

The Tax Value Method and User-based Design: “It’s not about us, it’s about them”

by Tom Reid¹

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Introduction

1 In this session I will look at the Tax Value Method (TVM) from a number of perspectives related to user-based design.

Lack of design

2 I start from the proposition that the existing mess that we call the income tax system is the result of lack of *design*, in particular a lack of *user-based* design. This proposition seems obvious, but the more you learn about user-based design as a capability, the more deeply you understand how true the proposition is.

TLIP

3 The Tax Law Improvement Project (TLIP), of which I had the honour of being a part, was an important first step towards remedying the mess. However, it suffered from 2 major limitations:

- It focussed entirely on the legislation (I will say more about the significance of this as a limitation).
- Its rewrites had to generate identical outcomes to the existing law.

Ralph

4 The Review of Business Taxation was able to specifically address the second of those limitations: the TVM proposal (previously known as Option 2) is one outcome of that.

5 One reason why the ATO's Integrated Tax Design Project (ITD) is of immense significance is that it addresses the first limitation by broadening the focus beyond the income tax law. ITD also has its roots in the Ralph Review process.

6 I want to focus our attention on the respective roles of the TVM and ITD projects, and how they interrelate.

ITD and its vision

7 The ITD Project is consciously and vigorously creating within the ATO a tax design practice based on a best practice design capability.

8 I draw on some of Second Commissioner Alan Preston's material to describe the Vision of the Project:

Integrated Tax Design Vision



9 It is well worth spending some time unpacking this.

Products

10 The thesis is that **products** collectively define the tax system. This is because people use products, not concepts (Darrel Rhea). (The products may be intangible, such as a call centre service, or the services of a tax agent, but they are more than just ideas.)

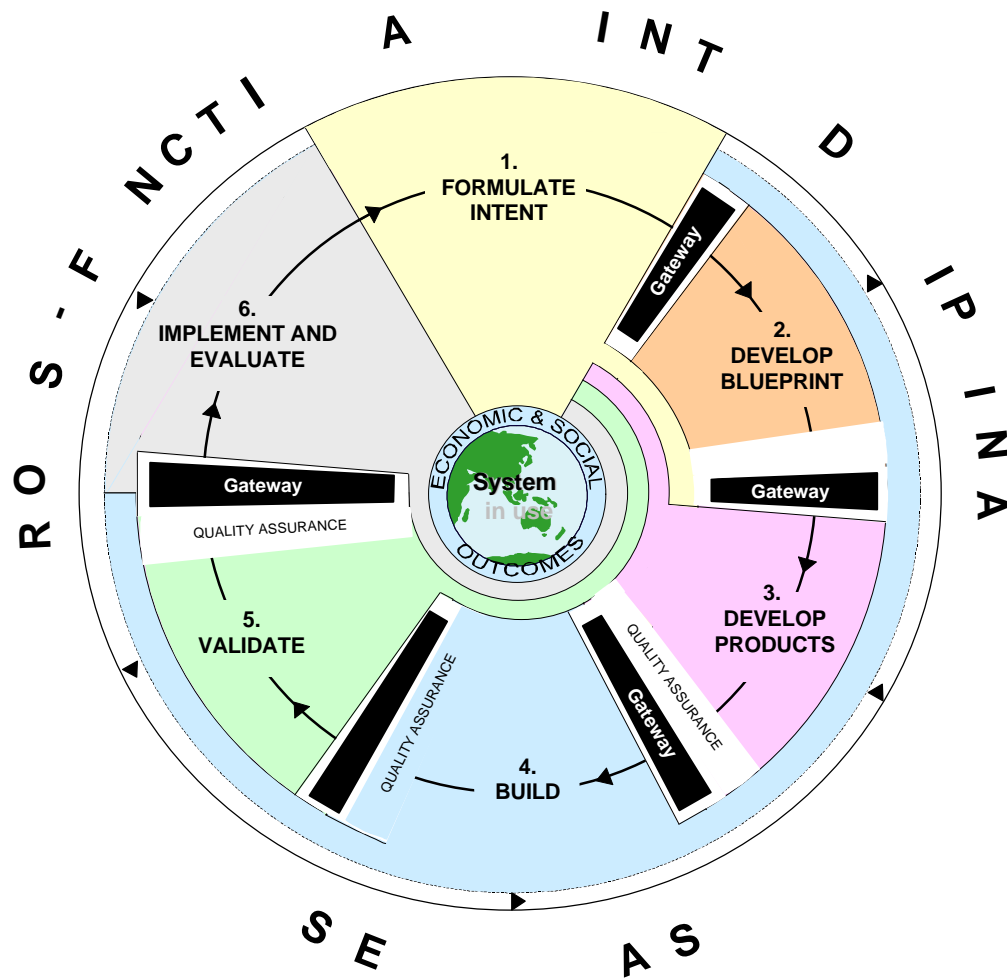
11 What's more, **multiple** products collectively define the tax system. In particular, it is not just the tax law.

