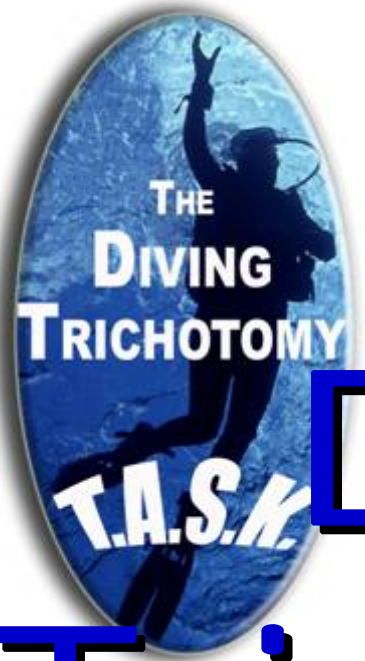


DEEP FATHOMS  
PRODUCTIONS



# The Diving Trichotomy



1

*High Impact Visual Tools for the Marine and Diving Sciences*

# Copyright



**Published By Deep Fathoms Productions**

**All rights are reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means; electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of both the publisher and author.**

Copyright © 2005 by Deep Fathoms Productions

**ISBN 0-9738920-0-5**

**First Edition September 2nd, 2005 - Copyright 1032498, Victoria, BC**

## Disclaimer

Prior to engaging in any extended range diving activities, person(s) must be first qualified and certified by a recognized training agency.

The material found in this program is only intended to promote and augment that training.

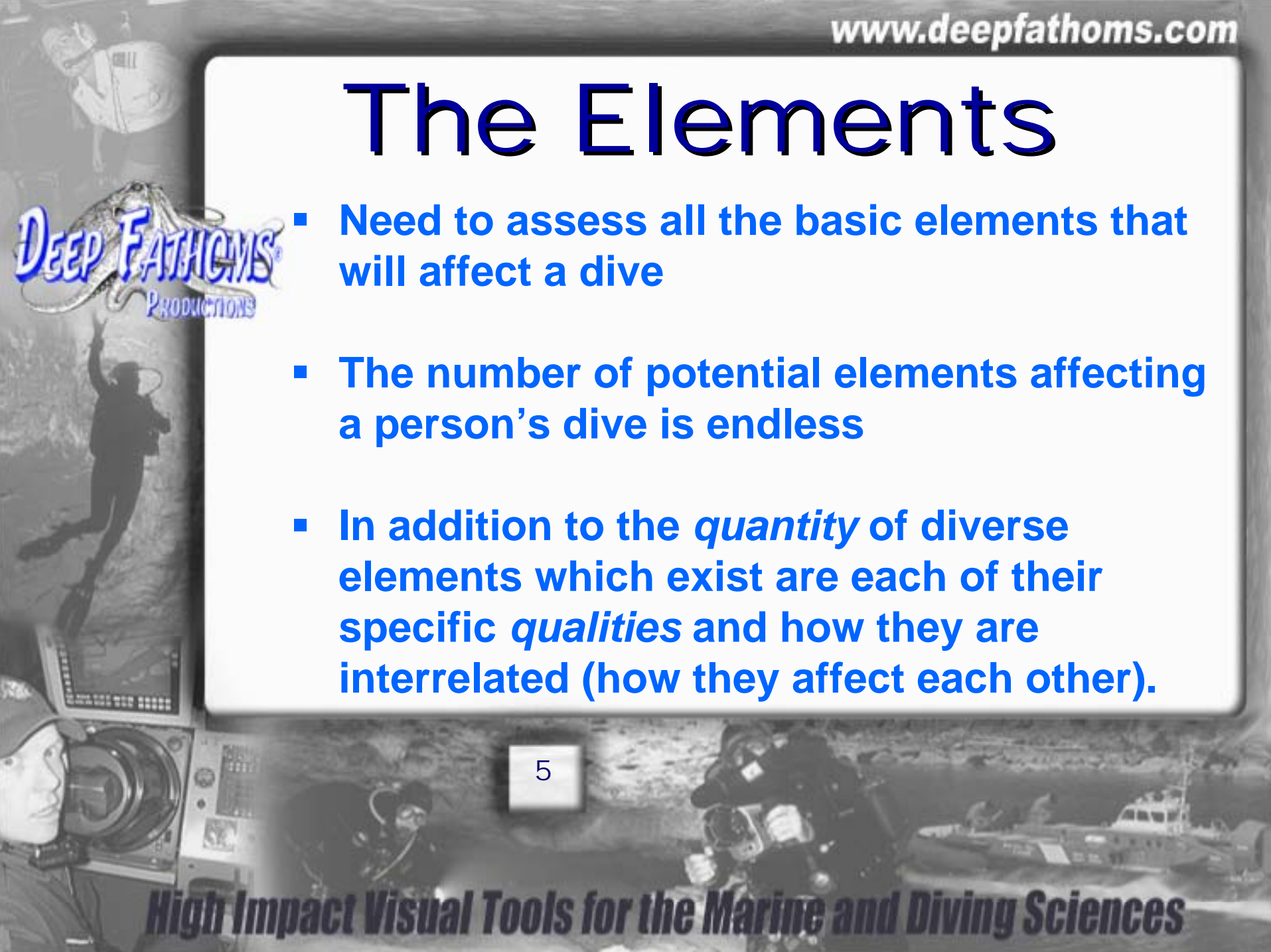
Information in this program is subject to change according to developing occupational practices. It is therefore required that anyone presenting this material first ensure that it meets current industry standards

# Before we begin...

- ✓ As a courtesy please turn off all cell phones and pagers
- ✓ Location of washrooms, amenities, parking, and emergency exit protocol
- ✓ Breaks, meals and general class rules
- ✓ Your participation is expected, questions and group discussion are encouraged

