaking in the Tamil film industry is imminent and near on the horizon to accomplish a great victory.

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