12 The Vision is to make and implement multiple products that **coherently connect policy intent with user needs**.

Process

13 For this to happen, the ITD vision asserts that an **articulated and disciplined design process** is required. The Project has made much progress in documenting its investigation of best practice in tax design, and in communicating this through the wider ATO. This includes a detailed exposition of how to build an integrated tax design capability within the organisation (*Reforming the Tax Design Process: a blueprint for building an integrated tax design capability*).

14 A key element of articulating the design process is the model known as the Integrated Tax Design Process Cycle or "the wheel":



People

15 An articulated and disciplined design process in turn calls for **tax design professionals** who operate **creatively and collaboratively**. The Project has drawn extensively on the design expertise of leading practitioners such as Tony Golsby-Smith, who with Richard Buchanan and his colleagues from the leading design school at Carnegie Mellon University in Pittsburg had a decisive role in setting the direction of TLIP. The ITD Project has also benefited from working with leaders in design thinking and practice with whom it has made contact through Carnegie Mellon.

Relevance to TVM

16 TVM, as Martin Keating and Paul Abbey have been demonstrating in their session, is a major breakthrough in making the conceptual basis of the income tax law simpler and more coherent.

TVM as a paradigm shift

17 “Paradigm” comes from the Ancient Greek word (παράδειγμα) meaning pattern. The term is particularly apt in this case, because TVM:

- reveals the underlying similarities in the treatment of different kinds of income and expenditure under the existing income tax law; and
- explains the basis of those similarities; and
- provides a benchmark for understanding differences in treatment, both in terms of the policy reasons for those differences and their practical outcomes.

18 To see how big a paradigm shift this is, remember that the current law contains about 6 differently constructed regimes dealing with assets (and to a lesser extent liabilities). Of these 6, the one for capital allowances had until recently about 30 variants scattered through the income tax law. These are nearly all brought together in a single regime by the *New Business Tax System (Capital Allowances) Act 2001*, which is based on the TVM approach (an earlier draft was in the Draft Legislation that accompanied the Final Report of the Ralph Review).

19 TVM creates coherence in thinking and talking about all aspects of income tax policy, law, administration and compliance. It does this by providing a common language for discussing:

- policy options and outcomes, on the one hand; and
- the law and practical administration on the other;

in terms of actual commercial reality.

20 Discerning this underlying pattern in the debris of the current income tax law was an act of genius: Wayne Mayo's hypothesis. Wayne was a leader in Tax Policy Division in the Treasury until just after the Ralph Review.

21 It is interesting to note that it required a deep thinker about tax policy to come up with the seed of TVM. Familiarity with the legislation was not enough to produce this insight. When I first became involved in the conversation about Business Tax (in about May 1998, in the lead up to *A New Tax System*), my ambition was to realise TLIP's original hope for a single capital allowances regime. I had no idea that a much bigger synthesis was possible.