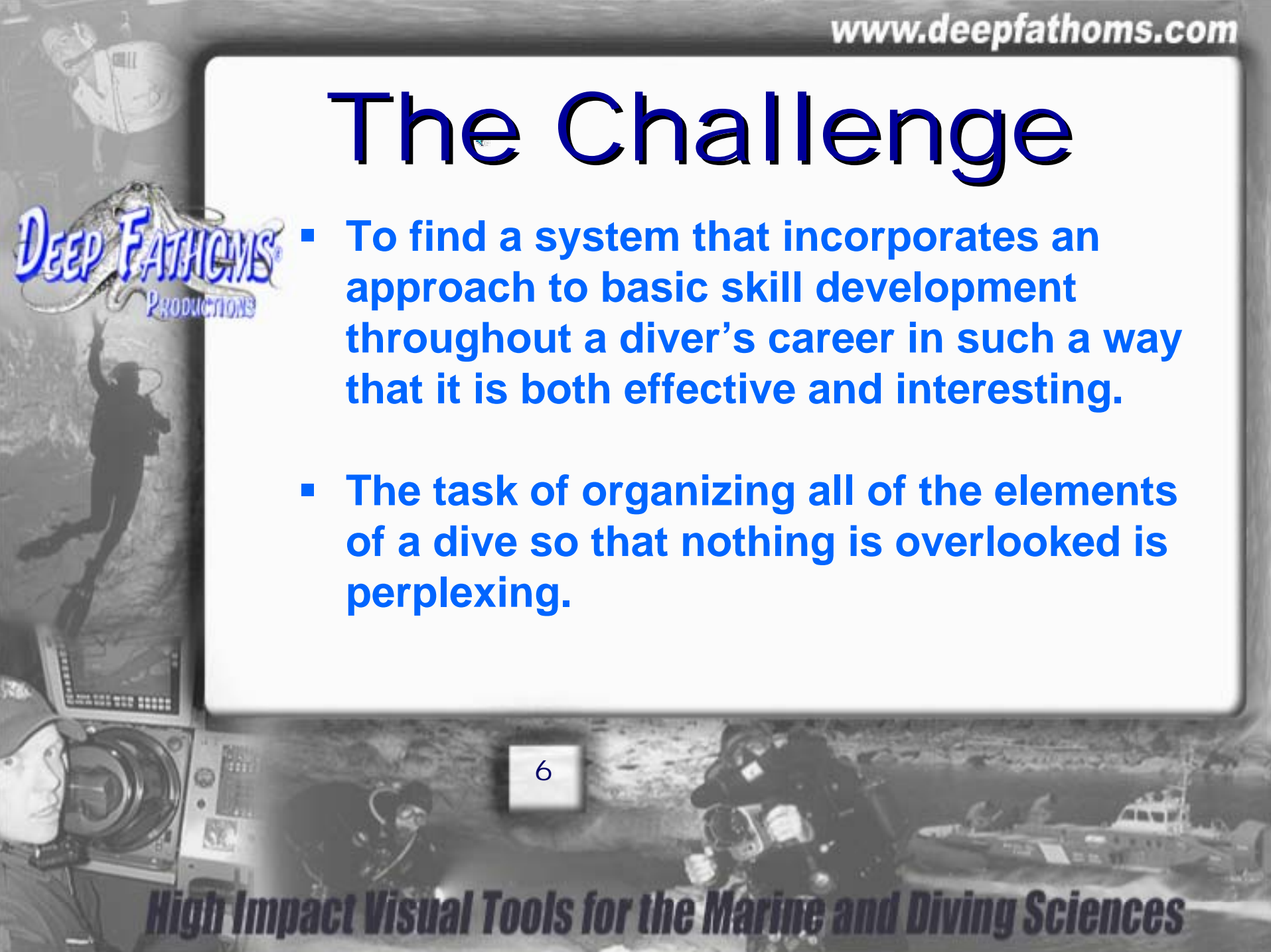
# The Elements

- Need to assess all the basic elements that will affect a dive
- The number of potential elements affecting a person's dive is endless
- In addition to the *quantity* of diverse elements which exist are each of their specific *qualities* and how they are interrelated (how they affect each other).



# The Challenge

- To find a system that incorporates an approach to basic skill development throughout a diver's career in such a way that it is both effective and interesting.
- The task of organizing all of the elements of a dive so that nothing is overlooked is perplexing.



# The Solution

**We developed a model, a strategy if you will that enables us to approach diver development and dive planning in a very simple and effective manner.**

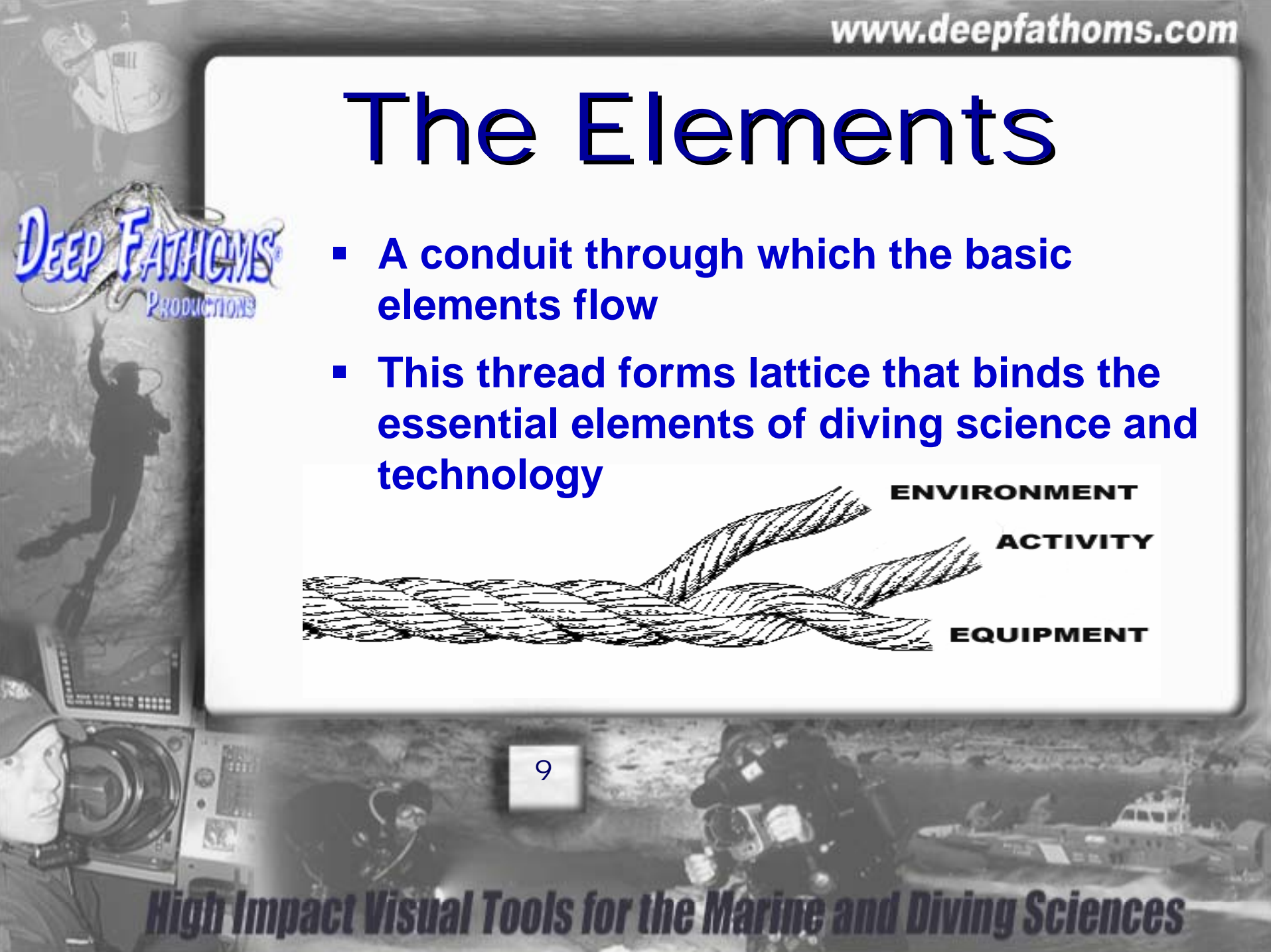


# The Basics

- Keeping an open mind to personalized development and accountability
- Basic development includes a total inclusion of all of the essential elements
- These elements are grouped into three primary *RANGES*

# The Elements

- A conduit through which the basic elements flow
- This thread forms lattice that binds the essential elements of diving science and technology



# Risk Assessment

- Starts with developing a stronger intimacy with the 'basics' – helps build a bigger picture
- A bigger picture empowers divers to look beyond the rudimentary aspects of the sport

