

SIMULATION OF DESSEMINATION OF MARKETING INFORMATION

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Abstract

The article deals with the use of theory of potential source as an analogy to the dissemination of marketing information.

1. Introduction

The article deals with the use of theory of potential source as an analogy to the dissemination of marketing information.

2. Used Methods

The analogy of phenomena in nature and economy is often used. An interesting idea might be to use the theory of the potential source, as an analogy to the dissemination of marketing information from a point in the plane. Function of source is described by the equation $F(z) = k \cdot \ln \frac{z}{z_0}(r)$. If we itemize the function, we get $\phi + i\psi = k \cdot [\ln(re^{i\phi})] = k \cdot (\log r + i\phi)$. So the real part called the potential function has the form $\phi = k \cdot \log(r)$ and imaginary part called the stream function has the form $\psi = k \cdot \phi$. Plotted circles of dissemination of marketing information from the point are done by the program. See figure 1 and program 1.

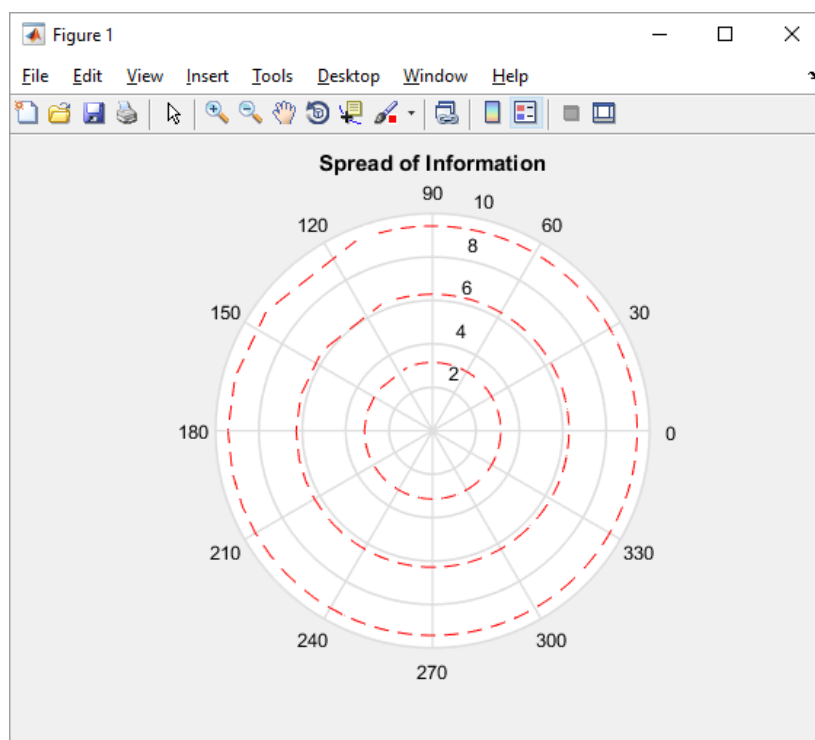


Figure 1: Dissemination of information

```
% Dissemination of information
clear all
r = -2*pi:0.01:-0.01;
z1 = log(r);
real_z1 = real(z1);
imag_z1 = imag(z1);
for i=[3 2 1]
polar(real_z1, i*imag_z1,'-r')
hold on
end
title(' Dissemination of Information')
```

Program 1: Dissemination of information

3. Case study

The case study represents the dissemination of marketing information, its direction and power. The further the distance from the source is, the more vague information is. The marketing information is spread in all directions represented by 360°.

4. Conclusion

Potential equation φ represents the power of information, the further the distance from the source is, the more vague information is. The current equation ψ represents the direction of dissemination of information. The supplementary functions can simulate inhomogeneous disseminating of information.

References

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