22 It is interesting that TVM is in a sense just a by-product of the work that Wayne and his colleagues were doing on reviewing the income tax base from a policy perspective. Without the "tax" in "tax value", the net income formula in section 5-55 of the prototype legislation restates the income tax base in the economic model of income tax known as the Haig-Simons or Comprehensive Income Tax model.

23 This shows that the difference between the economic model and what we have in the current law boils down to the difference between "value" (ie economic value) and "tax value" (which is an instrument of tax policy).

24 This is a crucial point, because the opponents of TVM have said that it is an attempt to redefine the income tax base in terms of the Comprehensive model, in particular that it represents a plot to impose income tax on unrealised gains. This is not the case at all.

25 During and since the Ralph Review Wayne Mayo has developed a spreadsheet model that uses the tax value concept to reflect income tax outcomes under the current law, even though the current law does not use that concept explicitly. This brings out 2 very important points:

- It confirms Wayne's hypothesis that TVM is, despite all the distortions in the current law, the unifying principle underlying it.

TVM can perform this function of being an underlying paradigm whether or not it is

26 The second point means that, as I have heard Alan Preston say several times, the genie is already out of the bottle. The power and implications of TVM as a paradigm cannot now be another, TVM is here to stay.

TVM as a product platform

However, TVM is only helpful from an integrated tax design perspective if it can be used intent with user needs”.

28 I suggest that we should be exploring that hypothesis at this conference, in order to assist the Board of Taxation and the Government in evaluating the TVM proposal. Another way to put better outcomes for users of the tax system.

What is a product platform?

I should say something about what a product platform is. The expression is a term of art families, which is a helpful concept for an organisation like the ATO that develops and maintains

30 have built a huge range of products that I could describe generically as “Walkpersons”. They over many years.

31 These products have been built on a small number of product platforms. These consist of the engineering and electronics technologies that together allow the degree of is essential to the appeal of all the products built on the platforms.

32 This example brings out several important principles that are relevant to a discussion of TVM:

Many products are built on a single product platform.

Unlike a product, a product platform is not something you can hold in your hand. In *not* the product platform.

The sophistication of the product platform is invisible to the user, even while it
The user is blown away by the size and functionality of the product, and the benefits those features offer her

33 discussing its merits or disadvantages. We must not let our fascination with the elegance and most users of the income tax system are not interested in what’s inside the box, only in what it means for their experience of the system. “Great design is often invisible”.

34 I should note that TVM is already being used as a product platform for delivering legislation products implementing some of the reforms recommended by the Final Report of the Ralph Review:

- the *New Business Tax System (Capital Allowances) Act 2001*, which I mentioned earlier;
- the General Value Shifting Regime, which has not yet been released for public comment.

35 The first makes straightforward use of a concept of “adjustable value”. The second also uses that concept, but needs to link it to 3 different existing asset regimes in the current law. This creates a considerable amount of complexity that TVM would have avoided.

36 It also seems fairly clear that the immense complexity involved in the tax treatment of financial arrangements, and leasing and rights, can only be managed by an asset and liability regime that uses tax value and related concepts.

Implications of ITD for TVM

37 The perspective of integrated tax design adds important dimensions to our consideration of TVM. So far the process has focussed exclusively on only 2 products: the prototype legislation and explanatory materials. Until this conference, the process has predominantly involved only 2 classes of users: tax professionals in the private sector and tax professionals within the ATO.

Why we need to consider other users

38 This is the whole premise of user-based design. The answer should be obvious, but it is worth reflecting on, at length and repeatedly. We need to remind ourselves regularly that design “is not about us, it’s about them” (Darrel Rhea).

Why we need to consider other products

Legislation products as blueprint

39 In the ITD Process Cycle, we are actually still in Phase 2 (Develop Blueprint): we are testing the hypothesis that building legislation (and other) products on a TVM product platform will produce better outcomes for users of the income tax system.