# Guidelines to Understanding the Diving Trichotomy


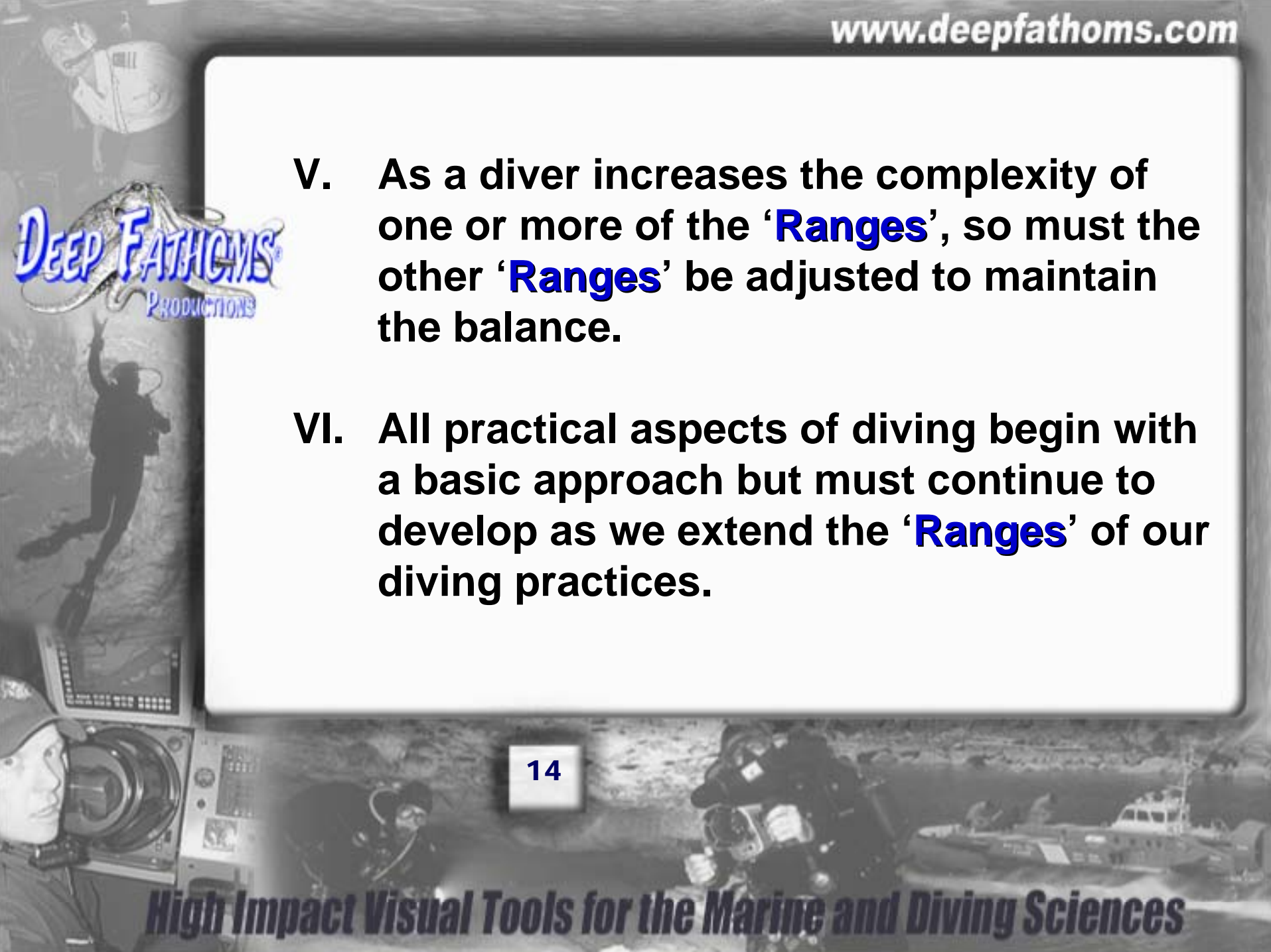




- I. Every dive conducted for the purpose of amusement regardless of its complexity or the type of equipment used is considered to be 'Recreational' with some level of technical difficulty.
  
- II. The basic **elements** that affect the complexity of any dive apply equally for all dives.




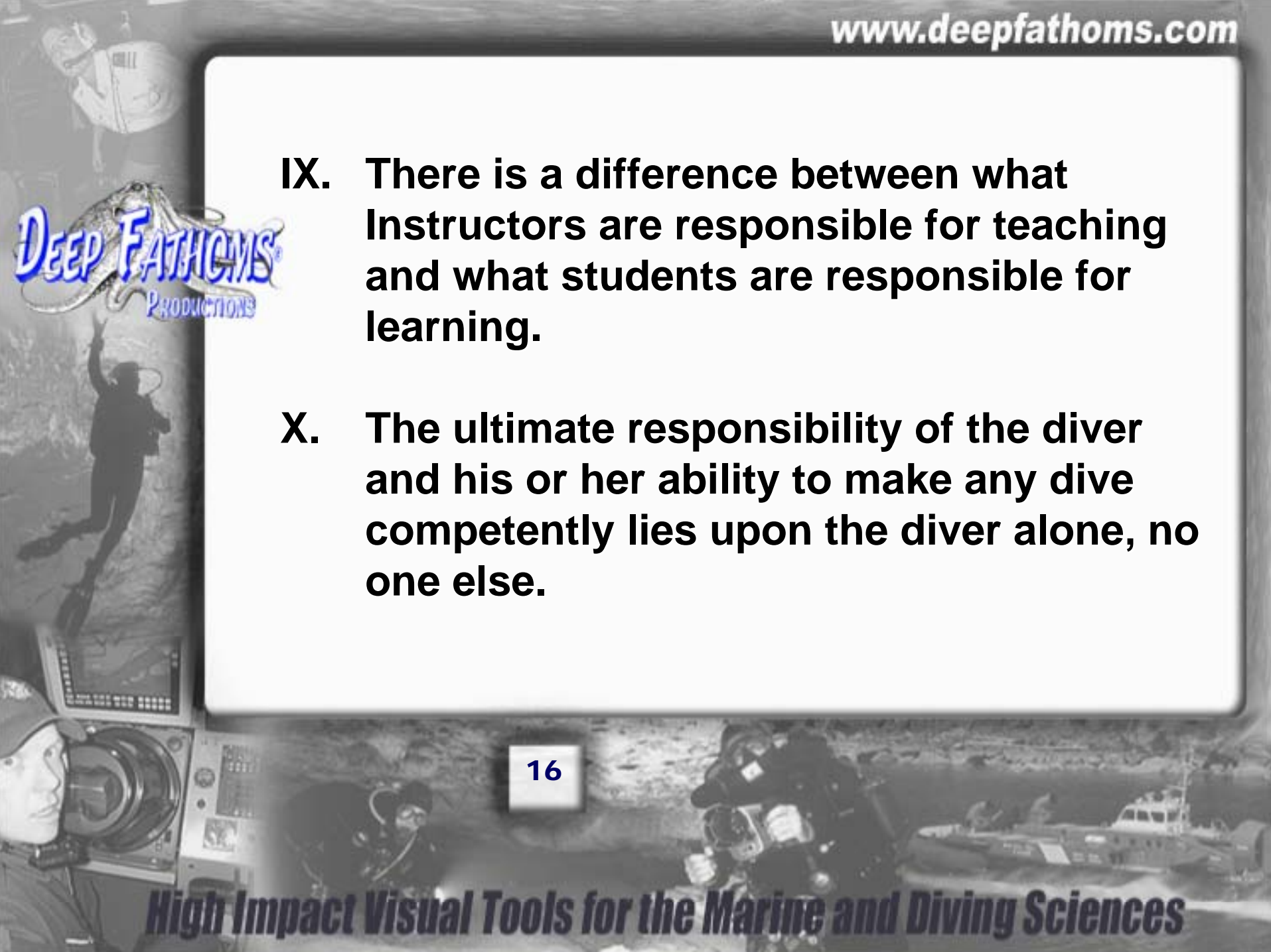
- III. The basic elements can be summarized into three categories; **Environment**, **Activity** and **Equipment** which are known as '**Ranges**'.
  
- IV. Each '**Range**' must be balanced in equilibrium with the other two '**Ranges**' in order for a dive to be conducted safely.

- 
- 
- V. As a diver increases the complexity of one or more of the '**Ranges**', so must the other '**Ranges**' be adjusted to maintain the balance.
  
  - VI. All practical aspects of diving begin with a basic approach but must continue to develop as we extend the '**Ranges**' of our diving practices.



