

promotional items should give any necessary warnings and any appropriate safety advice.

In the UK, the British Code of Advertising, Sales Promotion and Direct Marketing (the Code) is the rule book for non-broadcast advertisements, sales promotions and direct marketing communications (marketing communications).

All marketing communications should be legal, decent, honest and truthful. All marketing communications should be prepared with a sense of responsibility to consumers and to society. All marketing communications should respect the principles of fair competition generally accepted in business. Marketers should not exploit the credulity, lack of knowledge or inexperience of consumers.

Promoters should make every effort to ensure that unsuitable or inappropriate material does not reach consumers. Promotions should not be socially undesirable to the audience addressed by encouraging excessive consumption or inappropriate use and should be designed and conducted in a way that respects the right of consumers to a reasonable degree of privacy and freedom from annoyance.

Special care should be taken when promotions are addressed to children or when products intended for adults may fall into the hands of children. Alcoholic drinks should not feature in promotions directed at people under 18.

By creating and following self-imposed rules, the marketing community produces marketing communications that are welcomed and trusted. By practicing self-regulation, it ensures the integrity of advertising, promotions and direct marketing.

THE ROLE OF INNOVATIONS IN THE GLOBAL COMPETITION

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Now in the world the leading countries have already achieved the postindustrial level of economy, and Ukraine is still struggling

with crisis of an industrial economy. Therefore, our country should search for its own way to economic development. The surest one is innovational direction.

Innovations are a certain novice in engineer, technology, work organization or management spheres, based on science research and best practice exploiting. The new or advanced product sold in the market, or new technological process used practically results innovational activity.

In fact, innovations are one of some economic directions that bring high benefits with the minimum of investments. The most illustrative example of the benefits from innovations is a technopark. Today there are four technoparks really operating in Ukraine. They are conducting about 64 innovational projects. In the recent two years technoparks produced innovations for over grn. 292,8 billion, including products of grn. 102,9 billion for export. But, unfortunately technoparks today are the only working mechanism of the state innovational policy realization.

Today, in fact, Ukraine has disappeared from researching and innovational world map. It has only 0,1 % of the total world trade of science products. Inward market situation is a little bit better, but businesses prefer buying the technologies being used and tested already.

Despite the legislative problems in innovational regulation and stimulation, some Ukrainian entrepreneurs realize benefits that can be received from innovations. 902 enterprises of Ukraine were carrying out innovations in 2004, they have sold their products for over grn. 6,6 billion. The major activity direction for the most of innovative businesses was technologically new or advanced products creation and introduction.

For improvement of enterprises economic activity we need to carry out some stimulating measures for their innovational activity: increase efficiency of the state regulating policy in the business development; provide business-incubators and the innovational centres with the state support; promote investment attraction into small business development by stimulating their activity in the

information/communication technologies; deepen scientific and methodical maintenance of small business.

Ukraine has significant research and technology potential. Therefore we can't allow the economic situation and insufficient poor legislation to stop its further development.

TURBULENCE CLOSURE MODELS

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CFX-Taskflow is an integrated software system capable of solving complex multidimensional fluid problems. The fluid flow solver provides solutions for incompressible or compressible, steady-state or transient, laminar or turbulent single-phase fluid flow in complex geometries.

A large number of flows that are modeled are turbulent, and therefore turbulence models are an important component of a CFD code.

The mean flow equation section introduces the Reynolds stresses, and the subsequent closure problem, which results when the instantaneous Navier-Stokes equations are time averaged. To avoid the resolution of all turbulence time scales, these equations are statistically averaged, resulting in new unknown turbulence quantities in the averaged equations. This leads to the so-called closure problem. New transport equations can be derived for the unknown turbulence quantities, but these equations contain again new unknown turbulence quantities. Model assumptions for these unknown turbulence quantities have to be found based on known quantities. . The level where the equation system is finally closed and the number of additional equations for turbulence quantities define the type of the turbulence model and can be used to classify existing turbulence models.

Two-equation turbulence models are very widely used, as they offer a good compromise between numerical effort and computational accuracy. The k - ϵ and k - ω two-equation models use