40 To do this, we are developing the TVM concept as a product platform and documenting the design using prototype legislation products (Bill and EM) as our blueprint. Designing and building the Bill and EM as products in their own right belongs in Phases 3 and 4 of the Cycle. (Remember: a product platform is not something you can hold in your hand: in particular, the income tax law that gives effect to TVM is not the product platform.)

41 There is an important question whether legislation products are the best way of documenting this sort of design work. However, it has been the traditional way and was used during the Ralph Process. Also, there is a demand for it from most people external to Government who are involved in consultation.

42 The ITD Project is looking at better ways of blueprinting the overall design of a tax measure, to encompass not only legislative but also administrative and systems aspects of the design. That is a key element of what is meant by *integrated* tax design.

Other products

But even if we were in Phase 4 of the Cycle, of course the legislation products by to the needs of users of the tax system (as distinct from users of the tax law). We all know that very few taxpayers (if any) use the actual legislation products as their immediate tools for guiding them through the system or complying with their traditional habits in developing legislation to implement new policy.

44 Why we need to consider other products boils down to the question why we need to consider other users, because other products are what the other users use!

45

based design and testing. There are several reasons for this.

- We haven't yet considered the impact of TVM on products beyond the legislation and the EM.

Our testing is not using the techniques that professional designers use to evaluate user not trained in those techniques, but because the products that users would actually use in a TVM world haven't been built

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test results based on the experience of real users using real product prototypes built for a TVM world.

Until we do that, we will be limited to conjecture based primarily on our own subjective projecting these subjective reactions onto imaginary users, expressing what are really our own views in language that appears to be about users.

Until we engage in user-based design we will also not deliver the full potential of the TVM

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of user-based design involved in developing those products. (This is the layer that was of main concern to TLIP.) It is important to even on this layer of user-based design. There is still a significant amount of work to do on the legislation products from the point of view of designing them for their actual users.

The user pathway

50 At the heart of user-based tax design is the concept of the user pathway. This starts from the comprehend or experience the whole system. But you can comprehend and design the users' pathway through the system. You then design and build products user's experience of the pathway.

51 To do this successfully, you need to know a lot about the different types of users and their needs. On this basis you can develop a product strategy for building product families on suitable product platforms.

The Government, the Parliament and the Courts

52 These make up one layer of users. They may be few in number, and they have a variety of different roles and interests in the system, but they are key users of the legislation products.

53 The discussion of TVM so far has rightly emphasised its importance in improving policy and legislation products. These improvements can be considered under a number of headings.

The existing “product platform” is not sustainable

54 The Ralph Review recognised that the substantive reforms it recommended could not be sustainably implemented under the current income tax law. The complexity and incoherence of the income tax rules now represents a major obstacle to any kind of sustainable improvements to the income tax system.

55 This is true both of reforms to support the integrity of the tax base, and of changes intended to ease compliance burdens. TVM addresses key aspects of this complexity, producing substantial efficiencies in developing legislation products to implement future reforms.

Ensuring better policy and legislative content

56 TVM does this by providing clear benchmark principles and standard approaches. These can be departed from for policy reasons, but the overall framework highlights the departures, creating an implicit onus to document and explain them, thus making the rules more transparent.

57 The absence of this kind of coherence in the current rules has led to extraordinary numbers of anomalies: that is, deviations from principle that have no sound policy basis. (The work the TVM team has done on migrating the current CGT rules to TVM has brought out many examples of this). Moving the income tax law to a TVM platform therefore provides a powerful force for eliminating these anomalies.

58 Getting rid of what are called “black holes” (non-private expenditure that under the current law attracts no tax relief) is probably the most prominent example of this. I do not assert that black holes cannot be eliminated within the current legislation: the point is more that under an income tax law based explicitly on TVM they would never have arisen in the first place.

59 John Ralph has made another very important point about the transparency that results from a clear legislative benchmark: it is clear whether the detail of the policy implementation is congruent with the overall intent, and with the design based on that intent. By contrast, the complexity of the present legislation provides huge scope for obfuscation and concealment. In the end, this is about honesty in the relationship between Government and the governed.