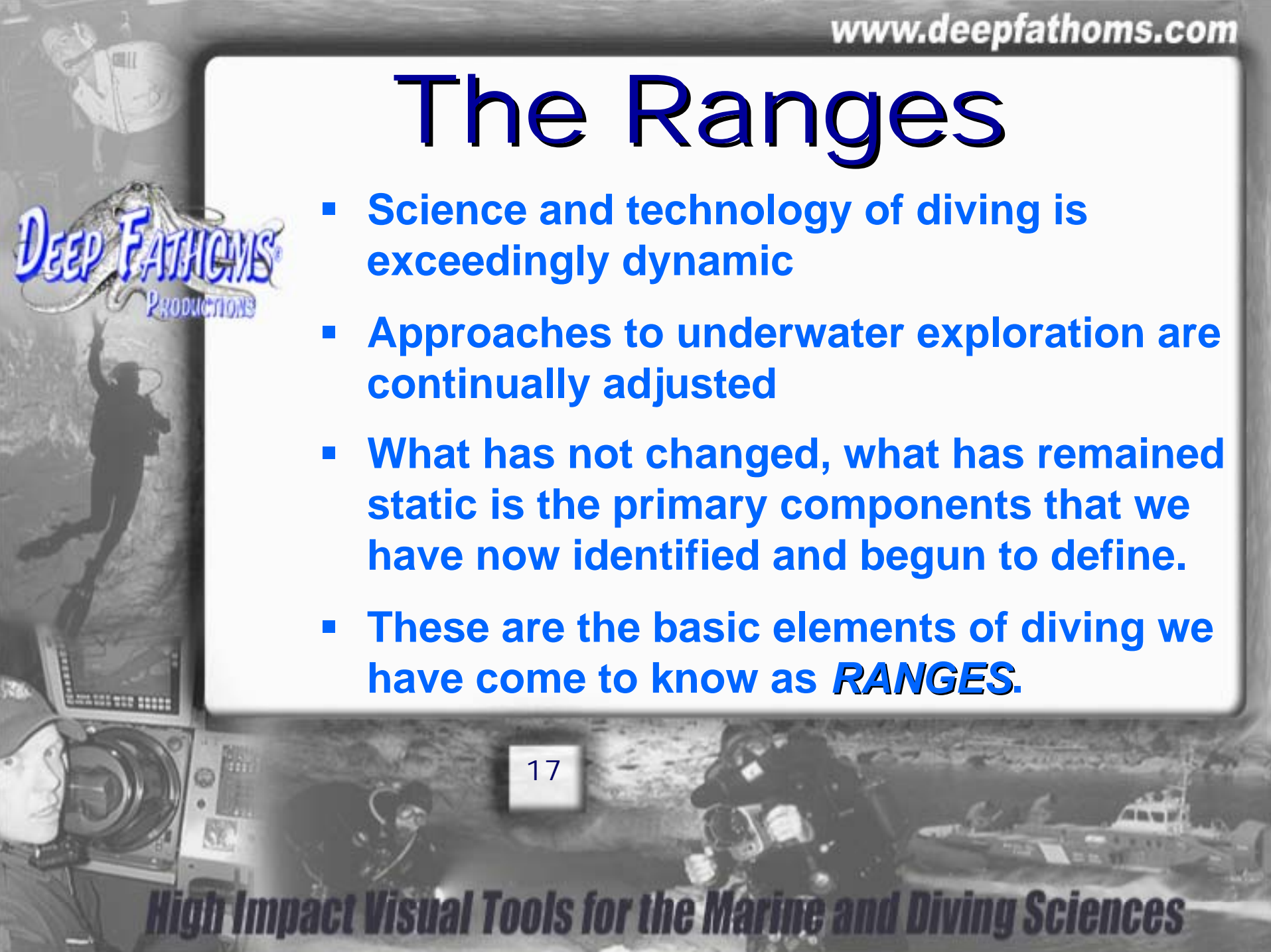
VII. As a diver increases the complexity of the '**Ranges**' they are said to 'Extend' the range or engage in an Extended **Range** Dive.

VIII. '**Ranges**' expand accordingly to the development of a diver's **Ability** which are defined as the Core Values of Diver Competency; **Training, Attitude, Skills and Knowledge.**

- 
- 
- IX. There is a difference between what Instructors are responsible for teaching and what students are responsible for learning.**
  - X. The ultimate responsibility of the diver and his or her ability to make any dive competently lies upon the diver alone, no one else.**

# The Ranges

- Science and technology of diving is exceedingly dynamic
- Approaches to underwater exploration are continually adjusted
- What has not changed, what has remained static is the primary components that we have now identified and begun to define.
- These are the basic elements of diving we have come to know as **RANGES**.

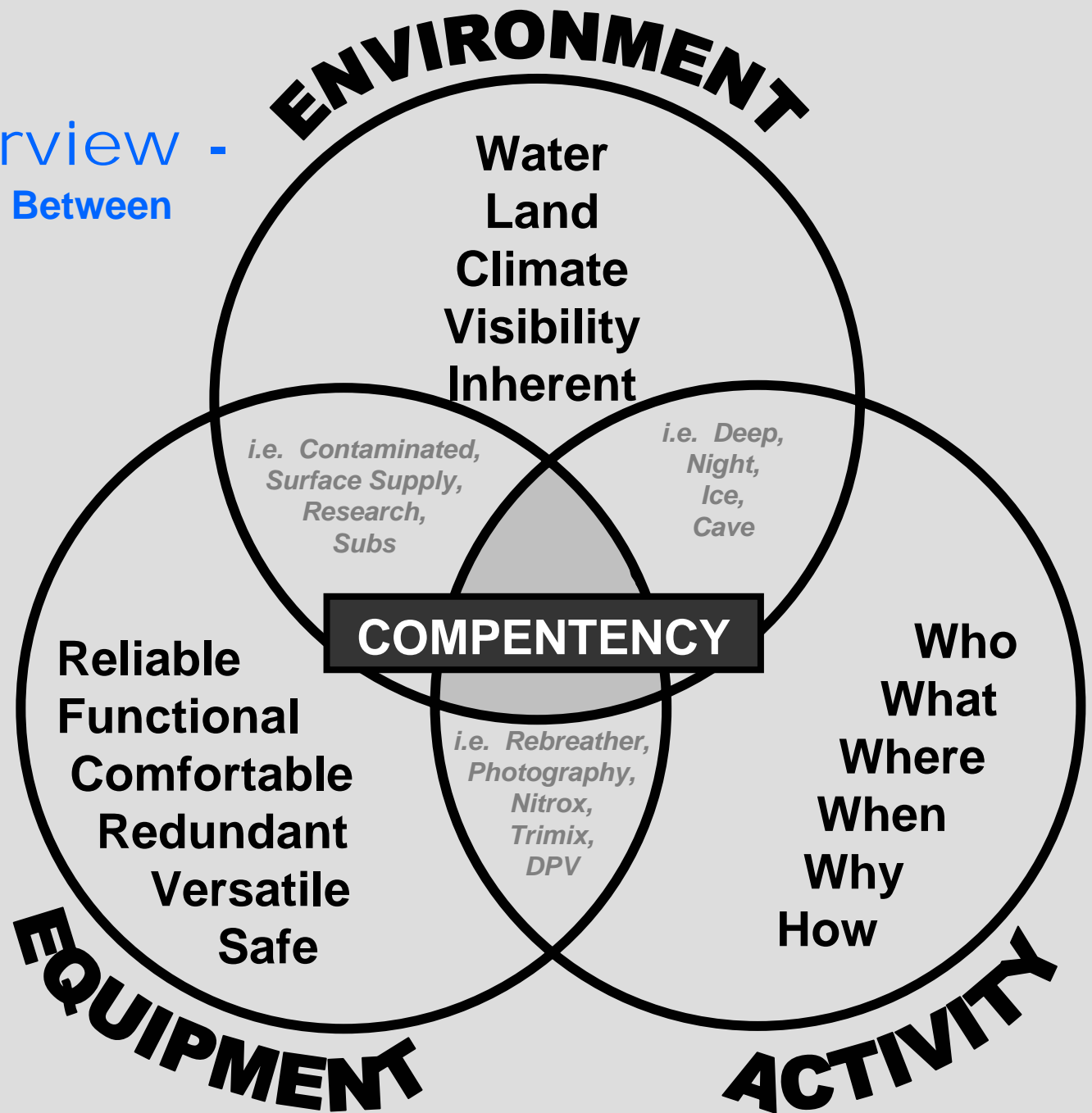


# The Ranges

- ENVIRONMENT – i.e. overhead, deep
- ACTIVITIES – i.e. cave, decompression
- EQUIPMENT – i.e. redundancy, versatility



