

A strategy for industrial utilization of atmosphere-ocean simulation data

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To extend socio-economic ripple effects by research and development activities by public organizations, this presentation discusses strategy to generate business utilizing super-computers and their results under cooperation with private sectors. Meteorological data, for example, data on air temperature and wind velocity, are data on the environment. In principle, there is no rivalry for data, because they can be duplicated. Thus, environmental data can be club goods without rivalry, excludable against business competitors. On the other hand, the environment is not excludable as public property.

To solve social problems, it is necessary not only to create successful cases but also to roll them out and operate them for a long term. More and more public funding requires prospects for social application by private entrepreneurs to supplement itself. On the other hand, public research organizations are also required to increase socio-economic effects caused by research results. But, public research organizations are too short of human resources to meet the requirement, occupied with on-going national projects. To overcome this difficulty, it is recommended to cooperate with private application developers so that benefits will exceed burdens on researchers in public research organizations. To reduce burdens on researchers in instruction of the application developers, private companies are to be found to undertake the instruction as their own business.

So that, in the earliest stage, socio-economic ripple effects will take priority to profit of public research organizations, densely populated areas or cities are not excluded, involving intermediate-user companies with high potential to secure customers or such end-user companies with numerous customers as in building industry.

In a view point of eco-system of data industry, needs are matched with seeds in multi-players to make supply-chains from these companies. Comparing existing weather and geo-informatics services, which could compete, the following strategies should be proper.

To aim at niche tops with the blue-ocean strategy without competing.

At first, assessment without repeated operation; next, seasonal prediction; in the future, short-term prediction for early alert.

To take shaping-type business strategy; to grasp a chance to form industry toward a profitable direction, utilizing facilities as a platform, flexibly coordinating cooperation among stake holders varying from immediate customers to end-users.

Keywords: industrial utilization, strategy, atmosphere and ocean simulation

経営戦略アプローチ

経営戦略パレット

「予測可能性」(将来の市場・環境の変化を予測できるか?)、

「改変可能性」(自社単独で、あるいは他社と協業して、事業をつくり変えることができるか?)

＼改変可能性 予測可能性＼	低	高
低	Adaptive	Shaping
高	Classical	Visionary

研究成果の
商業利用

予測はできないが改変可能性が高い

=業界のルールが(再)定義される前の早い段階

→業界そのものの(再)形成を主導する類稀な機会

気象・水文シミュレーション会社、
コンサル、シンクタンク、認証機関、
損保、マリコン、商社、等...
の多様なステークホルダからなる
柔軟なeco-systemを
♪オーケストラ♪のように

ビジョンを共有
して自身の有利
な方向に業界を
編成

施設・設備をPlatformとして協業を編成・調整