60 A clear legislative benchmark and transparent policy intent are also essential for judicial interpretation of the law. This point was made by a number of senior New Zealand judges at the 1996 Conference on Tax Drafting held in Auckland: courts need coherent indications of principle in tax legislation if they are to make any sense at all of the provisions.

End users: “clients” of the tax system

61 At the other end of the production line are the human beings who must fulfil their tax obligations day to day in the real world.

62 One thing is fairly clear about them: the last thing they want right now is more change. For them, an “improvement” that involves change is not an improvement. (For example, the prospect of GST being rolled back appears very unpopular with many business people who have invested a lot of time, effort and money in getting up to speed with the current GST arrangements.)

63 This presents us with a dilemma: how do we use a TVM product platform to improve outcomes for these users without imposing additional burdens on them?

64 Finding the answer to that question is another reason why it is so important to broaden the inquiry about TVM beyond the legislation products and the tax experts.

65 It seems likely that (for better or worse) TVM can be implemented with relatively little impact on products like TaxPack.

66 But if that is true, many people will ask, quite rightly: how does changing the product platform benefit end users of the tax system? This question needs to be looked at in depth, but I suggest that there are 2 potential answers at least.

Downstream benefits of improvements to policy and legislation

67 One is that there are downstream benefits for these users of the impact that TVM has at the policy and legislation levels. This is one of the points of my Walkperson analogy: a user can benefit from TVM without needing to understand how the system is constructed or why it works in the way it does.

68 Future change in the tax system will be continuous and inevitable. That change will be slower and more difficult to implement without the reformed infrastructure that TVM offers. Making the policy and legislation process more efficient also frees up tax design resources to work on improving other tax system products besides the legislation.

69 The non-sustainability of the existing legislative base affects products other than the legislation, for example rulings and information to taxpayers. I am told that the CGT experts in the Tax Counsel Network have advised that the CGT rules are now so complex that it is impossible to prepare appropriate explanatory material about them for inclusion in TaxPack.

TVM as a springboard for other design improvements

70 The other is that the introduction of TVM can be used over time as an opportunity to make improvements that are not strictly required by the new product platform, especially if we take the opportunity that TVM presents to create an environment of user-based design. Qualitative user-testing of new or rebuilt products is an essential tool in striking the right balance between making improvements and maintaining an essential degree of stability in users’ experience.

Tax professionals

71 Interposed between the first and second groups I have discussed are the tax professionals, both outside and inside the ATO. They don’t want change any more than the end users do. However, again, change is inevitable, and dealing with it is a major part of what it means to be a

professional.

72 Another major part is to seek constantly to improve one's tool set. You wouldn't try to run Windows 98 on a 486 machine. Continuing to implement tax policy changes on the current product platform is more like trying to run it on a 386.

Conclusion

73 In their article, "Managing product families: The case of the Sony Walkman"², Sanderson and Uzumeri wrote:

The Walkman is an example of outstanding product family management.

Sony's strategy employed a judicious mix of design projects, ranging from large team efforts that produced major new product 'platforms' to minor tweaking of existing designs.

Throughout, Sony followed a disciplined and creative approach to:

- focus its sub-families on clear design goals and
- target models to distinct market segments.

Sony supported its design efforts with continuous innovation in features and capabilities, as well as key investments in flexible manufacturing.

Taken together, these activities allowed Sony to maintain technological and market leadership.

74 Integrated tax design that is genuinely user-based and uses TVM as a product platform offers us a unique opportunity to transform for the better users' experiences of the products that collectively define Australia's tax system. If we grasp that opportunity, I believe that in 10 years time it will be possible to make statements about those products similar to Sanderson and Uzumeri's conclusions about the Sony Walkman.

² *Research Policy* 24 (1995) 761-782 (at page 762).