Range Overview -  
The Codependency Between  
Elements

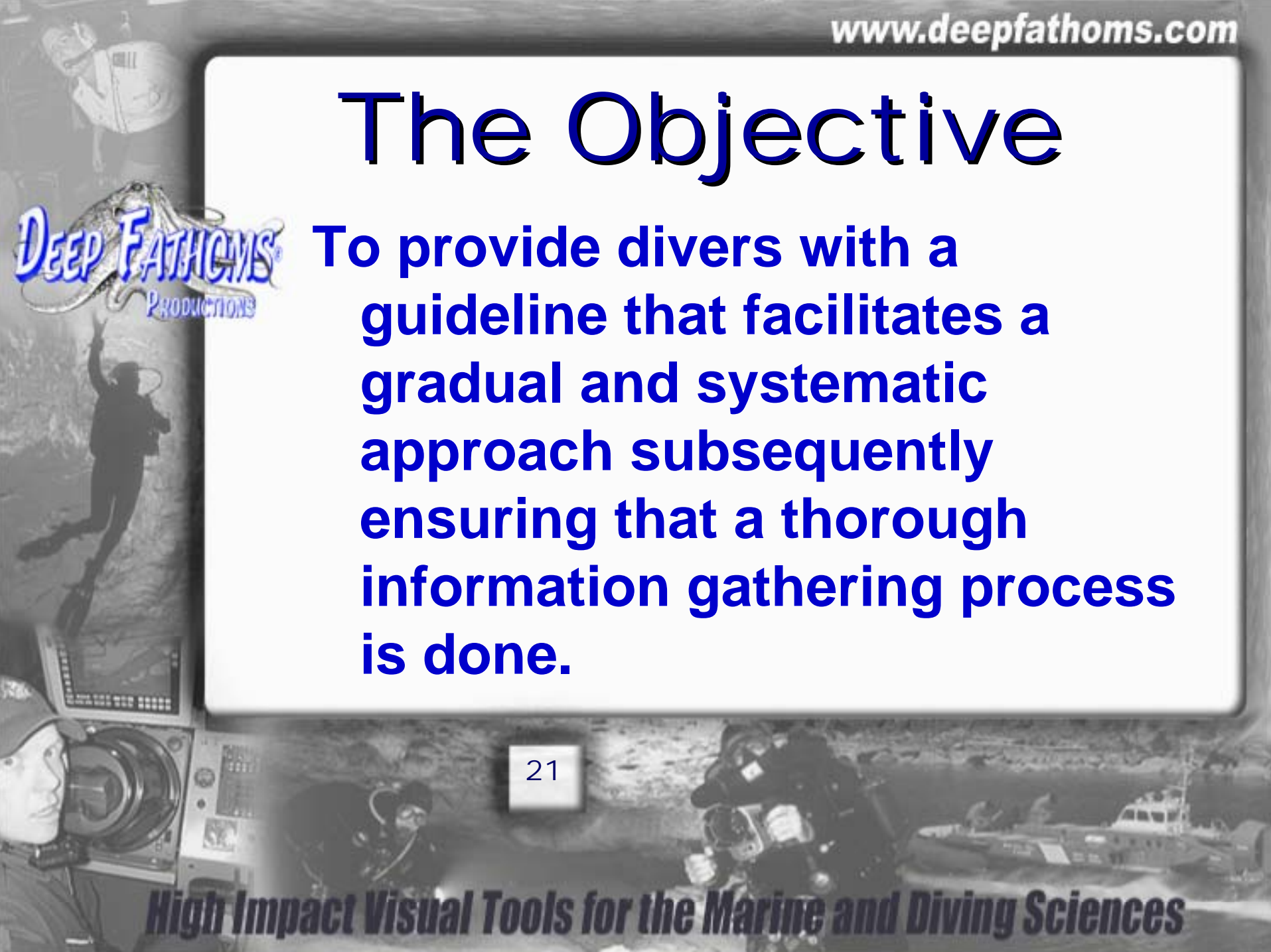


# The Diving Trichotomy Model



# The Objective

To provide divers with a guideline that facilitates a gradual and systematic approach subsequently ensuring that a thorough information gathering process is done.



**The Trichotomy of Diving is a conceptual model that provides divers with the blueprints for assembling the critical elements of a dive whilst acquiring total competency.**

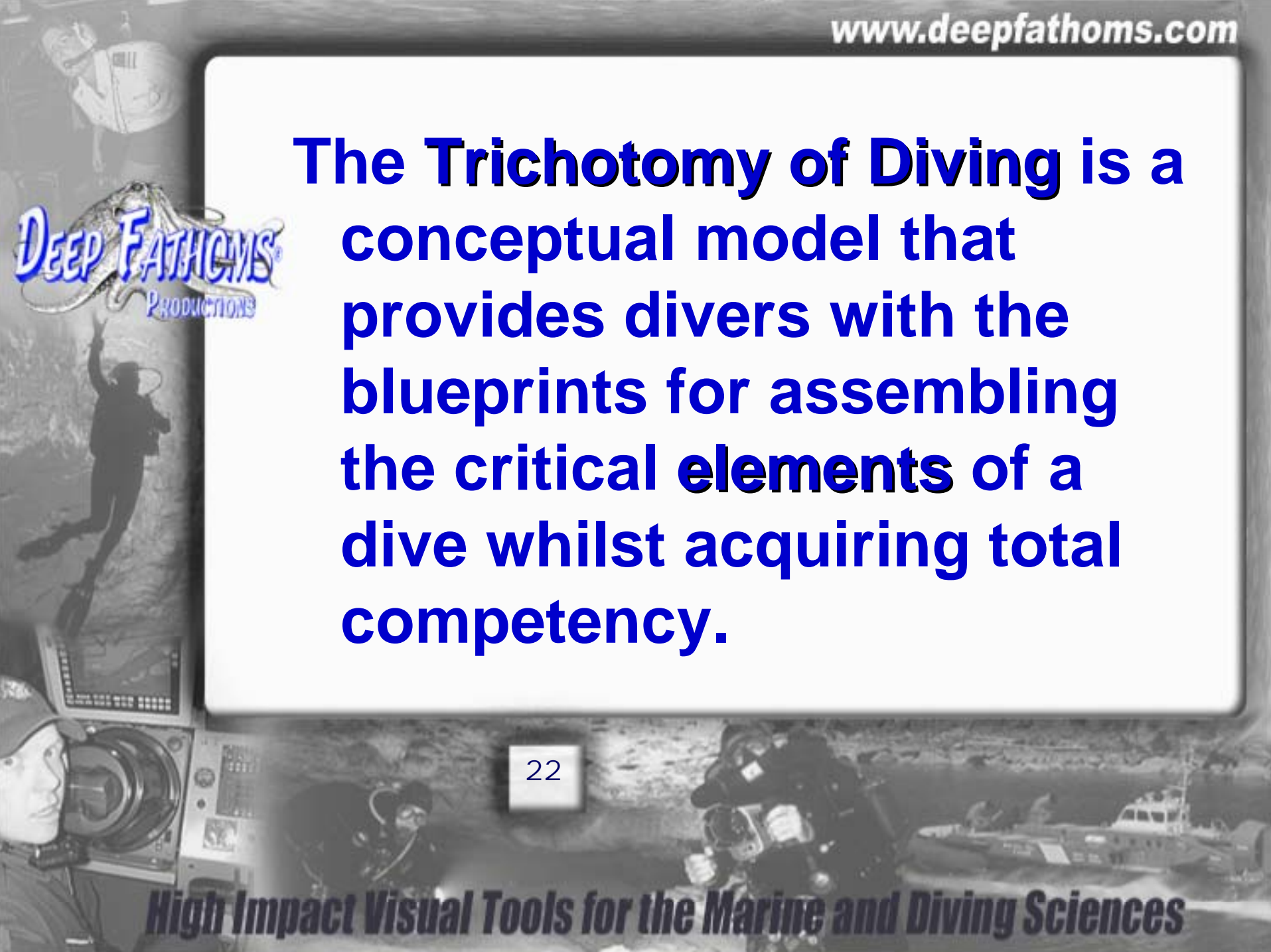
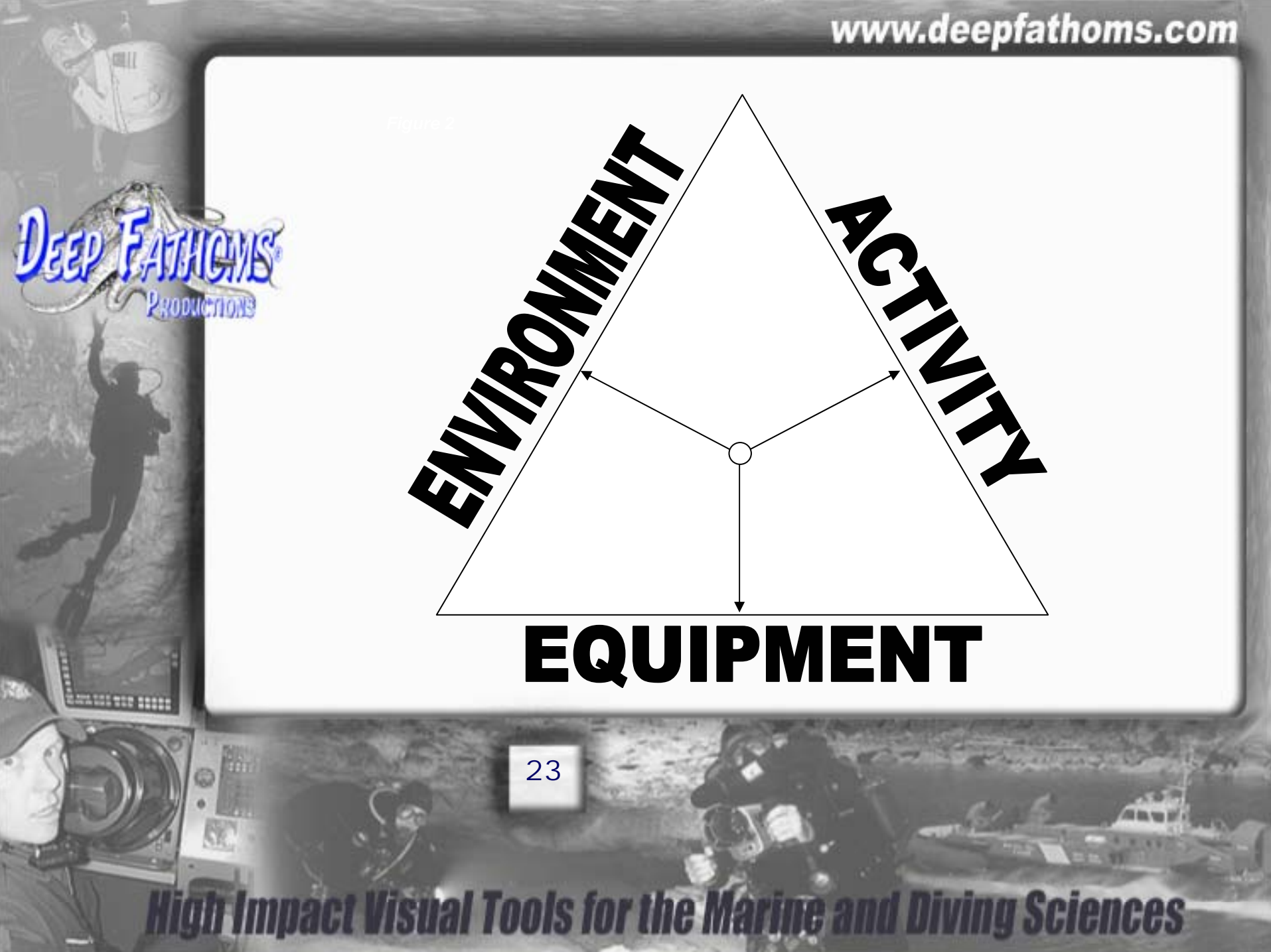
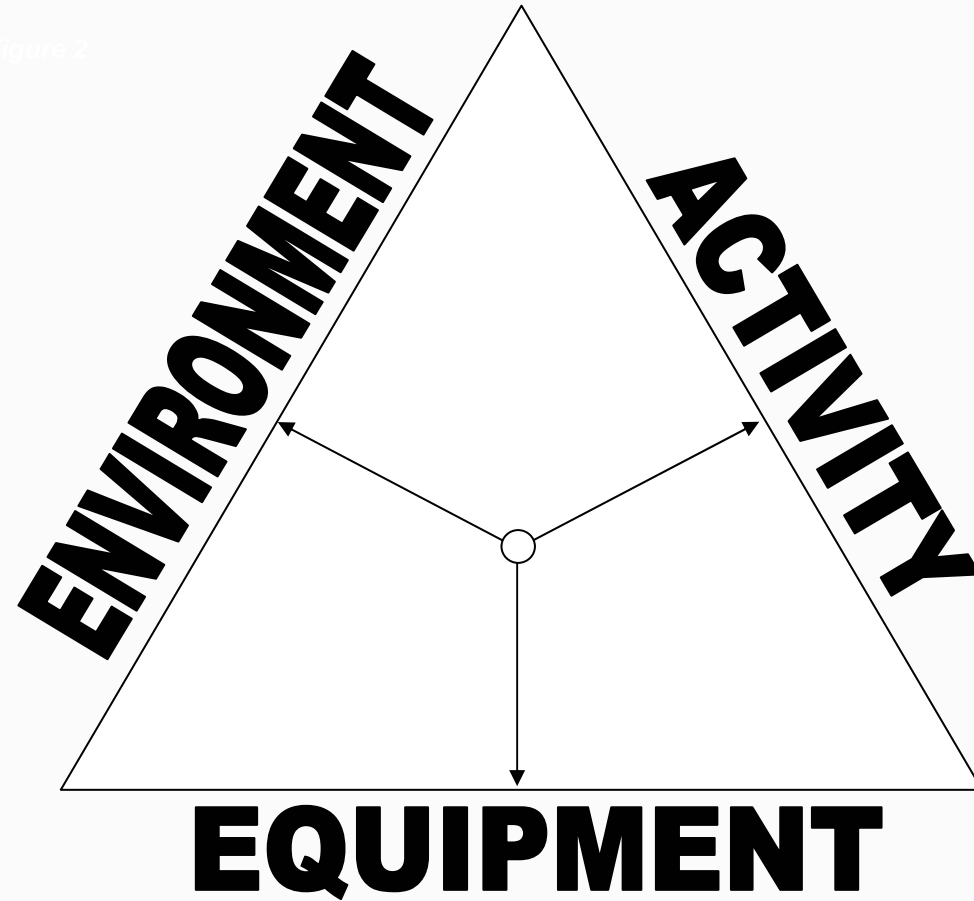


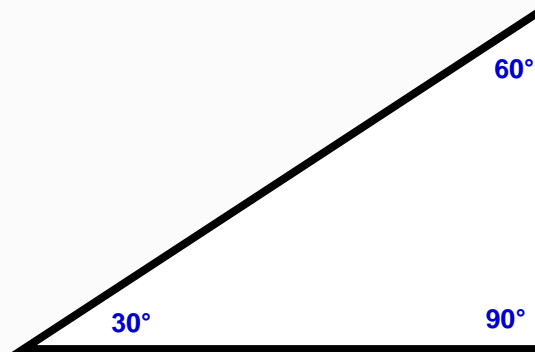
Figure 2



**DEEP FATHOMS**  
PRODUCTIONS

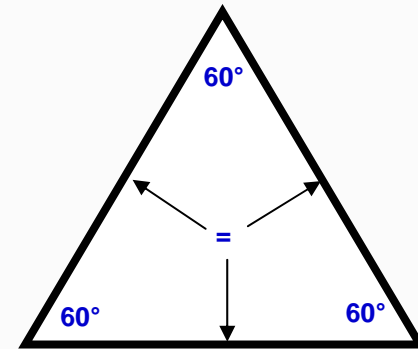
Figure 1

Non-Equilateral Triangle



~  $(30^\circ + 60^\circ + 90^\circ = 180^\circ)$   
~ at least two sides are a different length

Equilateral Triangle



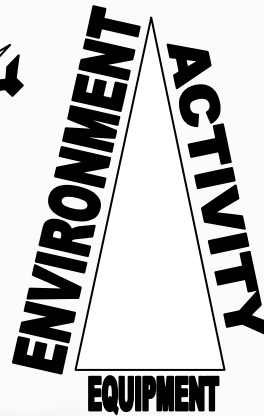
~  $(60^\circ + 60^\circ + 60^\circ = 180^\circ)$   
~ each side is the same length





Imbalances occur when a diver fails to consider the complexity or degree of difficulty of the dive.

We must ensure that the equilibrium of the triangle is maintained.



# Extended Range Diving

- Involves applications in these three 'ranges' that are beyond the traditional technique currently applied in recreational sport diving.
- As a diver's level of **COMPETENCY** develops so does his **ABILITY**.
- What compliments this particular approach to diver development is yet another unique and effective approach to diver training which you will come to know as *The TASK Model*.

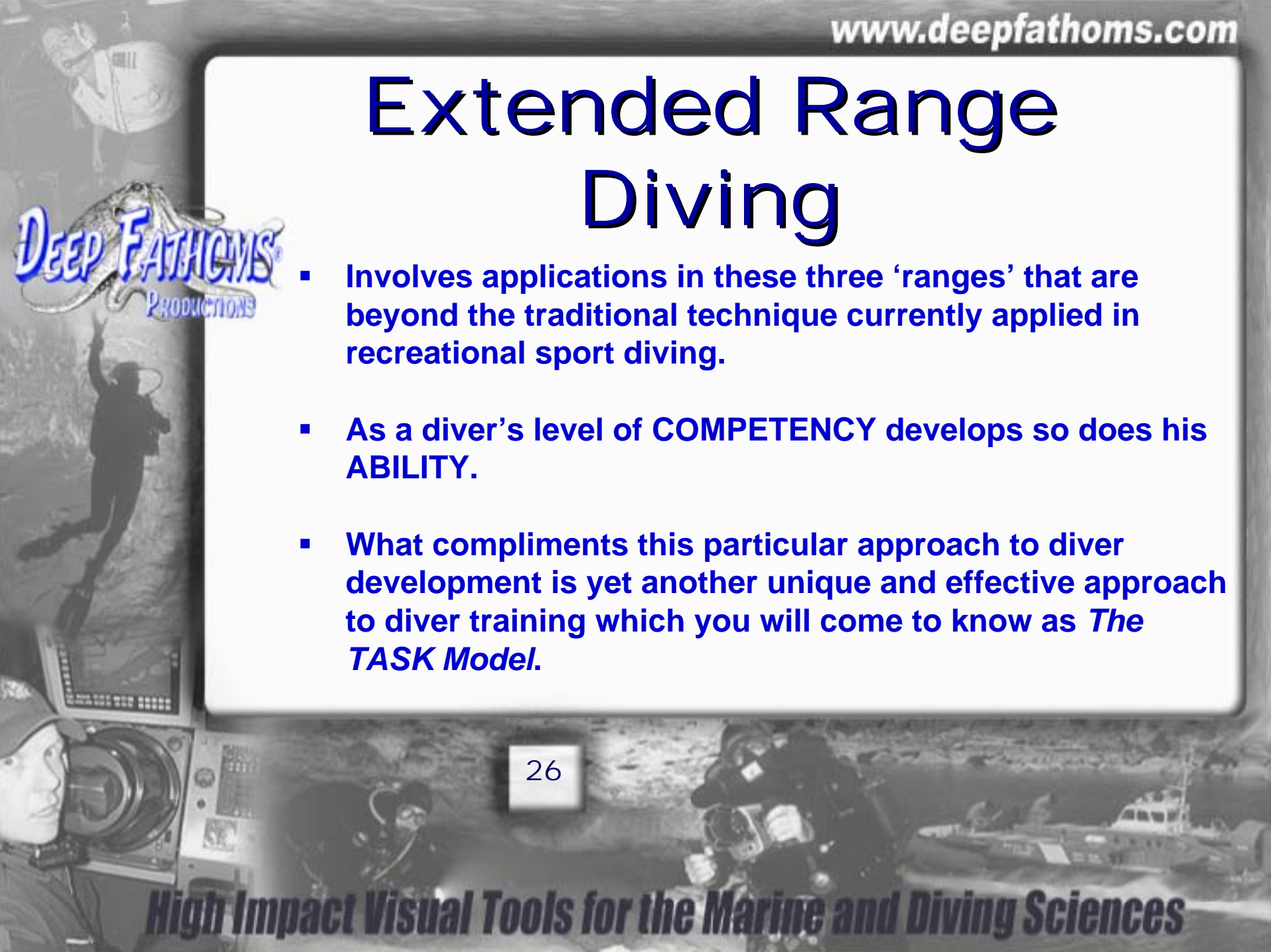


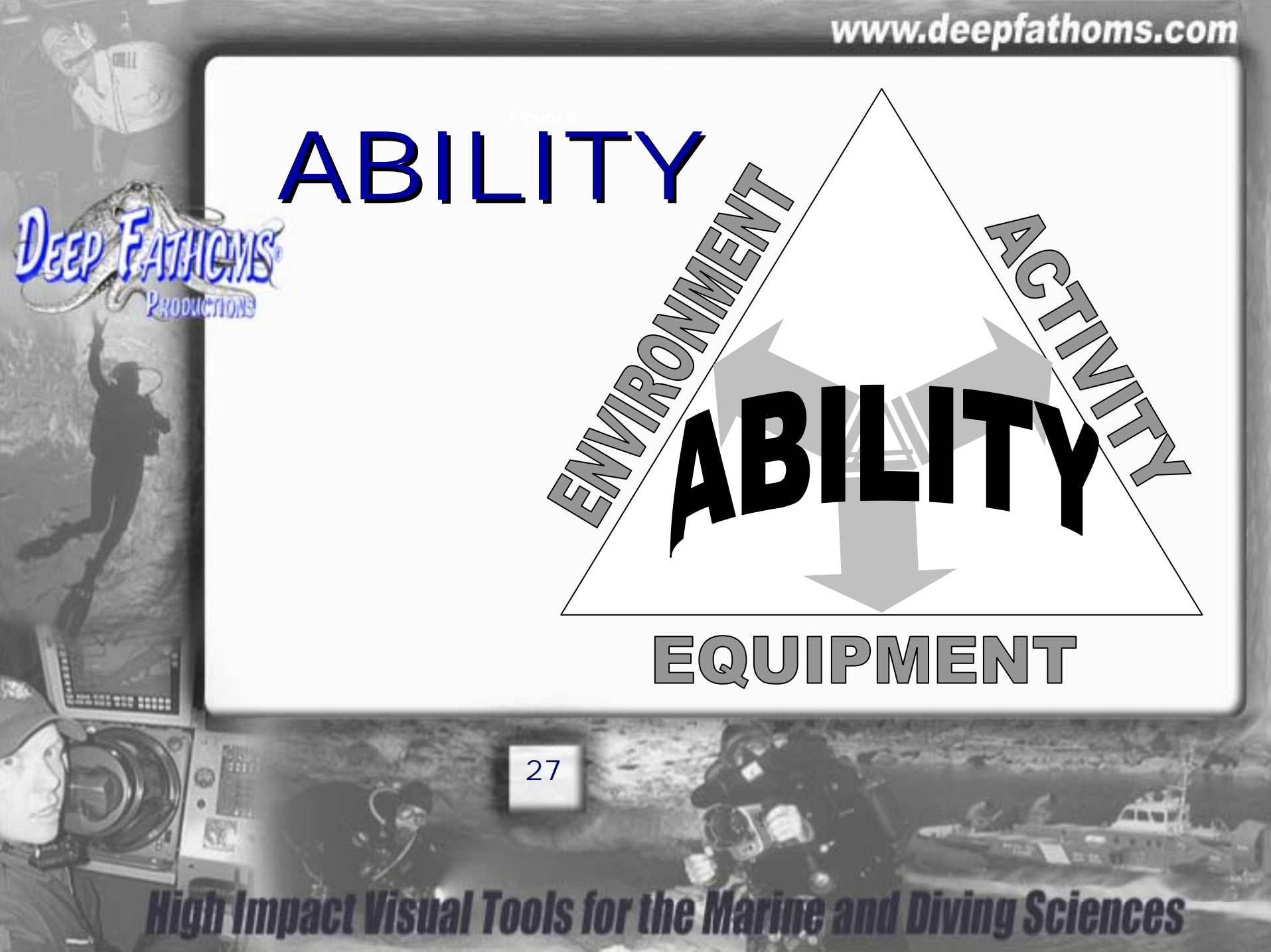
Figure 8  
**ABILITY**

**ENVIRONMENT**

**ACTIVITY**

**ABILITY**

**EQUIPMENT**



**DEEP FATHOMS**  
PRODUCTIONS

# Developing Ability

- How does one know if they have satisfied every available opportunity to develop the basics before extending the Range of their diving environment, activity or equipment?
- How does one know if they are ready to make that dive safely?



# The PACE Approach

PACE - Primary

PACE - Alternate

PACE - Contingency

PACE - Emergency





# The Core Values of Diver Competency

*A Divers Ultimate Objective!*

## ***Tactics for Survival***



*There is a difference between what instructors are responsible for teaching and what divers are responsible for learning.*



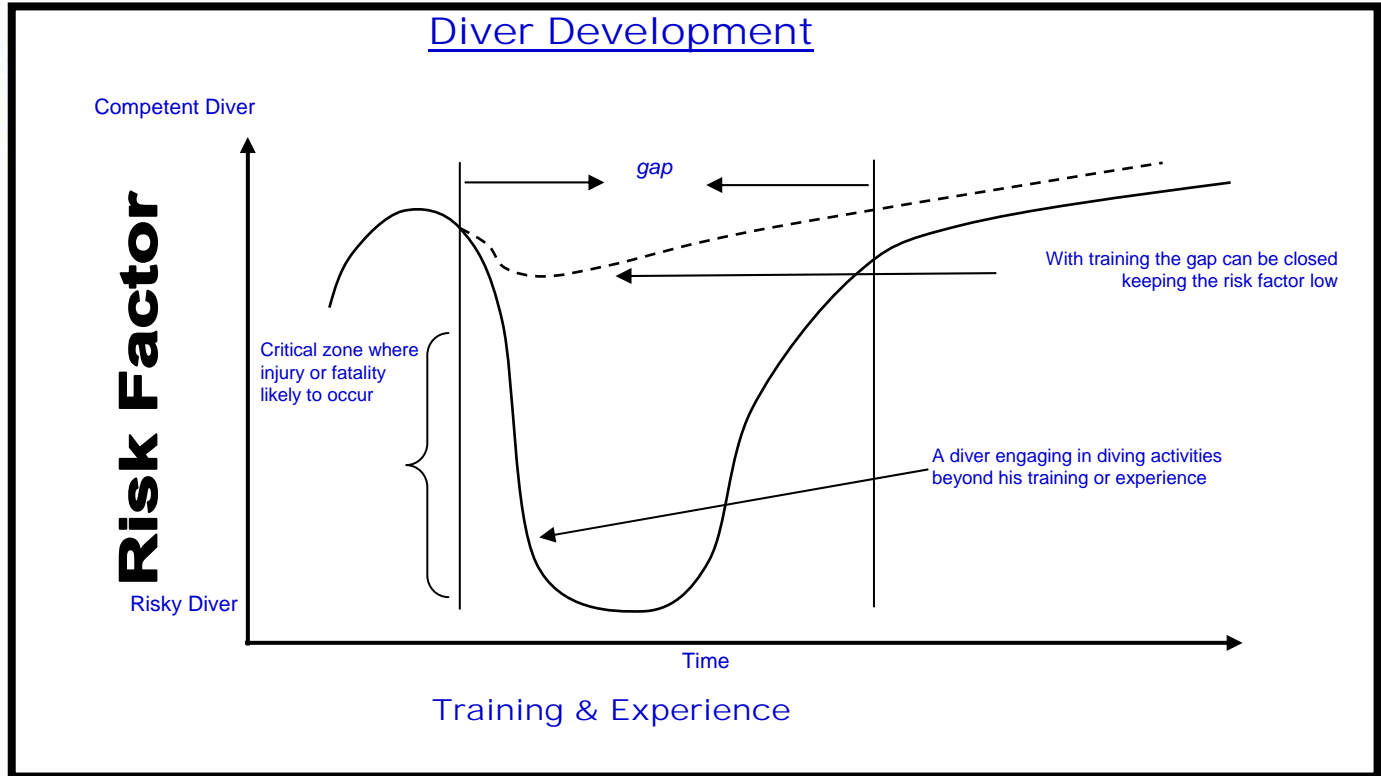
**TECHNICALLY SPEAKING<sup>©</sup>**  
*Your blueprint to total diver competency.*

# CORE VALUES OF DIVER COMPETENCY

(A Diver's Ultimate T.A.S.K)

- ☑ TASK – Training
- ☑ TAsK – Attitude
- ☑ TAsK – Skills
- ☑ TAsK – Knowledge

# Training



# Attitude

- Humility
- Keeping an Open Mind
- Perseverance
- Respect
- Honesty

**RISK ACCEPTANCE**

# Risk Acceptance

*'As we advance in  
life, we learn the  
limits of our  
abilities.'*

- James Anthony Froude



**DEEP FATHOMS**  
PRODUCTIONS

# Skills

## *Mastering a Skill*

### *The Three C's*

C - Confidently

C - Competently

C - Comfortably



# Knowledge

WISE – Wisdom

WISE – Intuition

WISE – Sagacity

WISE – Experience



Now, let us put it  
all together and  
see what it  
looks like...



# The PACE Approach

- Primary**
- Alternate**
- Contingency**
- Emergency**

# Core Values of Diver Competency

- Training**
- Attitude**
- Skills**
- Knowledge**



## ***Tactics for Survival***

Honestly  
evaluate  
whether you  
are capable  
and  
competent to  
make a dive

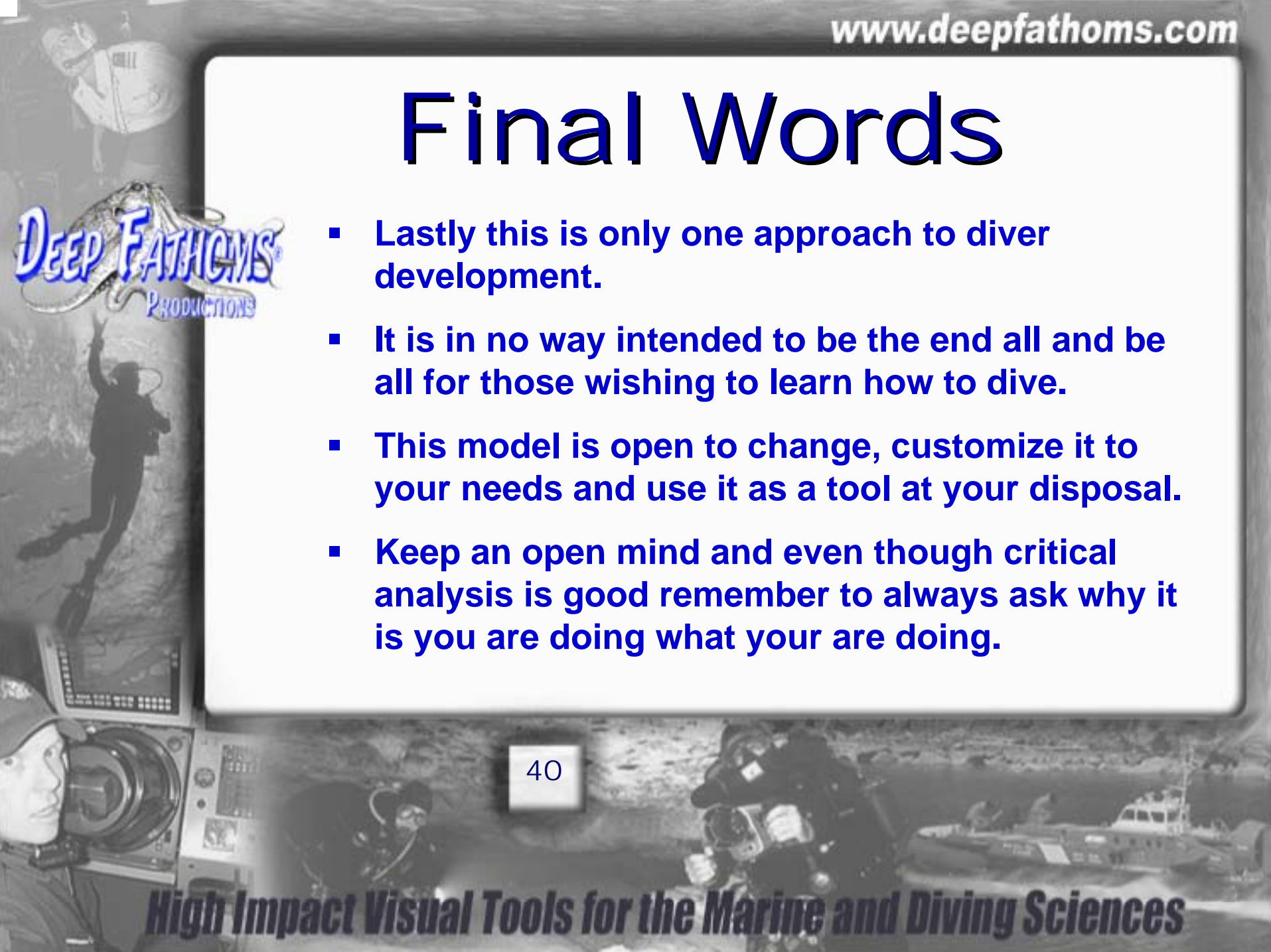
*Humility and  
competence requires  
that one makes  
accurate estimates  
of one's abilities.*



**TECHNICALLY SPEAKING<sup>©</sup>**  
*Your blueprint to total diver competency.*

# Final Words

- Lastly this is only one approach to diver development.
- It is in no way intended to be the end all and be all for those wishing to learn how to dive.
- This model is open to change, customize it to your needs and use it as a tool at your disposal.
- Keep an open mind and even though critical analysis is good remember to always ask why it is you are doing what your are doing.



www.DeepFathoms.com



Now Available!